ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP) - YEMEN

QUARTERLY REPORT

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USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

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List of Acronyms

A2F	Access to Finance
ACAPS	The Assessment Capacities Project
ACH	Automated Clearing House
ACT	Aden Container Terminal
AEO	Authorized Economic Operator
AGT	Aden Gulf Terminal
AIS	Automated Identification System
AMELP	Activity Monitoring, Evaluation, and Learning Plan
AML	Anti-Money Laundering
AR	Advance Ruling
ATM	Automated Teller Machine
BCP	Border Crossing Points
BIS	Bank for International Settlement
BOD	Board of Directors
BoE	Bank of England
BOP	Balance of Payments
BSD	Bank Supervision Department
CAMELS	Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Sensitivity
CAP	Credit Application Package
CB	Central Bank
CBY	Central Bank of Yemen
CCRT	Catastrophe Containment and Relief Trust
CD	Compact Disc
CDMRS	Commonwealth Debt Management & Reporting System
CFT	Counter Financing of Terrorism
CIT	Corporate Income tax
CNY	Chinese Yuan
COBIT	Control Objectives for Information Technology
CPI	Consumer Price Index
CRO	Chief Risk Officer
CY	Calendar Year

DFID	United Kingdom's Department for Foreign and International Development
DMFAS	Debt Management and Financial Analysis System
DSSI	Debt Service Suspension Initiative
DVD	Digital Video Disc
DWH	Data Warehouse System
ERLP	USAID's Economic Recovery and Livelihoods Program
ETL	Extraction Transformation and Loading
EU	European Union
EUR	Euro
FAL	Convention on Facilitation of International Maritime Traffic
FATF	Financial Action Task Force
FBRNY	Federal Reserve Bank of New York
FCDO	Foreign, Commonwealth & Development Office
FFS	Farmer Field Schools
FI	Financial Institution
FIU	Financial Intelligence Unit
FRM	Foreign Reserve Management
FTE	Full-time Equivalent
FUT	Factoring Underwriting Tool
FX	Foreign Exchange
FXRM	Foreign Exchange and Reserve Management
FY	Fiscal Year
GAC	Gulf Agency Company
GBP	British Pound
GDP	Gross Domestic Product
GOY	Government of Yemen
GRC	Governance, Risk Management, and Compliance
GST	Goods and Services Tax
HCCCEB	Higher Council of Community Colleges Executive Board
HDD	Hard Disk Drive
HR	Human Resources
HRM	Human Resource Management

IBM	Integrated Border Management
IBY	International Bank of Yemen
ICT	Information Communications Technology
ICU	Intensive Care Unit
IDA	International Development Association
IFI	International Financial Institution
IMF	International Monetary Fund
IMO	International Maritime Organization
IT	Information Technology
JC	Job Creation
KSA	Kingdom of Saudi Arabia
LOC	Letters of Credit
LOFF	List of Foreign Fisheries
LOP	Life of Project
LPG	Liquified Petroleum Gas
M2	Broad Money
MEG	USAID's Middle East Economic Growth Best Practices Program
MEL	Monitoring, Evaluation, and Learning
MENA	Middle East and North Africa
MFI	Monetary Financial Institution
MFS	Mobile Financial Services
MFW	Ministry of Fish Wealth
ML	Market Linkage
MMPA	Marine Mammal Protection Act
MoC	Ministry of Culture
MOCS	Ministry of Civil Service
MOF	Ministry of Finance
MOH	Ministry of Health
Moinfo	Ministry of Information
MOIT	Ministry of Industry and Trade
MOP	Ministry of Petroleum
MOPIC	Ministry of Planning and International Cooperation

MOU	Memorandum of Understanding
MOVET	Ministry of Vocation Education and Training
MSME	Micro, Small and Medium Enterprises
MSW	Maritime Single Window
MT	Metric Ton
MTC	Maritime Training Center
MTM	Mark-to-Market
NAF	National Fish Canning and Packing Factory
NCB	National Commercial Bank
NOA	Notification of Arrival
NOAA	US National Oceanic and Atmospheric Administration
NPC	National Payments Council
NPL	Non-Performing Loan
NTFC	National Trade Facilitation Committee
OMO	Open-Market Operation
OPEC	Organization of the Petroleum Exporting Countries
OTJ	On-the-job
P&L	Profit and Loss
PA	Partnership Agreement
PCA	Post-Clearance Audit
PCS	Port Community System
PERSGA	Regional Organization for Conservation of Environment of the Red Sea and Gulf of Aden
PFI	Partner Financial Institution
PITT	Performance Indicator Tracking Table
PIU	Project Implementation Unit
PM	Prime Minister
PPD	Plant Protection Department
PSA	Profit-Sharing Agreements
PSD	Payment System Department
PSP	Payment Service Provider
RBA	Risk Based Approach
RKC	WCO Revised Kyoto Convention

RM	Risk Management
ROYG	Republic of Yemen Government
RTGS	Real-Time Gross Settlement
SAFE	Safety Analysis and Functional Evaluation
SAR	Saudi Riyal
SDR	Special Drawing Rights
SL	Sustainable Livelihood
SME	Small and Medium Enterprises
SOP	Standard Operating Procedure
STP	Straight Through Processing
STR	Suspicious Transaction Report
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TA	Technical Assistance
TANA	Technical Assistance Needs Assessment
TBT	Technical Barriers to Trade
TDW	Tons Deadweight
TEU	Twenty-foot Equivalent Unit
TF	Trade Facilitation
TFA	Trade Facilitation Agreement
TOR	Terms of Reference
TOS	Terminal Operating System
TOT	Training-of-Trainers
TP	Yemen Trade Portal
TPM	Third-Party Monitoring
TT	AEO Trusted Trader
TVET	Technical and Vocation Education and Training
UAE	United Arab Emirates
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
UKMTO	United Kingdom Marine Trade Operations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program

UNVIM	United Nations Verification and Inspection Mechanism for Yemen
U.S.	United States
USAID	United States Agency for International Development
USB	Universal Serial Bus
USD	United States Dollar
USG	United States Government
VAR	Value at Risk
VAT	Value-Added Tax
VC	Value Chain
VMT	Vehicle Mounted Terminal
VTMIS	Vessel Traffic Management Information System
VTS	Vessel Traffic Services
WB	World Bank
WCO	World Customs Organization
WFD	Workforce Development
WTO	World Trade Organization
YASPC	Yemen Arabian Sea Ports Corporation
YCA	Yemen Customs Authority
YCB	Yemen Commercial Bank
YCLE	Yemen Continuous Learning Evaluation
YER	Yemeni Rial
YESS	USAID's Yemen Economic Success and Stabilization Program
YKB	Yemen-Kuwait Bank
YSMO	Yemen Standardization and Metrology Organization

EXECUTIVE SUMMARY

The Economic Recovery and Livelihoods Program (ERLP) supports Yemen's journey to self-reliance, by focusing on improving critically important macroeconomic stabilization and private-sector competitiveness enhancement conditions and outcomes. ERLP lays the institutional groundwork for sound macro-financial policy, and addresses trade barriers that limit the flow of commercial and humanitarian assistance. It promotes sustainable livelihoods, raises competitiveness, and generates employment opportunities in key high-potential sectors of the economy.

ERLP Component 1- Improved Macroeconomic Functions of Key Institutions - seeks to improve macroeconomic management by strengthening the capacity of the key Republic of Yemen Government (ROYG) institutions; including the Central Bank of Yemen (CBY), the Ministry of Finance (MOF), the Customs Authority, and the Port Authorities. It aims to restore macroeconomic stability, enhance fiscal management efficiency, and increase international trade flows.

The Monetary Policy Development and Implementation subcomponent provides effective macroeconomic management advisory services within the current crisis environment. It undertakes coordinated action with the CBY to control monetary growth, stabilize price and exchange-rate expectations, enhance the functioning of the payments system, and improve financial sector regulatory oversight to help gradually restore confidence in the financial system. During Q4, ERLP upgraded the CBY's institutional capacity and provided technical and training assistance designed to promote critical policy, regulatory, and institutional reform in the following areas:

Monetary Policy and Management: The project continued to assiduously monitor the ongoing implementation of the CY 2021 Annual Monetary Plan, which confirmed that the CBY successfully limited the growth of the money supply over the first half of the year. Base money (M1) grew by 4.1 percent against the semi-annual target of 9.5 percent; broad money (M2) rose 4.6 percent, well below the semi-annual target of 9.1 percent.

Foreign Reserve & Exchange Management: For the first time, the CBY, using a digital platform, conducted two system-wide foreign-exchange auction simulations in Q4 with the participation of Yemen's major banks. Using the placement/allocation framework developed by ERLP, the successful simulations set the stage for the CBY to conduct an actual live FX auction before the end of CY2021.

Following concerted ERLP efforts to ease access to major frozen FX accounts, a strong indication was received this quarter from the Bank of England (BoE) and the Bank for International Settlements (BIS) that the release of nearly USD 400 million in frozen deposits is imminent.

The Payments and Settlement Systems: Following improvements ERLP made to the core banking system, the same-day, near real-time electronic interbank settlement system for the commercial banking sector was successfully launched at the end of Q3 and became fully operational this quarter. This accelerates the time efficiency and predictability of financial intermediation processes. Now, for the first time since the move to Aden, a large number of transactions can be cleared daily. ERLP also continued its focus on helping establish a sound regulatory and operational framework for Mobile Financial Services (MFS) operations in Yemen. ERLP Payments Systems advisors initiated intergovernmental discussions to implement a groundbreaking MFS pilot project in which the salaries of selected government employees will be paid electronically.

Anti-money Laundering/Counter-Terrorist Financing: This quarter ERLP developed and submitted a white paper at the request of the Financial Intelligence Unit (FIU), detailing crucially needed amendments to bring Yemen's AML/CFT regulations into compliance with Financial Action Task Force (FATF) standards. The AML/CFT advisors also supported the FIU in adopting a mechanism to analyze and respond to Requests for Assistance (RFA) concerning suspected money laundering cases or terrorism financing.

COVID-19 Macroeconomic, Fiscal, and Financial Impact Public Sector Response Strategy. Using Pragma's detailed knowledge of the macro-fiscal environment in Yemen and COVID response option strategies across the MENA Region, ERLP has been working with CBY officials to fashion a sound and realistic COVID-related macro-financial response strategy and measures. In this regard the project developed an updated CBY COVID tracker instrument, together with an updated overview covering the macro-financial performance impact of the COVID Crisis and related response measures; as well as an updated analysis of the impact of the crisis on key money supply and liquidity indicators.

Bank Supervision and Risk Management: ERLP worked intensively with the newly organized Off-Site Surveillance team this past quarter to further upgrade and expand the CAMEL financial performance system and related performance ratios. This is designed to facilitate a detailed analysis of bank data, and enable the division to facilitate enhanced compliance with basic financial reporting and performance requirements.

The Fiscal Policy Development and Implementation subcomponent incorporates a strong focus on enhancing MOF's fiscal policy-setting and administrative oversight capacity; through targeted technical/training support designed to enhance institutional capabilities and operational frameworks/practices in the revenue forecasting and tax policy & administration, budget planning/execution, and debt management areas**.** During Q4, ERLP progress in support of Fiscal Policy Development was achieved in the following areas:

Revenue Policy and Administration: The project produced targeted analytical notes illustrating revenue estimation methodologies used to update CY 2021 oil and non-oil estimates, based on actual trends and production from CY 2020 estimates -- utilizing GDP growth and inflation estimates to provide tax buoyancy and elasticity measurements.

Tax Administration: ERLP developed strategic regulatory and operational guidelines for tax administration reform to improve the efficiency and transparency of core functions (registration, filing, examination/audit, collection, and appeals), initially through establishing and operationalizing a large taxpayer unit. ERLP fiscal advisors laid the groundwork for an agreement with Tax Authority officials on a targeted program to introduce major procedural reforms across the key functional areas of Taxpayer Registration, Filing and Payment, Audit, Collection, and Tax Disputes Resolution & Appeals.

The *Debt Planning and Management*: The project made substantial progress toward implementing a debt management system during Q4, and continued supporting the data collation/analysis and related debt recording and tracking domestic and external debt activity. The Debt Management team followed up with UNCTAD and CBY to facilitate the implementation of DMFAS 6 and provided related training. ERLP prepared an analysis assessing strategic options for addressing the current government overdraft balance at the CBY; and will submit this assessment to MOF and CBY for subsequent review.

Budgetary Planning: ERLP built on the momentum with MOF stakeholders to initiate support for efficient and well-organized preparation of the 2022 budget; including developing a pre-budget statement based on the ERLP-supported draft budget circular. In this regard, the team has continued to facilitate improved budget preparation procedures, integrating revenue forecasts into the new budget framework, progress towards adoption of a revised budget classification, and provision of training to senior and mid-level officials and technical officers.

Budget Implementation: ERLP facilitated the initiation of organizational restructuring activities for the budget execution units in the MOF, as agreed with the Ministry in Q3. The new structure will accommodate additional analytical functions, allow for the seamless transition of budget execution functions currently executed by the CBY, and clarify functional responsibilities within the MOF. The team also continued training on comprehensive procedures for expenditure management, cash flow forecasting, and the Treasury Single Account (TSA) reform. Also, a detailed manual was finalized on the better practice-compliant budgetary allotment, commitment control, and payment authorization procedures.

The Trade Facilitation Policy Development and Implementation Subcomponent facilitates trade reform and significantly improves sea and land transport and related logistical operations in Yemen by advancing reforms in line with international standards, including the World Trade Organization Trade Facilitation Agreement (WTO TFA). Substantial additional progress on Trade facilitation reform was achieved in the following areas during Q4:

Trade Facilitation: ERLP made significant progress in implementing TFA-relevant reforms this quarter. This includes helping operationalize the newly established NTFC, improving and operationalizing the Yemen Trade Portal (TP), expanding and enhancing the AEO Program; and further developing Risk Management (RM), Customs Valuation, and Post-Clearance Audit (PCA) procedural upgrades. ERLP also addressed cross-border cooperation and developed the capabilities and capacity of the Customs Training Center. To date, the project has successfully implemented twelve provisions of the WTO TFA.

Transport and Logistics. ERLP supported port productivity improvements at the Ma'alla Terminal in Aden this past quarter. The project also provided further recommendations on the reorganization of the ACT container yard, and a sound logistical approach for storing and charging for empty export containers. Trade advisors followed up with the Port on the recommendations generated by the second detailed focus-vessel exercise, and provided further support for improving the port website. In addition ERLP supported the Project Implementation Unit in improving port infrastructure, and acquiring a Maritime Single Window for the Port.

Cross-Cutting: The project continued to effectively research and address the economic impact of COVID-19. In addition, ERLP assisted in capturing and disseminating trade statistics, supporting international coordination and cooperation, preparing and circulating monthly Trade Access Reports, and compiling and reporting quarterly customs revenue data reports.

COMPONENT 2 - IMPROVED MICROECONOMIC CONDITIONS - Raises household incomes by strengthening small and medium-sized enterprises (SMEs), and improving the performance of the agricultural and fisheries sectors.

The **Strengthened SME Capacity Subcomponent** supports small and medium-sized businesses in key growth sectors to enhance productivity, create jobs, help secure financing, and match qualified job seekers with new job opportunities. The project works with SMEs to identify and sustainably address constraints that impede their competitiveness, growth, and employment generation capacity. In this regard, ERLP provides demand-driven technical assistance tailored to the specific needs of selected SMEs in key high potential industries. The Subcomponent also partners with and develops financial institutions to expand and enhance their lending activities with the SME sector. During Q4, ERLP Strengthening SME activities covered the following critically important areas:

Support to Small & Medium Enterprises: ERLP implements Pragma's successful buyer-led model to boost the competitiveness and business performance of high-potential small/medium-sized businesses; in a manner designed to drive employment growth, raises incomes, and stimulates greater private-sector self-reliance. This quarter, the SME team implemented the final three Partnership Agreements from the Y1 pipeline which are projected to create nearly 300 full-time, sustainable jobs. In total, 42 SMEs in the first year were provided technical advisory services allowing them to overcome the constraints to competitiveness that were prohibiting them from expanding output and creating jobs. Sales and revenues of partner firms increased by over 40 percent on average in Y1 as a result of ERLP competitiveness-enhancement interventions.

Workforce Development experts work intensively to upskill recent graduates and other job seekers in key skill-gap areas, emphasizing the expansion of opportunities for traditionally disadvantaged women and youth segments of the workforce. During Q4 the project provided high-impact pre-employment training for SMEs and conducted targeted, market-led building capacity interventions for women. ERLP conducted a number of targeted pre-employment training interventions in various sectors; including services, fisheries and garment and textiles. In addition two high-profile job fairs were organized in which 1,200 candidates applied, and more than 600 interviews were conducted for the 150 job opportunities offered.

Combined, the Support to SME and WFD teams generated 323 FTE jobs in Q4, for a total of 1,250 FTE jobs over the first twelve months of the project. As of Q4 FY21, ERLP supported 185 (including 119 start-ups) private sector firms across eight high-potential subsectors.

Access to Finance (A2F): ERLP delivered continued technical support during Q4 to seven partner financial institutions to further develop/expand their SME loan portfolios on a sustainable basis. The A2F team developed new overdraft facilities (Letters of Guarantee and Letters of Credit), diversifying the lending products PFIs have at their disposal to meet the needs of different applicants. ERLP also developed the first online-mobile loan application in Yemen, released by Amal Bank this quarter. To date, ERLPs dispersed 4,471 loans totaling $14.7 million, including $1.34 million in loans to women.

The Sustainable Livelihoods Subcomponent applies best practices and improved technologies for augmenting production and quality; while enhancing downstream market development and integration to improve the entrepreneurial capacity of farmers and fisherfolk, and increase household incomes. Progress in the reform area of Sustainable Livelihoods during Q4 was achieved in the following areas:

*Agriculture and Agribusiness***.** Through the first year, ERLP delivered 112 agriculture technical training sessions during the quarter benefiting 3,542 farmers (of which 35 percent are women), and partners signed 400 new sales agreements valued at more than $5 million. The skills training significantly enhanced farmer productivity, reduced postharvest losses, and added value to farm products by significantly improving product quality and marketing.

Fisheries: ERLP continued working with four main seafood processors in Q4: the National Fish Canning and Packing Factory (NAF), Al Wali, and Lobster Seafood Processing. The project also delivered tightly focused technical and training assistance and market linkage support to an additional 60 coastal women, helping them gain new or better employment, and effectively supporting women-owned microenterprises to generate increased sales. Targeted training was also provided to a large number of fisherfolk, who joined ERLP partner seafood processing companies to effectively work on the production line or become fish suppliers. Partner seafood processors/businesses reported significantly increased sales (by at least 10 percent), along with generation of $1 million in additional export sales.

COMPONENT 1: IMPROVED MACROECONOMIC FUNCTIONS OF KEY INSTITUTIONS

1.1 IMPROVED MONETARY POLICY DEVELOPMENT AND IMPLEMENTATION

ERLP is providing targeted technical and training support designed to promote critical macro-financial policy, regulatory and institutional reform in the following core areas:

1. Monetary Management Reform
2. Foreign Exchange and Reserve Management
3. Payment Systems Reform
4. COVID-19 Response Options
5. Anti-Money Laundering and Counter-terrorism Financing
6. Banking Supervision and Risk Management.

The Monetary Policy and Management Reform sub-component has focused on implementing a sound basic monetary control framework to promote further improvement in core macro-stability conditions and gradually restore trust in the national currency. The project also assists the CBY Research Department in compiling and issuing quarterly bulletins illustrating key macro-financial statistics. The Bulletins serve as a core reference in an effective and well-informed monetary policy decision-making process. The *4th Quarterly Bulletin – Economic and Monetary Developments* was published in September 2021.

In Foreign Reserve & Exchange Management, ERLP supports the full functionalization of a modern Foreign Reserve Management (FRM) Department in the CBY. This includes assisting the CBY FRM team in releasing frozen CBY deposits in foreign banks, developing a comprehensive regulatory and operational framework for FX auctioning mechanisms based on market-clearing practices, and systematically tracking and managing FX investment allocation processes. It also includes monitoring and executing FX payment processes (including foreign debt repayments under a reactivated DMFAS debt tracking/payment system), adopting best practice guidelines for FX reserves portfolio management, and restructuring the FRM Department.

The Payments and Settlement Systems subcomponent focuses on further enhancing the organizational capacity of the CBY Payments System Department (PSD). This entails the robust elaboration and implementation of job description and workflow requirements, and related staffing and training activities. It will also involve establishing the related IT infrastructure required for the efficient and time-effective management of payment system informational flows. In addition, the project has made substantial progress towards establishing a more efficient electronic interbank payments and check-clearance system. ERLP is also building a sound regulatory and operational framework for Mobile Financial Services (MFS) operations in Yemen and advocating the piloting of an MFS-based public-sector salary payment program.

To address identified deficiencies in Yemen's Anti-Money Laundering/Counter-Terrorist Financing (AML/CFT) framework, ERLP cooperates closely with CBY Banking Supervision Department (BSD) and the Financial Intelligence Unit (FIU) on achieving the required regulatory and institutional reforms needed. Together with key stakeholders, the project is implementing fundamental organizational, training, and operational recommendations to jumpstart the process of transforming the BSD and the FIU into Yemen's core AML/CFT compliance monitoring and enforcement institutions.

In the critical area of Bank Supervision and Risk Management, ERLP is focused on improving the safety and soundness of the financial regulatory framework and monitoring/compliance system. The importance of rapid progress in this area is further underscored by the impact of the COVID-19 crisis on financial stability and liquidity conditions across the financial system. The project is conducting a comprehensive reorganization and upgraded staffing & training program with the BSD.

In this regard, substantial progress has been made on the robust implementation of CAMELS on-site examination and off-site financial reporting/performance requirements designed to ensure sound financial performance on the part of commercial finance institutions. This effort also includes a targeted focus on improving the governance framework for IT risk management in the banking & finance sphere and supporting a broader effort to enhance CBY's overall capacity to measure and control risks across major functional areas of CBY activity.

1.1.1 MONETARY MANAGEMENT REFORM

BACKGROUND

Macroeconomic stabilization requires the ongoing strengthening of the CBY's capacity to conduct appropriate monetary policies, in a manner that can effectively regulate the money supply in line with the real economy's absorptive capacity, thereby mitigating inflationary and exchange-rate depreciation pressures. Establishing robust and effective macroeconomic management within the current unstable environment requires prompt and well-coordinated action by the CBY to control monetary growth and stabilize price and exchange rate expectations while ensuring more fiscal discipline.

The ongoing technical support to the CBY is helping restore basic macro-financial stability and effectively facilitating the adoption of prioritized and implemented reform actions. Progress in these areas lays the groundwork for a stable and well-regulated macro-economic and financial system and rebuilds public confidence in the stability and legitimacy of financial markets in Yemen.

ERLP continued to take critical next steps to help the CBY gradually move towards conducting an effective monetary policy by adjusting the supply of money in line with the key parameters of the annual monetary plan. This is achieved by controlling monetary emission and direct financing of the government on the one hand and the gradual introduction of open market operations in line with the defined quantitative targets on the other.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

During Q4, ERLP experts continued monitoring the ongoing implementation of the annual CY 2021 monetary plan and related cash currency management/circulation program. Project efforts were directed towards facilitating the initial utilization of basic indirect instruments of monetary control for monetary management purposes, including open market operations and a structured reserve requirement system, along with the establishment of transparent, efficient, and uniform eligibility criteria for banks' access to more flexible monetary policy control instruments/operations.

ERLP advisors collaborated closely with relevant staff to transfer skills and allow buy-in and understanding of the new regulatory framework and guidelines proposed to implement basic indirect instruments of monetary control by the CBY. A pilot program was also designed for banks to exchange liquidity (lending/borrowing) between one another for maturities ranging from overnight to 12 months in duration using the SWIFT platform. The primary objective is to reinforce monetary policy transmission channels and facilitate the adoption of more proactive liquidity management policies by banking institutions. ERLP then provided targeted training to CBY staff on liquidity management and the efficient application of indirect instruments of monetary control.

Monetary management activities and deliverables for Q4 are as follows.

Table 1: Q4 Monetary Management Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Continue to monitor/review the ongoing implementation of the CY 2021 monetary plan and suggest targeted corrective actions in case of a target over/undershooting.
Provide ongoing oversight of the implementation of sound cash currency management/circulation policies.</td><td rowspan="4">1. A comprehensive report detailing progress on the:
• implementation of the CY 2021 monetary plan. This will include targeted corrective actions (as needed) for target over/undershooting;
• implementation of sound cash currency management/circulation policies;
• Adaptation of a monetary policy control regime for implementing basic indirect instruments of monetary control. This chapter will include re-articulation as needed and enforcement of reserve requirement policies (in coordination with banking supervision advisory team) and
• Establishment of transparent, efficient, and uniform eligibility criteria for access to flexible monetary policy control instruments/operations.
2. A mini-report covering details of the pilot program initiated for banks to exchange liquidity (lending/borrowing) between each other for maturities ranging from overnight to 12 months in duration.
3. At least 6 targeted training sessions provided to relevant CBY staff in the areas of liquidity management and efficient application of indirect instruments of monetary control.</td></tr>
<tr><td>Facilitate initial utilization of basic indirect instruments of monetary control for monetary management purposes; including re-articulation as needed and enforcement of reserve requirement policies and establishment of transparent, efficient, and uniform eligibility criteria for access to flexible monetary policy control instruments/operations.</td></tr>
<tr><td>Facilitate establishment/initial implementation of a pilot program for banks to exchange liquidity (lending/borrowing) between each other for maturities ranging from overnight to 12 months in duration designed to reinforce monetary policy transmission channels and facilitate the adoption of more proactive liquidity management policies by banking institutions (thereby beginning to lay the groundwork for eventual focus on interest rates as an operational target for monetary control purposes).</td></tr>
<tr><td>Continue targeted training to CBY staff in the areas of liquidity management and efficient application of indirect instruments of monetary control.</td></tr>
</table>

I. ONGOING IMPLEMENTATION OF CY 2021 MONETARY PLAN AND RELATED CASH CURRENCY POLICIES

Monetary planning activities aim to control the growth of monetary aggregates, which is considered the main driver of inflation in the medium and long run. After designing the annual monetary plan for 2021, the Research and Statistics Department monitors its implementation on a quarterly basis with the assistance and guidance of ERLP experts. In this regard for CY 2021, the Annual Monetary Plan projected broad and base money to grow by 18.3 percent and 19.1 percent, respectively, consistent with the projected annual inflation rate of approximately 25 percent.

Base money rose by 4.1 percent over the first half of CY 2021 against a target of 9.5 percent on a semi-annual basis, or 19.1 percent annually. Currency issued grew over the same period by 6.2 percent ,compared to a target of 11.3 percent on a semi-annual basis (or 22.7 percent annually). Thus, the CBY balance sheet expansion during the first half of 2021 is well on track to comply with annual targets.

The growth of base money is mainly attributable to the net effect of increased credit to the government in the form of direct financing of the budget deficit, together with the decrease of foreign assets. Net credit to the government increased by 5.7 percent (284.3 billion YER), while foreign assets declined by 13.1 percent (50.8 billion YER) from December 2020 to June 2021.

Broad money (M2) grew by 4.6 percent over the first half of 2021, well below the semi-annual target of 9.1 percent, or 18.3 percent annually as reflected in the annual monetary plan. Maintaining this pace will prevent any acceleration of currency emission during the current year, and help stabilize exchange rates and prices.

The monitoring of Annual Monetary Plan implementation indicates that overall, the CBY succeeded in its mission of controlling money supply growth over the first half of 2021. In the absence of a foreign reserve buffer, a strong commitment to the Annual Monetary Plan targets remains the only tangible tool at the CBY's disposal to contain inflationary pressures and stabilize the exchange rate.

ERLP will closely continue monitoring the path of the money supply during the second half of the current year in accordance with the annual monetary plan targets. ERLP will strongly advocate maintaining this pace to prevent any acceleration of the direct financing to the government during the second half of the current year; in order to avoid build-up of additional inflationary and depreciation pressures. However, returning to the medium-term inflation target of 10 to 15 percent will likely require the mobilization of external resources, and expanding access to alternative non-inflationary sources of financing by the CBY.

II. INTRODUCTION OF BASIC INDIRECT INSTRUMENTS OF MONETARY CONTROL FOR MONETARY MANAGEMENT PURPOSES

The Central Bank of Yemen's mandate, as stipulated by Article 5 of its Law No. 14 of 2000, includes conducting an appropriate monetary policy to achieve price stability, and thereby contribute to the sound development of the national economy. In accordance with its overarching price stability goals, the CBY recently adopted with ERLP assistance a comprehensive toolkit of indirect instruments to help effectively absorb banking liquidity present in financial markets, by conducting targeted open market operations with commercial and Islamic banks.

Along these lines, the CBY issued 100 billion Rials in short-term securities on behalf of the government in late 2018. This issuance was rolled over each quarter. CBY is also working with ERLP to prepare the ground for a new issuance of an envelope of up to 400 billion Rials in the form of conventional bonds/bills and *Sukuk* (Islamic bonds) during late 2021 and the 1st half of 2022.

To achieve this objective, it will be necessary to create the conditions under which it is possible for banks to refinance their portfolios of government securities. In addition the CBY can also undertake Open Market Operations (OMOs) with banks, using their holdings of government securities as eligible collateral. In this regard, the liquidity management operations framework finalized during Q4 is designed to ensure the absorption of liquidity when the banking system remains in surplus, and the injection of liquidity when the banking system confronts a deficit with OMOs.

The surplus liquidity will be absorbed by issuing short-term instruments such as CBY certificates of deposit (CDs), debt instruments such as government treasury bills, and government bonds. Besides absorbing liquidity, the debt instruments can help meet the financing needs of the government. On the other hand, liquidity injection will be carried out through outright asset sales and purchases and repurchase agreements (Repo), using CBY CDs, government bonds, and government treasury bills.

To calibrate the magnitude of required money market interventions, as well as the appropriate mix between the different categories of OMOs, ERLP designed a liquidity table to help the CBY analyze the main factors affecting the banking sector's liquidity position with the central bank. These key variables, known as autonomous factors, include currency in circulation, FX operations (sales and purchase of FX) and public treasury operations. The next step will be to identify optimal approaches for detailed liquidity forecasting, as a prerequisite for conducting indirect monetary policy control operations by the CBY.

Banking institutions are in this regard, required to hold minimum reserves in accounts with the CBY. The legal framework for this system was established in CBY Law no. 14 of 2000. The CBY's reserve requirement system primarily aims to ensure a minimum degree of banking liquidity, thereby influencing the money supply and credit in the economy.

The reserve base of each bank is determined in relation to the composition of its balance sheet. The balance sheet data should be reported monthly to the CBY, which, in turn, determines relevant reserve ratios. The reserve ratio is currently 7 percent on deposits in local currency, and 10 percent on deposits denominated in foreign currencies. The minimum amount of reserves to be held by each institution with respect to a particular maintenance period is calculated by applying the relevant reserve ratio to each relevant item of the reserve base for that period.

To improve the required reserve mechanism, ERLP has proposed the following modifications to the procedures for creating required reserves by commercial and Islamic banks.

- Banks should submit special reports on required reserves to the CBY, with details on the breakdown of deposits between those denominated in local currency and those denominated in foreign currency
- As a starting point, the CBY could limit each bank's reserve base to deposits built up after the relocation of the CBY to Aden in 2016 (so deposits are free of any restrictions, such as those applying to frozen deposits accumulated before 2016).
- To stabilize interest rates, the CBY minimum reserve system should enable institutions to use averaging provisions. This implies that compliance with the reserve requirements is determined based on the average balance held by the bank over the maintenance period.

ERLP will continue working with the CBY to effectively refine its minimum reserve system features, and ensure compliance of all banks with the reserve requirements as specified in the banking regulation.

III. TRANSPARENT, EFFICIENT, AND UNIFORM ELIGIBILITY CRITERIA FOR ACCESS TO MONETARY POLICY OPERATIONS ESTABLISHED

Transparent and efficient criteria for counterparty access to central bank monetary policy operations have been specified and incorporated into the draft guidelines for implementing monetary policy operations by the CBY. The objective, in this regard, has been to ensure that a broad range of counterparties participate in CBY monetary control operations/activities under uniform eligibility criteria.

These criteria have been defined to ensure the equal treatment of counterparties across the Republic and that counterparties fulfill certain prudential and operational requirements.

Prudential Requirements

Eligible counterparties to monetary policy operations should exhibit financial soundness, in accordance with established prudential standards and rules. This, in turn, entails compliance with mandated capital and liquidity ratios. Moreover, the CBY can suspend, exclude, or limit access to monetary policy operations by counterparties in breach of the capital and liquidity requirements; or in the case of late or incomplete transmission of the relevant data to the Banking Supervision Department (BSD).

Operational Requirements

Eligible counterparties are required to hold accounts with the CBY for the purpose of ensuring appropriate settlement of payment orders, related to their participation in liquidity management operations. These, in turn, are to be settled at the moment of or after the final transfer of the eligible assets used as collateral for the operation. For this purpose, counterparties will be expected to: (i) pre-deposit the eligible assets at the CBY; or (ii) settle the eligible assets with the CBY on a delivery-versus-payment basis

In practice, most Yemeni banks should be able to readily meet core operational requirements. However, this may well not be the case regarding core prudential requirements related to capital and liquidity ratios. The capacity to meet these requirements should be assessed based on the most recent financial statements reported to CBY. To this end, the project is assisting the BSD to prepare a list of eligible counterparties (liquid and creditworthy banking institutions), that would be suitable to participate in the initial conduct of basic open market operations.

IV. FACILITATE ESTABLISHMENT/INITIAL IMPLEMENTATION OF A PILOT PROGRAM FOR BANKS TO EXCHANGE LIQUIDITY

In addition to the checks carried out for interbank transfers, another type of operation will be introduced to facilitate the exchange of liquidity between banks using SWIFT MT 202. These operations will enable lending banks to transfer funds from their accounts opened with the Central Bank for the benefit of borrowing banks. The settlement will be performed on the same day the SWIFT message is sent, provided that the CBY accepts the transaction. These operations are carried out with varying amounts, interest/return rates, and maturities agreed upon between the counterparties. Upon maturity, the borrower repays the principal with interest to the lender. In the event of non-payment, the dispute between banks should be resolved without any liability assigned to the CBY. According to the conditions determined by the CBY, a bank that suffers a shortfall of required liquidity can request related short-term financing from the Central Bank.

To encourage banks to exchange liquidity efficiently and transparently using SWIFT, a simulation was developed and successfully implemented among the most active banks in the market. His included the top 5 banks holding 90 percent of total reserves --- Al Ahli Bank, Al Kuraimi Bank, Tadhamon Bank, CAC Bank and Shamil Bank.

V. TARGETED TRAINING TO CBY STAFF

During Q4, ERLP also provided a series of training workshops for CBY staff working in the Research and Statistics Department, and other relevant departments. The Research Department's main goal is to provide a sound conceptual and empirical basis for monetary policymaking. In this regard, its primary objectives are to compile and analyze economic and financial statistics to improve understanding of how the economy functions; and provide tools and analyses to help the CBY achieve its mission of designing/implementing an effective monetary policy framework.

The regular publication of the CBY *Quarterly Bulletin* is a significant step towards enhancing CBY capacity in macro-financial statistics compilation and analysis. The Bulletin reviews key developments across critical macro-financial performance and policy areas, and analyzes their implications for the Yemeni economy. The first chapter looks at global and local macroeconomic developments. The second chapter outlines recent monetary and banking sector developments. The third chapter focuses on public finances, and the fourth on external sector developments (see *Annex 01 – Macro – Monetary Management and Statistics – CBY Quarterly Bulletin Issue 4*).

Conducted remotely via Zoom, the training sessions covered a broad range of topics; focusing primarily on money market microstructure, open market operations and procedures, standing facilities and monetary policy stances. Materials prepared for the training included PowerPoint presentations, as well as Excel spreadsheets for case studies.

The following is a summary of the training sessions provided to the CBY/Research Department.

DATES	TOPICS/ISSUES
August 5, 2021	Introductory session: Importance of having a comprehensive toolkit of indirect instruments of monetary policy at CBY disposal.
August 12, 2021	This session was dedicated to different types of OMOs that CBY could carry out in the current situation: CDs issuance, Treasury bond/bill issuance, FX swaps, Repo.
August 16, 2021	List of eligible counterparts that respect requirements of capital adequacy and liquidity.
August 19, 2021	The focus of this session was on the interrelations between OMOs and the development of the government bond market.
August 28, 2021	This training session focused on the types of reverse transactions • Liquidity-providing reverse transaction/fixed rate auction • Liquidity-providing reverse transaction/multiple rate auction • Liquidity- absorbing reverse transaction/fixed rate auction • Liquidity-absorbing reverse transaction/multiple rate auction

DATES	TOPICS/ISSUES
September 6, 2021	This session was dedicated to issuance of CBY Deposit Certificates and FX Swaps for Monetary Policy purposes with hands-on templates related to: • Example 1: 1 Issuance of CBY CDs/fixed rate auction • Example 2 Issuance of CBY CDs/multiple rate auction • Example 1 Liquidity-providing FX swap/variable rate auction • Example 2 Liquidity-absorbing FX swap/fixed rate auction

NEXT STEPS

During the upcoming period, ERLP will focus on continuing to strengthen CBY capacity to conduct an appropriate monetary policy aiming at ensuring effective regulation of the market liquidity conditions; including through the initial implementation of indirect instruments of monetary control.

Within this overarching context, the project will work to ensure regular monitoring of CY 2021 monetary plan implementation, and facilitate the transition towards adoption of indirect instruments for monetary policy implementation. This process will allow the CBY to conduct market-based monetary policy operations, including open market operations (OMOs), and apply transparent, efficient, and uniform eligibility criteria of counterparty access to monetary policy operations. It will in the process promote market participation by a broad range of commercial banks and other financial institutions. ERLP will also continue building capacity activities, by providing targeted training to relevant CBY staff (primarily the Research and Statistics Department) on practical monetary policy formulation and implementation topics.

1.1.2 FOREIGN RESERVE & EXCHANGE MANAGEMENT

In the foreign exchange and reserve management area (FXRM), ERLP support covers the full functionalization of a modern Foreign Reserve Management (FRM) department at the CBY in line with global best practices and cognizant of and tailored to the specific environment of Yemen. This includes providing assistance to the CBY FRM team in releasing frozen deposits in foreign banks and developing a comprehensive regulatory and operational framework for FX auctioning mechanisms based on market-clearing practices. It involves systematically tracking and managing FX investment-allocation processes and monitoring/executing FX payment processes (including foreign debt repayments under a reactivated DMFAS debt tracking/payments system). ERLP is also helping the FRM adopt best practice guidelines for FX reserves portfolio management and governance and restructure the FX Reserve Management Department to achieve the aforementioned targets. The ERLP FXRM approach aligns fully with the CBY's holistic vision of a modernized FX Reserve Management function.

The CBY has been engaged in managing a challenging FX situation since the start of the political crisis. The banking system in Yemen has a very low level of penetration (estimated only 5-10 percent of the population have access to bank accounts), while an estimated two-thirds of FX market activity happens outside the banking sector. FX trading outside the banking sector happens via exchange houses and small Hawala's. There are more than 400 of these listed entities in Yemen, and they have a much better geographical penetration than the banks.

The demand-supply gap, with demand for FX much higher than supply, coupled with this FX market microstructure mentioned above, are the basis of the existing divergence between official rates and parallel market rates, which reached 40 percent at certain points in time between 2018 and 2020. With an official rate of YER400/USD1 (up from YER250 previously), parallel market rates hovered around YER1,250/USD1 in September 2021. This highlights the importance of the ERLP engagement in this area through its key areas of intervention.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

Over the course of Q4, ERLP experts focused on achieving seven main targets: (i) Easing access to major frozen FX accounts; (ii) Developing foreign reserves investment strategy & policy guidelines; (iii) Conducting FX allocation/placement simulation and training, developing the related regulatory guidelines and transitional arrangements; (iv) Updating the systemic foreign reserves allocations, status reporting framework and data warehouse applications; (v) DMFAS installation and debt statistics forecasting status for FX Reserves Management Purposes. (vi) Achieving significant progress towards the adoption of modernized foreign reserves department organizational structure and FX reserves management best practice guidelines; (vii) providing training in FX Reserves Best Management Practices. In the following section, these deliverables are discussed in detail.

Table 2: FXRM Impact Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLE</th></tr>
<tr><td>Support ongoing efforts to regain access to all frozen FX accounts.</td><td rowspan="6">1. CBY access regained to frozen FX accounts representing at least 85-90% of the value of all previously inaccessibly external accounts. (On a best efforts basis)
2. Follow-up report provided on full and effective implementation of better practice compliant foreign reserve investment strategy by CBY.
3. Report provided on effective implementation of efficient and transparent rules-based FX allocation/placement activities by the CBY (including initiation of auction activities), which improve price discovery and dampen speculative FX market fluctuation.
4. Report provided on effective implementation of better practice compliant Business Continuity and Disaster Recovery Plan for foreign reserve management activities/systems.
5. At least six structured training sessions provided on FX management and tracking policies/practices with department staff.
6. Follow-up report provided on comprehensive dissemination of core electronic data warehouse applications.
7. DMFAS external debt management system effectively reactivated (in coordination with the fiscal advisory team).</td></tr>
<tr><td>Full and effective implementation of better practice compliant foreign reserve investment strategy by CBY.</td></tr>
<tr><td>Support effective implementation of efficient and transparent rules-based FX allocation/placement activities by the CBY, improving price discovery and dampening speculative FX market fluctuations.</td></tr>
<tr><td>Facilitate effective implementation of better practice compliant Business Continuity and Disaster Recovery Plan for foreign reserve management activities/systems.</td></tr>
<tr><td>Provide additional structured training sessions on FX management and tracking policies/practices with department staff.</td></tr>
<tr><td>Support comprehensive dissemination of core electronic data warehouse applications which further improve the efficiency and effective monitoring of foreign reserve allocation/investment activities, external debt management decisions, and FX risk compliance parameters, and facilitate time-effective and comprehensive publication of financial data on the CBY website.</td></tr>
</table>

I. EASING ACCESS TO MAJOR FROZEN FX ACCOUNTS IN FOREIGN BANKS

CBY liquid reserves currently stand at about $400 million, representing less than 1/3rd of a month of import financing requirements. If access were regained to all currently frozen accounts (about $450 million), that would essentially raise total liquid reserves to a little less than one month of basic import financing needs. Overall, FX reserves have fallen by around 90 percent from the high point of $2.2 billion in early 2019 (largely reflecting the rundown of KSA LOC funds to finance basic imports).

About $400 Million of the $455 million in frozen reserves (about 86 percent) is held in two major accounts – Bank of England and the Bank of international settlements. Table 1 presents the large active and frozen deposit accounts which exceed $5 million, and the figures are represented in $ millions as of September 30th, 2021.

For macro-stability purposes, a minimal rule of thumb is for a central bank to maintain precautionary reserves of at least 3-4 months of annual import financing needs. This underscores how urgent is the need for releasing the frozen funds.

Table 3: Major & Active Frozen Accounts Breakdown ($ million equivalent)

COUNTERPART	CURRENCY	USD EQUIVALENT (MILLIONS)	STATUS
Active Accounts			
Federal Reserve Bank of New York (FBRNY)	Gold	78	**Active**
National Commercial Bank - NCB (Riyadh - KSA)	SAR	143	**Active**
National Commercial Bank - NCB (Jeddah - KSA)*	USD	173	**Active**
National Commercial Bank - NCB (Jeddah - KSA)*	SAR	10	**Active**
Sub-Total Active		404	
Frozen Accounts			
Bank for International Settlements (BIS)	USD	109	**Frozen**
	EUR	177	**Frozen**
Sub-Total BIS		286	**Frozen**
Bank of England	GBP	113	**Frozen**
Bank of China Hong Kong	USD	43	
	EUR	2	
	CNY	11	
Sub-Total Bank of China Hong Kong		56	**Frozen**
Sub-Total All Frozen Accounts		455	
Total Material Counterpart Exposures		**859**	
IMF SDRs (XDR 474 million @1.41 XDR/USD1)**		**668**	
Total FX Reserves***		**1,563**	

Source: CBY, cross rates as of October 31st, 2021.
Notes: This represents the Saudi LOC. **Allocated this quarter upon increased SDR allocations by the IMF as part of a global COVID response package. ***Includes other small accounts.*

During Q4, ERLP experts have been working with CBY to move forward to finalize/transmit the required documentation and received strong indication from both the BoE and the BIS that frozen deposits release is imminent. This is a huge achievement resulting from coordinated team efforts by

ERLP experts across FXRM and AML/CFT components and a culmination of efforts in this respect over the last two years. For Q4 specifically, these included:

- KYC forms & operational usage guidelines for reserves when released for the BoE (Completed).
- Authorized signatories, KYC, and operational usage guidelines for reserves agreed-upon fee deductions for account management during the period it was frozen for the BIS.

In December 2020, ERLP FX advisors organized a consultation meeting with the CBY FX Reserves Management Department to set up a working group comprised of CBY key staff from the FX department, ERLP FX advisor, ERLP legal counsel, and AML/CFT experts. While deposits have not been released as of the date of report writing, ERLP believes this is imminent based on the efforts of this working group and the most recent detailed progress delineated above.

II. DEVELOP A FOREIGN RESERVES INVESTMENT & UTILIZATION STRATEGY & POLICY GUIDELINES

The Reserves Investment Management Policies and Guidelines prototype was designed to cover the general policies and procedures linked to reserves management. This prototype was presented to the CBY in Q3 for approval and adoption after being developed over Q2 using BIS best-practice reserves management and taking some elements of the earlier prototype developed in Q1. The proposal was well received by the CBY counterparts, with a commitment and buy-in towards full adoption in the near term once reserve balances increase to allow for portfolio segmentation. This milestone towards full adoption has been achieved after the recent additional SDR allocation by the IMF and the imminent release of frozen deposits. Both of which would result in a core balance of reserves that could be managed in accordance with the new guidelines.

In addition, the guidelines incorporated elements of the current reserves management policy of the CBY, which was prepared in conjunction with the World Bank for the CBY in Sana'a.

A sound FX reserve investment strategy enables the CBY to deliver its dual mandate of monetary stability and safeguarding financial stability. The minimal level of existing reserves should not be a prohibiting factor in developing an investment strategy and policy guidelines in line with best practice and within the bounds of the reality of the situation on the ground in Yemen and challenges faced by the CBY. On the contrary, because reserves are being built from a small base, this provides Yemen's CBY with a unique opportunity to finetune their investment strategy policy and guidelines during a period where they have the capacity to do so.

BIS best practices for reserves management incorporate an overview of trends and challenges globally, relying on data covering 80 percent of reserves under management by central banks and monetary authorities. Some of the *trends* documented include i) an increased focus on returns; ii) a more structured approach to decision making; iii) strengthened risk management (both for financial risks and operational risks); and iv) increased requirement for public disclosure. Some of the *challenges* highlighted include: i) balancing returns vs. risks; ii) choosing a benchmark currency; and iii) how much public disclosure.

According to WB/IMF data, global central bank reserves were estimated at USD11.0 trillion as of 2020, more than a six-fold increase since the Asian Financial Crisis, while holdings of non-traditional reserve currencies such as the AUD and CAD increased.

Additionally, the strategy provides specific policy guidelines for the investment of foreign reserves while considering some general criteria for determining the size of investment portfolios, the eligible asset classes, diversification, maximum maturity, and performance benchmarks. However, it is worth noting that the size of the liquidity and investment portfolio needs to be periodically reviewed based on forecasted liquidity needs, the expected medium-term foreign exchange needs of the country, and the assessment of the vulnerability of the balance of payments.

The investment strategy also sets guidelines for assessing return objectives, portfolio segments, currencies, acceptable instruments & counterparts, risk tolerance, risk parameters, benchmarks, performance attribution, and management processes are all defined in the policy guidelines.

The importance of a sound organizational setup for efficiently managing reserves cannot be overstated. As such, ERLP also introduced a proposed governance structure for CBY reserves management. This is in the form of a three-tier governance structure where the responsibilities for strategic, tactical asset allocation, and actual portfolio management are clearly segregated. Once in place, this framework will facilitate a disciplined implementation of the asset allocation decision and should help clarify accountability, manage risks, and promote a risk awareness culture across the organization.

An essential requirement for transparency and accountability is a clearly specified investment process combined with a sound governance structure. If the central bank decides on an active investment style, an increasingly popular practice is to have a three-tier governance structure comprising an Oversight Committee, an Investment Committee, and Portfolio Management units that are responsible for strategic and tactical asset allocation and actual portfolio management. This three-tier governance structure within the context of an investment process that allows active reserves management starts from a passively managed strategic asset allocation, adds a tactical asset allocation, followed by actual portfolio mandates. *The aim of this setup is to improve the risk-return profile of the strategic benchmark by providing the necessary flexibility to take advantage of short to medium-term investment opportunities.*

III. DEVELOPING AN FX PLACEMENT/ALLOCATION FRAMEWORK, FX AUCTION SIMULATIONS, AND TRANSITIONAL ARRANGEMENTS

FX advisors developed a comprehensive framework for the CBY to regulate market interventions and pursue FX placement/allocation activities utilizing the Refinitiv Platform or similar, with transitional arrangements over a two-year period for a blended system. The CBY would be able to enter bids on behalf of participants, which do not yet have direct access to the platform. This FX auction regulatory framework provides flexibility for the CBY to intervene as needed, defend the stability of the Rial, and revert to its traditional regulatory and oversight function once the interbank FX market is sufficiently developed to undertake this role. This regulatory framework is based on country best practices while accommodating the monetary policy specifics in the context of Yemen.

In Q4, for the first time using an electronic-based platform, two system-wide simulations were conducted with the participation of banks across Yemen in preparation for live auctions in the near term. The two simulations saw participating banks able to submit multiple bids for a notional amount of USD50 million, with each bank allowed to bid for total amounts of up to USD5.0 million and a minimum to maximum bid range of between YER1,000 to YER1,300. The FXRM component, in conjunction with the CBY, also established a set of eligibility criteria/requirements for money exchange bureaus to participate in auction operations through bidding via commercial banks. The CBY also maintains the right to bid on behalf of agents directly under robust governance arrangements if they do not at the time being have access to the Refinitiv online platform. However, transitional arrangements outlined in the proposed auction regulations dedicate that within two years of regulation adoption, all bidders must be on the Refinitiv platform and/or similar, whichever the CBY adopts for the execution of its FX auction mechanisms. This will not only ensure an efficient FX auctioning mechanism for the CBY but also guarantee that the infrastructure for the development of an FX interbank market is built in parallel.

The team engaged with the CBY on how to implement the initial FX auctioning system launch and how to use proxy bids on behalf of those who would not have access to the system in the early days of the rollout. For example, the CBY would publish the eligibility criteria on its website and in periodic reports in addition to those being predefined on the Refinitv platform during the onboarding phase. All licensed banks are eligible to participate. Foreign exchange bureaus are also eligible to participate to ensure market completeness and fair, competitive practices.

Annex 02 provides further details on proposed transitional examples of templates for banks or money exchange companies to be used in order to participate in auctions should they not have access to the Refinitiv platform. For example, the bank/exchange bureau must provide proof of licensing and sign a commitment form with referenced reporting criteria that must be met (see *Annex 02 – Macro – FX – Updated FX Auctions Policies, Procedures, Regulations and Transitional Arrangements*). It is also mandatory for commercial banks to open separate bank accounts hosted by the CBY for settlement purposes. The CBY must be authorized in writing to complete any settlement transaction through access to these accounts.

In the case of exchange bureaus, they must arrange for financial coverage/collateral by their representing bank, which acts as guarantor. Settlement of auctions will be pursued between the CBY and the representing bank. Then another settlement transaction will take place between the bank and the money change company to close the cycle.

The actual exchange of funds between the CBY and commercial banks should take place via electronic transfers, not in cash. This is a challenging requirement given that the Yemeni economy is primarily cash-based. However, this is arguably a crucial element to ensure transparency and comply with banking supervision best practices. The settlement of auction transactions would take place on a T+2 basis.

Proposed Auction Regulations

The auction regulations were drafted, taking into account the urgent need to move the FX allocation/trading framework in a more transparent and competitive manner against the backdrop of an opaque regulatory and operational framework currently in place for FX placement activities by the CBY. Prior to drafting the proposed regulation, the FX advisory team reviewed a wide set of relevant financial laws, including the CBY Law No. (14) 2000, Banks Law No. (38) 1998, Islamic Banks Law No. (21) 1996, as amended by Law No. (16) 2009, Money Exchangers Republican Decree No. (20)1995, as amended by legislation No. (15) 1996, and Anti-Money Laundry and Combatting Terrorism Law No. (1) for 2010, as amended by Law No. (17) for 2013.

The proposed draft lays out the main requirements for participation in FX auction activities, eligibility criteria, and related transitional arrangements. In the initial two-year phase, Refinitiv as the FX auctioning system will be rolled out and/or other chosen platforms adopted in parallel, such as Bloomberg, with agents allowed to bid under robust governance arrangements through the CBY using the templates provided in Annex 02. However, two years from the date of adoption of the proposed regulation, all players would need to have direct access to the Refinitiv and/or Bloomberg platforms as per the instructions of the CBY. This indirectly ensures that the core infrastructure needed to build an FX interbank market is being phased in immediately from the date of proposed regulation adoption.

The draft also lays out the auction structure and allocation procedures. The basic guidelines provided in the draft regulation according to the CBY ensure the following:

1. CBY interventions will be made through frequent FX auctions, whereby auctioning becomes the ultimate way of intervention by the CBY in the FX market.
2. The auction amount is determined by the CBY as a proportion of the aggregate daily demand of foreign currency (with a maximum allowed participation by each bidder).

FX Auction Simulations & Training

The team conducted two sets of system-wide FX auction simulations using the Refinitiv platform. This involved all steps from setting auction eligibility criteria, bid structure, bid limits, and the different ways of adjudication. The two simulations saw participating banks submit multiple bids for a notional amount of USD50 million, with each bank allowed to bid for up to USD5.0 million and a minimum to maximum bid range of between YER1,000 YER1,300. The weighted average price of the first auction was YER1,150/USD1, and the second auction simulation was YER1,232/USD1. Both system-wide live simulations included the following steps:

1. Installation of the Refinitiv platform at all participating banks in a demo version.
2. The auction participant onboarding process was done as if the planned FX simulations were upcoming live auctions, with authorized persons and key data identified, in addition to eligibility to participate and to place bids on behalf of other parties.
3. Between the Refinitiv team and the CBY team, the auction parameters in both cases, number of bids by participant, bid maximum and minimum, minimum bidding and maximum bidding amount, auction duration, etc., were set.
4. Two system-wide auction simulations were conducted in two consecutive weeks, with full support from Refinitiv on the ground to all participating banks and provision of system training.
5. Different auction adjudication and allocation processes were chosen and the impact on final auction pricing demonstrated.
6. Final auction announcement screens demonstrated and how they would instantly be communicated to participants on the Refinitiv platform.

DESCRIPTION OF RESULTS

The auctions were announced for amounts USD 50 million. Participating banks submitted multiple bids, representing more than 90 percent of banks operating in Yemen in terms of total assets in the first and second auctions, respectively.

The bids were allocated on a pro-rata basis based on the submitted bid pricing. The simulation fully demonstrated the advantages of implementing the Refinitiv system for Yemeni players in the FX market and how it could serve as the core infrastructure for developing the FX interbank market in Yemen. The next step is to launch a system-wide live auction with participation from a number of banks and exchange houses and set the auctioning schedule to be adhered to, with regular auctions taking place thereafter.

IV. SYSTEMIC FOREIGN RESERVE ALLOCATION, STATUS REPORTING FRAMEWORK, AND DATA WAREHOUSE APPLICATIONS

The data system at the CBY is quite rudimentary in nature, with no linkages to input feeds and output feeds into reporting and monitoring functions, nor is a historical database being maintained. An ad hoc reporting framework was used to monitor foreign reserves allocations and status reporting. While the system in place was minimally adequate for rudimentary FX management needs, modern data practices require a significant upgrade with updated products and processes in the FX Reserve Management Department and a new Data Warehouse System (DWH). The current system, for example, cannot easily retrieve necessary information or produce standard reports that include charts and graphics. A DWH provides the means to produce clean, accurate, timely, and integrated data. The DWH should allow for data to be drawn from all interfacing applications, Refinitiv (Reuters) for a various suite of indicators and for capturing FX trading values and volumes for envisaged CBY auctions, and at a later stage, all FX interbank market transactions through the Refinitiv add on Market Tracker function.

In addition, during Q4, the CBY processed its Bloomberg subscription. With all data and analytics from this platform also planned to be incorporated into the DWH. The DWH should also allow for data to be drawn from the Core Banking System and fed back to the Core Banking System, from SWIFT systems and SWIFT Scope output with the necessary interfaces developed for data input and output flows. A well-designed DWH specifically would allow the central bank to:

- Build or mine historical data,
- Make timely decision making on risk management,
- Conduct market research and analysis, and generate routine reports,
- Allow the CBY reserve management users to quickly access critical data from some sources all in one place,
- Provide consistent information on various cross-functional activities,
- Conduct ad-hoc reporting and query,
- Integrate multiple sources of data to reduce stress and load on the core system,
- Reduce total turnaround time for analysis and reporting, and
- Store a large amount of historical data, allowing the CBY reserve management team to analyze different periods and trends to make future predictions.

As the FXRM practice within the CBY evolves, the DWH would also be utilized in a more advanced manner, with analytical functions being more developed and leveraged, with the basic core functions being utilized less or more run or more in an automated manner.

With the help of ERLP, a basic Excel spreadsheet for systemic foreign reserves allocations and status reporting framework was developed and finetuned in Q1. In Q2, this spreadsheet was refined, and in Q3, the spreadsheet was fully linked to the Refinitiv terminal to automatically update every time it is opened on the platform. The design of an FX data warehouse and requirements was completed in Q2 and Q3, and implementation progressed significantly. In Q4, the CBY subscription to Bloomberg data and analytics will also be incorporated in the DWH.

The design being implemented focuses on interfaces with several technological frameworks, including Refinitiv (Reuters), Bloomberg, SWIFT, and the Core Banking System and all their associated functionalities. In turn, these can give real-time updates of the reserves portfolio, provide return and risk metrics in real-time, and feed this data into the FX data warehouse system. The FX data warehouse will capture on a real-time basis the status of foreign reserve allocations and pricing based on the FX auctioning system described and will also produce reports on the FX interbank market once it starts functioning. In addition, the choice of the most appropriate portfolio management systems and information sources will all feed into the status reporting frameworks via the appropriate interfaces.V.

V. REPORT ON DMFAS INSTALLATION AND DEBT STATISTICS FORECASTING STATUS FOR FX RESERVES MANAGEMENT PURPOSES.

The debt management system is one of the key elements to optimal reserves management as it: (i) provides accurate estimates of the outstanding debt stock and obligations at the level of the sovereign, which must be covered by foreign reserves (this includes details such as loan terms and conditions, interest rates and benchmarks, installments payable, grace periods, or moratoria if any). (ii) DMFAS output will be linked to the reserves data warehouse; and (iii) the ERLP proposed prototype reserves management policy is based on a segregated portfolio approach with three sub-portfolios: one for liquidity purposes, one for liabilities matching, and the third for yield enhancement and long-term investment purposes. The system in question is DMFAS6.0 (it is important to specifically note version to be installed).

During Q4, the CBY signed the agreement for the ERLP FX team revised financial and technical proposal from UNCTAD for a total implementation cost of under USD300,000 (from c. USD500,000 being the previous financial proposal from DMFAS), which was secured in Q3. Hardware costs were also estimated during the period for a total of c. USD100,000. The much lower cost proposal from DMFAS was due to a detailed investigation and presentations done by competing Crown Agents System (now branded as Meridien), which has rolled out a much more advanced system, with features such as straight-through processing (STP) and cloud-based applications (very useful for data back-ups and disaster recovery planning), with the cost of this system being quoted at c. USD300,000.

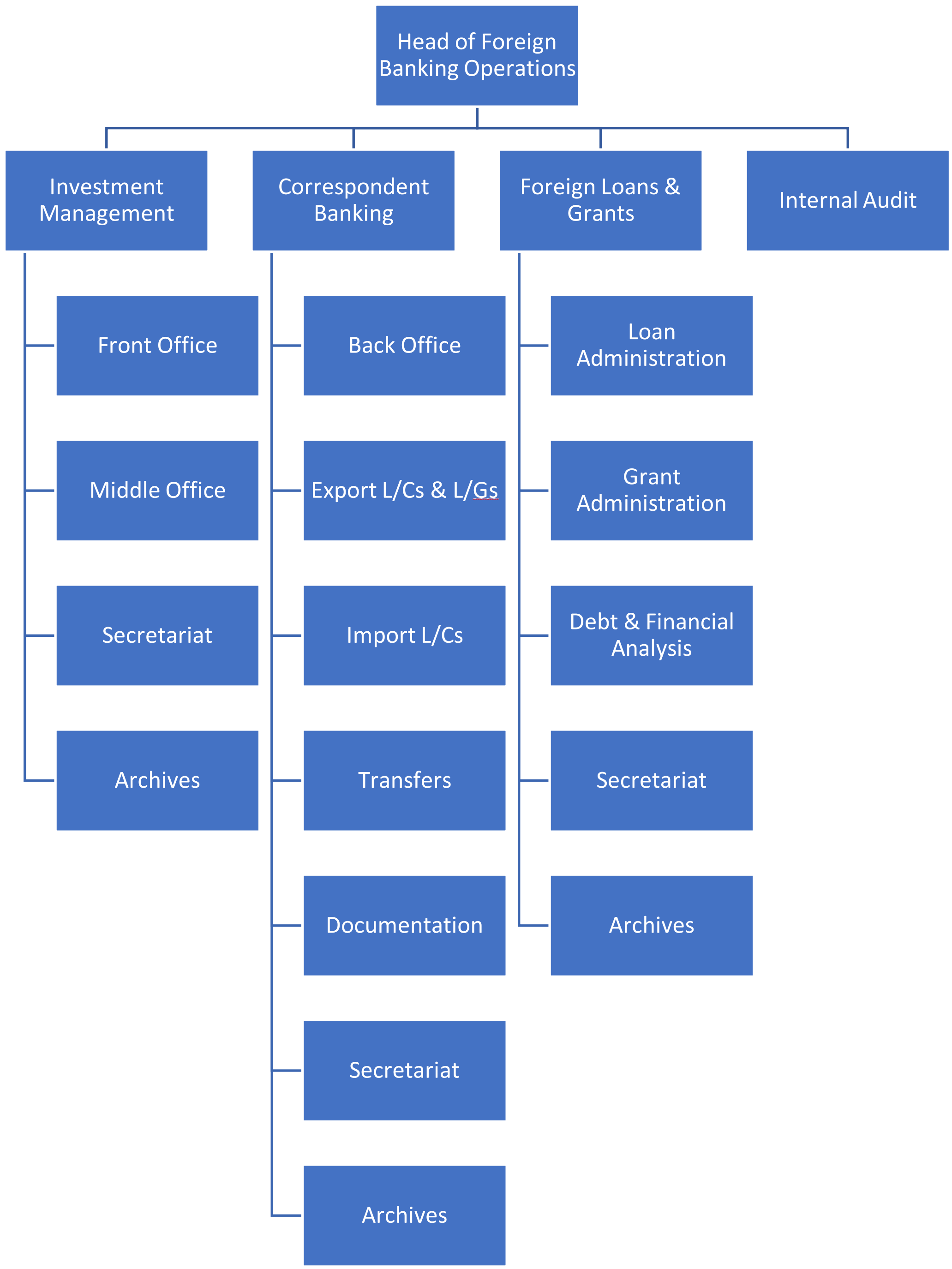
The Crown Agents system includes features that will only be present in DMFAS7.0 and is expected to be rolled out by mid to end 2022. However, ERLP did not want to lose momentum on debt systems installation and implementation owing to CBY Board approval being granted during Q3 for DMFAS6.0 installation. The cost of advocating a new system, along with internet instability in Yemen, which hinders the use of the advanced applications, dictated the pragmatism in moving ahead with DMFAS6.0 implementation to ensure that the informational output from this system for reserves management purposes is produced as early as conceivable. This will minimize any unexpected negative surprises or unexpected cash-flow requirements that further jeopardize a precarious currency situation.

Training on the DMFAS system is envisaged to take place in Cairo in December 2021, with support and knowledge sharing with the Central Bank of Egypt's DMFAS teams, coupled with the standard training provision from UNCTAD and by ERLP Senior Debt Management Expert, Dania El Osta.

VI. REPORT ON ADOPTION OF MODERNIZED FOREIGN RESERVES DEPARTMENT ORGANIZATIONAL STRUCTURE AND FX RESERVES MANAGEMENT BEST PRACTICE GUIDELINES.

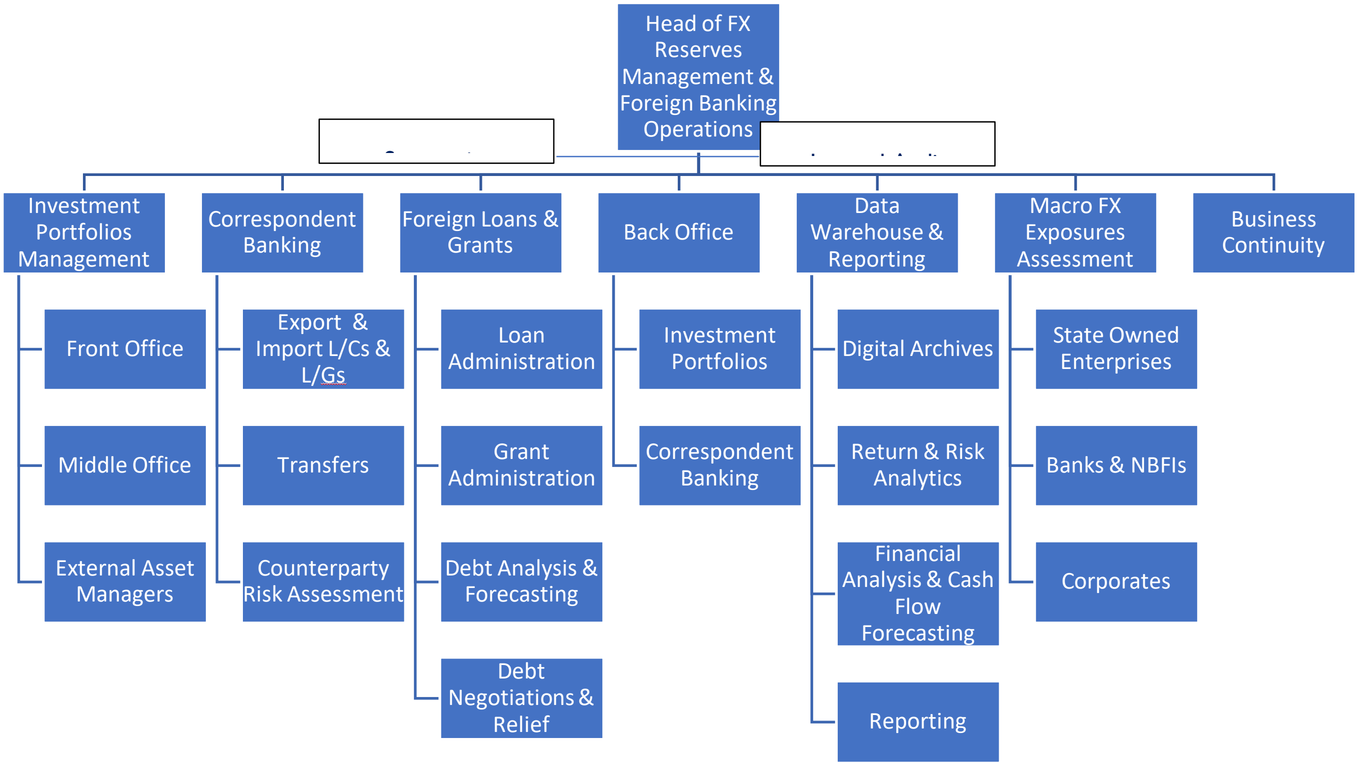
The following Figure 1 represents the existing FXRM department organizational structure; currently the department is called The Department of Foreign Operations. However, ERLP proposes that the department be called FX Reserves Management and Foreign Banking Operations.

Figure I: FXRM Current Organizational Structure



The following Figure II represents the proposed FXRM department organizational structure. This proposal was discussed in a workshop with the CBY senior FX Reserves Management Team in Q3 and was well received. During Q4, further refinements to the functions were discussed with the counterparts and buy-in to start the migration to a new structure along the major proposal presented and respective recruitment. Some functions, such as Macro FX Exposures Assessments, will be adopted after other core functions have been upgraded, such as front-office and back-office functions.

Figure II: FXRM Proposed Organizational Structure



The proposed organizational structure has seven Divisions as follows: i) Investment Portfolios Management; ii) Correspondent Banking; iii) Foreign Loans and Grants; iv) Back Office; v) Data Warehouse & Reporting; vi) Macro FX Exposures Assessment; and Business Continuity.

The first four divisions exist in the current structure; however, ERLP is proposing some changes to their organization, while the three latter divisions are new divisions the project is proposing to be created.

i) Investment Portfolios Management

This division is proposed to consist of the front office, middle office, and adding an external asset managers (oversight) sub-division. This is looking to the future once the CBY starts building its reserves management balances and implementing the proposed investment strategy, which includes minor allocations to external asset managers in line with global best practices. The new sub-division will be responsible for managing the contractual relationships with the external asset managers, fee negotiations, reporting, and oversight of external asset manager mandate targets, returns, and risks. ERLP proposes removing the archives and secretariat to sit at a centralized level for the whole FXRM department.

ii) Correspondent Banking

The division is proposed to consist of export and import L/Cs and L/Gs as one merged sub-division rather than two in the existing structure; transfers and a newly formed sub-division for counterparty risk assessments, where it is envisaged that dedicated analysts will be monitoring specifically periodic financials and all relevant data analytics sources on correspondents. On average, in the financial services industry, an analyst is in charge of anywhere between 7 to 15 financial institutions to cover. As the CBY reengages with the outside world, the number of correspondents it is engaged with will increase significantly, and therefore dedicated resources to monitor these relationships will be crucial. An unfavorable correspondent banking relationship would result in two undesirable risks: the risk of financial risk if the counterpart defaults and reputational risk about the capacity of the CBY to assess counterparty risk.

This does not conflict with Middle-Office functions but will mean they will focus on limit implementation and breach monitoring rather than assignment. The correspondent banking division is the first natural recipient of correspondent bank financials and other information, so placing this sub-division in the same division avoids duplication or loss of information between divisions.

ERLP proposes back-office moves as a new division to handle both Investment Portfolios Management transactions back office and correspondent banking back office to ensure full organizational segregation and enough resources to cover the expected volume of transactions as reserves grow exponentially.

ERLP also proposes that the secretariat and archives are again removed and centralized, the latter within the proposed newly created data warehouse division and in a digitized manner.

iii) Foreign Loans & Grants

For this division, ERLP is proposing the addition of one sub-division to oversee debt negotiations and debt relief. Yemen is about to embark on many discussions on the topic and having dedicated resources to cater to this would help optimize renegotiated terms in an informed manner. The project again proposes the removal of the secretariat and archives into a centralized structure.

iv) Back Office

This new division is proposed to handle both the investment portfolio management transactions back office and correspondent banking back office. As mentioned earlier, to ensure full organizational segregation and enough resources to cover the expected growth in the volume of transactions as reserves grow exponentially.

v) Data Warehouse & Reporting

This proposed division will act as a second 'brain' and 'memory' store for the FXRM Department. It is proposed to include the following sub-divisions: i) Digital Archives (centralized archives for the whole department that are digitized and can be accessed by anyone with the right authority access level); ii) Return and Risk Analytics Sub-Division, which uses all the historical data and forecasts uploaded to produce the required the return and risk analytics for the new proposed investment portfolio policy framework and its three segregated portfolios; iii) Financial Analysis and Cash Flow Forecasting Sub-Division; as all data feeds into the data warehouse, this sub-division will be in the best position to most efficiently produce short-term, medium-term and long-term cash flow forecasts to inform reserves management decision making.

This sub-division will also feed this information into the other divisions and continuously obtain updates with a two-way channel flow occurring.

It will also present its reports through the head of the division and a dotted line to the investment committee to provide the necessary information for its short term, medium-term, and long-term decision-making processes for optimal reserves portfolio management.

Finally, the fourth and last sub-division for the new proposed Data Warehouse & Reporting Division is the sub-division in charge of periodic and ad-hoc reporting. This sub-division will be producing all reporting on FXRM portfolios on a periodic basis, including any requested ad hoc reports.

vi) Macro FX Exposures Assessment

This division could be set up later as it will be aggregating information on FX exposures at the macroeconomy level. These area exposures would ultimately result in requests to the Central Bank of Yemen to cover any shortfalls that might arise on the back of the principal borrower unable to provide the required foreign currency. The CBY, as the LoLR, will have to step in. If the CBY does not have a clear picture of the magnitude and maturity of these exposures, it could be faced with sudden requests for large FX outlays which were not forecasted or accounted for. It is proposed to have sub-divisions for assessments of FX exposures of a) state-owned enterprises; b) banks and non-bank financial institutions; and c) corporates. A large exposure by a state oil and gas corporation, for example, could translate into a liability (implicit or explicit) for the Central Bank of Yemen to cover.

vii) The seventh and last proposed new addition to the department divisions is a business continuity sub-division. While there is a function at the level of the CBY which would cover CBY wide business continuity, the sensitivity of FXRM activities and foreign banking relations means that it is crucial to also have a dedicated department division for this. It is proposed to handle all backup and disaster recovery planning to ensure no losses occur because of lack of secondary trading venues, data backed up on servers, or the integrity of the DWH compromised. Trading disruption, for instance, during periods of market volatility could cause high losses.

This sub-division is also proposed to have protocols and processes explicitly tailored in the case of disruption to any FXRM activity to ensure minimum impact on business continuity.

VII. REPORT ON TRAINING ON BEST PRACTICES FX RESERVES MANAGEMENT.

The granular holistic reserves management best practices program and workshop were designed over Q1 for delivery in Q2, Q3 and the final components planned for delivery in December 2021. The objective of this tailored program on FX Reserves Management Best Practices for the CBY is to provide capacity building on the pillars of modern portfolio management and enable the formulation of and pilot application of a CBY reserves management policy.

The program is structured in two parts: (i) Modern Portfolio Management & Global Capital Markets and (ii) FX Reserves Management CBY Applications, with the latter to be based on Yemen-specific data inputs provided by the CBY. It ran for two days in July 2021 in Cairo, Egypt, in a face-to-face setting and a number of short sessions taking place virtually in September 2021, with the final two-day components planned for December 2021 in Cairo distributed across nine sessions.

At the end of the program, participants are expected to understand, calculate, synthesize and apply modern portfolio management analytics, techniques, and policies to the practice of reserves management at the CBY. Applications will be both in line with international best practices and have a Yemeni-focused implementation strategy.

1.1.3 PAYMENTS SYSTEM REFORM

BACKGROUND

ERLP provided the CBY with the guidance and support required to fully establish and operationalize a Payments System Department (PSD), which is currently staffed by 14 employees. This exercise entailed a robust elaboration and implementation of job descriptions, workflow requirements, and related HRM capacity building and training activities. In several areas, ERLP also supported the Bank in establishing the infrastructure required for the efficient and time-effective management of payment system informational flows.

These areas include: (i) improving a centralized check clearing system, (ii) enhancing the current core banking system (giving the CBY the ability to consolidate commercial banks accounts in CBY Aden and across all branches for the first time), (iii) and the full activation of the SWIFT environment, which allowed the CBY to streamline the inter-bank settlement processes and improve the financial intermediation process. These initiatives gave CBY more control over commercial bank accounts and the transactions that affect those accounts. It also streamlined and shortened the settlement cycle transaction flow.

ERLP helped the CBY derive appropriate lessons learned from the same-day, near-real-time settlement system that can be applied in the planning and implementation of robust RTGS and ACH systems in the future.

A white paper on the establishment of the National Payment Council was drafted by ERLP and adopted by CBY, which will facilitate institutional dialog and serve as a consultative body for the Central Bank. The council will also serve as a catalyst for the development of the national payment system. Additionally, the project submitted the finalized RTGS and ACH tendering documents to CBY. These documents are ready to be published by the CBY after internal approvals are finalized. ERLP also worked with the Bank to define a practical, nationwide deployment of Mobile Financial Services (MFS) to deliver a pilot to electronically pay the salaries of selected government staff. The proposed architecture would allow the CBY to deploy and manage MFS services before eventually transitioning the operational aspects to the private sector. Supervisory control would remain with the Central Bank.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

Table 4: Q4 Payments System Activities and Deliverables

ACTIVITIES	DELIVERABLES
Continue provision of training/outreach programs to CBY payments system division, covering core payment system functional responsibilities.	I. Targeted training/outreach programs (minimum of 6 sessions) provided to CBY payments system division, covering core payment system functional responsibilities. II. Further progress report provided on the implementation of near-same day electronic interbank settlement system for the commercial banking sector.
Monitor/refine as needed full implementation of the automated check-clearance system.	
Trouble-shoot ongoing “go-live” implementation of near-same day electronic interbank settlement system for the commercial banking sector; and further expand	

ACTIVITIES	DELIVERABLES
implementation of interbank short-term liquidity management (borrowing/lending) activities.	III. The MFS-based public sector salary payment program (in coordination with the ERLP fiscal team) further expanded to cover at least 30% of public sector employees. IV. Comprehensive tender documentation/bidding documents finalized/issued, which establish sound business and technical requirements for automated real-time gross settlement (RTGS) and small-value net settlement (Automated Clearing House/ACH) systems for Yemen.
Further refine/expand MFS-based public sector salary payment program to cover at least 30% of public sector employees (in coordination with ERLP fiscal team).	
Guide finalization/promulgation of tender documentation/bidding documents establishing business and technical requirements for automated real-time gross settlement (RTGS) and small-value net settlement (Automated Clearing House/ACH) systems for Yemen.	

I. TARGETED TRAINING/OUTREACH PROGRAMS (MINIMUM OF 6 SESSIONS) PROVIDED TO CBY PAYMENTS SYSTEM DIVISION, COVERING CORE PAYMENT SYSTEM FUNCTIONAL RESPONSIBILITIES.

The majority of the staff in the PSD appointed over the past quarter were new in this field and had limited experience working with payments systems. To enhance their capabilities, the ERLP payment advisory team provided ongoing training and capacity-building interventions. The training program during Q4 was broken down into the following series of six sessions. Each session was followed by a round of questions and answers with the department's team members.

The **first session** covered the CBY's legislative framework, the Central Bank's responsibilities, and the purpose of establishing a payments department.

The **second session** focused on the main objectives of a payment systems department, as well as how these activities relate to the legal framework.

The **third session** focused on the PSD's organizational structure, the functions of internal departments/divisions, workflow mechanisms, and relationships with other CBY departments.

The **fourth session** concentrated on electronic payment instruments, including an explanation of the benefits and drawbacks of each and the role of the Central Bank in enabling electronic payments. A special focus was directed to electronic payments via mobile phones and how this service could be provided to promote financial inclusion and contribute to economic growth.

The **fifth session** was devoted to elucidating the national payment system's concepts and components.

The **sixth session** provided a solid understanding of payment principles such as clearing, settlement, and the relationship between clearing and settlement systems, as well as the different forms of settlement such as real-time gross settlement and deferred settlement.

The PSD will be strengthened and further operationalized through the provision of more advanced training during Y2. This targeted capacity building is expected to have a significant, positive impact on implementing a modernized national payment system and strengthen the outreach and diversification of the financial intermediation system.

II. FURTHER PROGRESS REPORT PROVIDED ON IMPLEMENTATION OF NEAR-SAME DAY ELECTRONIC INTERBANK SETTLEMENT SYSTEM FOR THE COMMERCIAL BANKING SECTOR.

From September 2020 to September 2021, the project addressed the need for improvements in the SWIFT environment to ensure its stability at both the Central Bank and other financial institutions. In addition to establishing the PSD and raising the skills of its employees to perform basic payment systems functions, ERLP worked jointly with the CBY on launching a pilot project for a same-day, near-real-time settlement mechanism. ERLP advisors during this period also made additional related field visits to commercial and Islamic banks. The visits assessed banks' willingness to participate in the project and identified technical and institutional obstacles and issues that must be addressed to support implementation, as well as help identify practical solutions to address these challenges.

Progress in these areas led to the launch of the same-day, near-real-time settlement mechanism of local funds transfers through SWIFT during the end of Q3/beginning of Q4. The project was successfully rolled out by gradually transitioning from the initial implementation to the full launch stage at the beginning of Q4, with the participation of all banks.

ERLP continued to follow up the full implementation of the new settlement mechanism during Q4. The project helped the PSD monitor the use of the settlement service within the CBY and follow up with the banks to ensure their continuing commitment to using this new mechanism - especially to make sure that no transactions were executed manually. Some banks experienced initial operational issues adapting to the new way of working, making CBY/ERPL oversight and guidance critical to the initiative's success. CBY staff also needed time to adapt to the new process, but with ERPL support, they were able to rise to the challenge. ERLP will continue to follow up with the CBY and the banks to ensure full compliance with this mechanism.

In parallel with these activities during Q4, ERLP, in cooperation with PSD, studied and analyzed the transactions not included in the launch stage. These high-value transactions are done manually or through checks, resulting in a longer than desirable processing cycle. Accordingly, a circular was issued to all banks to process these transactions through SWIFT to achieve same-day, near-real-time settlement. All parties accepted this initiative, and implementation began.

In addition, ERLP discussed a pilot project for liquidity management with the CBY and a number of Yemeni banks, which was well received. Accordingly, ERLP prepared scenarios that will be applied between the commercial/Islamic banks and the Central Bank, based on the SWIFT environment and current core banking system. These scenarios will cover lending and borrowing operations. Implementation of the project will occur during the second half of October or the beginning of November, as agreed with the CBY.

III. THE MFS-BASED PUBLIC SECTOR SALARY PAYMENT PROGRAM (IN COORDINATION WITH THE ERLP FISCAL TEAM) FURTHER EXPANDED TO COVER AT LEAST 30 PERCENT OF PUBLIC SECTOR EMPLOYEES.

During Q4, ERLP initiated joint discussions between the CBY, MOF, and MOCS to implement a pilot project for electronic salary payments. The work teams formed, agreeing on facilitating the initiation of the pilot project by the end-year of 2021 or early 2022. This, in turn, will likely require targeted technical support to MOCS to update relevant employee databases and enhance communications with government agency spending units and the MOF.

This project is quite important, given the potential impact that its effective implementation could have on promoting wage-bill rationalization across the public sector. A two-phased approach has been developed for delivering electronic salary payments to the staff at government ministries, and this has been well-received by the MOF, MOCS and the CBY. The first phase will be a small pilot and can be carried out within 2-3 months. The second phase would be geared towards broadening the implementation to other government entities, and expanding service provision engagement with the private sector. Additional details are set out below:

1. Under the guidance of ERLP, the first phase would entail completion of a pilot project with the participation of CAC Bank (which is proactive and has solid technical infrastructure), the two ministries, the CBY, and two government agencies to be determined. A simplified database will be created, under the supervision of the MOCS, containing details of employee salaries. Shamil Bank will be the payment service provider, and has expressed its commitment to helping the selected agencies open accounts for its employees.

   Shamil will provide all facilities such as eWallets, banks accounts, and ATMs for the employees, plus selected points of sale. At the end of the first month, after these preparatory activities have been completed, the salaries of the agency staff will be paid electronically into their eWallets. Once the pilot has been established, ERLP will expand the service to include more government agencies. These activities will need dedication and support from all parties involved in the project, in addition to clear instructions from the government.

2. The second phase of the project will entail work with the CBY to identify and deploy mobile financial service (MFS) providers to pay the salaries of more public sector employees through the expansion of the CBY/MFS infrastructure. In this regard, ERLP and the CBY have collaborated to define a practical, nationwide deployment strategy for MFS to pay the salaries of additional government employees. The proposed architecture would allow the CBY to initially deploy and manage MFS provision, before eventually transitioning the operational aspects to the private sector.

   Supervisory control would be retained by the Central Bank. In the service architecture proposed, the CBY would be the exclusive issuer of eMoney in Yemen and maintain the MFS Trust Accounts, thus ensuring an equivalence between the eMoney issued and the fiat currency held in trust. Yemeni Rials would be deposited at CBY, against which the CBY would issue eMoney to the banks it has approved. These banks would then credit the individual holders of the eWallets. To provide an enhanced ability to reach the eWallet holders, banks approved by CBY may appoint agreed-upon entities, such as money exchange houses, as their sub-agents supporting consumer registration for cash-in and cash-out transactions. Further phases of the project would expand the number and variety of MFS activities offered.

Initial discussions with senior Central Bank management have generated a favorable reaction. The CBY is now reviewing the proposition in detail with the project, and is expected to provide a formal response in early Y2Q1.

IV. COMPREHENSIVE TENDER/BIDDING DOCUMENTS PROCUREMENT OF RTGS AND ACS SYSTEMS FOR YEMEN.

ERLP worked with the CBY to prepare and finalize a tendering document to help the Bank solicit proposals for suitable RTGS and ACH systems. These documents were finalized and submitted to the

CBY for their formal approval and publication during Q4. In preparation for the tendering exercise and the project's implementation, CBY senior management expressed full support for the initiative, and expressed their appreciation for ERLP's efforts to date. To ensure the coordination of efforts, the CBY will form a project team, as suggested by ERLP, comprised of representatives from different departments (including PSD, ITD, Domestic Financial Operations And International Financial Operations).

Since this is the first major procurement that the PSD has undertaken, project advisors will provide detailed presentations explaining the procurement documents, and train CBY staff on the procurement process following international best practices. This capacity-building can then be applied to other procurement exercises in the future, facilitating the Bank's move towards self-sufficiency.

The CBY plans to finalize internal preparation and publish the RFP before the end of 2021. ERLP will continue to provide support and guidance through the procurement and implementation process. The full operationalization of the RTGS/ACH system is expected within 2-3 years.

(See *Annex 03a – Macro – Payments – Comprehensive tender documentation/bidding documents towards automated RTGS and ACS for Yemen* and *Annex 03b for the matrix)*

NEXT STEPS

ERLP will continue to build upon the early-stage payments system reform efforts described above and continue the strategic transformation of the Yemen payments system. Particular focus will be given to further enhance the organizational capacity and functionality of the newly established PSD, and further expand the advancement towards establishing a more efficient National Payment System. Implementation will continue on the ACH/RTGS systems, which are core requirements for allowing the real-time discharge of settlement and clearing obligations. Also, ERLP will increase efforts to expand the same-day, near-real-time mechanism activity to increase the value and volume of transactions. For example, transactions conducted between banks and government accounts kept by the CBY will be included, as well as those facilitating implementation of the liquidity management pilot program.

ERLP will also continue to work intensively with the CBY, MOF and MOCS to implement the above-described pilot program for salary payments based on the Mobile Financial Services (MFS) architectural approach, which can support the efficient payment of public sector salaries. This will build on initial efforts being made by the ERLP Payments advisory team in collaboration with the CBY, MoF, and MoCS, designed to jumpstart a pilot activity (in coordination with state-owned CAC Bank) to pay government salaries for selected agencies through bank accounts and prepaid cards, and then moving toward more widespread/systemic use of MFS for salary payments and engagement of the private sector in payment processes.

In this regard, additional regulatory reforms are envisaged during Y2, such as the Regulatory Sandbox. This will allow FinTech start-ups and other innovators to conduct live experiments in a controlled environment under a regulator's supervision. Consumer Protection Regulations will be developed as well to protect and promote the interest of consumers against unethical and unfair practices by payments service providers. A QR Code Regulation, which is necessary to develop standards to establish uniformity and provide equal opportunity for all players in the payment space, will also be introduced in this regard.

In addition, a Payment Systems Oversight Framework will be introduced during Year 2 to promote the safety and efficiency of the national payment system through (i) Preventing or controlling systemic risk; (ii). Fostering fair access to the payments systems by market participants; (iii). Promoting competition in the payment services market; (iv). Protecting consumer interests; and (v). Fostering cooperation with other regulators.

1.1.4 COVID-19 MACROECONOMIC, FISCAL, AND FINANCIAL IMPACT PUBLIC SECTOR RESPONSE AND POLICY RECOMMENDATIONS

Yemen had witnessed a year of relative economic stability just before the outbreak of the pandemic crisis, which was reflected in a positive growth rate for the second year in a row in 2019. This growth was primarily driven by the recovery of oil production and exports, which reached its peak in 2019 at $1.1 billion after a contraction of about 40 percent during 2014-2017.

The outbreak of the COVID-19 pandemic in early 2020 and the subsequent lockdowns and collapse of oil prices generated contractionary macroeconomic adjustment pressures worldwide. This included a significant reduction in export demand for oil and other primary commodities and a concurrent reduction in international commodity prices. In conjunction with the pandemic spread, the drop in oil receipts had significant adverse effects on Yemen's economy. The recent recovery of oil prices is expected to improve slightly Yemen's macroeconomic performance, especially its fiscal position with less need for direct financing from the CBY.

Table 5: COVID-19 Impact Activities and Deliverables

ACTIVITIES	DELIVERABLES
Present an updated follow-up on the CBY COVID "tracker" instrument. Provide a concise updated economic overview covering the macro-financial performance impact of the COVID Crisis and related response measures. Provide a concise, updated analysis of the impact of the crisis on key money supply and liquidity indicators. Review recent debt relief initiatives related to the IFI COVID response strategy, including any pending requests made by the government for the postponement of loan repayment during the Q3/Q4 period.	A comprehensive final report on all related activities. This report will include: - Updated follow-up on the CBY COVID "tracker" instrument - A concise updated economic overview covering the macro-financial performance impact of the COVID Crisis and related response measures - A concise updated analysis of the impact of the crisis on key money supply and liquidity indicators - A review of recent debt relief initiatives related to the IFI COVID response strategy, including any pending requests made by the government for the postponement of loan repayment during the Q3/Q4 period

I. IMPACT ON ECONOMIC GROWTH, PRICES AND EXCHANGE RATES

The outbreak of the pandemic in early 2020 and the subsequent lockdowns and collapse in oil prices badly disrupted global markets and created severe recessionary pressures internationally. These factors had significant adverse effects on Yemen's economy, which led to a decline in activity in key sectors such as oil, fishing, wholesale and retail trade, transportation and communication, and construction, resulting in an estimated contraction of real GDP by 8.5 percent in 2020.

The fall in government revenues associated with the pandemic crisis and the drop in oil prices led to significant reductions in public salaries and delays in pension reimbursements, further slowing down aggregate demand. Yemen also witnessed exceptionally heavy rainfalls in 2020, which caused intense flooding, infrastructure damage, and human casualties.

Real GDP is projected to contract by 2 percent in 2021 before reverting to a positive growth rate of 1 percent in 2022. However, Yemen's economic outlook is subject to substantial downside risks related to the uncertain evolution of the pandemic and the adverse impacts of the protracted war. A coordinated monetary, fiscal, and financial policy response would help cushion the pandemic economic impact on households and SMEs.

Inflationary conditions worsened somewhat in 2020 after relative stability in 2019. The significant depreciation of the Rial, the lack of foreign reserve buffers at the Central Bank of Yemen, growing uncertainty, and increased dollarization contributed to rising inflationary pressures. Market surveys indicate that average food-price inflation exceeded 30 percent in 2020. The annual inflation rate was estimated at around 25 percent, up from an estimated average rate of 10 percent in 2019, and is projected to remain high at around 30-35 percent in 2021. Food-price inflation was estimated at 21 percent over the first half of CY 2021.

The Yemeni Rial depreciated to 670 YER per USD by the end of CY2020, from 591 YER/USD at the end of CY 2019. The exchange rate had crossed the threshold of 900 Rials per dollar on several occasions during the last quarter of 2020 and the first half of CY 2021. These trends led to a substantial shortage of foreign currency in the local FX market, hindering the country's ability to finance its imports of essential goods. More recently, the exchange rate between the Rial and the US dollar surpassed 1200YER:1USD as of the end of September 2021.

This significant depreciation of the YER in 2020 and 2021 is attributable to the crisis's multiple adverse direct and indirect effects – including the decline in oil prices, the significant drop in remittances, and the depletion of the US$2 billion the KSA deposited in the CBY in 2018. These factors placed serious downward pressures on the exchange rate, which crossed the threshold of 1500 YER per dollar during the first week of November 2021, equivalent to a 55 percent depreciation since the beginning of the current year

II. IMPACT ON THE BANKING SECTOR

Eighteen banks operate in Yemen, all of which, except for Al Ahli Bank and the newly licensed Alkuraimi Microfinance, are headquartered in Sana'a. Through their 400 branches and offices spread across the country, they provide conventional bank accounts for about two-thirds of the market, while Islamic banks and microfinance institutions account for the remaining one-third. Banking services are concentrated in the major cities. Secondary cities and rural areas lack most financial services, except for remittance transfers, which are primarily handled through commercial bank branches, exchange bureaus, and post offices. There has been an increase in activities from Money Exchange Houses, which penetrated certain areas of the banking sector's activities.

Yemen is a cash-based economy with limited intermediation capacity, including grossly inadequate payment instrumentalities. The institutional and commercial capacity of the banking system is very fragile, and the confidence of the public in the capacity of the financial system and financial service provision is limited. The low rate of bank deposits in Yemen — 2,565 billion rials, which is approximately US$3.9 billion, for a population of 30-plus million — reflects the significant lack of public confidence in the Yemeni banking system. Over the past two years, the public shifted their deposits to the exchange houses, which technically are not deposit-taking institutions. However, they emerged, filling the vacuum created by the public's descending lack of trust in the banking sector.

The liquidity squeeze in Yemen started before being escalated by the pandemic crisis. A huge concentration of bank assets in government securities (bills, bonds, and *Sukuk*) represents nearly 60 percent of the banking sector's total assets. Many banks are unable to liquidate their investments to meet the reserve requirements for withdrawals by depositors. As a result, many banks imposed a ceiling on cash withdrawals, further lowering public confidence in the overall financial system and shifting depositors towards other sources like exchange houses.

The decrease in public revenues, given the slowdown in oil production and the collapse in oil prices in 2020, restricted the overall liquidity position of the banking sector. Banks also lost a significant portion of their assets, which had been deposited in Lebanese banks. This situation led to two significant challenges: the number of non-performing loans (NPLs) increased while the available lending resources contracted further.

Within this context, the pandemic adversely affected the NPL portfolio in the banking sector, spreading beyond the segments directly hit by the economic downturn, such as oil and construction services, to impact the broader economy resulting in diminished import capacity.

ERLP experts reviewed the quarterly financial data of seven banks representing 75 percent of market share over eight quarters ending June 2021. The sector's key prudential indicators fluctuated in an ascending risk direction over the period but did reflect some signs of stabilization. For many banks, loan portfolios remain very low at less than 10 percent of assets. Many banks experienced a critical rise in non-performing loans during the period under review, approaching 90 percent. This was followed by corresponding adjustments to loan provisioning, which directly impacted income and the ability to increase reserves. Over the past few years, the country's adverse security, political and economic climate situation severely limited the expansion of financial intermediation activities and caused a shift towards money exchangers as the preferred source of basic banking services by the public. Money exchange houses capitalized on the situation, with seven approaching the CBY for bank licensing consideration to regularize their deposit-taking status. This constrained the capacity of commercial banks to diversify their asset portfolio. In this regard, most banking sector assets are invested in government debt (which is being rolled over annually). The current pandemic further worsened that situation.

Moving ahead, ERLP will be working with the CBY Bank Supervision Department to systematically update financial performance data for all banks through 2021, with anticipated strong financial reporting for year-end 2021. Doing so will provide a more precise picture of the financial status of commercial and financial institutions in general and the ongoing impact of the pandemic crisis on bank liquidity and solvency conditions.

III. IMPACT ON KEY MONEY SUPPLY AND LIQUIDITY

While ensuring consistency with the annual monetary plan targets, the CBY continued pursuing a moderately expansive monetary policy in response to the crisis to ensure the smooth functioning of the payment system, support overall business requirements, and cushion the contractionary impact of new domestic supply and demand constraints resulting from pandemic containment measures (e.g., market closures, bans on public gatherings, increase in transport costs, and supply chain disruptions).

This was reflected in the evolution of all money supply parameters during 2020 and the first three quarters of 2021. Broad money (M2) witnessed an increase of about 15 percent during CY2020, compared with 11.5 percent in 2019. This increase in the money supply was consistent with requirements for maintaining a minimum level of economic buoyancy in the face of the contractionary pressure associated with the pandemic crisis. It was driven mainly by an increase in direct financing of the budget deficit, consistent with the 2020 annual monetary plan. The plan proved to be highly effective as it helped rationalize the money supply and limit the inflationary pressure caused by monetary emissions. The effects of the pandemic could have been significantly worse without this accommodative but prudent monetary framework.

For the first three quarters of CY 2021, reserve money increased by 8.3 percent (equal to YER 326.9 billion). This reflected a 10.8 percent increase in monetary emissions (equal to YER 357.8 billion), partially offset by a 5 percent decrease in bank reserves (equal to YER 30.9 billion). The target growth rate of reserve money according to the annual monetary plan was projected at 19.1 percent. Net credit to the government increased by 7.2 percent (equal to YER 358.6 billion) since the beginning of the year. In the same line, M2 grew by 8.9 percent over the first nine months of 2021, well below the annual target of 18.3 percent target. Thus, overall monetary growth remains well within the parameters established in the annual monetary plan for 2021.

IV. HEALTH IMPACT OF THE PANDEMIC

The pandemic led to significant loss of life while straining the health system's limited capacity. In Yemen, the WHO reported that from January 3, 2020, to November 5, 2021, there were 9,831 confirmed cases of COVID-19 with 1,901 deaths. As of October 31, 2021, a total of 547,019 vaccine doses had been administered. Assuming every person needs two doses, that's only enough to have vaccinated about 0.9 percent of the country's population. At the same time the data indicated that COVID-19 infections were decreasing in Yemen, with nine new infections reported on average each day, representing 9 percent of the peak infection rate recorded in April 2020.

Despite the efforts, Yemen is still at an increased risk of a new surge in COVID-19 cases with a weakened public health system, particularly in displaced communities that already have limited access to hygiene and sanitation services.

The vaccination campaign is critical to containing the outbreak. However, the ongoing conflict and doubts regarding vaccine safety slowed down the process in many areas of the country. An effective rollout of the vaccination campaign to health workers and the most vulnerable groups is also needed.

The Humanitarian Needs Overview (HNO) analysis estimated that the ongoing conflict along with the pandemic economic fallouts could push 16.2 million Yemeni into a crisis state of food insecurity in 2021 (Integrated Food Security Phase Classification" IPC" Phase 3 or higher). Since 2015, the economy shrank by about half, and more than 80 percent of Yemenis now live below the poverty line. This collapse is mainly reflected in the loss of income, depreciation of the Yemeni Rial (YER), loss of Government revenue, commercial import restrictions, and rising commodity prices (food, fuel, construction materials, etc.).

MONETARY AND FINANCIAL-SECTOR RESPONSE POLICIES

I. MONETARY POLICY RESPONSE MEASURES

Yemen's already dire economic conditions were exacerbated by the global COVID-19 turndown, which led to a sharp drop in remittances – the largest source of foreign currency and a lifeline for many families where 80 percent of people live below the poverty line.

The economy and the currency continued to collapse as foreign reserves were depleted and the government could not provide food and other commodities for which Yemen is 90 percent import-reliant.

To restore macro-financial stability, CBY adopted the following cohesive overall monetary policy and financial sector response strategy with ERLP support.

- ERLP developed a time-framed action plan to assist the CBY in establishing a competitive and transparent FX allocation system that can promote price discovery and improve market stability, thereby alleviating the ongoing pressure on the foreign exchange rate. This allocation framework envisaged a comprehensive FX auctioning model, which would allow the CBY to intervene as needed in a transparent and non-distortive manner to help stabilize the Yemeni Rial. This framework is consistent with best practice compliant FX management/allocation practices regionally. It defines a clear and transparent set of eligibility criteria for market participation, covering commercial banks and money exchange bureaus. After several simulations using the Refinitiv platform, CBY will launch a real FX auction in early November 2021, with ERLP assistance.

- Effective and well-coordinated utilization of freed-up reserves (BIS and BoE balances) and some converted SDR resources could play a crucial role in anchoring expectations and breaking the current depreciation spiral. Halting and then reversing the accelerated depreciation of the Yemeni Rial would ease the import constraints and related pressure on food prices and the economy. To do so, the government should urgently explore opportunities to effectively support the foreign currency reserves in the Central Bank of Yemen. Doing so will also facilitate food imports and stabilize the economy. The exchange rate of the Yemeni Rial to the US dollar could further depreciate owing to diminished sources and reserves of foreign currency. This would lead to accelerated increases in imported food commodity prices, manifest through increased costs of the minimum food basket and deteriorated purchasing power of the Rial.

- ERLP worked jointly with CBY to reinforce the importance of adhering to the monetary policy framework designed. This was demonstrated in the bank's reconfirmation of the commitment made in CY2020 to meet the ROYG's quantitative targets for broad money and base money circulation. The CBY also demonstrated a strong commitment to its 2021's monetary plan. The 2021 monetary plan projected broad and base money growth at 18.3 and 19.1 percent, respectively, while monetary emission was estimated to grow by 22.7 percent. These values are consistent with a targeted inflation rate within the range of 25-30 percent. Adherence to these quantitative targets is necessary to rationalize money-supply prerequisites and limit high inflationary pressures stemming from monetary emission. Assessment of the monetary plan implementation as of September 2021 indicated that the plan is well on track.

- The CBY, with ERLP assistance, developed a market-based toolkit to facilitate a gradual transition towards a more diversified set of monetary control instruments, including open market operations, standing facilities, and a structured reserve requirement system. The MOF and CBY, with the assistance of ERLP, recently undertook an initiative to issue short-term government securities (treasury bills and *Sukuk*) for a maximum envelope of 400 billion YER during the second half of the current year. This represented a major forward towards effectively controlling the financing of the budget, absorbing the liquidity surplus from the market, and reducing potential inflationary and depreciation pressures. So far, the total subscribed amount of the newly issued deposit certificates and agency deposits, which will commence on December 1, 2021, reached a total of 29.8 billion Rials. ERLP is working with CBY to ensure a regular and timely issuance of treasury bills of different categories (3, 6, 9, & 12 months). This will help the government meet its financing needs from one side and absorb the excess liquidity from the other side, in line with the annual monetary plan and the macro-financial stabilization goals.

II. BANKING SECTOR POLICIES

ERLP worked closely with the CBY to (i) assess the impact of the pandemic crisis on liquidity and solvency in the banking sector and (ii) review the loan forbearance policies conducted by commercial banks to ensure that the CBY is monitoring these within the framework of a wider overarching financial COVID-related forbearance strategy/game-plan. ERLP also worked with the CBY to design adequate health and safety policies within the financial sector to protect banking sector employees and prevent transmission of COVID-19.

It is worth noting that many commercial banks took the initiative to offer preferential policies to their corporate customers. For example, the Yemen-Kuwait Bank (YKB) exempted 50 percent of loan repayments/installments across all economic sectors under the bank's crisis management plan. The survey also showed that all surveyed banks had reduced their person-to-person operations and relied increasingly on electronic banking facilities. ERLP is working closely with the CBY to ensure that these policies are tracked and monitored closely as the CBY is expanding its capacity to enforce stronger financial reporting and oversight requirements within the banking system. It is crucially important moving forward that the CBY assesses the implications of these policies within an overarching debt forbearance framework that considers the overall financial stress imposed on the banking sector due to these policies.

At the same time, ERLP is working closely with the CBY Bank Supervision Department (BSD) to facilitate the effective implementation of a phased regulatory and financial adjustment plan that could help commercial banks respond effectively to the liquidity and solvency challenges of the pandemic. This plan will be developed in a manner that aims to protect core macro-financial stability parameters while limiting disruptions in financial-service provision. Efforts will also be directed towards improving the quality of data collection within the banking sector. This, in turn, will be utilized to facilitate the elaboration of reliable and consistent key macro-financial indicators/balance sheets and assess with greater precision the impact of COVID-19 on financial sector stability in Yemen.

So far, the CBY succeeded in covering more than eight major banks that reported their financial indicators in line with the regulatory and prudential requirements. The ultimate goal is to cover the entire system and prepare a consolidated balance sheet for the whole banking sector by end 2021.

FISCAL POLICY RESPONSE

I. NEAR-TERM STRATEGIES

ERLP continued to work closely with MOF to update the fiscal policy response strategy vis-à-vis the pandemic crisis. The MOF has actively taken part in the 'Pandemic Inter-Ministerial Committee' the government created to address the consequences of COVID-19 on public health and the economy. Within this context, ERLP continued advising the MOF Budgeting Department to ensure a targeted pandemic response is included in the budget implementation.

The effects of the COVID-19 pandemic did not significantly impact the general public health situation in Q4. This allowed the MOF to continue to release COVID-related funding for the budget expenditure from the allocations made in the first half of 2021 for public health purposes. There was no significant increase in the demand for additional funding owing to low infection rates and fewer people requiring COVID-related medical assistance. Similarly, the protective equipment and medicines stocks remained at normal levels, not requiring additional funding.

Table 6 presents a detailed summary of government expenditures and foreign aid allocated to the healthcare sector in response to the COVID-19 crisis. It presents a detailed breakdown of the allocation of COVID-related government expenditures and foreign aid in the healthcare sector for CY2020 and CY2021, including the adjustments made during the past quarter. Overall, total healthcare expenditure allocations for COVID-related policies reached YER 16.52 billion in CY2020 and increased to YER 36 billion in CY2021. Foreign aid in response to the crisis in CY2020 is estimated at YER 24 billion and YER 30 billion for CY2021. The delivery of subsidized oil from KSA permitted reducing the share of funding used from the Treasury and increased share of donor financing for the COVID response.

Table 6: COVID-19-Related Government Healthcare Expenditures, CY2020 and CY2021

YEAR	CY2020		CY2021	
	COVID-19 RELATED COST FACTOR (IN YER MILLION)			
BUDGET CLASSIFICATION	General Treasury	International Assistance	General Treasury	International Assistance
Section 1: Wages & Compensations	**55**	**0**	**5,500**	**0**
Wages of Medical Staff	35	0	3,500	0
Additional Financial Incentives for Medical Staff	20	0	2,000	0
Section 2: Expenditures on Goods and Services	**983**	**11,073**	**1,259**	**10,880**
Medical Supplies	943	10,350	1,200	10,000
Public Awareness Campaigns and Training Seminars	22	0	30	0
Quick COVID-19 Tests	0	63	0	80
Outsourced Medical Services	1	0	5	0
Subsidized Meals for Medical Staff & Volunteers	2	0	4	0
Transportation Expenses to Local				

YEAR	CY2020		CY2021	
	COVID-19 RELATED COST FACTOR (IN YER MILLION)			
BUDGET CLASSIFICATION	General Treasury	International Assistance	General Treasury	International Assistance
Governorates	15	0	20	0
Logistical/Operation Medical Expenses	0	660	0	800
Section 3: Social Subsidies, Grants, & Benefits	**14,212**	**0**	**28,000**	**0**
Tax & Customs' Exemptions	11,567	0	11,567	0
Financial Subsidies to Yemeni Airlines	720	0	720	0
Financial Subsidies to Electricity Companies	0	0	6,000	8,000
Financial Transfers to Local Governorates	1,755	0	9,000	0
Financial Transfers to Al-Amal Medical Center	60	0	60	0
COVID-19 related social Benefits	110	0	653	0
Section 4: Non-Financial Asset Acquisition	**1,273**	**12,990**	**1,250**	**11,050**
Medical Equipment for Hospitals & Schools	750	12,990	750	11,050
Medical Equipment for Isolation & Quarantine Centers	500	0	500	0
Temperature Screening Devices	23	0	0	0
Total Expenditure	**16,522**	**24,063**	**36,009**	**29,930**
Grand Total in YER million	**40,585**		**65,939**	
Grand Total in USD million	**47**		**70**	

Table 6 presents total government expenditures on healthcare as a percentage of GDP for CY2020 and CY2021.

In CY2020, the government allocated YER16.5 billion (the equivalent of US$1.9 million, which represents just 0.11 percent of GDP) for healthcare spending. External donors provided additional foreign assistance resources of YER24 billion. Thus, total healthcare spending (out of the budget and foreign assistance combined) reached YER 41 billion (USD 47 million) for CY2020, representing 0.27 percent of GDP.

In CY2021, MOF raised its budget allocations for healthcare spending to YER 36 billion (equivalent to US$38 million, representing 0.2 percent of GDP). Additional donor assistance received in response to the pandemic in CY2021 reached YER30 billion (the equivalent of US$22 million, which represents 0.1 percent of GDP). Thus, total healthcare expenditure allocations reached YER 66 billion in CY2021, the equivalent of US$72 million, representing 0.4 percent of GDP.

Table 7: Total Public expenditures in Response to COVID-19

	CY2020			CY2021		
	In Billion rials	**In USD million**	**% of GDP**	**In Billion rials**	**In USD million**	**% of GDP**
Financed by the Treasury	17	19	0.1	36	38	0.2
Financed by Donors	24	28	0.16	30	32	0.1
Total Expenditures	41	47	0.3	66	70	0.3

During the first half of CY 2021, MoF moved forward with the requested financial resource allocations to cover the COVID–19-related expenditures as reflected in Tables 5 and 6. Delays in budget revenue inflows in the first half of CY2021 restricted improvement in the use of the Treasury funds for COVID-19 response. However, it is expected that COVID-19 expenditures from donor institutions that are reflected in the budget could increase to approximately 54 billion YER.

ERLP continued to support both MOF and MOH in prioritizing COVID-19 response goals and mitigation activities in the recently initiated medium-term health sector costing and activity planning exercises, now being conducted for the CY 2022-23 period.

Specifically, ERLP argued for increased funding to ensure the vaccination of the broader population, starting with healthcare professionals, educational institutions, and other populations at risk of exposure because of frequent contacts with the public. Currently, only 0.7 percent of the population has been vaccinated. The MOF will collect the necessary data for costing the initiative. Effective support for the vaccination of broad groups of the population offers better public health outcomes and reduces risks for the public health system being overwhelmed by a surge in hospitalizations from COVID-19.

The MOF will also focus on having adequate allocations for emergency approval of additional medical drugs for the treatment of the COVID patients, improved isolation ward and hospital facilities in case of severe outbreak increasing the risks of overwhelming the public health facilities. These measures will be launched and funding released upon request from the public health authorities.

DEBT FORBEARANCE

I. INTERNATIONAL MONETARY FUND (IMF)

Yemen benefited from the first, second, and third tranches of the COVID-19-related application of the IMF's Catastrophe Containment and Relief Trust (CCRT). The CCRT provided IMF debt service relief from April 2020 to October 2020 at an amount equivalent to the Special Drawing Rights (SDR) of US$14.44 million, from October 2020 to April 2021 at an amount equivalent to the SDR of US$10.96 million, and from April 2021 to October 2021 at an amount equivalent to the SDR US$17.05 million. The three tranches amounted to an SDR of US$42.454 million. In August 2021, Yemen also received US$of665 million (the equivalent of the SDR of US$467 million) from the IMF, which is part of a US$650 billion IMF allocation of Special Drawing Rights. The Central Bank of Yemen stated that this amount would contribute to strengthening the external reserves of foreign exchange in addition to supporting the national economy and achieving stability in the exchange rates.

II. THE PARIS CLUB

The Paris Club recognized that Yemen was eligible for benefits from the Debt Service Suspension Initiative (DSSI), which was endorsed by the G20. Thus, the Paris Club creditor countries agreed to provide the Yemeni government with a time-bound suspension of debt service from May 1 to December 31, 2020. Recently, this period was extended through December 31, 2021. Yemen is committed to devoting the resources freed up by this initiative to increase expenditures on COVID-19 mitigation in the health, economic, and social spheres. Yemen is also committed to seeking equal debt service treatment from all other bilateral creditors in line with the agreed-upon term sheet. To benefit from the suspension of debt service, Yemen sent suspension requests to its creditors in the G20 through its Ministry of Foreign Affairs. Yemen signed bilateral agreements with some Paris Club creditors as well as other creditors in which certain creditors, including Italy, France, USA, and Kuwaiti Fund for Arab Economic Development, agreed to suspend the debt service payments of their loans provided to Yemen and set a new payment schedule starting in June 2022. It is expected that Yemen will sign more agreements with other creditors soon.

NEXT STEPS

The pandemic challenge further aggravated Yemen's economic and social stabilization challenges by impacting public spending, public revenues, and inflation/exchange rate pressures. ERLP worked closely with the CBY and MOF to develop a detailed list of programmatic monetary and fiscal response policies. These included (i) the development of a monetary plan with well-defined targets aimed at containing inflation below 20 percent; (ii) the initiation of a comprehensive framework for the CBY to regulate market interventions and pursue FX placement/allocation activities using a competitive and transparent auctioning system, to control foreign exchange fluctuations and prevent further devaluation of the Yemeni Rial; and (iii) consolidating data reporting practices within the financial sector.

It also included a fiscal containment plan to design a meaningful pandemic-response component within the annual budget. ERLP is also helping to improve sectoral budget planning processes at MOF, based on optimal budget prioritization criteria, with an initial focus on the health care sector. This, in turn, includes a focus on improving the magnitude and efficient targeting of public resources allocated to healthcare services, including COVID treatment and prevention activities. These factors are also incorporated into the initial medium-term budget planning exercise with ERLP support in the health sector. Looking ahead, the ERLP team will continue to collaborate closely with CBY and fiscal authorities to monitor and adjust macro-financial and fiscal response strategy as needed in a manner that helps insulate the macro-financial system from the destabilizing effects of the pandemic crisis while helping mitigate its adverse socio-economic impacts on the Yemeni people.

1.1.5 ANTI-MONEY LAUNDERING/COUNTER FINANCING OF TERRORISM (AML/CFT)

BACKGROUND

In the years immediately following its MENAFATF evaluation in 2008, Yemen took steps to improve its AML/CFT legal and regulatory regime. However, the events in Sanaa after 2012 led to a complete halt to AML/CFT work. This negatively affected Yemen's ability to keep pace with developments in this field and advance the implementation of internationally recognized standards. It also negatively affected AML/CFT capacity building owing to the suspension of all training programs. In its 2018 CBY Diagnostic, the IMF noted serious shortcomings with Yemen's AML/CFT law and regulations and their implementation at the institutional-operational level; both in Sanaa and the newly established bank in Aden. Moreover, the IMF noted that there were no effective policies and mechanisms to enable effective cooperation among AML/CFT policymakers, the CBY, the FIU, and law enforcement.

AML/CFT operations were created entirely from scratch in Aden in 2019 with the establishment of the Financial Intelligence Unit (FIU). Pragma initiated work in 2019 under the USAID/YESS project with the new Aden-based office of the CBY, in order to address the deficiencies in the AML/CFT regime. A comprehensive gap analysis was conducted that identified issues with the legal/regulatory regime, and the related technical/training support needs which would have to be addressed to effectively assist the CBY and the FIU in improving AML/CFT monitoring and enforcement, as well as promoting compliance by banks and other financial institutions (FIs).

Despite recent improvements, Yemen still needs to address several deficiencies and build the necessary capacities to face challenges in combating money laundering and terrorist financing.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

To correct the critical AML/CFT policy/regulatory, capacity, and institutional deficiencies, ERLP's advisory experts have been working intensively with the CBY Bank Supervision Department (BSD), and with the FIU, on driving progress on critical reforms to Yemen's AML/CFT regulatory/operational framework and institutional oversight regime.

During the reporting period, ERLP focused, in accordance with the work plan, on (i) developing with counterparts a white paper detailing the needed amendments to Yemen's AML/CFT system, together with explanatory notes about the reasons for these proposals; (ii) assisting the FIU in adopting a mechanism to analyze and respond to requests for assistance (RFA) received from counterpart FIUs and judicial appeals received from foreign judicial authorities; (iii) developing an MOU format to be signed with counterpart FIUs in other countries; (iv) delivering training for BSD and FIU staff; (v) delivering a manual for compliance officer of reporting entities.

Table 8: Q4 AML/CFT Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>ERLP will assist BSD in publishing the amendments to current AML/CFT regulations</td><td rowspan="5">I. AML/CFT regulations amended to bring them in compliance with MENAFATF requirements and standards submitted to National Committee for publishing
II. FIU adopts and implements protocols for analyzing requests for assistance from other Yemeni authorities
III. MoU form between FIU and regional and international counterparts FIUs is finalized and adopted
IV. Advanced customized modular training programs on AML/CFT monitoring and inspecting skills are developed and delivered to FIU personnel and BSD examiners
V. Manual for compliance officers of banks and FI</td></tr>
<tr><td>ERLP will assist FIU in adopting procedures to analyze Request of Assistance and Judicial Motions</td></tr>
<tr><td>ERLP will assist FIU in establishing a Memorandum of Understanding "MoU" form with regional and international counterparts FIUs</td></tr>
<tr><td>BSD examiners and FIU personnel receive ten training workshops on the conduct of on- and off-site AML/CFT inspections</td></tr>
<tr><td>FIU develops a manual for compliance officers of reporting entities</td></tr>
</table>

I. WHITE PAPER ON THE OUTSTANDING AMENDMENTS NEEDED TO BRING THE AML/CFT REGULATIONS INTO COMPLIANCE WITH FATF STANDARDS DEVELOPED AND SUBMITTED TO CBY

The CBY issued two circulars[1] in January 2021, in which they addressed gaps in the AML/CFT system, specifically in terms of adopting a risk-based approach compatible with international standards; and forcing banks to adopt clear and specific criteria to determine the beneficial owners of accounts, most especially for accounts opened on behalf of legal companies. However, significant deficiencies remain and urgently need to be addressed through amendments to Yemen's AML/CFT regulations, which will bring them into greater conformity with core FATF standards. After ERLP and the CBY agreed upon the essential text of the amendments, the CBY in Q3 requested that ERLP prepare a white paper on the amendments, which the CBY committed to submitting to the National Committee on AML/CFT for adoption.

The white paper proposes a series of changes to Yemen's existing anti-money laundering and counter-terrorist financing regulations outlined in Presidential Decree No. 226 of 2010, as revised by Presidential Decree No. 2 of 2014. The amendments mentioned in this study were formulated to comply with Yemen's existing AML/CFT Law so that it will not also require amendments.

In particular, the White Paper identifies the four major areas where Yemen's current AML/CFT regulations are inconsistent with FATF recommendations:

1. The current regulations do not establish a system for regularly reviewing AML/CFT risk management strategies
2. Information on the Beneficial Owners of Legal Persons are not updated periodically by the supervisory bodies
3. Yemen's regulatory definition of shell companies does not meet the FATF definition of such entities
4. The current regulations do not enhance FIU independence and autonomy

Throughout the reporting period, ERLP and the FIU held highly constructive meetings on developing the text of the document. The White Paper was delivered to the Head of the FIU this quarter, and it is expected to be submitted to the CBY during the Y2Q1. (See *Annex 04 – Macro – AML – White Paper Proposal to the Central Bank of Yemen for Amending Yemen's AMLCFT Regulations to Increase Compliance with International Standards)*

II. FIU ADOPTS AND IMPLEMENTS PROTOCOLS FOR ANALYZING REQUESTS FOR ASSISTANCE FROM OTHER YEMENI AUTHORITIES

In addition to the Suspicious Transaction Reports (STR), the FIU receives Requests For Assistance (RFA) from local and international bodies as well as through Yemeni judicial references. Through this mechanism, the FIU is asked to provide information about the ongoing operations of the accounts in question in the banks/financial institutions, and/or their clients specified in the RFA.

Accordingly, during the reporting quarter, ERLP assisted the FIU in preparing procedures to assist the FIU in analyzing RFAs for information exchange outside of the Egmont Group of Financial Intelligence

[1] Circulars number (2), (3) of 2021 addressed to banks and financial institutions

Units. The FIU adopted the Protocols during Q4 and began using them immediately. (see *Annex 05 – Macro – AML – Procedures to Analyze Requests for Assistance (RFA) and Judicial Appeals*)

III. TEMPLATE FOR THE MEMORANDUM OF UNDERSTANDING BETWEEN FIU AND REGIONAL AND INTERNATIONAL COUNTERPARTS ADOPTED

The Anti-Money Laundering and Terrorist Financing Law stipulates that it is the FIU's power to receive reports and requests for assistance from counterpart FIUs, within the context of strengthening international cooperation between countries to combat the crime of money laundering and terrorist financing. A template for a memorandum of understanding that establishes the terms and conditions under which the FIU can cooperate and exchange information with other national FIUs was developed by ERLP. It was finalized and adopted by the FIU during Q4.

The FIU then sent a letter of intent to sign an MOU to exchange information related to money laundering or terrorist financing activities to the FIU of Bahrain. It is expected that this MOU will be signed in the Y2Q1. (See *Annex 06 – Macro – AML – Template for MOUs Between FIU And Regional And International Counterparts*)

IV. ADVANCED CUSTOMIZED MODULAR TRAINING PROGRAMS ON AML/CFT MONITORING AND INSPECTING SKILLS IS DEVELOPED AND DELIVERED TO FIU PERSONNEL AND BSD EXAMINERS

An on-site AML/CFT inspection aims to provide an in-depth analysis of the various AML/CFT-related risks, risk-based approaches (RBA), internal control systems, business models, and the internal governance of a supervised entity. Such inspections are conducted within a predefined scope and timeframe on the premises of the supervised entity. However, if deemed necessary, the scope and timeframe of the inspection can be changed while the inspection is in progress. More specifically, an on-site AML/CFT inspection aims to:

- Examine and assess the level, nature, and features of the inherent AML/CFT risks to which the entity is exposed, including its AML/CFT risk culture. (Inherent Risk represents the exposure to money laundering, sanctions or bribery and corruption risk in the absence of any control environment being applied). To identify an FI's inherent risks, an assessment across the following four risk categories is commonly undertaken: (i) Clients; (ii) Products and Services; (3) Channels; (iv) Geographies.
- Examine and assess the appropriateness and quality of the supervised entity's AML/CFT-related RBA, management processes, corporate governance, and internal control framework in the light of the nature of its business and risks; focusing most particularly on detecting weaknesses or vulnerabilities.

During Q4, ERLP trained the FIU inspectors on how to conduct on-site inspections, what documents should be requested from the bank, and how to study and analyze them in preparation for writing a report on the inspection results. The reports should include the FIU's notes, discuss the gaps discovered within the bank, and what corrective measures the inspected entity must take to address any reported deficiencies. (See *Annex 07 – Macro – AML – Training Program for Financial Institutions*)

V. FIU DEVELOPS A MANUAL FOR COMPLIANCE OFFICERS OF REPORTING ENTITIES

ERLP and the FIU collaboratively developed a manual to help management and staff in banks and other financial institutions understand that roles and responsibilities of various types of officials the organization require different kinds of training. The principal target audience of this manual is the compliance officers and other personnel in financial institutions, who design and deliver AML training programs, auditing, and senior management. The manual was submitted to the FIU, and is expected to be adopted during the Y2Q1.

NEXT STEPS

During Y2, ERLP will assist the FIU in ensuring the proper application of the STR manual, making the necessary amendments, if any, and submitting a report to the head of the FIU. It will incorporate targeted observations related to the quality of the STR received, and evaluating the analysis of the employees in the unit for these notifications.

Project AML/CFT advisors will also deliver more training sessions on how to address the compliance issues at banks and financial institutions that expose them to reputational and operational risks, as well as potential international sanctions. Increasing AML/CFT compliance at banks and financial institutions is of critical importance to Yemen; as the imposition of sanctions could easily cause correspondent banks to sever their relationships with the bank/financial institution in question, and damage the country's reputation.

1.1.6 BANKING SUPERVISION AND RISK MANAGEMENT REFORM

BACKGROUND

ERLP has focused during Year 1 on improving the safety and soundness features of the financial regulatory framework, and enhancing the monitoring/compliance system of the Banking Supervision Department (BSD). The work has included a targeted focus on improving the framework for assessing risk in the banking and finance sphere, and supporting a broader effort to enhance the CBY's overall capacity to measure and control risks across major functional areas of CBY activity.

ERLP experts have worked in-depth on targeted regulatory and operational advancements designed to enhance the safety and soundness of the financial regulatory framework, and the monitoring and compliance system. In this regard, the project has completed a comprehensive reorganization of the BSD to include a new organizational structure, upgraded staffing and training program, and enhanced capability to perform bank inspections compliant with CAMELS methodology. ERLP also supported the Money Exchange House Division in drafting a new licensing decree issued during the quarter.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

ERLP activities in bank supervision and risk management during Q4 have included (i) the introduction of the final version of the new organizational structure to the staff, (ii) the utilization by the CBY officers of both offsite supervision and onsite inspection manuals, and (iii) the CBY On-site Inspection Division continued its inspection program this quarter, using the procedures outlined in the manual provided by ERLP.

In Q4, ERLP worked with the newly organized offsite surveillance team to continue the development of the comprehensive supervisory matrix; by expanding the list of CAMELS financial performance ratios being applied with the introduction of additional prudential standards. This addition will facilitate an effectively detailed analysis of bank data, and enable the BSD to establish compliance with targeted regulatory requirements. This in turn will allow the analyst to adequately assess the risk rating of each prudential standard and develop various trend analyses.

In addition the supervisory matrix was updated with recent financial data from two banks during the quarter. The results are being analyzed to test the matrix and assess the validity of the thresholds. The offsite supervision team will extract the information provided by the matrix, in order to establish a set of trends. The result of their review will be provided to the onsite inspection team, as part of their inspection planning process. Moreover, several technical workshops were held this quarter, addressing core components of risk-based supervision.

Table 9: Q4 Banking Supervision and Risk Management

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Support the conduct of 2 additional onsite inspections of financial institutions and provide related on-the-job training to relevant bank supervision staff.</td><td rowspan="4">1- A final report is provided on the conduct of 3 onsite examinations undertaken during Year 1, and on overall progress towards implementing a better practice compliant bank examination regime.

2- The offsite regulatory/procedural framework is effectively applied across all licensed banking institutions and extended in an appropriately framed manner and on a pilot basis to Exchange Houses (on a best efforts basis) (Q4)

3- A final report is provided detailing the progress achieved in applications of the offsite framework prudential oversight across all licensed banking institutions and also on its pilot application in the Exchange Houses (Q4)

4- Detailed recommendations are provided on improved offsite supervision reporting/analysis software needs, and additional training sessions are programmed in these areas (Q4)</td></tr>
<tr><td>Facilitate approval and implementation of the restructuring plan for the Bank Supervision Department, which is a critical step in adopting modern bank supervision protocols</td></tr>
<tr><td>Facilitate effective introduction of an improved offsite supervision regulatory/procedural framework at CBY, and provide related recommendations on offsite financial reporting software needs (in coordination as needed with an IT expert).</td></tr>
<tr><td>Facilitate effective introduction of an improved offsite supervision regulatory/procedural framework at CBY, and provide related recommendations on offsite financial reporting software needs (in coordination as needed with an IT expert).</td></tr>
</table>

I. FINAL REPORT PROVIDED THE CONDUCT OF 3 ONSITE EXAMINATIONS UNDERTAKEN DURING YEAR 1 AND ON OVERALL IMPLEMENTATION PROGRESS TOWARDS IMPLEMENTING A BETTER PRACTICE COMPLIANT BANK EXAMINATION REGIME.

During the reporting period, the onsite inspection of two commercial banks continued with the support of ERLP advisors. The inspection team produced interim reports on topics related to the inspection plan, including the quality of the risk management overview and assessment of prudential risk. The Bank is also pushing forward with an outreach program to all banks, reminding them of the need to provide data and comply with reporting requirements in order to facilitate the next round of anticipated bank inspection exercises.

The inspectors are following the CAMELS approach outlined in the On-site Inspection Manual, developed by ERLP and officially adopted in Q2. The inspection approach also includes elements of risk-based supervision, introduced this quarter by ERLP to assess the quality of risk management and board performance. The goal during Q4 was to thoroughly review the CAC Bank operations, followed by a final report to be issued early next quarter.

The onsite inspection undertaken at CAC Bank was a full-scope review, while the second inspection at the National Bank of Yemen focused on the quality of risk management aspects. The BSD will use these inspections to help assess the functionality of the manual, and the approach followed by the inspection team. Lessons learned from the work done will be utilized to adjust the manual further as needed. Based on their enhanced supervisory capacity, ERLP anticipates that the CBY will perform (with ERLP support) at least one inspection per month in Y2, allowing a review of all banks by Fall 2022. This plan is subject to receipt of adequate data from each bank, and their acceptance and cooperation with the supervisory process.

II. THE OFFSITE REGULATORY/PROCEDURAL FRAMEWORK IS EFFECTIVELY APPLIED ACROSS ALL LICENSED BANKING INSTITUTIONS AND EXTENDED IN AN APPROPRIATELY FRAMED MANNER, AND ON A PILOT BASIS TO EXCHANGE HOUSES (ON A BEST-EFFORTS BASIS)

During the quarter, ERLP continued to provide targeted technical support to the CBY's offsite supervision team in analyzing the financial data of Arab Bank, against the newly established set of prudential standards as applied within the supervisory matrix. The data provided by the National Bank was also received and subjected to the supervisory matrix review. The analysis established compliance against prescribed thresholds, and the analysts were able to establish the risk level for each prudential standard and institutional net overall risk.

The money exchange houses have not yet been included in this analytical approach, as the CBY awaits adequate financial data from the money changers. A financial reporting template is in place, and it is anticipated that data will be forthcoming by end-2021. Meanwhile, the project is preparing the matrix to accept and review the data when/as it becomes available.

III. DETAILED RECOMMENDATIONS ARE PROVIDED ON IMPROVED OFFSITE SUPERVISION REPORTING/ANALYSIS SOFTWARE NEEDS, AND ADDITIONAL TRAINING SESSIONS ARE PROGRAMMED IN THESE AREAS.

ERLP has reached out to a software company with demonstrated expertise in delivering central bank supervisory software to several central banks. They were invited to deliver a presentation of their product and services. In this regard, the project organized a video conference call between the Vizor Software IT company and the BSD. This allowed the IT firm to present its products and services, and how they would be applied in Yemen.

The BSD was able to get an overview of the software available and the capabilities such a product would offer in support of licensing, offsite data analysis, and supporting risk-based supervision of the financial sector in Yemen. The IT firm followed the call with a set of informative documents on the software, and the BSD indicated an interest in exploring this opportunity further.

IV. A FINAL REPORT PROVIDED DETAILING THE PROGRESS ACHIEVED IN APPLICATIONS OF THE OFFSITE FRAMEWORK PRUDENTIAL OVERSIGHT ACROSS ALL LICENSED BANKING INSTITUTIONS, AND ALSO ON ITS PILOT APPLICATION IN THE EXCHANGE HOUSES.

The overall BSD reorganization plan was approved in principle by CBY management and the Board in Q3, with implementation beginning in Q4. The newly approved organizational structure mandating all offsite analysts currently embedded within each Onsite Inspection Division to be merged under one expanded Offsite Supervision Division has been approved in principle, with its implementation slated to be completed during the next quarter. The Money Exchange House Division is working on segregating its operation between offsite and onsite responsibilities. The plan is for the Offsite Supervision Division to analyze all financial data submitted by every financial institution operating in Yemen, then submit its findings to the relevant Onsite Inspection Division for action. This operation will directly impact how the CBY assesses the risk level and ranking of all financial institutions.

In addition, ERLP provided support to the Offsite Supervision Division in reviewing and analyzing the information received from banks. The supervisory matrix is in place and being tested. The Exchange House Division received assistance from the ERLP in drafting a new licensing decree, that will streamline the licensing process, which was issued late this quarter.

NEXT STEPS

Looking ahead, ERLP will focus intensively on the final and comprehensive implementation of the new organizational structure for the BSD. This is designed to facilitate efficient and effective workflows and shorten work cycles, by reducing the number of administrative levels. This in turn will entail the reorganization of supervisory functions resulting in a redefined Offsite Supervision Division, an Onsite Inspection Division for banks and another for money changers supported by IT Risk Management and AML Units. This will be followed by establishing a specialized autonomous Licensing Division.

ERLP will also review the Y1Q4 onsite inspection report, and provide comments and recommendations towards the bank's implementation of corrective actions. The team will support the conduct of additional onsite inspections of commercial financial institutions and provide related on-the-job training to relevant bank onsite inspection staff.

In addition the team plans to enhance the current CAMELS inspection approach with the continued introduction of risk-based banking supervision elements, and provide targeted risk-based supervision on-the-job training to the On-site Inspection Division staff. ERLP will also provide detailed guidance on core offsite supervision, risk matrix analysis procedures and techniques. This will be followed by an offsite financial risk analysis exercise for all banks, as their financial data is received. ERLP will also develop the core supervisory matrix for the Money Exchangers Division, and deliver related on-the-job training to relevant Offsite Supervision Division staff. This will directly impact enhancing the capacity of the BSD to adequately assess the level of risk each institution exhibits.

1.2 IMPROVED FISCAL POLICY DEVELOPMENT AND IMPLEMENTATION

The ERLP fiscal policy reform strategy focuses on five core areas:

1. Revenue Policy and Administration
2. Tax Administration
3. Debt Planning and Management
4. Budgetary Planning
5. Budget Implementation

In the *Revenue Policy and Administration* area, the project strengthens revenue estimation capacity and develops strategic reform options, incorporating best practice experience in post-conflict settings. This includes a focused analytical review and drafting effort with MOF on core elements of a sound revenue policy framework. A critical focus of the reform effort includes making the transition to a fully-fledged VAT system, as well as further improvement in the revenue regime for the oil and fisheries sectors.

Following an earlier comprehensive Performance Assessment Report, ERLP *Tax Administration* advisors developed a detailed set of recommendations with targeted regulatory reform measures to improve the basic functional efficiency and transparency features of the tax administration system in Yemen. These recommendations are primarily focused on the re-design of the Tax Administration Authority organizational structure along functional lines, based on a careful review of the existing organizational structure of the Tax Authority and a detailed assessment of best practice examples from the MENA region.

ERLP developed a policy & procedural framework for domestic and external *Debt Planning and Management* in Yemen. This will enable the MOF to forecast improved estimates for debt servicing requirements for the 2021 budget. The project is helping reshape the institutional framework for debt management in Yemen to promote better coordination between the MOF, CBY, and MOPIC. The project has laid the groundwork, procedurally, technologically, and through human capacity building for the reinstallation of the DMFAS.

Budgetary Planning is focused on systematic budgetary reforms designed to strengthen planning processes and outcomes. Priority focus areas include developing a sound budgetary policy/procedural framework, integrating GFIS-compliant budget coding requirements, and developing a robust expenditure prioritization strategy and procedural framework. ERLP also provides targeted capacity-building assistance to MoF staff to promote reforms in critical budgetary allocation areas and develop an initial integrated medium-term budgetary framework (with integrated recurrent and capital budgets) for key sectoral areas as healthcare and education.

In the *Budget Implementation* area, ERLP is facilitating the rationalization and transfer of crucial budget execution and treasury functions from the CBY to the MOF. The project is developing an integrated framework for adopting a Single Treasury Account System and implementing budget execution reform by consolidating commitment control functions within the budget execution cycle, launching new cash-flow forecasting procedures, and initiating effective operations of the Joint Committee for the Management of the Treasury.

1.2.1 REVENUE POLICY AND ADMINISTRATION

BACKGROUND

Fiscal policy and revenue administration reforms, coupled with effective revenue estimation processes, are important prerequisites of post-conflict recovery. In Yemen, tax collection witnessed improvements during the first to the third quarter of 2021; actual collection for Jan-July 2021 increased by around 49 percent, reaching YER 290 billion compared to YER 200 billion in the same period last year. The improvement in tax collection is mainly attributed to enhanced revenue administration capacity and real GDP growth. Improved tax collection makes it possible to resume paying civil servant wages and pensions, thus increasing household purchasing power and promoting overall economic growth.

During the first three quarters, ERLP provided technical expertise and capacity-building support designed to significantly further improve revenue estimation methodological tools and capacity and enhance critical aspects of the revenue policy & administration regime in Yemen. ERLP effectively engaged the counterparts in developing annual and monthly oil and non-oil estimates for CY 2021, developing border tax forecasts, assessing fiscal risks, and developing sensitivity and scenario analysis of revenues. In addition, an assessment of revenue classification in relation to GFS framework requirements was conducted, along with the production of detailed reports on revenue forecasts and micro-simulation-based revenue estimates. To that end, in Q4, the fiscal team continued to further refine CY 2021 oil and non-oil revenue estimates, by incorporating actual and historical collection trends while generating initial CY 2022 estimates, based on macro-economic assumptions and tax buoyancy and electricity measurements

Moreover, building on what has been achieved over the first to the third quarter in the area of revenue forecasting, ERLP contributed to drafting a concise analytical document that articulates the fiscal impact and major benefits of exchange rate liberalization on revenues. ERLP also drafted a comprehensive analytical note that showcased extensive analysis on the subnational revenue system in Yemen, to initiate a reform process geared towards improving subnational revenue collection.

Building on what has been achieved over the first to the third quarter in the area of tax policy analysis, ERLP experts completed a further deep-dive diagnostic of the tax policy framework in Yemen during Q-4. The team carried out a detailed analysis of the excise tax systems successfully applied by several countries around the world and has been spreading very fast in the Gulf region in recent years but yet to be introduced in Yemen. The report introduces the concepts and structure of excise tax, as well as revenue contribution in select countries while setting forth important excise tax policy parameters, including excisable goods and services, tax base, tax rates, time and point of tax imposition, filing and payment requirements and control system. The team also worked on how to collect GST on the operation of the branch offices operating in the liberated areas of the telecommunication companies whose headquarters are located in Sanaa. In addition, the team also conducted a further analysis of current revenue regimes in the fisheries sector, recommended regulatory reforms to impose a 3 percent resource rent collected via a withholding mechanism through auctioneers/cooperative societies.

ERLP held several rounds of remote consultation meetings with senior staff from the Ministry of Finance and the Tax Authority.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

ERLP produced targeted analytical notes illustrating revenue estimation methodologies used to update CY2021 oil and non-oil estimates based on actual trends and production of CY 2020 estimates -- utilizing GDP growth and inflation estimates - to provide tax buoyancy and elasticity measurements.

ERLP also completed three reports and PowerPoint presentations in Q4, including (i) A Report on Excise Tax Policy Parameters, forming the Basis for Draft Excise Tax Legislation (ii) Need to introduce a Special Type of General Sales Tax Registration System in Yemen, and (iii) Guidelines on Fishery Sector Revenue Collection.

Table 10: Q4 Revenue Forecasting Activities and Deliverables

ACTIVITIES	DELIVERABLES
Apply improved revenue forecasting tools for purposes of providing refined forecasts of CY 2021 revenue inflows across all major sources of revenue.	1. Improved revenue forecasting tools effectively applied across all major sources of tax revenue, and providing refined forecasts of CY 2021 revenue inflows. 2. Improved revenue forecasting tools effectively applied across all major sources of revenue, and providing initial projections of CY 2022 revenue inflows.
Apply improved revenue forecasting tools for purposes of providing initial projections of CY 2022 revenue inflows across all major sources of revenue.	

I. IMPROVED REVENUE FORECASTING TOOLS EFFECTIVELY APPLIED ACROSS ALL MAJOR SOURCES OF TAX REVENUE, AND PROVIDING REFINED FORECASTS OF CY 2021 REVENUE INFLOWS.

CY 2021 Non-Oil Revenues

During Q4, ERLP updated the CY 2021 non-oil revenues full-year estimates, taking into account actual receipts for the periods Jan-July 2020, Jan-July2021, and CY 2020 full year actuals. The methodology applied incorporates previous actual collection trends into the estimation process to generate more realistic and accurate revenue forecasts. Moreover, ERLP proactively engaged counterparts in in-depth discussion and analysis of actual performance for the period Jan-July 202; for purposes of effectively assessing seasonality, one-off revenues, and externalities that may be impacting collection trends.

As illustrated in Annex 08, actual performance for Jan-July 2021 has improved compared to the same period last year, despite increased economic and political tensions. Non-oil revenues in Jan – July 2021 totaled around YER 301 billion, up from YER 203 billion during the same period of the previous year, constituting a 49 percent increase. This is mainly attributable to enhanced revenue administration capacity on the part of the Tax Authority and the Ministry of Finance. In this regard, ERLP has assisted with the implementation of newly designed procedures to detect non-compliant large taxpayers by reviewing outstanding returns, payments, and tax arrears. This cost-benefit-based approach to prioritizing the collection of large and new debts has positively impacted the tax revenue stream. In addition, with project support, a systematic approach has been initially implemented to cleanse the taxpayer database by removing stop-filers, which has allowed auditors and collection teams to focus on actual non-compliant taxpayers. To that end, and considering improved actual projections, ERLP revised the CY 2021 estimates upwards, from YER 630 billion to YER 864 billion. During the upcoming period, ERLP will continue engaging with key MoF counterparts to further analyze actual performance for the remainder of CY 2021, with the aim of further effectively refining revenue projection efforts.

CY 2021 Oil Revenues

By the end of CY 2020, Oil Ministry projections for annual production of each of the seven oil fields for CY 2021 totaled approx. 25.7 million barrels. However, actual oil production for the period Jan–August 2021 was 12 million barrels, constituting approx. 46 percent of the projected full-year production. This is also a 13 percent decrease compared to the 13.6 million barrels produced during the same period last year (as indicated in Annex 08). These lower production volumes were mainly attributed to increased security constraints and related reduction in production efficiencies. Given decreased production levels for the period Jan – August 2021, ERLP has revised the CY full-year oil revenue projection downward to approx. US$900 billion, compared to an earlier projection of US$1.2 billion.

(See *Annex 08 – Macro – Revenue Policy and Administration – Report on CY 2021 and 2022 Oil and Non-Oil Revenue Forecasts and VAT Fiscal Impact on CY 2022 Revenues*)

II. IMPROVED REVENUE FORECASTING TOOLS EFFECTIVELY APPLIED ACROSS ALL MAJOR SOURCES OF REVENUE, AND PROVIDING INITIAL PROJECTIONS OF CY 2022 REVENUE INFLOWS.

CY 2022 Oil Revenues

During Q4, the MOM provided ERLP with initial production estimates for CY 2022. Total production is projected to reach around 31 million barrels, constituting a 20 percent increase compared to the MOM CY 2021 estimates. A significant portion of the increase is attributed to the assumption that Block 5 Ganna field would resume production starting September of 2021 and into 2022. To that end, the ERLP projects CY 2022 oil revenues to reach $1.3 billion, equivalent to YER 763 billion. This, in turn, would constitute a 42 percent increase compared to the previous year.

CY 2022 Non-Oil Revenues

Despite a decline in real GDP of approx. 2 percent in 2021, owing to the constraining impact of both COVID and the ongoing political economy turmoil, revenue collection for CY 2021 improved somewhat compared to the same period last year. Moreover, real GDP is projected to grow by 2-3 percent in CY2022, with lower inflation compared to the previous year. Additional tax administration and policy reforms are anticipated in CY 202, which should set the stage for a significant further increase in CY2022 revenue inflows.

ERLP incorporated updated and improved GDP and inflation figures to generate tax buoyancy and elasticity-based CY 2022 revenue estimates in collaboration with MoF stakeholders. Initial projections indicate a rise in revenues to YER 1.4 trillion, compared to YER 864 billion in 2021 – a projected 64 percent increase.

Table 11: Q4 Tax Policy Activities and Deliverables

ACTIVITIES	DELIVERABLES
Provide technical support designed to facilitate approval (on a best-efforts basis) of measures designed to revise the natural resource extraction-based revenue regime from a revenue buoyancy and transparency perspective.	1. Regulatory reforms approved which revise the natural resource extraction-based revenue regime, from a revenue buoyancy and transparency perspective. (On a best efforts basis) 2. Regulatory reforms approved which mandate the efficient and transparent restructuring of the current VAT system. (On a best efforts basis)
Providing technical/training support designed to facilitate approval (on a best effort basis) efficient and transparent restructuring of the current VAT system, with an accompanying time-framed game plan for establishing a comprehensive VAT regime and concomitant phasing out of the existing sales tax system;	

III. REGULATORY REFORMS APPROVED WHICH REVISE THE NATURAL RESOURCE EXTRACTION-BASED REVENUE REGIME, FROM A REVENUE BUOYANCY AND TRANSPARENCY PERSPECTIVE. (ON A BEST EFFORTS BASIS)

Regulatory Reforms Designed to Improve the Natural Resource Revenue Regime, from a Revenue Mobilization and Fiscal Transparency Perspective

During Year 1, ERLP provided an initial assessment and related strategic recommendations for revising the natural resource extraction-based revenue regime. This included a report entitled "Report on Regulatory Reforms Designed to Improve the Natural Resource Revenue Regime, from a Revenue Mobilization and Fiscal Transparency Perspective."

During Q4, ERLP updated its previous strategic review of revenue flows from the fisheries sector. The current system requires fisherfolk to pay a resource rent of 3 percent for the use of natural resources in the fisheries sector. However, since 2012, fisherfolk have not paid any resource rent for their fishing activities. Due to weak compliance and enforcement of regulations and conflict-induced insecurity, collecting resource rent directly by the government from a large number of individual fisherfolk is likely to prove extremely challenging.

As a result, ERLP recommended that this important stream of natural resource rents could best be collected by means of a withholding mechanism where auctioneers/cooperatives would withhold resource rents from fisherfolk, effectively operating on behalf of the ROYG. In this regard, auctioneers/cooperatives are limited in number and fixed in specific geographical locations; therefore, if given appropriate incentives, they could provide efficient resource rent collection services. For this purpose, auctioneers/cooperatives could be given 5 – 10 percent of the resource rent amounts collected to recover administrative expenses of auctioneers/cooperatives, depending upon the outcome of discussions/negotiation with the auctioneers/cooperatives.

This, in turn, would be consistent with the revenue allocation and utilization aspects of other provisions of the Yemeni Fishing Law; which mandates at present that 10 percent of the value of the collected revenues from the exploitation and investment of aquaculture, and the fines imposed under the Fishing Law, are to be allocated to support MFW activities at the local level. The combination of ongoing security and political economy constraints has limited the capacity of the MoF and MFW and their readiness to move towards the finalization of a detailed accord in this area up until now. However, over the next quarter, ERLP plans to discuss and facilitate an agreement with authorities on a detailed procedural framework for moving ahead with an auction-based collection system for the 3 percent fee on fish sales; based upon the efficient application of a withholding mechanism.

IV. REGULATORY REFORMS APPROVED THAT MANDATE THE EFFICIENT AND TRANSPARENT RESTRUCTURING OF THE CURRENT VAT SYSTEM. (ON A BEST EFFORTS BASIS)

One of the important activities included in the area of tax policy in the ERLP Year 1 Annual Work Plan was the conduct of a detailed analysis and accompanying time-framed game plan for establishing a comprehensive VAT regime and concomitant phasing out of the existing GST; as well as support for the development of a new VAT regime. To this end, ERLP has prepared two related reports in Q3: (i) A Report on VAT Policy Parameters; and (ii) Report on the Evaluation of the Current Sales Tax System and a Roadmap to Establish a Comprehensive VAT System. In addition, ERLP also held several rounds of consultation with senior staff from the Ministry of Finance and the Tax Authority. In addition, the team held extensive meetings on these topics during the recent visit of Yemeni economic governance officials to Cairo.

As a result of these consultations and meetings, MOF and Tax Authority officials and ERLP consultants agreed in principle on key VAT Policy Parameters. ERLP also prepared a detailed and time-framed VAT Roadmap for consideration, incorporating the major policy features/parameters required to establish a better practice compliant VAT Law. This will be followed by the development of a detailed VAT law based on the agreed policy parameters. In Q4, ERLP worked on excise tax and imposition of GST on the activities of branch offices operating in the liberated areas of the telecommunication companies, whose Headquarters are located in Sanaa, by introducing a branch registration system under the GST as follows:

Report on Excise Tax Policy Parameters to be Discussed and Agreed with MOF and Tax Authority, Forming the Basis for the Draft Excise Tax Legislation

During Q4, ERLP carried out a detailed analysis of requirements for establishing a better practice compliant excise tax system in Yemen. It should be noted in this regard that it has been successfully applied by many countries in the Gulf region in recent years but has yet to be introduced in Yemen. The analysis covered core features of a better practice-focused excise tax regime, its application in various countries internationally and in the region, and the resulting implications for its effective application in Yemen.

The analysis focused centrifugally on key recommendations in the following areas:

<u>Excisable goods and services</u>: cigarettes and other tobacco products, oat, non-alcoholic beverages, fuel, vehicles and vessels, telecommunication services, gold accessories, cosmetics, sugar, and gambling equipment may be defined as excisable goods.

<u>Excise tax base</u>: For items subject to specific rates, the excise tax base should be the volume of production, whether for imported or domestically produced goods. For items subject to ad valorem rates, the tax base should be the selling price or fair market value of domestically produced goods or services; while for imported goods, the tax base should be the cost, insurance, and freight (CIF) price, customs duty, and any other levy imposed at the point of importation.

Excise tax rates: Specific rates with automatic inflation adjustments based on changes in the CPI should be levied on tobacco products, non-alcoholic beverages and petroleum products; while ad valorem rates should be applied for other items.

Time and point of tax imposition: Excise taxes on domestic products should be imposed when goods are released from production premises and when services are provided. The excise tax on imports should be imposed when goods are imported

Filing and payment requirements: Taxpayers should be required to file excise tax returns and pay an excise tax for each tax period (calendar month); within the 21st day of the following month. Excise taxes on imports should be collected at the point of importation (along with customs duties).

Control mechanism: Excise tax enforcement should include the utilization of excise stamps to safeguard revenue. Tracking.

During the next quarter, ERLP fiscal team will work assiduously with relevant MoF and Taz Authority officials on proposed excise tax policy parameters; and develop a detailed draft excise taxation law.

Need to introduce a Special Type of General Sales Tax Registration System in Yemen

During Q4, ERLP prepared a report entitled the "Need to introduce a Special Type of General Sales Tax Registration System in Yemen." The main objective of this analysis was to foment the development of a regulatory framework that would allow GOY to levy direct taxes on the local branches or divisions of companies whose headquarters are located in Sana'a. This is particularly relevant/important in the case of telecommunication services. Currently, local internet providers and mobile phone providers that operate in Government-controlled areas do not pay GST on their transactions to the tax administration service in Aden -- though they use the airwave facilities provided by the Government. In order to resolve this loophole, ERLP has recommended a branch registration system and the issuance of a separate TIN, such that the local office would then be required to comply with the tax obligations required for all registered taxpayers. ERLP plans to further discuss this proposal in-depth with relevant MOF and Tax Authority officials during Q4 and agree on the proposed branch registration-related regulatory and procedural framework to be applied and provide initial preparatory training to tax officials on its application.

1.2.2 TAX ADMINISTRATION

BACKGROUND

ERLP's senior tax administration advisor worked with Tax Authority officials in August 2021 to review progress on and coordinate follow-up implementation steps related to the ERLP action plan to improve the efficiency and transparency of core functions of the Tax Administration system; specifically with reference to registration, filing, audit, collection and appeals. This encompassed detailed discussions with Tax Authority officials across a range of key departments and further refinement of targeted reform recommendations on critical procedural changes needed across core functional areas to enhance the efficiency and transparency of revenue administration processes and systems.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

During Q4, ERLP intensified advocacy for adoption of critical tax administrative organizational and functional reforms designed to improve the efficiency and transparency of core tax administration functions (registration, filing, examination/audit, collection, and appeals); initially to be implemented on a pilot basis under the aegis of the large taxpayer unit.

Table 12: Q4 Tax Administration Activities and Deliverables

ACTIVITIES	DELIVERABLES
Initiate implementation (on a best efforts basis) of a plan to improve the efficiency and transparency of core functions (registration, filing, examination/audit, collection, appeals), with an initial focus on the establishment of a large taxpayer unit.	1. Adoption and initial implementation (on a best efforts basis) of a large taxpayer unit organized along functional lines (registration, filing, examination/audit, collection, appeals).

1. ADOPTION AND INITIAL IMPLEMENTATION (ON A BEST EFFORTS BASIS) OF A LARGE TAXPAYER UNIT ORGANIZED ALONG FUNCTIONAL LINES(REGISTRATION, FILING, EXAMINATION/AUDIT, COLLECTION, APPEALS)

ERLP worked intensively during this past quarter to lay the groundwork for agreement with Tax Authority officials on a targeted program to introduce major procedural reforms across key functional areas, initially to be applied to large taxpayers. In spite of the institutional rigidities associated with the COVID Crisis and fragile political economy and security conditions, the effective institutional groundwork has been laid for the near-term introduction of pilot reforms in the following key areas:

Taxpayer Registration:

The following critical functional reform priorities in the taxpayer registration area have been identified and discussed in-depth with Tax Authority counterparts:

- Controlling TINs: Identifying and putting in place controls to check that no TIN is assigned to more than one taxpayer and that no taxpayer is assigned more than one TIN. The Tax Authority has, in this regard, already initiated the numbering of taxpayers in liberated areas.
- Cleaning the registration database: The taxpayer register is inadequately maintained, incomplete and out of date. With ERLP technical support, the Tax Authority (TA) has taken initial steps toward cleansing its database, including the removal of stop-filers from the active taxpayer's database. It has also adopted a review mechanism designed to detect and report on active stop-filers.
- De-registering taxpayers: The TA's lack of efficiency in de-activating non-existent taxpayers impacts other functions' efficiency. In the absence of any legislative authority to de-register such taxpayers, ERLP has worked with the TA to agree on a strategy of re-categorizing them as "inactive." This, in turn, will allow the TA to focus more effectively on actual non-compliant taxpayers.
- Detecting unregistered taxpayers: The TA has traditionally avoided taking serious action to promote the discovery and pursue the mandatory registration of unregistered taxpayers. ERLP has proposed a targeted set of procedures designed to help detect those taxpayers who remain

outside the formal registration net; based on targeted analysis of information gathered from tax audit and field survey activities and governmental parties.

Filing and payment:

The TA is working manually with minimum automation capacity and limited communication with banking institutions. These constraints significantly inhibit its capacity to process returns rapidly and identify non-compliant taxpayers. In this regard, ERLP has recommended that TA focus initially on promoting greater filing and payment compliance from large taxpayers. This approach will allow the TA to economize on scarce administrative and automation resources and maximize per capita revenue collection impact. Key related reform measures include:

- Segregation of returns filing from the payment process: This procedure has been accepted, though it will require adjoining regulatory measures to increase the penalties on late payment.
- Rapid detection of stop-filers: The TA with ERLP support initiated the design of processes and procedures for large taxpayers that will assist in the rapid detection of non-compliance status. In this regard, the TA Headquarters Office has sent regional offices a memorandum with instructions designed to rapidly detect registered large taxpayers who do not submit a monthly GST or PAYE return and to classify them as stop-filers.
- Compliance-related civil sanctions: If an outstanding tax return or tax arrears exist, the TA should act to temporarily suspend the offending party's business license. This would, in turn, prevent the relevant taxpayer from transacting business with government entities and/or importing goods through customs. This tool should, for obvious reasons be used cautiously, particularly in light of current fragile macroeconomic conditions.
- Facilitating compliance: The TA is utilizing targeted media outreach efforts to remind taxpayers of filing due dates.
- TA headquarters is now requiring from regional offices monthly statistical information on returns and payments. It has been recommended by ERLP that, at a minimum, all large taxpayer stop-filers should be contacted within 14 days of their return becoming overdue.
- Accommodation of electronic payments processes is a must. In this regard, discussions have been initiated with the TA to facilitate planning for the startup of negotiations with commercial banks for purposes of enabling tax payments through banking institutions; which would be subsequently transferred to government accounts at the CBY.

Audit:

Responsibility for the crucially important audit function is inefficiently allocated between TA Headquarters and regional offices. There is no standardized risk-analysis-based audit selection system in place at the Headquarters level. In turn, there is little guidance over and standardization of audit policies and procedures at the field level. In this regard, further technical assistance needs to be provided to help ensure the effective standardization and professionalization of the audit function; including design of a sound risk analysis/based audit manual, development of strategic annual audit plans for regional offices, allocation of adequate audit resources to regional offices, evaluation of audit program results, and related intensive training in risk-based audit selection and implementation processes.

Audit efficiency standards will also need to be developed and implemented to facilitate effective assessment of audit coverage as a percentage of the total taxpayer population subject to audit in a given year. The application of these principles should also facilitate efficient targeting of those taxpayers who have the largest underpayment obligations, and enhance overall compliance rates and revenue-intake goals.

Collection:

The TA has started with ERELP assistance to put basic procedures in place to rapidly identify arrears for large taxpayers and assign priority for follow-up collection activities. Further intensive technical assistance is envisaged over the next quarter and beyond to help the TA establish collection processes and procedures which help to efficiently identify/select the most significant and at-risk arrearages. It will also focus on applying cost and time-effective collection actions -- based on the available resources -- to rapidly detect large delinquent taxpayers and targeted repayment actions. Future technical assistance foci will also include establishing collections enforcement procedures, including offsetting refunds due, garnishment of bank accounts, court action for the seizure of assets, and public auction procedures.

Tax Disputes Resolution & Appeals

Taxpayer appeals procedures are not well-defined at present, and are not handled in a timely manner. The TA has, in this regard, initiated with ERLP support the development of guidance to facilitate the tracking of the amount of elapsed time required to respond to an appeal request. Moving forward, clear and effectively defined procedures should be defined for handling objections and stricter time limitations need to be imposed by the TA to significantly reduce the backlog of 'objections' which have accumulated. This is critical from a transparency and fairness perspective. It is equally important from a revenue buoyancy viewpoint since the filing of an objection effectively stops all collection actions by the TA.

1.2.3 DEBT PLANNING AND MANAGEMENT

BACKGROUND

During Y1, ERLP developed an overall strategic framework for external and domestic debt management in Yemen. The project worked with the CBY, MOF, and MOPIC to establish a sound debt tracking system in Aden, by supporting the reinstallation of the DMFAS debt management system. ERLP also developed a database containing all available information on outstanding external loans and obligations to track and link them to the budget estimation analysis. In addition, the project worked with key government agencies to enhance transparency and information-sharing regarding debt management and debt obligations. In addition a centralized data reporting framework was prepared that effectively collates debt disbursement and obligation information from decentralized units. ERLP successfully advocated for and helped establish the joint MOF/MOPIC/CBY Working Group during Y1.

The purpose of the Working Group is to coordinate all debt management and planning work and oversee tracking activities for external loans and grant/aid-related data. During the second half of Y1, the government transformed the Working Group into the Joint Committee on Debt Management. The joint committee is composed of a Technical Working Group, designed to support day-to-day debt data and collation work, and a Senior Management Group, which provides guidance and leadership on debt planning and management policy.

It is worth noting that information sharing between MOF, MOPIC, and the CBY was virtually nonexistent before ERLP helped establish the Working Group. At present, these agencies meet and exchange information regularly. In addition, the project delivered a set of debt-related training activities to MOF, CBY, and MOPIC staff and senior officials. ERLP also helped the CBY review available debt management applications and select the UNCTAD System for the DMFAS 6 platform; as a rigorous and internationally recognized data analysis vehicle for collating and effectively managing its public debt data. Moreover, ERLP prepared detailed procedural guidance to support the reinstallation of DMFAS in Aden. DMFAS will facilitate – for the first time since the GOY transferred operations to Aden – efficient and time-effective management and analysis of external and domestic debt and grants data.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

In Q4, ERLP continued to support the data collation/analysis and related debt recording and tracking domestic and external debt activity. The debt management committee and members of the MOF, MOPIC, and CBY met bi-weekly to discuss all debt-related topics and developments. The group developed initial estimates of debt servicing obligations to incorporate in the 2022 CY budget proposal, for purposes of submission to the MOF for its review. ERLP also continued communication with UNCTAD and CBY to facilitate the implementation of DMFAS 6 and prepared a related report. In this regard, ERLP prepared an analysis assessing strategic options for addressing the current government overdraft balance at the CBY, and will submit this assessment to MOF and CBY for subsequent review. Finally, ERLP debt management experts delivered a series of training workshops to relevant CBY, MOF, and MOPIC officials and technical staff on various debt-related topics during Q4.

Table 13: Q4 Debt Planning and Management Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Further update and fully disseminate a comprehensive framework for debt data tracking through the operation of the DMFAS system.</td><td rowspan="5">1. A report on the implementation status of the DMFAS system prepared
2. A concise “white paper” finalized which assesses strategic options for addressing the current government overdraft balance.
3. Initial analysis/estimates of debt servicing obligations and disbursements provided for purposes of incorporation within the CY 2022 budget proposal
4. Targeted training to MOF and CBY employees on debt-related issues and on the utilization of DMFAS</td></tr>
<tr><td>Provide further support for the effective operation of a reorganized debt reporting framework involving decentralized public sector entities.</td></tr>
<tr><td>Develop a concise “white paper” assessing options for addressing the current government overdraft balance of 2.2 trillion rial</td></tr>
<tr><td>Support the development of initial analysis/estimates of debt servicing obligations and disbursements for incorporation into the CY 2022 budget proposal.</td></tr>
<tr><td>Continue targeted training to MOF and CBY employees on utilization of DMFAS.</td></tr>
</table>

I. A REPORT ON THE IMPLEMENTATION STATUS OF THE DMFAS SYSTEM PREPARED

ERLP prepared a progress report on the implementation status of the DMFAS system in Aden. The CBY subsequently sent the official request to UNCTAD to install the system, and ERLP expects UNCTAD to review the request in early Y2Q1; allowing for the settlement of the financial consideration between the two parties.

The first scheduled training activity, “IT Training on the Installation and Maintenance of the System,” will occur once the request is officially approved. The remainder of the training will be scheduled once the system is fully operationalized. IT training is expected to take place before the end of 2021. ERLP played a significant role in facilitating the communication and coordination between CBY and UNCTAD. The team will continue to liaise as necessary with both parties to ensure that everything is on track regarding the coming steps. (See *Annex 09 – Macro – Debt – Report on The Implementation Status Of The DMFAS System*)

II. A CONCISE "WHITE PAPER" FINALIZED, WHICH ASSESSES STRATEGIC OPTIONS FOR ADDRESSING THE CURRENT GOVERNMENT OVERDRAFT BALANCE

ERLP prepared a white paper that includes potential solutions for limiting the government's overdraft balance at the CBY, including a debt issuance approach to help finance the sizeable public deficit. Currently, the government is financing its deficit by issuing certificates of deposits, *wakala* deposits, and other financial instruments through the CBY. The white paper proposed two potential avenues of reducing the government's overdraft balance, including a plan to issue CBY a 30-year, fixed-interest bond to ensure debt sustainability. The paper also suggested the development of a bond market to issue short-term and long-term securities

ERLP expects to discuss the implementation strategy for the proposed solutions with the MOF and CBY representatives in November of 2021 once all parties have reached a final agreement. (See *Annex 10 – Macro – Debt – White paper on Strategic Options for Addressing the Current Government Overdraft Balance*)

III. INITIAL ANALYSIS/ESTIMATES PROVIDED OF DEBT SERVICING OBLIGATIONS AND DISBURSEMENTS FOR PURPOSES OF INCORPORATION WITHIN THE CY 2022 BUDGET PROPOSAL

ERLP worked with MOF, MOPIC, and the CBY to prepare initial estimates of domestic and external debt servicing obligations and disbursements to be incorporated within the CY 2022 budget proposal. The budget proposal also estimated obligations and disbursements associated with new debt instruments; such as the proposed bond for the CBY, interest payments on IDA and other external loans, and expected external loan disbursements.

IV. TARGETED TRAINING TO MOF AND CBY EMPLOYEES ON DEBT-RELATED ISSUES AND ON THE UTILIZATION OF DMFAS.

ERLP prepared training material and delivered a set of debt-related training activities to MOF, CBY, and MOPIC debt management staff and senior officials. The training covered essential topics such as the guidelines for public debt management and the role of MOF in public debt management, public debt instruments, and an overview of DMFAS 6. Moreover, the training on DMFAS 6, delivered in Cairo to CBY officials in early July (and remotely for additional MOF, MOPIC, and CBY staff in August), increased familiarity with DMFAS modules and features among Yemeni officials; focusing on important technical and operational aspects of the system. The module explained its use in managing debt and other financial instruments throughout the core phases of their life cycles: registration, mobilization of funds, and debt service operations. It also introduced the reporting and analysis features.

After participating in these training sessions, the counterparts expressed a high level of satisfaction with the topics delivered and the features and capabilities of DMFAS 6.

NEXT STEPS

In Year 2, ERLP will continue to support and expand effective debt monitoring and tracking activities; and target the retrieval of missing external loan data to be entered into the database. ERLP expects to provide targeted capacity-building support for MOF, CBY, and MOPIC debt management staff on different debt-related topics, including DMFAS preparatory training sessions.

ERLP will also improve the operational efficacy of the Debt Management Office at the MOF by introducing manualized guidelines and efficient, well-coordinated debt assessment and tracking activities. MOF has pledged to issue new debt instruments to help cover the overdraft balance at the CBY. ERLP will, in this regard, follow up on a recently prepared ERLP white paper, covering strategic options for utilization of distinct debt instruments and open market operation techniques. ERLP will in addition provide targeted guidance and support to MOF and the CBY to facilitate the implementation of a sound debt instrument issuance strategy and game plan, including close coordination between the ERLP Debt Planning/Management and Monetary Management advisory teams.

In addition, the MOF and CBY will receive targeted training interventions and manualized guidelines on the auction process for issuing treasury securities. Moreover, ERLP technical experts will help operationalize the Debt Management Office within the MOF, laying the institutional groundwork for sound debt planning & management activities within the MOF. ERLP will continue to coordinate as well with UNCTAD and CBY to expedite the installation of the DMFAS System by the end of CY2021. Finally, the team will also facilitate the DMFAS training activities and deliver capacity-building training interventions on areas not covered directly by UNCTAD.

1.2.4 BUDGET PLANNING

BACKGROUND

The ERLP Budgetary Planning component is focused on systematic budgetary reforms designed to strengthen budgetary planning processes and outcomes. Priority focus areas include the development of a sound budgetary policy/procedural framework, integration of GFIS-compliant budget coding requirements, and the development of a robust expenditure prioritization strategy and procedural framework. Within this overall context, the project also provides targeted capacity-building assistance to MoF staff to promote reforms in critical budgetary allocation areas, and development of an initial integrated medium-term budgetary framework (with integrated recurrent and capital budgets) for key sectoral areas, such as healthcare and education.

Building on the momentum of the precedent quarter, ERLP has been focusing on putting in place the foundation for the preparation of the 2022 budget, including developing a pre-budget statement on the basis of the first budget circular, developing sound budget preparation procedures, integrating revenue forecasts into the new budget framework, adopting a revised budget classification, and providing training.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

ERLP worked with MOF to facilitate operationalization of the budget circular and build consensus on the fiscal objectives that will guide the CY2022 budget preparation. In order to support this activity, ERLP organized two seminars, one on budget planning and one on Expenditure Ceilings with updated budget procedures These seminars included training and discussions of the existing fiscal and budget planning challenges and optimal approaches for addressing them.

This participatory approach has facilitated effective identification of a number of issues that will need to be addressed in the new budget planning process: (i) weaknesses in sector policy planning, (ii) difficulties in assessing precisely the pool of resources that can be mobilized and the fiscal space available for improving public service delivery and increasing capital spending, (iii) lack of comprehensiveness of past budgets that did not include capital spending financed by donors, failed to track precisely subsidies or to include a number of off-budget expenditures, (iv) lack of focus on expenditure efficiency factors, and (v) the necessity of improving service delivery.

The training on MTEF focused on moving towards a practical framework adapted to the present situation in Yemen. A number of core rigidities in this area are being addressed, mainly (i) the traditional absence of program-based budgeting concepts, (ii) a dual process with two pilot ministries engaged in planning based at a broad level on application of policy prioritization concepts, while other line-ministries continue with line-item budgeting, (iii) the absence of strategic plans at the sector level (iv) a large volume of off-budget expenditure that needs to be brought in budget. These issues are addressed in the Concept Note that outlines the proposed new budget procedures.

At the moment, ERPL is assembling the building blocks of the MTEF. Non-oil revenue projections are already available and the fiscal team is preparing oil revenue projections based on oil field production projections. Based on the revenue projections and on a targeted deficit between 4 and 5 per cent of GDP, fiscal space will be calculated and allocated based on the policy priorities set in a first Budget Circular. This includes a core focus on containment of the wage bill; and allocation, if possible, of an enlarged portion of the budget to capital expenditure and to improvements in public service delivery. Projections for 2021 expenditure have been prepared to guide this process.

The 2022 Budget Framework represents the initial building block of the MTEF, and can be used as a baseline for future development of a full-scale MTEF. At this point the project will work with key priority ministries (Health and Education) to facilitate initial development/presentation of integrated and goal-focused expenditure forecasts over a three-year timeframe.

The Budget Framework will be used to set a ceiling for overall expenditures and for disaggregating that ceiling into major expenditure categories: wages, non-wage operational expenditure, capital expenditures, subsidies, and interest payments. Based on the aggregate ceiling, MOF will allocate the available budget to line-ministries and other budget users. A related follow-up training plan has been put in place and approved by MOF. The topic of these first sessions is (i) Good practices in budget preparation, (ii) The construction of expenditure ceilings, and (iii) The prioritization of expenditures.

Table 14: Q4 Budgetary Planning Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Monitor adjustments in CY 2021 budgetary allocations from an efficient and transparent budget prioritization/allocation perspective.</td><td rowspan="3">1. A comprehensive report prepared on adjustments in CY 2021 budgetary allocations, analyzed from a budgetary efficiency/transparency perspective.
2. Better practice-compliant budget circulars and related procedural guidelines issued for initial preparation of the CY 2022 budget.
3. Targeted regulatory/procedural reforms adopted, which promote a more efficient budget prioritization process for the CY 2022 budget.</td></tr>
<tr><td>Provide technical support for the initial development of budget circulars and related procedural guidelines for initial preparation of the CY 2022 budget.</td></tr>
<tr><td>Facilitate adoption and initial implementation of regulatory/procedural reforms designed to promote an efficient budget prioritization process for the CY 2022 budget.</td></tr>
</table>

Support establishment of an organized budgetary planning process designed to facilitate development of an integrated medium-term expenditure framework for 2-3 budgetary sectors.	4. GFIS-compliant budget coding procedures are utilized/followed for purposes of CY 2022 budget estimation purposes. 5. Procedural reforms are adopted which facilitate effective citizen engagement in the national budget process. 6. A detailed presentation of the proposed CY 2022 budget is finalized/presented to the inter-ministerial budget committee (the committee which reviews and approves the final budget draft) 7. At least 4-6 structured training sessions provided on better practice compliant budget preparation and classification procedures. 8. A detailed report providing a recommended institutional and procedural framework to initiate a budgetary monitoring unit for SOEs within MOF. 9. A detailed study assessing the impact of the existing subsidy scheme on economic and social conditions in Yemen, with particular focus on fuel subsidies, and a detailed strategy for a transitional reform program combining fuel subsidy reductions with direct income transfers
Initiate implementation of a GFIS-compliant budget coding manual for the MOF for purposes of CY 2022 budget estimation purposes.	
Facilitate development and initial implementation of procedural reforms which incorporate an organized institutional outreach process to facilitate better practice compliant citizen engagement in the national budget process.	
Support development by MOF of a detailed presentation of the proposed CY 2022 budget by the MOF team within the inter-ministerial budget committee (the committee which reviews and approves the final budget draft)	
Provide structured training support on better practice compliant budget preparation and classification procedures.	
Develop an institutional and procedural framework to initiate a budgetary monitoring unit for SOEs within the MOF head-offices. This new unit will assess the budgetary performance of existing SOEs, and define clear compliance targets for the transfer of budgetary resources from the government account to selective SOEs	
Present a detailed study assessing the impact of the existing subsidy scheme on economic and social conditions in Yemen, with particular focus on fuel subsidies. The study will include a detailed strategy for a successful reform program, combining fuel subsidy reduction with direct income transfers to the poorest one-third of households during the reform phase	

I. A COMPREHENSIVE REPORT PREPARED ON ADJUSTMENTS IN CY 2021 BUDGETARY ALLOCATIONS, ANALYZED FROM A BUDGETARY EFFICIENCY/TRANSPARENCY PERSPECTIVE

ERLP has compared budget allocations for January-June 2021 with the budget allocations for July-December 2021. Overall, the analysis confirms that the mechanism for spending control put in place with the assistance of the ERPL team works well at the aggregate level, and has been successful in allowing MOF to remain within the parameters guiding targeted levels of spending. The effort will shift moving forward to a more disaggregated level of budget classification, through enhanced budget prioritization and strengthening of expenditure control below the most aggregative levels of budget classification.

The table attached in Annex 11 does not demonstrate great variations from one half of the year to the next. At the same time the budget allocation numbers, as well as the actual numbers, do not take into consideration the accumulation of arrears and the reallocation of funds either at lower levels of budget classification or between secondary budget users. Enhancing allocative transparency and efficiency in these areas represents an important component of ERPL strategy looking ahead to CY 2022. This will for instance include enhancing detailed budgetary reporting at the sub-national (governorate) level, and for major SOEs and other commercialized public sector entities.

In order to strengthen the efficiency and transparency of budgetary allocation/adjustment policies, EPRL team is implementing a number of important measures:

- The new budget classification structure that is being introduced should improve considerably the budget planning process, by providing more effectively disaggregated information on spending levels/patterns. This will provide MOF with better control over spending; while facilitating further enhanced budget analysis and planning processes.

- The new 2022 budget will be more realistic in terms of spending capacity and expenditure prioritization, through the new budget preparation procedures being introduced.

- Efforts are envisaged to facilitate more realistic budget planning processes for electricity and water. The first stage should be rigorous planning for the purchase of fuel for electricity generation, which should be provided directly to MOF; and which then should be incorporated in a clearly defined manner in the budget of the Ministry of Electricity, and related to explicitly defined performance objectives.

- A plan is being put in place to improve budget execution in general and commitment management in particular to allow MOF to effectively monitor the complete payment cycle. Commitment reports will give advance notice to cash management of cash needs, and from there it will be possible to monitor the volume of transactions being processed from the purchase orders to the final payments and to measure and address delays in payment execution.[2]

- ERPL is developing a proposal for start-up of an efficient arrearage inventory/reporting system, and related establishment of an arrearage prevention strategy. Once the stock of arrears is firmly established, they can be ranked by order of priority and a concrete arrear management strategy can be put in place, including gradual liquidation linked to progress in revenue collection and deficit reduction measures.

(See *Annex 11 – Macro – Budget Planning – A Report on Adjustments in CY 2021 Budgetary Allocations, Analyzed from A Budgetary Efficiency-Transparency Perspective)*

II. BETTER PRACTICE-COMPLIANT BUDGET CIRCULARS AND RELATED PROCEDURAL GUIDELINES ISSUED FOR INITIAL PREPARATION OF THE CY 2022 BUDGET

A new budget preparation procedure has been adopted by MOF that is described in more detail in the following section of this report. While issuance of a final budget circular has been delayed somewhat by ongoing political economy and security uncertainties, final issuance of the circular which reflects close coordination between ERLP experts and MoF officials is expected shortly. In this regard MOF wishes to release the circular with budget user ceilings in order to ensure that the new budget preparation process is tested and stable. At present the initial section of the draft circular describes the general objectives of the budget, and the economic assumptions underpinning it.

In addition the major financial reforms targeted in the draft budget 2022 are described, notably a number of measures related to revenue mobilization. Reducing the deficit below 5 percent of GDP is

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[2] Please see the budget execution section of the report for additional details.

mentioned as a primary fiscal objective; with this introduction of a borrowing program to avoid substantial further monetization of the deficit, with strong coordination between fiscal and monetary policy formulation. This part of the budget circular is the equivalent of a fiscal policy declaration.

A subsequent section provides general instructions to line ministries for budget preparation purposes. This includes instruction for estimating employee compensation, operating expenditures, social benefits, transfers and financial subsidies, capital spending, and financial (debt repayment) expenditures. ERPL is finalizing discussions with MOF on best aligning this section with the new budget classification scheme.

Finally, ERPL and the MoF are coordinating on incorporation into the circular of an additional section that will describe a new budget prioritization procedural framework; which will help guide the detailed budget preparation process by ministries. This in turn is expected to serve as a foundation for the development of future budgets.

III. EFFICIENT BUDGET PRIORITIZATION PROCESS FOR THE CY 2022 BUDGET

The new budget process combines a top-down approach based on fiscal policy and a bottom-up approach based on needs. The process has basically three phases: (i) overall country ceiling disaggregated by five expenditure categories (salaries, non-wage recurrent expenditure, subvention, interest and investment), (ii) line-ministries' expenditure ceiling disaggregated by three expenditure categories (salaries, non-wage recurrent expenditure, investment) and (iii) detailed budgeting reconciling expenditure needs with the fiscal space available in the ceilings.

The disaggregation of the country ceiling by budget users will include prioritization of expenditure by sector and prioritization between expenditure categories. Regarding sector prioritization health, education and infrastructure maintenance will be prioritized over other expenditures. Regarding prioritization by expenditure categories, salaries will receive the highest priority. Investments will be limited to a number of priority sectors and priority projects. Considering the very limited fiscal space currently available for investments, the objective will be both to expand that space at the margin, while working to ensure a proper balance between investment and service delivery allocations.

(See *Annex 12 – Macro – Budget Planning – New Budget Preparation Process*)

IV. GFIS-COMPLIANT BUDGET CODING PROCEDURES ARE UTILIZED/FOLLOWED FOR PURPOSES OF CY 2022 BUDGET ESTIMATION PURPOSES

Work on the classification has been resumed by the Pragma/ERLP team. The lowest level of classification under the economic classification system has been carried out. The revision of higher levels of classification (chapters and sub-chapters) has just been completed, and will shortly be submitted for approval to the Ministry of Finance.

The new classification pursues three objectives: (i) to be fully GFS compliant at all levels of the classification structure for reporting and accounting purposes, (ii) to improve budget preparation by introducing clearer expenditure categories, especially those that are highly significant in terms of budgeting, and (iii) to facilitate expenditure prioritization through better linkage with sector policies.

The major classificatory changes being introduced are referenced below:

Chapter 1 provides a more detailed disaggregation of employee compensation.

Chapter 2 is where most of the key changes occur. The number of sub-chapters goes from 5 to 9. Fixed capital consumption is not a budgetary concept, but a chart of accounts concept. However, some small amounts are sometimes recorded. It has been decided to retain it with code 2.0, that will not interfere with the flow of other sub-chapters until the quality of underlying accounting structures and processes is improved. The increase in the number of sub-chapters will help capture details on professional services, utilities and telecommunication services, and travel expenses. Other property-related expenses other than interest that will be covered include spending on maintenance, rejuvenation, of oil fields and other extractive activities.

Chapter 4: the line supplies has been moved to Chapter in accordance with GFS principles. The line fixed asset acquisition -- which did not previously provide any detail -- has now been disaggregated into eight categories (Buildings, Vehicles and transportations equipment, ICT equipment, Other equipment, Other fixed assets including weapons systems, Inventories, Valuables, Non-produced assets). This is in line with the IMF manual of Government Statistics.

Chapter 5: the payment of interest on loans has been moved to chapter 2, where it more properly belongs. A new category for capital participation has been introduced. This line will be used mainly for SOEs.

(*See Annex 13 – Macro – Budget Planning – Budget Classification Proposal*)

V. PROCEDURAL REFORMS ARE ADOPTED WHICH FACILITATE EFFECTIVE CITIZEN ENGAGEMENT IN THE NATIONAL BUDGET PROCESS

Objectives for CY 2022

- **The Pre-Budget Statement** could be a quick win, as the first draft of the budget circular prepared by the ERLP team can be read as a Fiscal Policy Paper. ERLP is currently working on a draft of that circular which, with limited adjustments, can also be presented as a Pre-Budget Statement, and made public after being endorsed by the authorities.

- **A consultation of representatives of the civil society based on the pre-budget statement.** These representatives can be chosen by MOF and the purpose of the consultation will be mostly for information. The number of participants could be around 20, chosen among the press and various relevant organizations, including the representation of women.

- **The Executive's Budget Proposal** should be easy to make public irrespective of a vote of the House of Representatives which, due to present circumstances, might be unable to meet. This executive budget proposal, also called a Revenue and Expenditure Plan, after formal endorsement by the Cabinet, would become the official budget of the country

- **The citizen budget** will be prepared with support from the ERLP Team.

- **The Mid-Year Review** is of particular importance; as it will be a means of assessing the quality of the first budgeting process, and will offer a chance to make some corrections in the budget. It is quite possible that by June 2022 the economic environment may have changed, leading to a revision of the assumptions underpinning the budget. Should these assumptions change, the new assumptions should be published with the revised budget.

By any objective standard, if the MOF can meet these core transparency objectives during CY2022, great progress will have been made. Considering current institutional circumstances, the likelihood of a vote on the budget by the House of Representatives might be a difficult objective to achieve. Other key milestones such as the envisaged in-year reports, end-year report, and the audit report could be implemented by CY22 or CY23 latest. The comprehensiveness of this report will of course be facilitated if progress can also be made on IFMIS development.

(See *Annex 14 – Macro – Budget Planning – Citizen Participation*)

VI. A DETAILED PRESENTATION OF THE PROPOSED CY 2022 BUDGET IS FINALIZED/PRESENTED TO THE INTER-MINISTERIAL BUDGET COMMITTEE (THE COMMITTEE WHICH REVIEWS AND APPROVES THE FINAL BUDGET DRAFT)

Discussions have been initiated with MOF on the presentation of the CY 2022 budget to the cabinet and to the public. Looking forward, this consultation will need to be initiated expeditiously after final adoption of a budget preparation methodology (expenditure plan vs. budget), and of the further revised budget classification. Although delayed somewhat by political economy and security perturbations over the past few months, it is expected that the final approvals for the recommended budget preparation methodological enhancements will be provided shortly by MoF leadership, and that consultations will follow shortly thereafter.

It should be noted that the proposed budget format follows the core concept that the budget presentation should incorporate a clear and cogent narrative that explains the objectives, the underpinning assumptions, and the expenditure prioritization mechanisms behind the numerical structure of the budget. The presentation that is envisaged and is under final discussion with MOF entails the following:

1. Statement of fiscal and economic policy (Main fiscal objectives in terms of revenue and expenditure, main economic objectives, sector prioritization, investment prioritization, expected outcomes)
2. Economic assumptions underlying the budget preparation (Oil price, Exchange rate; Inflation Covid-19 spending, Economic recovery
3. Budget summary
4. Presentation of the revenue forecasts
5. Presentation of the country expenditure ceiling
6. Presentation of ministries and budget users' expenditure ceilings
7. Presentation the budget by ministries
8. Presentation of the budget by sub-national Governments
9. Consolidated budget by expenditure categories
10. Financial plan for financing the budget deficit

VII. AT LEAST 4-6 STRUCTURED TRAINING SESSIONS PROVIDED ON BETTER PRACTICE COMPLIANT BUDGET PREPARATION AND CLASSIFICATION PROCEDURES

Three detailed training modules on budget preparation have been conducted thus far:

1) Budget Classification: This training program introduced the different types of classification (economic, administrative, and functional) and how they can best be adapted to Yemen. A special emphasis was put on GFS requirements and what they entail in terms of detailed budget classification requirements. The training focused as well in-depth on COFOG classification needs (in the process of being introduced).

2) Budget Planning and Prioritization: This training module covered basic budget policy and planning, budget preparation steps and the related prioritization process, MTEF principles, program-based budgeting, establishment of sound budget ceilings, and effectively linking recurrent and investment expenditures.

3) Good practices in budget preparation: this training module provided an introduction to the proposed new budget preparation process. It covered the requirements for a document to be recognized internationally as a budget, the core rationale for moving away from mechanistic expenditure plans, and the three core phases of a sound budget preparation process: overall ceilings, setting ceilings at the budget user level, and detailed budget planning concepts.

Given availability constraints on the part of staff at this stage of the budget cycle, these training modules were prioritized as representing the most critical skill-transmission areas for sound CY 2022 budget planning purposes. During the next quarter, expanded training activities across more detailed budget planning related conceptual areas will be provided as well,

VIII. A DETAILED REPORT PROVIDING A RECOMMENDED INSTITUTIONAL AND PROCEDURAL FRAMEWORK TO INITIATE A BUDGETARY MONITORING UNIT FOR SOES WITHIN MOF

Major SOEs include the Electricity Company, the Water Company, the Oil Company, the Telco Company and Yemeni Air. Telco and Yemeni Air send the proceeds they collect to Sanaa. They do not receive any Government support. SOEs or non-corporatized entities that receive Government assistance include the Electricity Company, the Water Company and the network of public hospitals. However, as there is no headquarters operation in Aden for these companies, the entity which is responsible for tracking the provision of financial transfers to them and the receipt of revenues from them – The Economic Unit Directorate -- deals with each branch separately, usually one branch in each Governorate.

The financing of economic entities does not appear as such in the budget. This in part reflects the fact that these entities are typically not corporatized and function as "commercialized" departments under ministries. Moreover financial resource flows to these entities are not recorded as transfer; but are instead registered as operating expenditures under their respective ministries. These provide MOF only aggregated expenditures at the level of sub-chapters of the budget classification. For instance, when the Ministry of Electricity make a transfer to the Electricity company, MOF does not know if the transfer is for salaries or for other operating expenditure.

It is clearly an urgent priority from both a budgetary efficiency and transparency perspective to establish an organized, coherent and consistent budgetary planning and tracking/monitoring framework for rationalizing the transfer of public resources to commercialized state-sponsored service provision entities. Given that this process is starting from scratch – and under very challenging political economy and security conditions – it will be important to advance this process in a gradual, phased manner. At the moment, our effort to establish enhanced budgetary planning and accountability processes will be focused primarily on the electricity and (subsequently) water companies. Hospital financing issues will be examined as well.

The proposed initial intervention plan the ERLP Team is developing in this areas envisages the following core elements:

- To give to the Electricity Company branches a separate budge user code from the Ministry of Electricity;
- To put in place for the Electricity Company a financial reporting framework approved by MOF, that will consolidate all branches;
- To put in place a regulatory framework that will define the respective budgetary reporting and related financial performance responsibilities of the Electricity Company/Ministry, as well as conditions for accessing budgetary funds;
- To institutionalize regularized financial reporting by the Electricity Company and by the Ministry of Electricity supported by adequate Excel tools;
- To request the Ministry of Electricity to present a budget for the generation of electricity which is separated from its own operational budget;
- To put in place in place financial reports capable of calculating losses before subsidies after aggregating all branch operations
- To request the Electricity Ministry to present a cash plan revised every quarter.

Major elements of this ambitious plan are expected to be put in place for purposes of their application by summer CY 2022, The final budgetary reporting and performance and related regulatory reform parameters of this approach will be coordinated with the ERLP electricity sector advisory expert, within the context of ongoing related work on the KSA Fuel Subsidy-related M&E Program being developed through ERLP.

IX. A DETAILED STUDY ASSESSING THE IMPACT OF THE EXISTING SUBSIDY SCHEME ON ECONOMIC AND SOCIAL CONDITIONS IN YEMEN, WITH PARTICULAR FOCUS ON FUEL SUBSIDIES, AND A DETAILED STRATEGY FOR A TRANSITIONAL REFORM PROGRAM COMBINING FUEL SUBSIDY REDUCTIONS WITH DIRECT INCOME TRANSFERS

For the purpose of this survey, ERPL has collected data directly from the Ministry of Electricity, as no related/relevant data was available from the Ministry of Finance. This data covers transfers from the Ministry of Energy to the Electricity Company (PEC) for salaries and for good services. Each branch of the Electricity Company collects and retains the proceeds of electricity bills. If the collection is not sufficient to cover the operating cost, the respective branch turns to the Ministry of Electricity and Energy for financial support. The Ministry in turn uses its own approved budget lines to provide financial support to the PEC branch in question. or requests supplementary budget support from the Ministry of Finance.

Analysis of salary transfers indicate considerable variation over time; this could be an indication that arrearages are building up as well. Transfers for goods and services are paid either in rials or in US dollars. The amount in dollars is quite significant (45.3M USD), and reflect the purchase of fuel and equipment; though there is insufficient information in the records to conduct more detailed analysis at present.

The social cost of uneven and sporadic distribution of electricity is high. It impacts directly agriculture that needs electricity to run water pumps and small businesses and, in the end, contributes to raising the cost of living. It is very clear form this initial analysis that it will be important over time to shift from the current untargeted and grossly inefficient subsidy system for electricity, towards a direct transfer system; accompanied by a broader sectoral reform plan which ties budgetary transfers to the state electricity operator to financial reform an enhanced financial and managerial performance targets.

It should be noted that a fundamental prerequisite for a gradual transition from untargeted production subsidies towards direct income transfer support is better control over generation and distribution costs, through better accounting and reporting and improved payment collections to ensure operational sustainability. In this regard the present reporting system does not allow measurement of the size of the problem. Improved reporting on payment collections is essential. As payments are made in cash, without appropriate controls in place, a portion of them may well be 'leaking' out of the collection/reporting system. Overall the public electricity company has little incentive to enhance financial oversight and improve operational efficiencies, given the completely untargeted and politicized nature of the transfer/subsidy process.

As noted above, a critical next step will be the establishment of a multi-year financial and operational reform strategy for the electricity sector, and development of an accompanying SOE budget planning and monitoring unit and system for recalibrating the sectoral budget transfer strategy and related monitoring processes over time. ERLP budgetary and sectoral specialists will as noted above be working together in this direction moving ahead.

(See *Annex 15 – Macro – Budget Planning – Note on the Electric Subsidy Scheme*)

NEXT STEPS

The focus of the next quarter will be on the adoption of the new budget classification, scheme, and full preparation of the CY 2022 budget, in accordance with best practice compliant budgetary procedures. Special attention will be given to the preparation of initial strategic MTEF gameplans for the health and education sectors, In addition ERPL will further accelerate work one early stage SOE budgeting reforms, with a core initial focus on the electricity sector.

1.2.5 BUDGET IMPLEMENTATION

BACKGROUND

ERLP continued to implement the comprehensive Budget Execution Reform Action Plan, which was developed during Q2. The Action Plan consists of detailed guidelines for consolidating commitment control functions within the budget execution cycle, launching new cash-flow forecasting procedures, and initiating effective operations of the Joint Committee for the Management of the Treasury (JCMT).

The proposed new organizational structure for budget administration activities was designed to improve the capacity of the MOF to achieve its core budget execution objectives, particularly the control over government finance and budget operations. The restructuring process will create a reorganized and upgraded budget execution entity within the MOF (Budget Regulation and Government Accounts Department), with expanded authorities and functions covering the entire budget execution cycle.

ERLP has also assisted with the transition of the treasury management function from CBY to the MOF, developing a game plan for establishing missing commitment control functions within the budget execution cycle and supporting the launch of the organizational restructuring of the budget execution function in the MOF.

QUARTERLY WORK ACTIVITIES/DELIVERABLES

In Q4, ERLP (i) supported the organizational restructuring of the Regulations and Public Accounts Department, (ii) explored further options for strengthening the MOF through cooperation with the CBY on the JCMT, (iii) continued training of government officials on comprehensive procedures for the expenditure management, cash flow forecasting, and the Treasury Single Account (TSA) reform, (iv) finalized a detailed manual on better practice-compliant budgetary allotment, commitment control, and payment authorization procedures and completed the TSA reform framework.

Table 15: Q4 Budget Implementation Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Support initial implementation of a detailed organizational restructuring plan for the General Administration for the Management of the Public Account (GAMPA) at MOF into five new subdivisions.</td><td rowspan="3">1. Implementation of GAMPA organizational restructuring plan is initiated.
2. Transfer at least 25 percent of relevant CBY staffing resources to MOF.
3. Conduct a minimum of 2 training sessions to MOF employees on revised budget implementation procedures and treasury recording/reporting functions.
4. Finalize and disseminate detailed manual on better practice-compliant budgetary allotment, commitment control, and payment authorization procedures.
5. Finalize full establishment of a TSA framework/system.</td></tr>
<tr><td>Support the initial transition of relevant staff functions/resources from CBY to MOF.
Provide ongoing training to MOF employees on revised budget implementation procedures and treasury recording/reporting functions.</td></tr>
<tr><td>Facilitate completion/dissemination of a detailed manual covering budgetary allotment, commitment control, and payment authorization procedures.</td></tr>
</table>

1. IMPLEMENTATION OF GAMPA ORGANIZATIONAL RESTRUCTURING PLAN IS INITIATED

In Q3, ERLP advisors developed the reorganization plan for all departments involved in the budget execution process, which was submitted to the MOF and adopted. This quarter the MOF, in collaboration with ERLP, initiated the organizational restructuring of the ministerial departments involved in budget execution. ERLP and the MOF determined in Q4 that the new structure would eventually encompass all departments of the MOF performing the budget execution tasks, in addition to GAMPA.

The MOF determined that establishing the cash management function was the core priority at this stage and formed a working group comprised of existing staff to support the nascent Cash Management Unit in conducting cash flow forecasting under the guidance of ERLP advisors. The Working Group will also assist with receiving the necessary data and coordinating the cash forecast with the work plans of other MOF departments

The Budget Execution Action Plan emphasizes developing adequate ICT support for the MOF. ERLP advisors reiterated the importance of building a fully functional ICT unit in the MOF to support the implementation of the CBY core banking system, the budget execution database, and the needs of the budget execution personnel. The Ministry committed to hiring the necessary staff to restore ICT functionality, and the CBY will provide the necessary training and support to connect the core banking system and access the government accounts data. Furthermore, the MOF ICT staff with ERLP assistance will further expand budget execution functions, including developing a budget execution database and acquiring a Government Financial Management Information System (GFMIS).

The organizational restructuring of the Regulations and Public Accounts department should be completed in Y2Q2 with ERLP support as the agreements on the transition of the Treasury management functions from CBY to the MOF are implemented, and CBY transfers personnel to assist the MOF.

II. TRANSFER AT LEAST 25 PERCENT OF RELEVANT CBY STAFFING RESOURCES TO MOF

In accordance with the Budget Execution Action Plan, ERLP is facilitating the transition of the treasury management function from the CBY to the MOF. ERLP focused on developing analytical procedures within the MOF, including cash flow forecasting and improving the accuracy and timeliness of financial data as the first step. The second step will be the development of adequate ICT functionality which will be initiated by Y2Q2 after the MOF determines the specifications of the computer and network equipment to procure. ERLP will deploy an IT expert to assist with the procurement and setup. The CBY assigned three people to start specific joint transition-related tasks with the MOF at both the Ministry and the Central Bank.

CBY staff began actively supporting the MOF, focusing on the following priorities expressed in the Budget Execution Action Plan:

- Active participation in the cash flow forecasting process with the JCMT technical team
- Generating digital schedules of transactions in the government accounts in the CBY to facilitate the preparation of government fiscal data.
- Preparing to provide the MOF access to the CBY core banking system.
- Training the government staff to use the CBY core banking system for reporting and managing the system configuration in the MOF.

ERLP initiated a discussion of the practical aspects of the treasury management transition during a JCMT meeting on November 2, 2021, to expedite increasing the level of CBY support. The Committee advised that an agreement should be reached on the specific duties to be taken over by the MOF and the additional staff assigned by the CBY to assist in the transition. ERLP advised that the MOF should assume the following key responsibilities:

- MOF will ensure sufficient funds are in the public account before payment instructions are sent to the CBY. Cash flow forecasting will reduce the uncertainty regarding the volume of available cash resources.
- MOF and CBY will agree on replacing the unlimited overdraft facility of CBY with a new lending facility that considers monetary policy requirements.
- MOF will assume the responsibility for making borrowing decisions and using different debt instruments depending on the requirements of financing government payments.

- MOF will develop a fully functional treasury organization based on the current Regulations and Public Accounts Department. ERLP has provided detailed recommendations for the organizational restructuring plan.

III. CONDUCT A MINIMUM OF 2 TRAINING SESSIONS TO MOF EMPLOYEES ON REVISED BUDGET IMPLEMENTATION PROCEDURES AND TREASURY RECORDING/REPORTING FUNCTIONS

ERLP continued to support the objectives of the Budget Implementation Action Plan during the quarter by providing rigorous training to MOF staff designed to address core budget execution needs. Project advisors delivered training interventions on the practical aspects of implementing the commitment control system in the ROYG, improving the skills of the counterparts in cash flow forecasting, and the strategies for approaching the TSA reform.

The Cash Flow Forecasting training emphasized the importance of applying market exchange rates for foreign currency-denominated revenues, despite possibly increasing the cost of expenditures impacted by these rate. The training also addressed the importance of the timely adoption of the budget to ensure that government policies are implemented without delays.

The Commitment Controls training concentrated on the practical aspects of integrating financial planning for cash outflows from government accounts with the budget allocation/procurement activities in the unified budget expenditure cycle. In a collaborative effort, the team developed new templates for financial planning, commitment recording, and integrated expenditure controls, which were recommended to MOF management for review.

The TSA Strategy training covered practical steps for launching the reform and enhancing MOF-CBY collaboration. ERLP emphasized the practical and targeted use of available ICT systems to facilitate the consolidation of the government payment arrangements while planning to acquire a specialized accounting and financial management system for the government. The payment procedures have been fully decentralized to the spending units, and the MOF needs to develop more robust controls.

The below table summarizes the technical training support provided by ERLP during the quarter to enhance capacity enhancement at MOF:

Table 16: Q4 Summary of the training activities on budget implementation

KEY STEPS FOR IMPLEMENTING EFFECTIVE ALLOTMENT AND COMMITMENT CONTROLS IN THE GOVERNMENT OF THE REPUBLIC OF YEMEN:
• Establishing legal provisions for effective commitment controls • Preparing financial plans to distribute the budget allocations over the fiscal year • Preparing a procurement plan to drive the commitment activities • Maintaining expenditure control leger to link the budget allotments, commitments, and payments • Reporting on the status of allotments, commitments, and payments
OJT FOR FORECASTING GOVERNMENT CASH FLOWS:
• Updating cash flow outlook for 2021 • Addressing uncertainties in the government cash inflows and outflows • Studying cash flow patterns for the government revenue • Measures to improve revenue inflows and reduce revenue volatility • Variance analysis comparing actual cash flows with the forecast
THE STRATEGY FOR THE TREASURY SINGLE ACCOUNT REFORM
• Clarifying the objectives of the TSA reform • Identifying the deficiencies in the current government banking arrangements • Clarifying the strategy based on the opportunities • Discussing the roadmap • Agreement on immediate action and next steps

IV. FINALIZE AND DISSEMINATE A DETAILED MANUAL ON BETTER PRACTICE-COMPLIANT BUDGETARY ALLOTMENT, COMMITMENT CONTROL, AND PAYMENT AUTHORIZATION PROCEDURES

ERLP, in collaboration with MOF counterparts, developed a detailed manual reflecting new budgetary allotment, commitment control, and payment authorization procedures. The MOF appointed a working group to facilitate the manual's development and integrate the procedures with the processes currently applied in the government units in close collaboration with ERLP as follows:

- The spending units will apply a new financial planning template to estimate the distribution of the financial resources approved in the budget broken down by the months of the fiscal year.
- A structured consultation process will be introduced for the MOF to review various types of commitments to control as a core aspect of the unified budget execution cycle.
- The spending units will coordinate with the MOF on the commitment processing. Spending units reaching 70 percent of the budget would be subject to a mandatory pre-commitment review by the MOF before further issuance is authorized.
- The spending units will issue purchase orders and make other commitments to secure the necessary supplies to enable government services.

- During the verification/payment phase, the spending units will receive ordered goods and services, verify receipt, and record the accounts payable. Subsequently, payment vouchers are processed, and payment instruments are issued to settle the obligations.
- An allotment and commitment expenditure report from the spending units to the MOF will provide a comprehensive summary of all stages of the expenditure cycle.

Notably, the manual provides practical guidance for completing financial plans, commitment records, the allotment and commitment expenditure control ledger, and reporting to the MOF.

The manual, including the templates, was reviewed at the technical level and submitted to senior management. Approval is expected within the quarter to prepare for pilot implementation using the manual processes and Excel-based support. An ERLP IT expert will join the team in Y2Q2 to provide practical IT support for the new processes.

(See *Annex 16 – Macro – Budget Implementation – Manual on Budgetary Allotment Commitment Control and Payments*)

V. COMPLETE FULL ESTABLISHMENT OF A TSA FRAMEWORK/SYSTEM

ERLP experts, in collaboration with the MOF and CBY, developed a comprehensive TSA framework to reform the current environment, in which the CBY has full responsibility for the management of the government treasury. Ultimately the updated TSA framework will eliminate the requirement for multiple government bank accounts. The MOF has conceptually agreed to the proposed framework and to proceed with the staff and financial resources allocated to the MOF for these purposes.

The objective is to build an efficacious and professional government treasury organization based on the restructured MOF Regulations and Public Accounts Department. The key function of the TSA system is the concentration of government payment functions in the new treasury.

The MOF began preparations for installing the CBY core banking system and designated staff to receive training on its operation. This will allow the MOF to (i) access the data on transactions in the government accounts and account balances, (ii) enter data into the core banking system budget allotments without producing a paper-based document for CBY operations staff to create credit entries to the accounts of the government units, and (iii) start processing payment instructions related to the central appropriations.

During the next stage, the MOF will start accepting payment requests directly from spending units and issuing payment instructions from the TSA, making individual spending-unit bank accounts unnecessary. The gradual re-routing of the payment transactions through the government treasury will permit the closing of individual spending unit bank accounts in the CBY.

NEXT STEPS

During the next quarter, the Budget Implementation component will continue to support the Budget Execution Action Plan and assist the JCMT working group in reviewing government cash flows and adopting appropriate measures t deviations from the cash management plan. This will include further improvement in the budget allotment and cash-flow forecasting practices and new procedures to institute a sound commitment control system in the expenditure process. ERLP will also continue the overhaul and reorganization of payment authorization and reconciliation procedures and assist in adopting the manual for a comprehensive allotment, commitment control, and payment procedures.

ERLP will also continue to provide targeted training designed to address government accounting and financial reporting weaknesses; and facilitate the compilation of comprehensive, timely, and reliable fiscal data to support effective fiscal management and new analytical functions in the MOF.

1.3 STRENGTHENED TRADE FACILITATION POLICY DEVELOPMENT AND IMPLEMENTATION

The Trade Facilitation (TF) subcomponent reduces trading costs/delays and corrupt practices and increases transparency to integrate Yemen into the global trading environment.

This is being achieved by continuing to introduce modern trade facilitation measures (per the WTO Trade Facilitation Agreement (TFA), digitalizing trading procedures, and reducing the number of documents and non-tariff barriers to trade. These targeted actions will serve on an ongoing basis to (i) facilitate the flow of essential goods into Yemen, particularly humanitarian aid, food products, and critical medical supplies for countering COVID-19; (ii) enhance the competitiveness of Yemeni producers, particularly SMEs; and (iii) promote Yemeni exports. ERLP also focuses on the longer-term development of port services in Gulf of Aden ports to achieve targeted operational improvements.

During this quarter, the ERLP undertook a range of activities to reduce clearance and dwell times and trade costs, enhance public-private dialogue and partnership, and enable greater port efficiency through streamlining port operations and logistics.

1.3.1 TRADE FACILITATION

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

During this quarter, the ERLP Trade Facilitation component focused on implementing the TFA, including guiding the newly established NTFC, improving and operationalizing the Yemen Trade Portal (TP), expanding and enhancing the AEO Program, further developing Risk Management (RM), Customs Valuation, and Post-Clearance Audit (PCA). ERLP also addressed cross-border cooperation and developed the capabilities and capacity of the Customs Training Center.

Table 17: Q4 Trade Facilitation Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Strengthen the NTFC</td><td rowspan="5">1. Standard Operating Procedures for the NTFC secretariat
2. AEO awareness program at the Mukalla Port
3. Trade Portal installed at the Ministry of Industry and Trade
4. Awareness event on Advance Rulings delivered at Aden Ports
5. Awareness event on administrative appeals delivered at Aden Ports
6. MOU signed on cooperation and coordination among border agencies</td></tr>
<tr><td>Build capacity on AEO</td></tr>
<tr><td>Develop Risk Management, Post-Clearance Audit, and Valuation Capabilities</td></tr>
<tr><td>Institute Advance rulings</td></tr>
<tr><td>Institute Administrative Appeals</td></tr>
</table>

Bolster Coordinated and Integrated Border Management	7. Valuation training delivered to customs officers 8. Workshop for businesses, YSMO, and PPD on exporting from Yemen
Facilitate Exports to Target Markets	

I. TRADE FACILITATION AGREEMENT IMPLEMENTATION

Following the formal establishment of the National Trade Facilitation Committee (NTFC) under MOIT Ministerial Resolution 12-2021, ERLP conducted a needs assessment to establish the NTFC Secretariat to support and coordinate the committee's work in advancing the implementation of TF measures. Further in Q4, the project developed Standard Operating Procedures (SOP) for the NTFC's Secretariat to coordinate and support the work of the NTFC. ERLP assisted the MOIT in preparing TFA implementation notifications for submission to the WTO. The document specifies the level of compliance, target dates for commitments, and required support, as stipulated in the agreement, from the WTO for implementing certain TFA provisions. The notification will serve as a roadmap for TFA implementation as part of Yemen's commitments to the WTO.

To date, ERLP supported the implementation of 12 WTO TFA provisions comprising Post-clearance Audit, AEO, Risk Management, Consultations (Public-Private Dialogue), Use of International Standards (Customs Valuation), Publication, Information Available Through the Internet (Trade Information Portal), Advance Rulings, Administrative Appeals and Review, Single Window, National Trade Facilitation Committee, and Border Agency Cooperation.

II. EXPANDING AND ENHANCING THE AEO PROGRAM

ERLP recently presented a 5-point game-plan to Yemen Customs Authority (YCA), supporting the expansion of its existing AEO program to include businesses conducting operations in the Port of Mukalla. The expansion of the AEO program will further enhance security and facilitate cross-border trade through increased public-private sector collaboration.

ERLP provided further technical support during the quarter to build and expand the YCA AEO Program. This support included ERLP experts and YCA managers organizing and holding an AEO awareness event for Mukalla Port private sector representatives supported by Hadhramaut Chamber of Commerce. A total of 13 trade representatives took part in the event.

Group photo of ERLP-supported Mukalla AEO event, attended by YCA and Hadhramaut traders, August 19, 2021, Mukalla. Photo Credit: ERLP TF Team.

ERLP experts highlighted that the AEO program is a key international trade facilitation initiative promoted by the WTO and World Customs Organization (WCO). YCA managers then confirmed their administration's firm commitment to use the AEO program as a means to build a partnership with those engaged in importing and exporting goods in order to speed up and simplify the customs clearance procedures. Attendees then had an opportunity to review and discuss the AEO Program Guide presented by the YCA.

At the event's conclusion, trade representatives welcomed the presentation of the AEO program and stated that they hoped its introduction at Mukalla port would positively contribute to reducing the overall costs of trading through the Port.

III. ENHANCE AND OPERATIONALIZE THE YEMEN TRADE PORTAL

During Q4, the project held a special event to introduce MOIT specialists to the Yemen Trade Portal, developed with ERLP support. The Minister presided over a key session on further trade facilitation measures needed to simplify, harmonize, and enhance the transparency of import/export processes and procedures. The event was covered by multiple national media outlets, including Saba News Agency and the Council of Ministers e-platform. The Minister underscored the importance of the portal in reducing the time and cost required to process regulatory requirements while enhancing transactional transparency and predictability. The MOIT was also provided essential equipment supporting the portal's operation.

ERLP TF team handing TIP support materials to the MOIT, August 23, 2021, Aden. Photo Credit: ERLP TF

IV. DEVELOP POST-CLEARANCE AUDIT AND RISK MANAGEMENT CAPABILITIES

As part of its efforts to reduce the time and costs of moving goods across borders, the ERLP/TF component is working closely with YCA to build its Post-Clearance Audit (PCA) capacity. Mentoring the PCA Unit manager continued during this quarter to ensure a comprehensive PCA audit program is successfully introduced. ERLP continued capacity-building activities to strengthen YCA RM capabilities by developing an advanced RM-focused training module for future delivery.

V. INSTITUTE ADVANCE RULINGS

This quarter, ERLP continued to support YCA and raise awareness of the trading community toward establishing an Advance Rulings mechanism. Advance Rulings (AR) programs are a proven trade facilitation tool that reduces trading costs and delays, increases transparency and predictability, and reduces disputes between traders and Customs. Economic operators obtain precise and binding information before importing goods--allowing them to plan their operations with certainty. Disputes with the Customs authority on tariff, origin, and valuation issues are thus reduced because the deliberation process among officials takes place before the issuance of the AR. Advance Rulings constitute a fundamentally important customs procedure that allows officials to decide on the classification, origin, and valuation of goods in advance of their arrival. On July 15, 2021, an ERLP Awareness event, "Working Together for a Better Future – Advance Ruling Initiative," was held in Aden Ports for representatives of the trade community. This event focused on explaining the use of an advanced ruling system to lower trade costs and enhance certainty for importers and exporters.

During the event, ERLP experts made presentations explaining that in many jurisdictions, international traders can apply to customs authorities for an advance ruling for classification, origin, or valuation before they import or export their goods and that the utility of advance rulings is recognized in the WTO TFA and the WCO Revised Kyoto Convention. At the end of the event, a question-and-answer session was held with the participants. They welcomed the knowledge sharing of international practice in facilitating trade and confirmed their support for introducing an AR system in Yemen.

Further work is now being undertaken with YCA to implement an advance rulings program in Yemen.

VI. INSTITUTE ADMINISTRATIVE APPEALS

It is critical for YCA and economic operators involved in international trade to address and resolve any disputes regarding compliance with the Customs Law and regulations quickly and efficiently. This requires a comprehensive, transparent, and effective administrative appeal procedure, which provides an alternative dispute resolution mechanism to pursuing court cases.

Group photo of participants in the Administrative Appeals awareness event, with the Chairman of YCA (middle center below) and senior private sector representatives, August 3, 2021. Photo: ERLP TF Team

Administrative appeals were covered during the quarter, in the above-referenced Customs/Trade Awareness event, for 23 representatives of the Yemen trading community.

Event discussions started with a review of the international standards, particularly those contained within the Revised Kyoto Convention (RKC), covering the Customs appeals process. The YCA Director-General then chaired a discussion session looking at the main challenges posed by the existing Yemen Administrative Appeals process. Areas for improvement were identified, and possible solutions to fully align the existing administrative appeals process with international standards discussed.

Participants agreed that any disputes regarding compliance with the Customs law and regulations need to be addressed and resolved as quickly and efficiently as possible. This requires a comprehensive, transparent, and effective administrative appeal procedure that provides an alternative dispute resolution mechanism to pursuing court cases.

ERLP experts are now working with YCA senior managers on a plan to implement the Customs Administrative review and appeals procedure enhancements proposed by ERLP.

VII. BOLSTER COORDINATED AND INTEGRATED BORDER MANAGEMENT

Border Agency Cooperation

Following the progress achieved in strengthening border agency cooperation, an inter-agency Memorandum of Understanding (MOU) was signed on July 15, 2021, to further advance the coordination and cooperation between all relevant government agencies involved in Yemen border management procedures related to the control of goods.

Leaders of YCA and OGAs when signing the MOU, Aden, July 15, 2021. Photo credit: ERLP TF Team

The MOU establishes a formal framework for advancing cooperation among the agencies in areas of common interest, such as implementation support for the introduction of WTO TFA standards, including AEO and Single Window.

The Memorandum will enhance the economic development of Yemen by assisting the various border agencies to focus their endeavors to facilitate legitimate imports into and exports from the country.

All border agencies acknowledged the importance of enhancing cooperation based on this MOU and agreed to work on developing and delivering joint working initiatives to facilitate trade.

Cross-Border Cooperation

Cross-border cooperation (CBC) seeks to facilitate the movement of goods by eliminating redundant processing and minimizing physical inspections at the border. The aim is to achieve a smoother movement of goods crossing borders by increasing Customs-to-Customs interconnectivity and interoperability. ERLP held a meeting with YCA senior officials and discussed how to move forward with cross-border cooperation with the Kingdom of Saudi Arabia (KSA) during Y2 of the project.

VIII. DEVELOP THE CAPABILITIES AND CAPACITY OF THE CUSTOMS TRAINING CENTER

Customs administrations need to invest in human resources in a fast-changing environment to deliver on the government's trade facilitation priorities. To achieve this, they need to establish a cadre of professional customs officers who can efficiently perform their duties. This requires that officers acquire and develop a wide range of skills, knowledge, attitudes, and behaviors through a comprehensive and complex learning process.

During Q4, ERLP prepared and delivered several training events to enhance the skills and knowledge levels of YCA officers and the trading community. The events included Valuation training for YCA officers and public outreach programs covering AEO, AR, and Administrative Appeals. Continued support is provided to YCA to establish, effectively manage, and provide essential training to YCA field officers to ensure streamlining procedures and enhancing trading across borders.

YCA Chairman attending Customs Valuation training session, on July 11, Aden, Yemen. Photo: ERLP TF

IX. CUSTOMS VALUATION

This quarter, ERLP conducted a workshop for YCA on customs valuation based on the WTO Customs Valuation Agreement. YCA officers acquired essential skills for applying the "transaction value" of goods, which provides a fair, uniform, and neutral system for the valuation of goods for customs purposes. Sound and fair valuation methods protect both the interests of traders and Yemen's treasury.

X. FACILITATE EXPORTS TO TARGET MARKETS

Among different follow-up activities this quarter, the Trade component carried out a successful workshop with 12 participants from the business community, YSMO, and PPD. This event was an opportunity to show different Yemeni stakeholders the structure of fruit and vegetable value chains and how different suppliers compete in different markets. Perishable products such as fruits and vegetables are subject to quality, safety, and other standards discussed in this webinar with relevant examples to Yemen as an exporter and importer of these products.

Nine participants attended in person and three via the internet. The workshop went over the different competitiveness factors of horticulture as a promising sector in Yemen. There is a large amount of horticultural activity taking place in the country, but it is not up to speed on improving export preparedness. This workshop gave attendees the opportunity to discuss the major issues faced in acquiring that preparedness, particularly in terms of accessing better buyers in regional markets. As an immediate result of this event, several follow-up activities

A key illustrative slide during the discussion with stakeholders.

were enumerated, such as focusing on potential opportunities for specific products where Yemen could be competitive. Other issues dealt with Yemen's access to better logistics to compete and an improved financial/business environment to receive payments in foreign currency or without losing value in unfavorable exchange rates. Attendees agreed to continue the discussion in future events.

Participants gained a clear understanding of what it means to be competitive and realized where they stand in terms of export preparedness to Gulf countries and other market destinations.

1.3.2 TRANSPORT AND LOGISTICS

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

The ERLP Transport and Logistics team supported port productivity improvements at the Ma'alla Terminal in Aden, provided further recommendations on the reorganization of the ACT container yard and method of storing and charging for empty export containers, followed up with the Port on the recommendations coming from the second detailed focus vessel exercise, enhanced marine services and logistics, and provided further support for improving the port website. Furthermore, ERLP supported the Project Implementation Unit in improving port infrastructure and acquiring a Maritime Single Window for the Port. Further, the project developed materials to improve the capabilities and capacity of the Maritime Training Center.

Table 18 – Q4 Transport and Logistics Activities and Deliverables

<table>
<tr><th>ACTIVITIES</th><th>DELIVERABLES</th></tr>
<tr><td>Support Port Productivity Improvements at the Port of Aden</td><td rowspan="3">1. Guidelines on core operational improvements needed at the Aden Ma'alla terminal to significantly enhance its operational efficiency were delivered.
2. Roundtables with YGAPC and Ma'alla port management to discuss guidelines.
3. ACT New tariff structure simulation and impact assessment for empty containers conducted.
4. Roundtables with YGAPC and ACT port management to present tariff structure for empty containers, impact, and implementation procedures.
5. One training seminar for stevedores delivered.
6. Two training modules for general cargo and bulk handling delivered.
7. Two ToT events on harbor craft safety and operations for the MTC delivered.</td></tr>
<tr><td>Modernize Terminal Operating System at the container terminal</td></tr>
<tr><td>Build the Capabilities and Capacity of the Maritime Training Center (MTC)</td></tr>
</table>

I. SUPPORT PORT PRODUCTIVITY IMPROVEMENTS (MA'ALLA TERMINAL)

During Q4, the Trade component advised the Ma'alla Terminal management on core operational improvements needed to significantly enhance its operational efficiency. ERLP delivered two training modules on general cargo and bulk handling to boost safe operations practices for stevedores, followed by two training-of-trainer events for MTC. ERLP reviewed the current operational state of Ma'alla Terminal and carried out a detailed analysis of operational procedures and data on ship movements and cargo types/tonnages handled to establish baseline performance, identify potential opportunities for improvements, and develop performance improvement recommendations for the terminal. The project delivered twelve recommendations, with three main guidelines, to assist the team responsible for terminal operations as they improve current practices and deal with the problems faced in delivering these services. Two roundtables were held in August and early September to discuss recommendations and the adoption of guidelines and present the financial modeling simulation sample using steel cargo as the example.

The Guidelines on General Cargo and Bulk Modelling explains the use of a spreadsheet that simulates cargo handling while enabling the calculation and breakdown of costs associated with different cargo types. Cargoes considered include vehicles, bulk wheat, coal, clinker, steel rebar and rolls, timber, and general cargo.

The Guidance on Operations Process Mapping for Efficient Cargo Handling contains vehicle handling, breakbulk, and Port Authority cargo control practices to be considered in implementing the level of practice commonly found in international terminals.

The Guidelines on Handling Operational Accidents contribute to better preparedness in handling accidents as part of HSSE initiatives for safer operations and lower casualties. Training materials were also delivered in handling cargo at the Ma'alla Terminal. (See section VI below.)

II. IMPROVE CONTAINER HANDLING PRODUCTIVITY AND YARD SPACE UTILIZATION (ACT)

The second focus report on TSS SHAMS voyage No 2108, between June 18 and June 21, 2021, outlined the need for the ACT to tackle empty container stowage and handling. It was recommended that ACT should utilize a different approach to the way it charges its liner agents. This focus vessel report resulted in five major recommendations to increase the utilization of empty yard stacks and overall terminal yard utilization. The recommendations are that the ACT needs to change the storage charges calculation for empties, coordinate with liner agents on empty container selection, employ block stowage, increase the stacking height, and use mainly empty handlers and reach stackers load empties rather than the RTGs currently being used. Online meetings with ACT management and staff on the outcomes of the second focus vessel exercise were continued, leading directly to the identification of key improvements in container handling productivity and yard space utilization.

ACT is currently a gateway terminal handling import and export containers, with the main exports by volume being empty containers, comprising 94.5 percent of total exports. However, while empty export containers utilize almost half of the terminal ground slots, they command the least return in handling and storage fees. Strategies need to be devised to minimize the impact of handling empty containers regarding the number of operations they require and their handling costs. This was done with the core aim of reducing operating costs at the terminal and freeing up space for higher revenue-generating containers, mainly full import containers and possible future transshipment business.

In Q4, the ERLP conducted a new empty container tariff simulation, followed by a roundtable in September with ACT port management and the ACT commercial department to verify the calculations and present the new tariff structure, impact, and implementation procedures. The report proposed a sensitivity analysis of four different options to ACT management with one recommended tariff structure to be pursued. The project also provided guidelines on the use of the recommended Port Pricing Methodology.

III. MODERNIZATION OF THE TERMINAL OPERATING SYSTEM (TOS)

During Q2 and Q3, ERLP discussed with Aden Port Management the need to improve productivity and modernize the TOS used at the Terminal. They reviewed the questionnaire provided by potential suppliers of a new TOS on the features that the new TOS would need to provide. In June, the project was able to share with USAID news of a major step forward when the ACT (Aden Port Development Company) announced an agreement with DP World to upgrade its TOS from Zodiac 5.0 to Zodiac 7.1. DP World describes this as "one of the most advanced and user-friendly systems on the market for ports and terminal management." The Chairman of the Port of Aden stated that he looks forward to achieving high productivity rates while managing the terminal more efficiently and reducing demurrage times

It is important to note that further improvements are needed to secure the full range of benefits that the new TOS can offer, including a fully functioning WiFi system in the container yard and the provision of Vehicle Mounted Terminals (VMTs) for the moving equipment. ERLP continued to work with Port Management to support its work in finding practical solutions for these issues.

IV. SUPPORT THE PROJECT IMPLEMENTATION UNIT (PIU) IN IMPROVING PORT INFRASTRUCTURE AND SYSTEMS

The VTMIS for Aden is being built by the supplier and will be installed at the Aden Control Tower when ready. As noted below, ERLP continued to follow up with Port Management and the UNDP on this work and how the long-term operational success of the equipment installed can be supported. Part of the package to be provided by the supplier is training in operation and maintenance, but in Q3, the Port expressed concern that staff responsible for VTMIS operations may not have the prerequisite skills to fully understand the more advanced training. In Q3, the project proposed a solution to this problem using expertise from within the region to provide basic VTS Operator training before the supplier delivers their training program. Further discussions have been held with the Port in Q4, and the Port now plans to send VTS operators in groups to the Regional Maritime College in Alexandria, Egypt, for initial training ahead of the training to be provided by the supplier.

A further concern of the Port is the existence of a number of wrecks in Aden Harbor. ERLP has discussed the removal of these with port management and reviewed the use of an innovative method of wreck removal called the 'Salvage Rail System' that may have some potential for use by the Port.

As noted in Q3, the PIU is also concerned about the condition and capacity of the fendering available at the Ma'alla Terminal, with much larger vessels being berthed. ERLP continued discussions with the Port regarding the fendering at the Ma'alla Terminal. As the capacity of the quay wall to carry the loads imposed by heavier fenders may be an issue, one solution under consideration is to provide floating Yokohama-type fenders used in ship-to-ship operations that would protect the wall and the vessels using the berths without putting a load on the concrete structure. Further examination of the options is planned.

As noted in Q2 and confirmed in Q3, the Port decided that its priority at present is to establish a Maritime Single Window (MSW) to implement FAL Convention requirements in cooperation with the YCA. Accordingly, ERLP drafted and refined, with port management, materials needed to complete and submit an Expression of Interest (EOI) to seek funding from the Port of Singapore's Single Window for the Facilitation of Trade (SWiFT) initiative. Singapore has in operation a world-class MSW to facilitate the arrival, stay, and departure of ships and exchange documents electronically, in compliance with the latest requirements of the IMO FAL Convention.

Aden hopes to be selected as a port in a 'pilot country' to receive this support to develop its port Maritime Single Window (MSW), based on the EOI response that includes important information on cooperation with Customs and other port stakeholders with which the project is closely involved. The EOI was submitted, IMO and Singapore will assess the bid, and a response is awaited. Meanwhile, the Trade component continued to carry out research on the implementation of MSWs in other countries and will continue to support the Port toward establishing an MSW.

Aden continues to work on the development of Phase II of the Port Web Site. In Q4, ERLP communicated with the Deputy Chairman of the Port during a visit to Amman to meet with the Web designers and liaised with the commercial chart expert/software supplier. The expert advised that he will be able to provide the required software to allow the navigation charts to be displayed on the Web Site as required by the Port, showing ships' positions and data. The supplier was again in contact with UKHO to confirm which version of the charts can be used for the website under a license granted to the Ports Corporation and will revert to the Port in the next quarter on a potential solution.

V. ENHANCE MARINE SERVICES AND LOGISTICS

The provision of efficient marine services by marine craft and pilots to promptly get ships to and from their berths is critical to the effective use of available berths. ERLP has continued to follow up with the Port Management and the UNDP on the installation of the VTMIS, where the Port's technical team has been working during Q4 to prepare the control tower for the installation of the new equipment.

In Q4, the Trade team held further discussions with the Assistant Harbor Master on the training to be provided to VTS operators by the equipment suppliers. ERLP then made recommendations on actions that can be taken to ensure that staff working in the Control Tower gain the skills needed to become competent in their duties, in addition to the training to be provided by the suppliers.

During the reporting period, ERLP developed Standard Operating Procedures (SOPs) for the Port of Aden as part of the Marine Logistics SOPs package. The first SOP covered Pilotage, Towing, and Mooring and set out the requirements for handling a ship coming to the Port. Among these are keeping navigational data updated, port passage planning, preparing the pilotage plan, pilot transfer, cooperating with the ship's Bridge Team, communications, working with tugs, dealing with malfunctions on the ship, and managing emergencies.

The second SOP, specific to pilot boats, skippers, and crew, set out requirements for handling a pilot boat under the range of scenarios expected in harbor waters. The third SOP, specific to harbor towing operations, sets out requirements for handling the tugs that provide ships with towing services under the range of scenarios expected in harbors. The SOPs will be presented to port management for internal adoption and support training for relevant staff at the Port.

In Q3, ERLP supported the Port of Mukalla in identifying a potential second-hand tug to assist in port operations at Mukalla. The need for a 'new' tug was identified in the Rotterdam Damage Assessment Report. At the end of Q3, Mukalla was considering the acquisition of a second-hand tug and was provided with details of potential tugs available in the Gulf and the Caribbean. In Q4, the matter was resolved when the UAE gifted a second-hand tug to Mukalla Port and delivered it at the end of August.

VI. BUILD THE CAPABILITIES AND CAPACITY OF THE MARITIME TRAINING CENTER

Staff development continues to be critically important to Yemeni ports. During Q3, ERLP further refined the training materials that form part of the support being provided for the Maritime Training Center. The first module covers pilotage and consists of an extensive series of PowerPoint slides supported by handout notes for the lecturer. Modules 2, 3, and 4 cover the safe handling of pilot boats, tugs, and mooring boats. The materials are compatible with the SOPs developed for the Marine Department and are designed to increase the competence of departmental staff. In August, the project held a series of meeting with the Assistant Harbor Master, a former ship's Chief Officer and Captain who delivers many of the training courses at the Maritime Training Center. The project has reviewed with him the training materials for the pilots, pilot boat operators, tug crew, and mooring boat gangs prepared under the ERLP. After making some minor amendments to the materials, they were delivered to marine department staff at the Port.

As part of TF support to Ma'alla Terminal productivity improvement, special care was given to terminal supervisors and third-party stevedores on the safe handling of general and bulk cargoes. In August, the project delivered two training modules on Stevedores Safety and Operations: i) Safety Induction Course for Stevedores and ii) Ship Working and Wire Rigging Course for Stevedores. Both courses were translated into Arabic for use by the MTC.

1.3.3 CROSS-CUTTING

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

The Cross-Cutting component of the ERLP project continued to research and address the COVID-19 impact. In addition, ERLP assisted in capturing and disseminating trade statistics, supporting international coordination and cooperation, preparing and circulating monthly Trade Access Reports, and compiling and reporting quarterly customs revenue data reports.

Table 19 – Q4 Cross-Cutting Activities and Deliverables

ACTIVITIES	DELIVERABLES
Facilitate International Coordination and Cooperation	1. Dialogue with international donors on topical port issues held 2. Customs Revenue Report developed 3. Trade Access Reports issued on a monthly basis
Assist in Capturing and Disseminating Trade Statistics	
Report on Progress in Collecting Customs Duties and Taxes	

I. COVID-19 IMPACT

The COVID-19 pandemic has continued to severely impact world trade, ports, and shipping around the world, with many major ports continuing to adjust their working practices to deal with the virus and suffering from staff shortages and lack of land transport to move cargoes to and from the ports, causing severe delays and high costs. This quarter, ERLP continued to monitor and update YCA and the other government agencies on the WTO/WCO/WHO/WB/UNCTAD COVID-19 related reports and guidance notes and their impact on world trade and trading across borders, including the indicative lists on trade-related bottlenecks and trade facilitation measures on critical products to combat COVID-19 and HS classification reference for COVID-19 medical supplies.

The project also monitored daily updates from the Gulf Agency Company (GAC) on changes in regulations and working practices across world ports to see what the Ports in Yemen can usefully learn from these developments. The daily reports on ships at the anchorage provided by the Assistant Harbor Master at Aden continue to include details of ships that Health Officials have visited and cleared to berth. Time spent at the anchorage is no longer connected with COVID-19 delays, and ships can, at present, berth 'on arrival.' Fifteen of the 79 ships berthing at Aden in Q4 berthed on the same day they arrived at the anchorage. The Port remains aware of the risks that COVID-19 presents to the port staff, and ships are required to take appropriate steps to prevent the spread of the virus to port personnel. In Q2, the Assistant Harbor Master confirmed that the Port requires the temperatures of all crew members to be checked when ships arrive and that ship's accommodation is sanitized before they are permitted to berth. This requirement remains in place, with ships able to berth 2-3 hours after arriving at the anchorage. He further confirmed in Q4 that physical documentation exchange between visiting ships and the Port is kept to a minimum.

II. INTERNATIONAL COORDINATION AND COOPERATION

During this quarter, ERLP continued to coordinate with international development organizations on relevant trade facilitation activities.

During Q4, ERLP continued to work closely with key figures in Aden's Port Management, with shipping agencies and major traders, to maintain awareness of developments in the ports and shipping operations and freight costs. Relationships continue to be maintained with the UNDP, the IMO, the FCDO, UKHO, PERSGA, Aid agencies, and the UKMTO. The project continued the good working relationship established since Q1 with both the FCDO and ACAPS, making weekly contact with ACAPS to exchange information on ships and cargoes, producing an agreed set of monthly cargo figures, and responding to questions from these organizations on cargo figures. ERLP uses the UNVIM data and daily reports from Aden Harbor Control on ships at the anchorage and alongside to validate shipping agency data provided by WSS in cases where cargo figures or details are in doubt.

In Q4, the project was asked to participate in a meeting on Private Sector Engagement in Yemen's Food Security organized by ODI, Mercy Corps, and ACAPS. ERLP continued to engage effectively with UNDP and, at the request of the UNDP Resident Representative in Yemen, prepared a draft paper on actions needed to establish a War Risk Bond for Yemen. This paper builds on earlier work done by ERLP in estimating War Risk costs for ships calling at Gulf of Aden ports. It reviewed the background of War Risk charges on ships, examined the current situation, and outlined steps that need to be taken to set up a Bond. It noted that if a Bond can be agreed upon, it would have the potential to bring substantial savings on shipping insurance costs for Yemeni ports. UNDP will use the information provided to follow up with the London War Risk Committee.

III. CUSTOMS REVENUE REPORT

ERLP/Fiscal and TF experts compiled and submitted a statistical report on customs revenues for April to June 2021, disaggregated by type of tax/duty and entry point. The customs revenue data will help ERLP effectively monitor customs revenues, track collections, and further contribute to improved revenue forecasting and budget planning (in close coordination with the ERLP Fiscal team).

IV. TRADE ACCESS UPDATES

ERLP prepared and submitted Trade Access Reports in July, August, and September to update data on imports of fuel, food, and other cargo through seaports and across land borders. These were supported by 'snapshots' of total imports at weekly intervals provided to USAID to support more frequent tracking of tonnages of commodities imported.

The highest-ever fuel imports were recorded through Aden in Q3, with as many as nine fuel tankers at Aden anchorage waiting to discharge. However, total fuel imports in Q4 fell to 72 percent of the Q3 figure, and the number of tankers at Aden anchorage fell from 7 to an average of 4 during the quarter. Significantly, the number of tankers waiting in the CHA has fallen from 18 at the start of Q1 to an average of 4 in Q4, indicating a fall in the number of ships prepared to wait for long periods in the CHA to enter Hudaydah.

Restrictions on fuel imports permitted into Hudaydah continue to impact the Port and availability of fuel supplies in 'the north.' In this regard, 454,000 MT were imported through Hudaydah in Q1, falling to 89,500 MT in Q2, improving marginally to 143,500 MT in Q3, and falling to 48,000 MT in Q4. In contrast, Aden imported 505,500 MT of fuel in Q4 and Mukalla 141,500 MT to compensate for the low tonnage at Hudaydah.

In Q3 total fuel imports through all ports averaged 509,500 MT, 73 percent higher than in Q2. Imports fell to an average of 367,500 MT/month in Q4, a drop of 28 percent. However, the 12-month average of 425,000 MT/month to the end of Q4 was only slightly below the high 12-month average of 431,500 MT recorded for the 12 months up to the end of Q3. The Hudaydah restrictions have resulted in fuel shortages in the north and high levels of black market-related fuel sale activities. Shortages are largely being covered by fuel moved by trucks from the Gulf of Aden entry points (Aden, Qana'a, Mukalla, Nishtun) to the north. National production at Marib, of an estimated 120,000 MT/month, is a further important contribution to diesel and LPG supplies for the country.

Qana'a used a ship-to-ship transfer of fuel from larger ships to smaller tankers that can get close to the shore to discharge. Unofficial data on import tonnages indicate that around 10,000 MT/month were imported in Q2 and Q3, but no activity at Qana'a has been reported in Q4 since early July. At Nishtun, a high level of tanker activity has been seen on AIS sites, with figures for fuel imports given on the YASPC website up to the end of 2020. So far, 2021 figures have been estimated and will be revised when the website is updated.

In Q3, the project prepared a note comparing food imports over the months before Ramadan and Eid 2021 with imports recorded over the months before Ramadan/Eid periods in previous years, indicating that, in fact, over these critical periods in 2021, food imports were higher than any previously recorded period. Food imports through Yemen's seaports increased from 580,000 MT/month in Q1 to 614,000 MT/month in Q2, fell to 563,500 MT/month over Ramadan/Eid, and in Q4 increased to 609,000 MT/month. The 12-month average food import tonnage through ports at the end of August 2021 is 622,000 MT/month, below the Q3 12-month average figure, but still well above the 'food import minimum' figure currently used by international aid agencies of 565,000 MT/month. Land border food imports raise the 12-month average food import figure to 662,000 MT/month -- 97,000 MT/month above the 'minimum.'

In Q2, very high container volumes were recorded through the ACT, averaging 46,473 TEUs/month, or 31 percent higher than the same period in 2020. At the same time, anchorage delays for container ships in Q2 dropped from an average of 18.4 days in December 2020 to 3.4 days in March 2021. Following the surge of containerized goods into Yemen in Q2, the container volume declined in Q3 and remained steady in Q4. The average throughput from January to August is now 36,242 TEUs, making 2021 the second-highest year (to date) since the record volume reported in 2019. Time at the anchorage for container ships in Q3 averaged 1.4 days and fell further to 0.8 days in Q4.

After exporting 3,900 TEUs more than the number imported in Q3, reducing terminal congestion, import volumes have risen in Q4 to exceed exported boxes by 5,000. This will need to be reversed in the months ahead. The Ma'alla Terminal continues to perform well. The average throughput handled for the first eight months of 2021, which included Ramadan and Eid holidays, has been at the rate of 8,800 MT/day. Ma'alla cargo consists mainly of clinker, steel, timber, cement, food, general cargo, and imported vehicles.

The private Hayel Saeed Anam terminal in Aden, the Aden Gulf Terminal (AGT), continues to make an important contribution to Aden's total port capacity. The company has imported bulk wheat, palm oil, and coal (a consignment of 55,000 MT) during Q4. The company continues to charter vessels in the 50,000 to 63,000 TDW range, discharging around 50 percent of each ship's bulk wheat cargoes at Aden before completing discharge at Hudaydah. A total of 116,000 MT of wheat was discharged at the AGT in Q4, with a further 58,000 MT being discharged at Hodeidah by two ships that discharged at Hudaydah after calling Aden. This allowed the Hayel Group to reduce the shipping cost of wheat to these two ports significantly. The terminal also handled 38,500 MT of palm oil in Q4.

The deeper berths at Salif also allow larger ships to use the Port. The Fahem Group imported 53,000 MT of wheat in one ship at Salif, and the Hayel Group 48,000 MT of coal to provide energy for their sugar refining operation at Ras Issa.

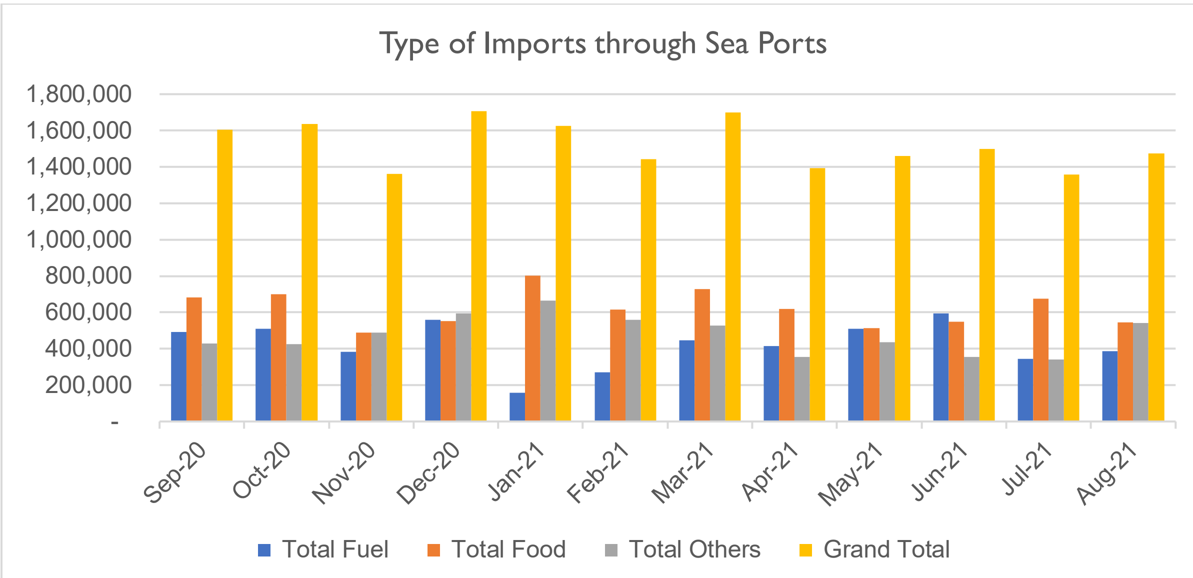
Container traffic at Mukalla reported by the Yemen Arabian Sea Ports Corporation (YASPC) website increased rapidly from 28,900 TEUs in 2018 to 42,750 TEUs in 2019 (a 148 percent increase) and 56,700 TEUs in 2020 (an increase of 133 percent). The website has not yet been updated to provide data for 2021, but in Q4, the number of container ships calling Mukalla is high. At the same time, delays to these vessels at the anchorage are also high, averaging around ten days in Q4 due to a shortage of quay and working/storage space at the Port and the need for tankers to use the berths inside the breakwater during the SW monsoon during July and August.

Mukalla imports bulk wheat cargoes approximately every three months, but no wheat was delivered in Q4. Substantial tonnages of other foodstuffs and general cargo/building materials arrive by dhow. Dhow import tonnages are given on the YRSPC website and recorded in the ERLP Trade Reports.

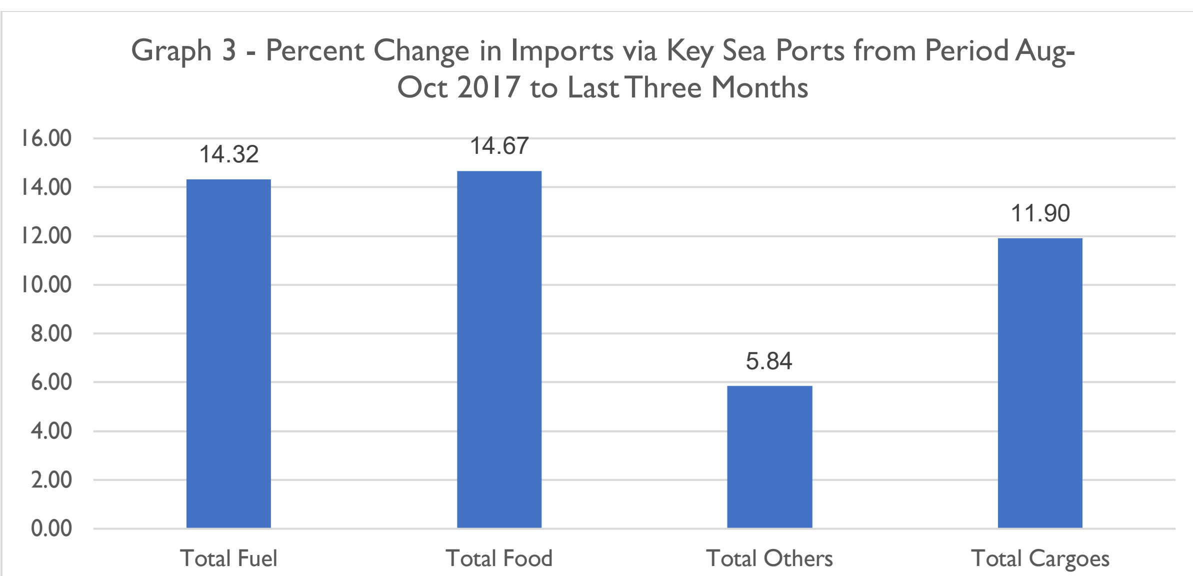
Using the latest available figures for Mukalla and Nishtun, the monthly report up to the end of August records that imports via seaports have averaged 1,521,500 MT/month for the 12 months from September 2020 to August 2021, compared with 1,575,500 MT/month at the end of Q3. Aden, Mukalla, and Nishtun in the Gulf of Aden have, between them, been responsible for 70.44 percent (Q3 was 69.74

percent) of total seaport imports in 2020, while Salif and Hudaydah have handled 29.56 percent (Q3 was 30.26 percent) of Yemen's total port cargo.

Overall import figures for the last 12 months, given in the chart below, show the drop in total imports in April/May over the Ramadan/Eid period followed by a rise in May/June. Total imports averaged 1.4 million MT/month in Q4. Overall this quarter has seen modest total import tonnages of fuel and non-food dry cargo, balanced by reasonably high food imports.



The figure below gives the three-month average for various cargo imports, compared with the three months before Hudaydah was 'closed' in November 2017. This shows that the tonnage of fuel imported through all seaports in Q4 - despite the restrictions at Hudaydah - was 14 percent higher this quarter compared with the 2017 data, food 15 percent higher, and other cargoes were 6 percent higher. The overall level of imports was 12 percent higher than in August to October 2017.



ERLP records the rolling average tonnages for three-month periods from January 2018 to the latest quarter in its monthly Trade Reports for all land and sea entry points. This gives a 'long view' of changes in cargo imports into Yemen, with an upward trend for total cargo tonnages.

TF experts continued to monitor and report on crude oil exports through the terminals at Rudum and Ash Shihr Rudum exported 1.2 million barrels in Q4 and delivered 46,000 barrels to Aden Oil Harbor on a local vessel. No exports were recorded for Ash Shihr in Q4.

NEXT STEPS

During the next quarter (October-December 2021), the Trade component will carry out the following key activities:

1. Assist the NTFC in establishing Secretariat and appropriate working groups/technical committees.
2. Continue to promote AEO and hold one AEO awareness event.
3. Finalize procedures related to advance rulings and administrative appeals.
4. Develop a draft MOU for cross-border cooperation.
5. Develop procedure on Inspections of Low-Risk Perishable & Semi-Perishable Products.
6. Integrate two additional trade procedures into the trade portal.
7. Conduct eight online training sessions on the Trade Portal to familiarize relevant ministries/state bodies and the private sector with its operations.
8. Continue facilitating dialogue between YCA and Oracle for hosting AW.
9. Assist in establishing CTC and in delivery of one training seminar (on risk management). –
10. Develop a cost accounting model to revise the YSMO fee structure for reflecting the approximate costs of services rendered.
11. Provide Port Management with updates on anchorage time and time alongside for container and dry cargo ships at Aden (and Mukalla) to allow management to highlight 'time in port' reductions with shipping lines/agents and advocate for cost reductions in Ocean Freight Rates.
12. Conduct a survey of regional port tariffs and prepare an advocacy note on amending tariffs in line with findings.
13. Support the Port of Aden and the MoT, and cooperate with international agencies during discussions with the London Insurance Market on shipping/war-risk costs, and prepare a related technical and information paper.
14. Develop a tool to support Port management in understanding the impact of shipping and port costs on end-user costs, allowing management to monitor costs of transport and other costs in the logistics chain as shipping costs (in particular) change over time.
15. Continue supporting the PIU in Improving Port Infrastructure, including during the installation of the new VTMIS.

COMPONENT 2: IMPROVED MICROECONOMIC CONDITIONS

2.1 STRENGTHENED SME CAPACITY

ERLP supports small and medium-sized businesses (SMEs) in key growth sectors to enhance productivity, create jobs, help secure financing, and match qualified job seekers with new job opportunities. The project works with SMEs to identify and sustainably address constraints that impede their competitiveness, growth, and employment generation capacity. While some constraints are associated with the broader enabling environment, most are specific to each firm. In this regard, ERLP provides demand-driven technical assistance tailored to the specific needs of selected SMEs in key growth industries.

SMEs are selected through a rigorous scoping and selection process, and technical assistance is delivered through goal-focused partnership agreements (PAs) developed and executed by ERLP advisors. PAs outline each partner firm's unique growth goals, productivity enhancement parameters, and corresponding technical assistance and training support areas. Information obtained is also used to develop performance measures regarding incremental sales and new FTE jobs generated.

2.1.1 SUPPORT TO SMALL AND MEDIUM ENTERPRISES (SMES)

BACKGROUND

ERLP continues to impactfully address Yemen's massive youth unemployment by working collaboratively with key private sector actors to identify sustainable employment generation and economic growth opportunities at the enterprise and value chain levels. Selected high-potential SMEs continue to serve as engines of growth, playing a catalytic role in job creation, economic recovery, and community revitalization.

ERLP's proven employment generation approach, appropriately adapted to the Yemeni institutional context, provides customized, tightly targeted business advisory services to select private-sector firms. The technical assistance services enhance the competitiveness of partner SMEs and expand their access to finance and investment, enabling them to grow and generate new employment opportunities, particularly focusing on women and out-of-work youth.

To date, ERLP has effectively partnered with over 100 private companies. The project's buyer-led approach has significantly enhanced the competitiveness of private firms across several key sectors, including agribusiness, information and communications technology, private healthcare, and private education.

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

During Q4, ERLP supported core workplan activities and deliverables, reviewed and selected SMEs, provided tightly targeted technical assistance, conducted key interventions, monitored and tracked sales increases for partner SMEs, and generated additional FTE jobs. ERLP experts focused on achieving three main objectives: (i) delivering technical assistance to partner SMEs, (ii) monitoring the sales of ERLP partner firms, and (iii) generating FTE jobs.

Table 20: Support to SMEs Activities and Deliverables

ACTIVITY	DELIVERABLES
Follow up ongoing technical assistance for selected SMEs and initiate the technical assistance for the 3rd group of firms.	1. 30 additional qualified SMEs prospected and reviewed. 2. 17 new SMEs receive technical assistance under the approved PAs. 3. 125 new jobs generated and reported in Q4. 4. Increase in sales reported in %.
Monitor sales increases for the second batch of partner SMEs and report new sales agreements sealed following the USG support.	
Monitor/track sales increases for the third batch of partner SMEs and report new sales agreements sealed following the USG support.	

I. SMES REVIEWED AND SELECTED

In Q4, ERLP implemented ongoing technical assistance and training support to previously selected SMEs in Aden, Mukalla, and Al Wadi. The project also selected three new companies, for which PAs were developed and implemented. Additionally, the project initiated the selection process for companies targeted to receive project assistance during Y2. With these interventions, ERLP reached its annual targets of 1250 FTE jobs and 27 SMEs that have improved management practices or technologies as a result of USG assistance. Most interventions were completed during the first three quarters and came to fruition by Q4, allowing the project to report the impact on job creation and sales increase.

II. SELECTED SMES RECEIVE TECHNICAL ASSISTANCE UNDER APPROVED PARTNERSHIP AGREEMENTS

This quarter, ERLP developed and implemented three new PAs with selected SMEs. The newly approved PAs will generate an estimated 296 FTE jobs. The table below provides a list of companies and sectors that received ERLP technical assistance this quarter, their location, and the precise numbers of projected jobs generated.

In total, 42 PAs were approved in Y1, with three finalized in Q4. ERLP SME and MEL experts worked together to track their impact on business growth, competitiveness enhancement, incremental sales, and employment generation. The table below summarizes ongoing job creation (JC) and workforce development (WFD) support interventions, followed by illustrative examples of interventions and their impact.

Table 21: Q4 Ongoing SME Support Interventions

PARTNERSHIP AGREEMENT	SECTOR	LOCATION	COMPONENT	N° JOBS
SMES RECEIVING PRE-EMPLOYMENT TRAINING AND MATCHING JOBS				
Shamsan Mount Security Services	Services	Aden	WFD	30
Productive Families Center	Textile & Garmen	Hadramout	WFD	25
TOR women-owned businesses	Textile and Agribusiness	Hadramout	WFD	50
NAF	Fisheries	Hadramout	WFD/JC	191
Total number of jobs to be matched				**296**

Supporting Manufacturing Businesses: the case of The Bahaj Industrial Group in Mukalla

ERLP provided technical assistance to several manufacturing businesses that faced competitiveness challenges hindering their growth prospects. For instance, during the quarter ERLP worked closely with the Bahaj Industrial Group in Mukalla to address critical competitiveness enhancement constraints. The Bahaj group specializes in the manufacture and distribution of various fiberglass and aluminum products such as water tanks, kitchen installations, swimming pools, cupboards, storage units. The factory has witnessed growing demand to the increasing demand for water tanks and kitchen structures in the urban areas of Hadramout and Shabwa.

However, the factory reported difficulties in meeting that demand and addressing underlying weaknesses in their business management practices and systems, resulting in product delivery bottlenecks and the loss of important orders from major clients. Bahaj was in this regard unable to follow best practice-compliant financial management/accounting policies/procedures, and consequently struggled to track daily sales operations. This hurdle prevented the accurate monitoring of procurement functions, resulting in a flawed decision-making process at the senior management level. Discussions with ERLP revealed that Bahaj failed to adequately monitor basic operations such as manufacturing processes, stock of raw materials on hand, and gross margins per item.

ERLP and Bahaj discussed the factory's critical competitiveness enhancement challenges, and agreed in response to prioritize the implementation of a comprehensive Enterprise Resources Planning (ERP) system to improve their financial management processes. This intervention activity enabled the factory to manage its financial operations in an accurate, efficient, and orderly manner. This in turn has allowed management to make sound, well-informed decisions and to track expenses, stock on hand, gross margins, and expenses across all departments.

As a direct result of the ERLP technical assistance, the Bahaj Group generated 13 new jobs and reported an increase in sales in 2021 estimated at $290K -- a 40 percent increase.

Supporting the Education Sector: market-led technical assistance to private schools in Hadramout

With the start of the new academic year during the quarter, Al Banoun School, Al Majd School, and Al Najah School reported the generation of 59 new jobs following ERLP technical/training support activities.

In this regard, ERLP developed a demand-driven approach to respond to education-sector partner needs and designed tailored, market-led technical assistance interventions for the three schools. These were designed to improve service delivery and capacity to ensure educational continuity for students. The intervention activities focused centrifugally on improving operational processes and enhanced institutional capabilities, in a manner that helped promote delivery of high-quality education services using innovative digital solutions.

An online School Management System (SMS) software was designed as well to assist the three schools in digitally monitoring daily activities, and managing all resources and information on a single platform. The project focused on blended learning service delivery, and provided systematic process and operational improvements in private partner schools.

ERLP workforce development experts also upskilled the existing administrative and teaching staff on how to effectively utilize the school management system, and provided pre-employment training to the new recruits. This capacity building and recruitment game plan enabled the schools to significantly improve their overall productivity and efficiency, and ensure educational continuity.

III. INCREASE IN SALES IN USD REPORTED

In collaboration with the MEL team, ERLP SME experts monitor the sales increases of partner firms to assess the efficacy of the technical support provided to help enhance firm competitiveness, as measured by increases in sales and employment generation. The following table summarizes the incremental sales of ERLP partner firms through Q4 is summarized in Annex 17 (See *Annex 17 – Micro – ERLP Partner Firm Year 1 Incremental Sales*)

IV. FTE JOBS GENERATED AS OF Q4 FY21

During the quarter, the ERLP SME and WFD interventions generated 323 FTE jobs for a total of 1245 FTE jobs over the first twelve months of the project. As of Q4 FY21, ERLP supported 185 (including 119 start-ups) private sector firms across eight economic sectors (see Table 20 below).

Table 22: Number of FTE jobs verified as of the end of Q4:

PA/TOR	SECTOR	COMPONENT	JOBS
Al-Wahda Factory	C-15-Manufacturing	JC	18
Doctors Tower	Q-87-Human Health	JC	14
Al - Salam Specialized Clinic	Q-87-Human Health	JC	50
Al Hosn Factory for Salt	C-10-Manufacturing	WFD	5
Al- Madar Specialized Clinic	Q-87-Human Health	JC	16
Al Rawdhah Hospital	Q-87-Human Health	JC	36
Pure Aden for Plastic and Sanitary Water Industries	C-11-Manufacturing	JC	16
Youth Capacity Building	M-70-Professional activities	WFD	14
YOU for Information Technology	J-62-Computer Programming	JC	10
Al-Jamaheer M.C	Q-87-Human Health	JC	10
Al-Haramain Medical Center	Q-87-Human Health	JC	19
Al Arabya Soft	J-62-Computer Programming	WFD	26
Abu Sufyan Trading Corp	C/21: Trading and Industry	JC	29
Gulf Hospital	Q-87-Human Health	JC	38
BBsoft	J-62-Computer Programming	JC	5
AL Salehi Medical Corporation	C/21: Trading and Industry	JC	17
Al Naqueeb Hospital	Q-87-Human Health	WFD	85
Babel Hospital	Q-87-Human Health	WFD	41
King Security & Safety Guarding Group	N-80-Security	WFD	24
Mawada Food Industries	C-11-Manufacturing	JC	21
E-Commerce	J-62-Computer Programming	JC	8

PA/TOR	SECTOR	COMPONENT	JOBS
Covid 19 Aden	Q-87-Human Health	WFD	112
Covid 19 Taiz	Q-87-Human Health	WFD	58
Al Reyada Hospital	Q-87-Human Health	WFD	67
BaHaj Factory for Tanks	C-22-Manufacturing	JC	13
TOR Education	P-85-Education	WFD/JC	45
NAF	A-03-Fishing and aquaculture	JC	16
TOR Tailoring Workshops	C-14-Manufacturing	WFD	45
MAAP Hospital	Q-87-Human Health	JC	36
Al Majd School	P-85-Education	WFD	14
Shubyk	I-56-F&B service activities	JC	0
Al-Haramain for Plastic Industry	C-22-Manufacturing	JC	28
Zelal Factory for Mineral Water	C-11-Manufacturing	JC	31
National Company for Leather Industries	C-15-Manufacturing	WFD	23
Aden Stores Company	A-03-Fishing and aquaculture	JC	11
Afaq Gate for Medicine	C-21-Manufacturing of Pharmaceutical products	JC	18
Bravo Hyper	G-45-Wholesale and Retail Trade	JC	18
Shamsan Mount Security Services	N-80-Security	WFD	36
Al Ruwda for Mineral Water	C-11-Manufacturing	JC	17
Fisheries (fiberglass)	C-22-Manufacturing	WFD	9
Fisheries (coastal women)	C-10-Manufacturing of food products	WFD	74
JOB FAIR ADEN	several sectors	WFD	21
JOB FAIR MUKALLA	several sectors	WFD	5
TOR Women Businesses	C-14-Manufacturing	WFD	40
Burum	A-03-Fishing and aquaculture	JC	8
TOTAL			1247

2.1.2 WORKFORCE DEVELOPMENT

BACKGROUND

ERLP expands employment opportunities by addressing critical constraints that limit SME capacity to increase productivity and expand sales, exports, and jobs across high potential industries. The WFD component focuses on building systemic “backward linkages” between SMEs and the education system. This strategy addresses the critical skills gaps identified during the enterprise support process; by conducting pre-employment training activities in occupational areas in high demand by employers.

Acting as a catalyst, WFD interventions support initiatives to expand two-way communication between educational institutions and employers. A critical objective is to narrow the existing gaps between job seeker preparation and employer requirements. This strategic HR assistance track aims to promote more efficient HRM functionality within firms, strengthen networks between universities and businesses, and optimize the communication between employers and the education/training system.

Finally, it strives to update the methods and tools used by recruiters. The WFD Team seeks to develop and strengthen employer recruitment processes through targeted institutional outreach actions; designed to reinforce recruitment assistance and pre-employment training outcomes. The latter is provided by leveraging a pool of local training providers to fill employer-identified skill gaps for job candidates.

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

In Q4, ERLP experts achieved all three principal workforce development objectives: (i) providing pre-employment training for SMEs, (ii) building capacity for women, and (iii) supporting market-relevant curriculum development.

ACTIVITY	DELIVERABLES
Conduct pre-employment training with the fourth group of firms.	1. At least 175 women and youth trained in new and/or upgraded skills and obtained sustainable income 2. At least 17 new Partnership Agreements approved and signed 3. 200 new jobs matched (750 cumulative jobs matched) 4. Participants from at least 20 SMEs attend each job fair 5. 600 candidates attend the job fairs
Prepare a targeted and time-framed action plan and implement skills development interventions with women entrepreneurs in Hadramout	
Organize two invitation-only jobs fairs in Aden and Hadramout	
Finalize the curriculum development interventions with all curriculum development partnership agreements in Hadramout.	
Monitor/track the implementation and report the milestones achieved under the third batch of PAs	

This quarter, ERLP conducted four pre-employment interventions in various sectors, including services, fisheries and garment and textiles. With these four interventions, WFD attained the annual target of training 750 persons receiving FTE jobs. ERLP also organized two high profile job fairs where 1200 candidates applied, and more than 600 interviews were conducted for the 150 job opportunities offered. Moreover, during this quarter ERLP attended the closing ceremony of Seyoun Community College to celebrate the adoption of the nine new curricula developed with ERLP support during previous quarters.

I. CONDUCT PRE-EMPLOYMENT TRAINING ACTIVITIES WITH SELECTED SMES

ERLP Support to Female-Owned Businesses: the Productive Families Center

During Q4, ERLP delivered targeted pre-employment training services to Productive Families Center, a women-owned tailoring factory in Mukalla, founded in 2005. Recently, the Center developed a new business line to design and produce garments; in response to demand from wholesalers and shops in Hadramout. The small business has succeeded in concluding deals with local buyers in Hadramout interested in specialty items: female dresses, school uniforms, and children's clothes, all in high demand on the local market.

In this regard, the center expanded its production facility and invested in 25 new sewing machines to increase production, and prepare the new orders on time. However, the Center had found itself unable to identify qualified staff skilled in the fine tailoring and sewing needed to make the new garments. Overall there is a significant shortage of qualified sewists in Hadramout, and there are no public or private technical centers that offer certifications in tailoring and sewing. This major skill deficiency has substantially limited the center's potential sales growth, presenting a significant obstacle to its expansion.

Pre-employment Skills Development training for newly recruited female sewists

To address these weaknesses, ERLP workforce development experts prioritized the design and implementation of a tailored pre-employment training activity that would alleviate this hurdle, and build the center's training & placement capacity. ERLP then worked with the center's management to develop a well-targeted workforce development intervention plan, prioritizing skills development of new sewists; and a related market linkage support effort to guarantee sustainable orders for the center. ERLP also helped identify and select qualified candidates, and designed and delivered training sessions for the newly recruited female sewists.

The core training objective was to provide new skills and know-how in the design, assembly, and production of in-demand women's dresses and school uniform garments for boys and girls. In addition, the ERLP provided targeted market linkage (ML) support, identifying new buyers in Hadramout and other governorates. As a direct result of the ERLP technical assistance, the factory generated 25 new jobs and is expected to reach $30K in sales by December 2021.

II. CONDUCT SKILLS DEVELOPMENT INTERVENTIONS FOR WOMEN ENTREPRENEURS

Following the first Women Empowerment Workshop in July, ERLP built a strong working relationship with the Women's Economic Empowerment Division at the Ministry of Industry and Trade. The program also linked up effectively with the network of the chambers of commerce of Yemen, which had expressed interest in collaborating with ERLP to reach out to 500 registered businesswomen in need of technical support to grow their businesses.

In addition, ERLP partnered with the Hadramout Foundation to build an extensive local and regional network, that enables gender-opportunity-focused job generation to be scaled up in several districts and villages in the targeted governorate of Hadramout. This, in return, was designed to help the program reach vulnerable women with limited mobility or access to vocational training opportunities. Beneficiaries include female IDPs who had fled violent conflict in Houthi-controlled areas and settled in Southern governorates, as well as widows and breadwinners who had lost husbands during the conflict, and have struggled to feed their families.

During the first year of ERLP, four interventions were developed and implemented for women beneficiaries, which focused on sustainably strengthening this network. The most recent (fourth) intervention targeted 50 additional businesswomen who started up legally registered small businesses. The main clients of these 50 businesswomen include event/wedding organizers in need of caterers, local bakery shops that outsource pastry-making to home-based producers, and local clothing shops/garment wholesalers in Hadramout and Shabwa.

This quarter, ERLP supported 50 businesswomen by providing skills development and market-linkage opportunities to help them build their home-based businesses; and create more diversified and independent roles in their coastal communities. The intervention supported vulnerable women by increasing their ability to access new markets, generate/increase household income, and create new jobs.

The expected business growth/sales increase generated is expected to reach over $300,000 within one year following implementation. This intervention activity will support 50 direct beneficiaries and impact over 400 individual household members. As expanding businesses take on new workers, this is expected to support the creation of at least 30 new jobs within the first year of the intervention.

Women Empowerment Workshop, July 2021, Aden, Yemen

III. IMPLEMENT CURRICULUM DEVELOPMENT INTERVENTION

ERLP conducted strategic curriculum development activities during the reporting period supporting systemic improvements in the quality and market-relevance of curricula in key skill areas, among a network of vocational education institutions associated with Seyoun Community College. Targeted pedagogical focus areas were identified through in-depth skill gap related information received via the project's ongoing work with partner firms. ERLP then worked to introduce curricula reforms designed to effectively address well-defined discrepancies between the current curriculum and private sector workforce demand.

On September 6, ERLP WFD representatives attended the closing ceremony of the curriculum development intervention in the community college of Seyoun. The deputy governor of Hadramout attended the ceremony. He enthusiastically thanked USAID/ERLP for the program's efforts in support of the systemic improvement in the quality and market-relevance of curricula in key skill areas in the Seyoun Community College.

The project focused on addressing skill-gap issues by working closely with the Seyoun to reform key curricula in three different in-demand specializations: "Renewable Energy," "Software Programming," and "Health Management," commencing with the academic year 2021-22. Curricula reform activities were designed to produce high-quality teacher development and training materials, as well as providing market-relevant curricula in critical skill gap areas. The curricula reform effort focused on addressing major discrepancies between the current curriculum and soft skills development needs within the education system. Major pedagogical skills gaps were addressed through targeted training-of-trainers programs, and a related review of curriculum structure and content. This holistic partnership approach enabled the community college network to develop appropriate curriculum and assessment tools, that can efficiently respond to the labor market's current and future needs.

Curriculum development intervention Closing Ceremony at the Community College of Seyoun. Photo Credit: ERLP SME Team

IV. ORGANIZATION OF TWO INVITATION ONLY JOB FAIRS IN ADEN AND HADRAMOUT

During Q4, ERLP organized two invitation-only jobs fairs, one in Aden and one in Mukalla. Prior to both events, the project organized focus-group discussions with participating private-sector firms to identify their job matching needs; and also developed the required job descriptions advertised during the job fairs.

The WFD team also organized several CV-Writing and Interview Skills workshops to effectively prepare job seekers to apply for the available jobs, and for the interviews conducted during the events.

ERLP utilized the Yemenjobs internet platform to advertise the opportunities offered by the participating firms. More than one thousand candidates applied through Yemenjobs, from which the most highly qualified candidates were selected. Five hundred selected candidates were invited to the two events, and more than 640 interviews were conducted. One hundred and fifty jobs were offered by 49 participating firms, as a result of the events.

Job fairs in Aden and Mukalla. Photo Credit: ERLP SME Team

NEXT STEPS

During Y2, ERLP will continue implementing tightly targeted technical assistance and training activities supporting private sector competitiveness and sales/export expansion. These will include:

1. Providing strategic support to targeted private sector enterprises through tightly tailored technical assistance and training.
2. Organizing one invitation-only job fairs in Seyoun, in order to help partner firms identify qualified workforce participants and effectively fill vacant positions.
3. Continuing to prospect the private sector and conduct assessments of firms eligible for ERLP technical support and training. There are already 12 additional PAs in the pipeline with an estimated 400 jobs.

2.1.3 ACCESS TO FINANCE

BACKGROUND

Accounting for 99 percent of Yemeni enterprises, SMEs are a significant source of employment, an essential provider of basic goods and services, and a crucial part of socio-economic resilience and recovery. Access to financial services is a constraint for SMEs, hindering their potential to grow and generate jobs and economic growth. Yemen has one of the lowest levels of household financial inclusion in the MENA region; only six percent of Yemeni adults have a bank account, well below the MENA average of 18 percent, and only one percent of Yemenis keep their savings in a formal financial institution.

The financial sector in Yemen struggles to efficiently mobilize capital toward private-sector development. Weak credit information, inadequate understanding of SME risk, excessive collateral requirements, and financial products ill-suited to SME needs significantly constrain lending and impede sector growth. The SMEPS 2017 survey found that 73 percent of businesses could not access credit. In response, ERLP assists partner financial institutions to better serve and meet SME client needs by expanding institutional outreach capacity and providing a wide range of cutting-edge financial services.

ERLP rapidly established a strong network of seven Partner Financial Institutions (PFIs) comprised of the country's largest commercial banks[3]. ERLP activities continue to be adapted to reflect and match each financial institution's unique experience and situation with tailored deliverables.

This quarter, ERLP continued working closely with current PFIs to scale up SME financing workstream models, introducing new financial products and outreach strategies. Building on the solid knowledge and knowhow gained during the first three quarters, the A2F team focused on the institutional structures of the PFIs, helping them reorganize their SME units based on international standards and refocus their credit structures, processes, approval cycles, policies, and authority matrices.

The project enhanced the capacity of the newly established SME units in the International Bank of Yemen (IBY) and the Yemen Commercial Bank (YCB). The focus was directed to providing on-the-job training for the newly hired staff. The project also supported the newest PFI, the Shamil Bank of Yemen and Bahrain (SBYB), in developing the structure, function, and position within the bank of its new SME Unit. ERLP also supported Itthad MF and El Tadamon MF in structuring their Risk Management Departments and institutionalizing their risk management approach. The team also helped Itthad distinguish and separate between the functions of risk management and internal audit.

After the successful pilot phase at the headquarters of the largest commercial banks in Yemen, IBY, and YCB, as well as at Al Amal Bank MF, ERLP successfully launched the second phase of this effort by expanding the use of the CAP model to the branches of these banks. ERLP also helped these banks delegate the credit approval authority from HQ to the branch managers. This will accelerate the loan approval process and significantly increase the growth of SMEs portfolio of these banks.

Al Amal Bank, received an award for the Global SME Finance during the IFC-supported SME Finance Forum.

A significant achievement in Q4 was the development by ERLP, in partnership with Al Amal Bank, of the first online-mobile loan application in Yemen. The application will allow the small trader to receive credit from the bank against their credit invoices online. The application is currently in the testing phase and will be available on the Android App Store next quarter with a formal launching event. Thanks to the intensive ERLP TA to Al Amal Bank, the bank was awarded the Global SME Finance prize for this initiative from the IFC-supported SME Finance Forum.

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[3] International Bank of Yemen (IBY), Yemen Commercial Bank (YCB), El Tadhamon Microfinance, El Amal Bank (AMB), Al-Ittihad Microfinance Program and the new partners Kuraimi Bank and the Shamil Bank of Yemen and Bahrain.

ERLP technical support consisting of new and improved SME lending policies, procedures, and products, combined with greatly enhanced PFI outreach, generated **over $14 million** in SME loans**.**

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

During the reporting period, ERLP experts focused on achieving five main targets: (i) Provide continued technical support to partner FIs develop their SME loan portfolio, (ii) Facilitate technical assistance and training on LC/LGs and develop leasing finance products, (iii) Develop "Pipeline SME 4" of credit-ready SMEs and facilitate their access to finance, (iv) MFS/Fintech products are introduced to the market by PFIs and market campaigns to scale up the utilization of the SME DFS/FinTech products.

Table 23: Q4 Access to Finance Activities and Deliverables

<table>
<tr><th>ACTIVITY</th><th>DELIVERABLES</th></tr>
<tr><td>Provide continued technical support to partner Financial Institutions (FIs) develop their SME loan portfolio</td><td rowspan="9">1. 7 partner FIs provided technical/training assistance to build their SME loan portfolio
2. 3 partner FIs provided training on updated uses of L/C and LGs
3. Leasing Product developed
4. 4 partner FIs provided technical support to develop leasing finance
5. One new partner FI screened and selected
6. Partnership Agreement with new partner FI formalized
7. Potential SMEs screened and selected
8. The fourth pipeline of at least 15 additional credit-ready SMEs developed
9. 4 prioritized MFS/Fintech products were introduced to the market
10. Provide an assessment report on the performance of the pilot phase and apply necessary adjustments
11. Official Launch of product
12. Two MFS/Fintech products introduced to the market by partner FIs
13. Marketing/signaling campaign to scale up the utilization of the SME DFS/FinTech products supported
14. $3 million in additional lending to SMEs (at least $700,000 to women-owned firms)
15. 170 SME clients (at least 40 women) benefitted from financing received from ERLP partners
16. $700,000 in additional lending to agriculture activities (at least $170,000 to women-owned firms)
17. 170 ERLP-supported agricultural sector chain actors received financing from assisted institutional partners
18. One FI introduces MFS/Fintech products to the market and initiates electronic savings/deposit account services</td></tr>
<tr><td>Facilitate updated training on the use of international trade instruments, including Letters of Credit (L/Cs) and Letters of Guarantee (LG)</td></tr>
<tr><td>Facilitate continued technical support to partner FIs in developing their leasing finance portfolio</td></tr>
<tr><td>Increase ERLP/A2F network by adding one new partner financial institution</td></tr>
<tr><td>Develop "Pipeline SME 4" of credit-ready SMEs and facilitate their access to finance</td></tr>
<tr><td>Support FIs in developing, testing, and introducing to two prioritized MFS/Fintech products</td></tr>
<tr><td>Support FIs to develop and implement a marketing/signaling campaign to scale up the utilization of the SME DFS /FinTech products.</td></tr>
<tr><td>Pre-launch adjustments, followed by the official Launch</td></tr>
<tr><td>Support FIs in developing, testing, and introducing to two MFS/Fintech products

Support FIs to develop and implement a marketing/signaling campaign to scale up the utilization of the SME DFS /FinTech products.</td></tr>
</table>

I. PROVIDE CONTINUED TECHNICAL SUPPORT TO PARTNER FIS DEVELOP THEIR SME LOAN PORTFOLIO

Advertisement for the launching of SBYB SME Unit

ERLP continued to support the seven PFIs in developing their internal capacity and fostering systematized institutional transformation and integrated modifications to create new financial products targeting SMEs. Several tailored training sessions to relevant PFI staff were conducted during the reporting period on effective SMEs lending best practices. Three training courses on Ag-value chain, Risk Management, and Overdraft/LG finance were delivered, attended by 41 participants

Table 24: Q4 Access to Finance Year 1 Training

PFI	TRAINING	ATTENDEES	WOMEN	TRAINEE DAYS
AMB	CAP Model	20	5	40
TM	CAP Model	10	2	20
YCB	SMEs & CAP Model	19	5	38
IBY	SMEs & CAP Model	30	13	60
YCB	Credit Risk	15	2	30
Al-Itihad	SMEs & CAP Model	13	5	39
IBY	Credit Risk Training	31	15	62
Al-Itihad	Credit Risk Training	42	23	84
YCB	Factoring Product I	14	3	28
AMB	Factoring operation	15	3	30
SBYB	SME Lending Introduction	10	2	20
YCB	Factoring Operation II	14	3	28
Kuraimi	Ag-Value Chain Finance	12	0	12
IBY	LG/LC	14	5	14
SBYB	Credit Risk Management	9	0	9
TOTAL		233	86	514

During Q4 ERLP helped to address the absence of a proper Risk Management approach, an insufficient risk management function, and conflating internal audit and risk management functions with major partner banks. The project supported the three biggest partners, IBY, YCB, and SBYB, plus the Al Itthad MF, in building solid risk-management systematic approaches based on OCED principles and Basel III. The PFIs were also supported in establishing risk management departments and developing the associated functions and processes framework. This effort was not limited to credit risk but also considered the portfolio, operation, and strategic risk of ERLP PFIs.

During this quarter, the seven PFIs received technical assistance to build their SME lending capacity and new financial products. This directly resulted in the launching of a new SME lending unit in SBYB. ERLP supported this effort by creating the SME Lending Strategy, the development of the functions and positions of the unit, as well as the bank's credit policy. As referenced above, these efforts also resulted in implementing the CAP model at the branch level of YCB and IBY with loan approval authority delegation to the branch managers.

II. FACILITATE TECHNICAL ASSISTANCE AND TRAINING ON LC/LGS AND DEVELOP LEASING FINANCE PRODUCT

ERLP is diversifying lending products for PFIs to meet the needs of different applicants and make it easier for borrowers to choose the best solution for their financing requirements. During this quarter, ERLP introduced overdraft facilities, LGs and LCs, as innovative financing approaches to help meet the working capital financing needs of medium-sized enterprises.

Risk Management training at SBYB

Unlike a conventional loan, overdraft financing saves processing/review time for both the lender and the borrower. It reduces the processing required for each loan approval by allowing a client to make several drawdowns under one approved limit. LCs and LGs suit medium-sized exporters and importers; the two products facilitate the trade finance chain in Yemen. During the reporting period, the ERLP team conducted training based on international trade best practices on LC & LG finance to three PFIs (IBY, SBYB and YCB) to enhance their capacity to deliver these products.

Joint Visit to beneficiary by ERLP SME & A2F Team

ERLP has also helped introduce a Sell-and-Lease-Back product as an asset finance methodology for the first time in Yemen. The new products will allow a large segment of small manufacturing enterprises to access financing and enhance their liquidity, through loans guaranteed by their assets. This quarter, the A2F component developed a product manual for SBYB and trained the credit staff on product implementation and asset evaluation; this product was designed in the Islamic Ijara mode. The product was also presented to Kuraimi Bank targeting Ag-manufacturing clients. A2F advisors also introduced vendor-finance leasing to YCB as a new methodology for SMEs to help acquire machinery through vendor guarantee. The new product will be launched next quarter.

III. DEVELOP "PIPELINE SME 4" OF CREDIT-READY SMES AND FACILITATE THEIR ACCESS TO FINANCE

As part of cross activities with other ERLP components, A2F advisors supported project partner SMEs to rapidly and effectively assess their financial needs and how they managed resources, helped identify their funding gaps, and recommended efficient approaches to help meet their short- and longer-term financial needs. Similarly, A2F, in collaboration with the Agriculture and Fisheries components, managed several financial workshops. These workshops bring together ERLP beneficiary farmers with partner financial institutions, enabling PFIs to directly introduce their agro services to farmers and answer their questions.

These workshops effectively establish strong banker/customer relationships, especially for borrowers with limited or no banking experience. Through a symbiotic collaboration with PFIs, ERLP connected them with the pipeline of 60 partner Ag-SMEs in need of financial services and credit ready, resulting in 21 agricultural and non-agricultural SMEs applying for and receiving loans.

V. MFS/FINTECH PRODUCTS ARE INTRODUCED TO THE MARKET BY PFIS AND MARKET CAMPAIGNS TO SCALE UP THE UTILIZATION OF THE SME DFS /FINTECH PRODUCTS.

Screenshot of the Al Amal Bank On-line Invoice Finance Loan

Digitalization is revolutionizing financial systems in developing countries. Financial transactions are being completed online and by mobile phone 24/7, from large urban centers to remote villages.

During the reporting period, ERLP, in partnership with Al Amal Bank, successfully developed the first online Mobile Application – a loan product in Yemen for small traders to sell or auction their trade receivables owed by their customers to the bank. The digitalization of this financial service has quickly proven to be a game-changer. This new financial application will enable SMEs, especially rural areas, to use FinTech platforms to receive financing and structure eligible receivables to match them with investors. SMEs can in this regard directly connect their accounting software to the invoice finance platform from anywhere using the Mobil Application, and apply for a loan based on the value of individual receivables. The product was tested and is currently in the pilot phase of implementation. It will be available on the Android App Store next quarter. ERLP assisted Al Amal in organizing a marketing campaign on YouTube and social media to promote the new product.

Al Amal Digital Loan Application

Capitalizing on the success of Al Amal Bank's experience, ERLP has initiated replication of the digitalization of trade finance products and other lending products at YCB, IBY, and Kuraimi Bank.

During the reporting period, ERLP supported IBY in the selection of loan products to be presented to SMEs online; for example, payment management as a type of reverse factoring for big buyers dealing with small suppliers will be implemented through the bank platform, and small loans for working capital will be implemented through YCB E-wallet platform. During Y1, four PFIs received targeted technical support for development of Fintech/MFS products.

SME LENDING

During the reporting period, ERLP continued to work with the PFIs to help grow their respective SME lending portfolios. The use of the CAP model has dramatically changed the credit approach within these institutions. Senior management in three partner banks (IBY, YCB, and Al Amal) decided to use the CAP model as the certified tool to implement all the credit transactions at the branch level; with loan approval authority delegated to the branch managers. This has led to a dramatic improvement in the PFIs SME loan portfolio, which grew to over $14.7 million, of which $1.34 million were loans to women.

A2F advisors have worked intensively with the PFIs to develop needs-based financial tools, including working capital, Bai Salam, and invoice financing. This includes the dedicated SME unit at YCB, which initiated SME lending after the success of the pilot phase. The new unit already disbursed nearly $7million to 86 SMEs, while the new SME unit at IBY has disbursed $635,494.

ERLP has in addition enhanced the capacity of PFIs to target more effectively this new segment in the agricultural sector. As a result of number of these institutions are poised to generate a significant increase in sustainable agriculture lending over time. In this regard, comprehensive training related to agriculture lending was provided this quarter to Kuraimi Bank and Al Itthad Microfinance Program. The project also provided training support to Kuraimi Bank on Ag-Value Chain finance; which as a result introduced innovative short-term lending instruments to input suppliers, as well as new pre-harvest and post-harvest financing products. This quarter, Ag-lending activities generated almost $1.6 million in new agricultural loans, with $66,040 in new loans for women agricultural value chain participants.

NON-AGRO LOANS	MALE (NO)	MALE (USD)	FEMALE (NO)	FEMALE (USD)	TOTAL (NO)	TOTAL VALUE (USD)
TM	1,129	3,516,016	416	652,107	1,545	4,168,123
AMB	1481	518,269	389	235,172	1,870	753,441
Itthad	345	483,575	409	327,950	754	811,525
YCB	86	6,854,866	0	0	86	6,854,866
IBY	66	568,935	14	66,559	80	635,494
Total Non-Agro Loan	3,107	11,941,662	1,228	1,281,789	4,335	13,223,450
AG LOANS	MALE (NO)	MALE (USD)	FEMALE (NO)	FEMALE (USD)	TOTAL (NO)	TOTAL (USD)
TM	73	889,716	5	50,891	77	940,607
AMB	0	0	0	0	-	-
Itthad	190	387,629	13	15,149	203	402,778
YCB	0	0	0	0	-	-
IBY	0	0	0	0	-	-
KIMB	23	209,167	2	-	23	209,167
Total Agro Loans	286	1,486,512	20	66,040	303	1,552,552
Grand Total	3,393	13,428,174	1,245	1,347,829	4,638	14,776,003

2.2 SUSTAINABLE LIVELIHOODS

Agriculture and fisheries constitute a primary source of Yemeni livelihoods, ranking only behind petroleum in economic significance. The sectors are highly labor-intensive, employing over 50 percent of the rural workforce and accounting for more than 20 percent of GDP. To support these core industries, ERLP implements targeted, market-led efforts to improve entrepreneurial capacity. The project applies best practices and improved technologies for augmenting both production and quality while enhancing downstream market development and integration. In the wake of the humanitarian crises, the agricultural and fisheries sectors are critical to expanding food security, decreasing import reliance, and increasing vulnerable household incomes.

2.2.1 AGRICULTURE AND AGRIBUSINESS

A more stable and positive future for Yemen depends on having robust agricultural markets and farmers capable of producing and supplying them. The agriculture sector is underperforming because of low productivity and limited market access. Over the years, outdated farming practices have resulted in an escalating decline in output, directly contributing to increased rural poverty. ERLP introduces technologies and best practices to increase returns to producers across four key value chains: coffee, horticulture, honey, and livestock. Targeted upstream ERLP support promotes the efficient use of scarce resources to reduce production costs and wastage, improve product quality, and leverage high-end markets to increase producer prices.

The project builds smallholder farmer capacity in the abovementioned value chains through targeted technical assistance, training, and hands-on learning through ERLP-established farmer field schools and small-farm enterprise demonstrations. For small-scale markets, ERLP interventions bolster vertical and horizontal linkages and build trust between value chain actors. ERLP works with targeted clusters in the four value chains to develop stronger working relationships – and establish more lucrative sales agreements – with major buyers and traders. The impact of the downstream support interventions improves the prospects for long-term sustainability.

Over the first year, ERLP worked with upstream/downstream participants to strengthen the above-referenced value chains and increase the quantity and value of agricultural commodities under a strategically structured technical support plan. The project established 14 clusters of farm families in 15 districts across four governorates and facilitated the selection of community cluster representatives. To date, the project successfully built the technical capacity of 3,543 beneficiaries - 35 percent of whom were women - through 112 training events. These events improved output by introducing affordable, innovative technologies that significantly increase input efficiency and productivity. As a result, ERLP skills training substantially reduced postharvest losses and added value to farm products, enhancing farmer productivity and increasing household incomes.

ERLP also established 10 farmer field schools and 7 demonstration sites to showcase and increase the adoption of low-cost, high-return farming activities. These sites demonstrate efficient water use, livestock fattening, greenhouse production, low-tunnel farming, improved modern beehive methods, and drip irrigation. ERLP-supported technologies deliver the potential to provide a considerable return on investment or increase in yields in 3-12 months. Data gathered from ERLP-demonstration sites showed that improved beehives attained an over 500 percent return on investment during a single, four-month production cycle and goat/lamb fattening provided a 41 percent return on investment in less than three months. Low-tunnel farming methods demonstrated a 275 percent higher return on investment compared to traditional practices in one watermelon production season. Greenhouse production yielded a 2,600 percent increase for tomatoes in one season compared to traditional practices on a per-unit-area basis. Drip irrigation combined with plastic mulching enhanced water use efficiency by 70 percent while reducing the cost of diesel fuel needed to run the water pumps by 70 percent.

To support sustainable market linkages to farm families in a manner that will significantly raise rural incomes on a sustainable, long-term basis, ERLP also identifies important downstream market opportunities to boost sales and increase household incomes. The project engages with clusters of farmers to build their capacity to negotiate contracts with new buyers more strategically. During the quarter, ERLP facilitated 83 new sales agreements worth $ 0.45 million – resulting in a total of 400 agreements worth $5.04 million over the span of the project.

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

ERLP achieved the following targets outlined in the work plan: (i) conducting value chain training and establishing farmer field schools to provide farmers with hands-on training; (ii) conducting farm-level visits to encourage farmers to implement ERLP technologies; (iii) implementing targeted technical assistance to partner traders, processors and associations; and (iv) expanding the database of new, qualified traders/key buyers, signing sales agreements, and identifying new processors. ERLP met all the annual targets by training 3,543 beneficiaries, establishing seven demonstration sites and ten farmer field schools, and conducting 600 farm levels visits to encourage farmers to apply technologies and best practices they have learned under the ERLP technical support. Additionally, ERLP facilitated the signing of 400 sales agreements worth $5.04 million. Despite the pandemic-related unprecedented uncertainty surrounding the coffee and honey value chains, progress was made on rolling out electronic platforms to reach international buyers, which will be available for existing and new buyers in the first quarter of Y2 two of the project.

Table 25: Q4 Agriculture and Agribusiness Activities and Deliverables

<table>
<tr><th>ACTIVITY</th><th>DELIVERABLES</th></tr>
<tr><td>Conduct value chain training.</td><td rowspan="7">1. 250 new cluster participants trained
2. 10 new Farmer Field Days conducted
3. 24 additional hands-on-learning sessions conducted for 350 farmers
4. 200 additional farm level visits conducted
5. 100 new sales agreements signed valued at 1.25 million in sales.
6. 20 new processors and exporters are identified for the next quarter.
7. Coffee and honey value chains electronic platforms created and available for international buyers and 200K USD in sales value realized through the platform</td></tr>
<tr><td>Organize farmer field days at demo sites.</td></tr>
<tr><td>Establish new farmer field schools (FFSs) and conduct hands-on learning sessions.</td></tr>
<tr><td>Collect evidence demonstrating farmers applying new technologies or improved management practices.</td></tr>
<tr><td>Follow up ongoing technical assistance for selected processors and preparation of a second group.</td></tr>
<tr><td>Implement strategic market linkage strategic to close sales deals under each VC.</td></tr>
<tr><td>Design technical intervention for honey and coffee exporters and processors, and provide targeted technical assistance to livestock and horticulture processors.</td></tr>
</table>

I. VALUE CHAIN TECHNICAL TRAINING, ESTABLISHMENT OF FARMER FIELD SCHOOLS

ERLP technical training introduces improved, market-led farming practices and new technologies that significantly impact coffee, honey, horticultural crops, and livestock production and quality. This quarter, ERLP trained 250 farmers and provided hands-on learning to 350 participants by establishing seven farmer field schools. The ERLP technical interventions address weaknesses identified through technical assistance needs assessments (TANAs) that impede production and agriculture sector growth. The training events consist of classroom presentations as well as practical, hands-on learning in the field designed to improve production techniques, reduce waste, and enhance product quality. All participants are provided with manuals developed by ERLP technical advisors for future reference.

Horticulture Value Chain

ERLP technical/training support efforts improve small producer livelihoods in the horticulture value chain by improving production, harvest/postharvest handling practices, and creating sustainable market linkages. ERLP training educates farmers about modern techniques for growing tomatoes, onions, chili peppers, and watermelons, using greenhouses, low tunnels, and drip irrigation to improve production, enhance quality, and reduce waste.

During the quarter, ERLP trained 165 farmers in production management and postharvest handling of watermelon intercropped with chili in the Ahwar District (Abyan Governorate). Project experts also introduced a modern seedling production method, using peat moss as a growth medium. Seedlings produced using this technology have lowered production costs and increased crop yield by 15-20 percent.

ERLP established one farmer field school (FFS) in Tuban District (Lehj Governorate) and provided hands-on-learning to 62 watermelon and chili growers on pest management by using beneficial insects and natural plants. At the same location, the project also established another FFS on drip irrigation and gave 60 watermelon and chili growers a practical demonstration on drip irrigation operation and maintenance.

Results compiled from the demo sites established during previous quarters show remarkable progress. The greenhouses demonstrated a 2,600 percent higher tomato yield on a per-unit-area basis compared to traditional practices; low-tunnel farming showed 275 percent more return on investment in watermelon production compared to traditional methods; and drip irrigation increased water-use efficiency by over 70 percent, saving the same percentage in diesel fuel used to run the water pumps. During farm-level visits by ERLP field staff, many of the beneficiaries reported a significant increase in their incomes by applying the ERLP technologies

Livestock Value Chain

ERLP trained 38 small farmers during the quarter, including 19 women (50 percent), in the Ghayl and Bawazir Districts (Hadramout Governorate). The training focused on proper nutrition, examination, and diagnosis. Improvements in these areas can significantly improve productivity and reduce economic losses.

During Q4, four FFS sessions were conducted, providing hands-on learning for 99 women on dairy processing in the Ad Dees Ashaqiya and Ashihir Districts (Hadramout Governorate) and the Tuban district (Lehj Governorate). ERLP demonstrated simple household processing and preservation methods for making cheese, yogurt, milk curd, *lebnah* (sour cream), and ghee.

ERLP concluded the two demonstration sites established during the previous quarter on fattening and conducted economic analyses of the gatherings. Results showed a 41 percent average return on investment in less than three months. Feedback reported by the ERLP field team during their farm-level visits indicated that many farmers were applying the ERLP fattening techniques and livestock production management practices.

ERLP TECHNICAL SUPPORT IMPROVES LIVESTOCK FARMER INCOMES

"I have never expected to achieve threefold growth in my farm income." — Mrs. Saba Fadle Aoud Ba Owm, Livestock Farmer, Tuban District, Lehj Governorate

In November 2020, Mrs. Saba Fadle Aoud Ba Owm from Zoon Awaniah village in the Tuban District (Lehj Governorate) participated in an ERLP Agriculture Training Intervention. Prior to the training, Mrs. Saba fattened 16-20 goats every year prior to selling them during the Eid holiday. After keeping her goats on traditional feeding practices for 5-6 months, she barely earned 45,000 Yemeni Rial (YER) as net return per goat. Mrs. Saba did not know how to safeguard her goats against fatal diseases, resulting in considerable mortality incidences every year.

Soon after the ERLP training, Mrs. Saba fattened her goats by applying the new fattening techniques and treated her goats against diseases by herself. She fed her goats based on the ERLP-daily feed requirement that uses a mix of hay/dry fodder, green fodder, and minerals. This year, Mrs. Saba's goats remained healthy with no losses, and the fattening period was reduced to 3 months. As a result, her return per goat jumped to 135,000 YER (a 300 percent increase).

"The additional income I have earned through ERLP technical support has helped me expand my farming business and improve the livelihood of my family of 10 (five younger sisters, three brothers, and parents)."

Honey Value Chain

Honey producers in Yemen lack the experience and know-how to produce quality, significantly higher value-added products. ERLP provides producers with the technical knowledge needed to combat honeybee pathogens effectively and increase productivity through modern beehive and beekeeping best practices to leverage the sector's full potential. Beekeepers are shown how to harvest and process high-quality products and use more effective packaging, labeling, and branding. The project also provides access to profitable markets for value-added, natural, organic products.

This quarter, ERLP provided hands-on learning to 101 honey producers/processors by conducting three FFS sessions on honey quality management in Shibam District (Hadramout Governorate). ERLP experts explained how proper bee nutrition, various enzymes, heating and cleanliness, and hygiene impact honey quality. Additionally, ERLP conducted one FFS session on modern beehive management for 29 beekeepers in Al Habyline District (Lehj Governorate). ERLP experts provided hands-on learning to the participants on bee colony transfer from traditional hives to modern beehives, an inspection of the queen bee, and honey extraction from modern hives by mechanical methods.

The project further enhances product value by ensuring that products meet regional and international quality standards and are more effectively and aggressively marketed to niche markets. For example, *Sidr* honeycomb is traditionally harvested in round, one-kilogram tin containers, which is in high demand regionally and sells for roughly $100/kilogram. However, honeycombs produced from modern beehives are rectangular and must be cut to fit in the round tins, resulting in significant wastage. In this regard, ERLP established a demonstration site in Shibam District (Hadramout Governorate), designed to showcase important modifications to the modern beehive. The modifications permit the efficient production of round honeycombs that fit in the one-kilogram tin containers. Analysis of the data gathered from the demo site revealed that the improved beehives provided an over 500 percent return on investment during a single, four-month production cycle. A significant number of beekeepers have already adopted the enhanced hives.

II. GENDER MAINSTREAMING

In recognition of women's crucial contributions to agriculture, gender mainstreaming remains at the core of ERLP Sustainable Livelihoods support activities. ERLP designs and implements initiatives that expand women's participation in all four value chains. By improving women's access to inputs and creating new opportunities by identifying and disseminating industry best practices, ERLP transfers the knowledge and information needed to achieve successful outcomes. During Y1, ERLP trained 1,296 women (38 percent of all project beneficiaries), including 784 in livestock, 198 in horticulture, 162 in honey, and 152 in coffee.

NEXT STEPS

In Q1 Year II, ERLP advisors will establish four new value chain clusters, prepare four technical assistance need assessments, and conduct 13 training sessions for 425 cluster participants. The project will establish one demonstration site and one farmer field school. Five hands-on learning sessions will be conducted for 100 farmers.

2.2.2 FISHERIES

BACKGROUND

Small-scale fisheries are central to the livelihoods of millions in Yemen's coastal communities, and they contribute to the country's socio-economic development in terms of food security and employment. Fish and seafood products are Yemen's second-most exported commodity, significantly contributing to foreign exchange earnings. However, the international market for fisheries exports is highly competitive with rapid shifts in demand in terms of fish quality and food safety issues. Numerous other challenges constrain the sector's growth, despite its significant economic potential for Yemen.

The COVID-19 lockdown and containment measures led to additional disruptions, causing ripple effects across the entire value chain. Fisherfolk saw a steep drop in demand and prices. Processors lost access to lucrative regional and international markets as global restrictions on air, land, and sea borders adversely impacted seafood exports. Coastal women were disproportionally impacted, losing higher-paid fish-processing jobs, and left with low, typically unpaid caregiving and domestic work.

ERLP is working with a broad range of fishing industry stakeholders to help restore and sustainably improve the sector's performance. The project works directly with fisherfolk to improve capture methods, handling, and preservation practices that significantly impact catch quality and quantity. The project also works with processors to strengthen management, boost production, and comply with international quality and safety standards. Market linkages to more lucrative regional and international markets are also being bolstered.

ERLP is centrifugally focused on helping Yemeni fisherfolk and fish/seafood processors integrate effectively into regional and international export markets with substantial unexploited potential. Moreover, consistent with the project's holistic approach to developing the sector, ERLP provides direct assistance to coastal women, helping them start up small businesses to generate additional income for their households.

QUARTERLY WORK ACTIVITIES AND DELIVERABLES

This quarter, ERLP continued working with fisheries stakeholders, including fisherfolk, coastal women, seafood processors, and fisheries associations. Demand-driven interventions targeted upskilling seafood processing workers in food hygiene and basic sanitation standards, building the capacity of coastal women and fisheries associations, and designing technical assistance and ML support to seafood processors.

During the reporting period, ERLP continued working with four main seafood processors: the National Fish Canning and Packing Factory (NAF), Al Wali, and Lobster Seafood Processing. The fisheries team also provided market-linkage assistance to coastal women, who were upskilled during the previous interventions, promoting their products locally and regionally through targeted downstream support.

Overall, ERLP delivered technical assistance and training to 192 coastal women by the end of Y1, helping them gain new or better employment, and supported women-owned microenterprises to generate increased sales. Training was also provided to 394 fisherfolk, who joined ERLP partner seafood processing companies to work on the production lines or become suppliers. Seafood processors/businesses reported increased sales of at least 10 percent, along with $1 million in additional export sales.

Table 26: Q4 Fisheries Activities and Deliverables

ACTIVITY	DELIVERABLES
Vocational skills development Fish handling Quality standards training Provide technical/training assistance to seafood processors and other fisheries-related businesses	1. At least 60 new coastal women provided training for new skills or upgraded skills to obtain income (e.g. food processing, dry and salted fish) 2. At least 60 new fisherfolk trained in skills related to quality of catches (reflected by price) 3. 5 new seafood processing plants provided TA and reported improved hygiene and quality standards 4. 3 new seafood processing plants received USG support. 5. 10% incremental sales reported 6. $1M new export sales reported ($4M exported sales reported between Q1, Q2, Q3 & Q4)

I. COASTAL WOMEN SKILLS DEVELOPMENT SUPPORT

In Q4, ERLP continued working with coastal women and diversified the skills development interventions. After promoting home-based businesses and providing support to women entrepreneurs who developed small businesses in agribusiness and handicrafts, ELRP secured more than 60 full-time jobs for a group of coastal women from the poor village of Al Shiher. The intervention consisted of conducting a training workshop in food safety and hygiene principles and tuna cleaning/conditioning for 60 fish industry workers recruited by NAF (National Fish Canning and Packing Factory) as full-time employees.

Sixty (60) coastal women attending a training event in Principles of Food Safety and Hygiene and Tuna Cleaning and Conditioning in the National Fish Canning and Packing Factory. Photo Credit: ERLP SL Team

The project also continued supporting the two groups of coastal women who had benefited from an earlier ERLP capacity-building program in making seashell jewelry/accessories and innovative seafood menu items. The additional support involved following up with their sales and marketing activities; ERLP helped them improve their outreach using social media to promote their products and to receive orders online. The ML experts presented effective methods for expanding the buyer base and accessing new markets. In addition, the targeted groups of coastal women in Mukalla and Aden participated in two ERLP-supported bazaars to showcase their seashell jewelry and accessories.

Notably, this intervention raised the number of coastal women benefitting from ERLP skills development programs to a total of 192 since the program was launched.

II. SUPPORTING FISHERMEN TO IMPROVE FISH HANDLING

By the end of Y1, ERLP's direct support to fisherfolk in Hadramout, Shabwa and Al Mahra reached 394 individuals who received training in seafood handling/preservation and food hygiene/sanitation. This capacity-building intervention enabled fisherfolk to improve the quality of fish caught and increase their income by directly selling their catch at auction. During Q4, more than 100 trained fisherfolk obtained full-time jobs at the NAF, Burum and Aden Stores processing companies.

ERLP designed market-driven interventions by assessing the needs of partner seafood processors, particularly (i) the recruitment of a qualified workforce in clean handling and (ii) finding high-quality seafood suppliers/fisherfolk. ERLP collaborated with the three above-named key seafood processing firms and developed/conducted strategically targeted training based on the ongoing needs assessment program in fish handling, fish cleaning, and seafood conditioning. As a result, 394 fisherfolk were upskilled and then employed full-time at one of the three seafood processors, securing sustainable employment/incomes.

III. ERLP SUPPORT TO SEAFOOD PROCESSORS: NATIONAL FISH CANNING AND PACKING FACTORY

Ongoing ERLP technical assistance and training with National Fish Canning and Packing Factory (NAF) continued. This quarter ERLP conducted training in "Principles of Food Safety and Hygiene and Tuna Cleaning and Conditioning Skills" for 175 fish industry workers. The SME component previously delivered a collaborative intervention with NAF's brand-new seafood processing plant recently launched in Hadramout, producing fresh, canned, and frozen fish, fishmeal, and fish oil.

ERLP conducted a detailed business process diagnostic/design exercise for NAF, supporting the integration of critical functions within the company. These included: (i) implementation and strategy design and execution; (ii) business/manufacturing process design and workforce planning; (iii) development of human resource processes and systems; (iv) design of the quality management function; and (v) change and continuous improvement management of all aspects and departments of the company. After successfully launching full operations of the factory last month, NAF management reported the recruitment of 192 new employees: 175 new fish processing workers were trained by ERLP, and 17 new employees were recruited in the factory administration.

Notably, the intervention with NAF led to systematic upgrading of their services based on better-practice standards. NAF reported the successful launching of its processing units and is now ready to start processing tuna for the new season.

IV. INCREMENTAL SALES

ERLP fisheries capacity building and technical assistance interventions are directed towards efficiency-enhancing operations that boost ERLP partner company sales. In Q4, project fisheries experts continued to monitor incremental sales recorded by ERLP beneficiaries. The table below provides an illustrative view of incremental sales reporting resulting from ERLP capacity-building interventions over the past three months. Most beneficiaries reported at least a 10 percent increase in their sales results.

INTERVENTION	Q3 SALES	Q4 SALES
Ice plants Intervention	$142,557	$ 350,136
Coastal women (handicraft)	$1,472	$ 3,465
Coastal women (seafood recipes)	$ 23,765	$22,705
Fiberglass Boat Maintenance	$5,378	$7,459

V. INCREASING EXPORT SALES THROUGH TARGETED MARKET LINKAGE SUPPORT

To help Yemeni processors compete in the international market, ERLP delivers targeted support to upgrade fish processing techniques, meet international standards, and provide value-added products that generate demand from export markets and more lucrative returns. For example, ERLP advisors encouraged processors to prepare processed lobster (lobster tail) and export it frozen to Asian markets instead of selling whole lobsters. Prices of processed Lobster ($22) are much higher than those of whole round lobster ($15), and demand for processed lobster is higher.

ERLP provided targeted technical assistance and training to address key challenges and bottlenecks in Yemen's fisheries sector. ML advisors helped enhance fisheries-sector competitiveness and expand exports by diversifying international exports and facilitating break-through export linkages with regional and international markets. During Q4, and based on the recent market trends, ERLP developed a new time-framed action plan to export cuttlefish, ribbon fish, Indian mackerel, and JTB seafood products, targeted to secure an additional ten international sales agreements valued at 1 million USD. During the reporting period, by helping negotiate and close significant sales agreements, this key downstream intervention helped Yemeni processors sell their stock of frozen seafood products to new buyers introduced by ELRP. This quarter, ERLP ML experts confirmed the following deals:

- Lobster Factory: $370k deal with an Omani trader for a three-month export sale of frozen sardines.
- Al Wali Seafood Processor: $313K deal with two new buyers in Malaysia and Thailand. The deal included 54K Kg of ribbon fish and 54K of Indian mackerel
- Lobster Factory exported to Malaysia 25k Kg of Japanese Threadfin Bream (JBT) for a sales value of $55K

Sample product exported to Malaysia and processed by Al Wali Seafood processor in Hadramout

In addition, ERLP continues surveying the international seafood market to provide fish processors with pricing information from international buyers, as well as a list of potential buyers in Yemen and abroad interested in the products they offer.

The depressed global economy and COVID-19 lockdown have brought about demand instability and a wide range of supply challenges. Price, payment terms, and quality have all been strongly affected by the pandemic and its economic repercussions. Yemen's seafood industry has thus faced an unstable market with exceptional price volatility across a variety of fish products. Regarding fresh seafood products, the ERLP team has been in continuous communications with traders in Sri Lanka, Malaysia and Thailand to discuss price fluctuations and the current pricing structure for products such as ribbon fish, lobster, mackerel, JBL, and grouper.

Many variables affect seafood product prices. The seasonality of the product is a key factor affecting the quantity and quality available for sale. Customs duties and trade agreements affect prices and profits, as do logistics costs, which may vary or be more flexible depending on the quantity of product. Prices are also sensitive to holidays, global events, weather conditions, and the capture methods (types of boats, fishing techniques used-hand or long line), which can affect the quality.

In addition to the downward pressure on prices, payment terms have changed from the standard line of credit to customers' requesting extended payment terms, for example, +30-60 days for frozen goods. Cash-against-documents payment terms are not even considered.

NEXT STEPS

During Y2Q1, ERLP will continue implementing tightly targeted technical assistance and training activities supporting the competitiveness of the fisheries sector and expansion of sales and exports. These will include:

1. Develop new technical assistance interventions with new seafood processors in Hadramout and Aden.
2. Continue working with fisherfolks and coastal women and provide training and skills development interventions.
3. Start promoting the export of yellowfin tuna, coinciding with the start of the season in November.

MONITORING, EVALUATION, AND LEARNING

ERLP engages with the public and private sectors in Yemen, working to address the critical macroeconomic stabilization and private sector competitiveness enhancement challenges, which need to be addressed to stabilize economic conditions and sustainably enhance employment and earnings opportunities for the Yemeni people. These objectives will be accomplished through the achievement of two core component results: (1) macroeconomic functions of key institutions improved by strengthening the capacity of ROYG institutions (CBY, MOF, the Customs Authority, and port authorities) to restore macroeconomic stability, enhance the efficiency of fiscal management and increase international trade flows; and (2) microeconomic conditions improved seeks to strengthen private sector performance and competitiveness to create jobs and raise incomes.

To measure and report on the achievement of the eleven ERLP results statements, the Pragma Corporation utilizes 25 performance indicators. Of these performance indicators:

- A total of 17 or 68% are ERLP contract required indicators.
- A total of 2 or 8% will be collected by USAID through an evaluative process.
- A total of 16 or 64% are custom or USAID standard archived (and now custom) indicators.
- A total of 14 of 56% are gender-sensitive indicators; and
- A total of 9 or 36% are Foreign Assistance Framework Economic Growth standard indicators.

ERLP MEL ACHIEVEMENTS DURING THE PERIOD OF PERFORMANCE

During the period of performance, the following ERLP MEL tasks were achieved:

- ERLP responded to three YCLE-USAID third-party monitoring reports, all of which had very positive feedback for the program, with no issues or recommendation actions raised.
- ERLP MEL provided to YCLE the monthly implementation plans for ERLP field activities – these plans are used by USAID to identify and schedule remote verification of ERLP events.
- ERLP completed survey data collection for five key trade indicators with a Yemeni research firm. The report is currently pending final revisions, and the performance data will be reported in early FY22.
- Continued to build the capacity of the USAID's Annual Performance Plan and Report (PPR) reporting, data quality standards, and fine-tuning data collection methods for ERLP standard indicators.

ERLP GEOGRAPHIC INFORMATION: BY COMPONENT

MAP OF ERLP FIELD ACTIVITIES BY SUB-COMPONENT (JULY-SEPTEMBER 2021)

MAP OF ERLP BY SUB-COMPONENT – FOCUS ON ADEN (JULY-SEPTEMBER 2021)

MAP OF ERLP BY SUB-COMPONENT – FOCUS ON MUKALLAH (JULY-SEPTEMBER 2021)

PERFORMANCE INDICATOR ANALYSIS

The ERLP MEL plan functions as a key element that is fully integrated into the technical implementation. As a result, there is an operational feedback loop between implementation tasks and MEL. Performance data and information are shared in near real-time with the ERLP managers and decision-makers.

For this performance report, ERLP reports 18 indicators or 72 percent of the total approved AMELP performance indicators – a 6 percent increase from the prior progress report. Each performance report is expected to report on additional indicators. Initially focused mainly on output indicators, the reports gradually introduce outcome indicator data and finally report impact indicators at the end of the program. This process reflects not only the ERLP theory of change but also the expected pace of change.

OUTCOME 1: MACROECONOMIC FUNCTIONS OF KEY INSTITUTIONS IMPROVED

Indicator 1.a: Number of laws, policies, or regulations formally proposed, adopted, or implemented as supported by USG assistance: This custom ERLP indicator is based on a USAID standard Foreign Assistance Framework indicator and has been tailored to the Yemen context. ERLP Trade and CBY technical staff collect data for this indicator. Note that steps are not necessarily progressive, and some may be skipped altogether, or later steps occur before prior steps. During the period of performance, the Anti-Money Laundering/Counter-Terrorism Financing regulations were sent to the National Committee for publication, thus beginning the implementation of this key regulation. Other advances were made on the adoption and implementation of the FIU protocols on the channels for information exchange (including analyzing requests for assistance from other Yemeni authorities). Finally, the Foreign Reserves Investment Management policies made progress throughout FY21 and in Q4 draft policy was well received by the CBY counterparts, with a commitment and buy-in towards full adoption in the near term. As a result, ERLP has met the LOP target for this indicator – as two regulations/protocols have begun to be implemented by GoY counterparts.

<table>
<tr><th colspan="10">Table 27: 1.a Number of laws, policies, or regulations formally proposed, adopted, or implemented as supp7rted by USG assistance</th></tr>
<tr><td colspan="2">LOP TARGET</td><td>500[4] points</td><td colspan="8" rowspan="2">ACTUALS</td></tr>
<tr><td colspan="2">LOP % ACHIEVED</td><td>106%</td></tr>
<tr><td colspan="2" rowspan="2">ACTUALS (CUM.)</td><td rowspan="2">530</td><td colspan="2">FY21 Q1</td><td colspan="2">FY21 Q2</td><td colspan="2">FY21 Q3</td><td colspan="2">FY21 Q4</td></tr>
<tr><td>TOTAL POP</td><td>140</td><td>TOTAL POP</td><td>210</td><td>TOTAL POP</td><td>60</td><td>TOTAL POP</td><td>120</td></tr>
<tr><td colspan="11">MILESTONE STEP (POINTS)</td></tr>
<tr><td rowspan="4">PROPOSED</td><td colspan="2">Concept/Agreement (10 Points)</td><td colspan="2">40 (Anti-money laundering/Counter terrorism financing regulation; Model internal compliance procedures for IFIs; Protocol on the channels for information exchange; FX Auction Regulation)</td><td colspan="2"></td><td colspan="2">10 (Memorandum of Understanding Between the BSD and the FIU)</td><td colspan="2">10 (Reserves Investment Management Policies)*</td></tr>
<tr><td colspan="2">Discussions between ERLP and Counterparts (10 Points)</td><td colspan="2">20 (Anti-money laundering/Counter-terrorism financing regulation; FX Auction Regulation)</td><td colspan="2">20 (Model internal compliance procedures for IFIs; Protocol on the channels for information exchange)</td><td colspan="2"></td><td colspan="2">10 (Reserves Investment Management Policies)*</td></tr>
<tr><td colspan="2">Workshops with Counterparts (30 Points)</td><td colspan="2">60 (Anti-money laundering counter-terrorism financing regulation; FX Auction Regulation)</td><td colspan="2">60 (Model internal compliance procedures for IFIs; Protocol on the channels for information exchange)</td><td colspan="2"></td><td colspan="2">30 (Reserves Investment Management Policies)*</td></tr>
<tr><td colspan="2">Draft prepared and Translated (20 Points)</td><td colspan="2">20 (FX Auction Regulation)</td><td colspan="2">60 (Anti-money laundering/Counter-terrorism financing regulation; Model internal compliance procedures for IFIs; Protocol on the channels for information exchange)</td><td colspan="2">20 (Memorandum of Understanding Between the BSD and the FIU)</td><td colspan="2">20 (Reserves Investment Management Policies)**</td></tr>
</table>

[4] The LOP target includes: 5 laws, policies, procedures, or regulations adopted.

Table 27: 1.a Number of laws, policies, or regulations formally proposed, adopted, or implemented as supp7rted by USG assistance

ADOPTED	**Submitted to Counterpart (10 Points)**		**30** (*Anti-money laundering/Counter-terrorism financing regulation; Model internal compliance procedures for IFIs; Protocol on the channels for information exchange*)	**10** (*Memorandum of Understanding Between the BSD and the FIU*)	**10** (*Reserves Investment Management Policies)***
	Approved (20 Points)		**40** (*Anti-money laundering counter-terrorism financing regulation; Model internal compliance procedures for banks/Financial Institutions*)	**20** (*Memorandum of Understanding Between the BSD and the FIU*)	**20** (*Protocol on the channels for information exchange)*
IMPLEMENTED	**Publishing (10 points)**				**10** *(Anti-money laundering counter-terrorism financing regulation)*
	Line Ministries issue guidance (10 points)				**10** (*Protocol on the channels for information exchange)*
	Enforced (10 points)				
TOTAL		70	210	60	120

* Lagging data from FY21 Q1.

** Lagging data from FY21 Q3.

INTERMEDIATE RESULT 1.3: TRADE FACILITATION POLICY DEVELOPMENT AND IMPLEMENTATION STRENGTHENED

Indicator 1.3a – Cost to import at selected border crossings, Indicator 1.3b – Cost to export at selected border crossings, Indicator 1.3.c – Average dwell time for cargo that passes through selected border crossings, Indicator 1.3d – Number of documents required to export goods across selected borders, and Indicator 1.3e – Number of documents required to import goods across selected borders (EG.2.1-1). Data for these five indicators were collected through a survey of traders and logistics experts conducted in the Summer of 2021. The data for the indicators is currently being cleaned and analyzed. Results of the survey will be reported in the next quarterly report.

Indicator 1.3f – WTO Trade Facilitation Agreement provisions, recognized as substantive improvements and specified in conjunction with USAID, adopted (linked to EG 2.1-1). The data for this indicator is collected from the ERLP Trade experts and then verified by the MEL staff through a review of the supporting evidence. During FY21 Q4, ERLP continued to provide technical advice and training to the Yemen Customs Authority focused on a total of eight key provisions of the WTO TFA and provided assistance to one new provision focused on Single Window. This brings the total number of provisions supported by ERLP to twelve for FY21.

Table 28: 1.3f: WTO Trade Facilitation Agreement provisions, recognized as substantive improvements and specified in conjunction with USAID, adopted (linked to EG 2.1-1)				
LOP TARGET	18	ACTUALS		
LOP % ACHIEVED	67%			
ACTUALS (Cum.)	12	FY21 Q2	FY21 Q3	FY21 Q4
POP ACTUALS	9			
NEW PROVISIONS		7	4	1
CONTINUING PROVISIONS		0	3	8
WTO PROVISION		Active Provision(s) During PoP*		
Consultations (Private-Public Dialogue)		1 (New)	1	0
Expanded AEO		1 (New)	1	1
Risk Management		1 (New)	1	0
Advance Rulings		0	1 (New)	1
Use of International Standards (Customs Valuation)		1 (New)	0	1
Administrative Appeals & Review		0	1 (New)	1
Post-Clearance Audit		1 (New)	0	0
Border agency cooperation		0	1 (New)	1
Information available – internet (Trade Information Portal)		1 (New)	0	1
Publication		1 (New)	0	1
National Trade Facilitation Committee		0	1 (New)	1
Single Window		0	0	1 (New)

* Slightly revised the table, now reporting the provisions with ERLP activities during the quarter, instead of the number of activities for each provision.

Indicator 1.3g – Number of new Authorized Economic Operators (AEOs) certified is collected from ERLP technical experts and directly from Yemeni customs officials and AEOs. During Q4, ERLP recently presented a 5-point plan to Yemen Customs Authority (YCA), supporting the expansion of its existing AEO program to include businesses conducting operations in the Port of Mukalla. This support included ERLP experts and YCA managers organizing and holding an AEO awareness event for Mukalla Port private sector representatives supported by Hadhramaut Chamber of Commerce. A total of 13 trade representatives took part in the event. As a result, additional AEO certification of Yemeni firms is expected in early FY22.

Table 29: 1.3g: Number of new Authorized Economic Operators (AEOs) certified				
LOP TARGET	20	ACTUALS		
LOP % ACHIEVED	10%			
ACTUALS (Cum.)	2	FY21 Q2	FY21 Q3	FY21 Q4
POP ACTUALS	2			
NEW AEOs Certified		0	2	0
Exporter		0	0	0
Importer		0	2	0
Mixed (Export & Import)		0	0	0

Indicator 1.3h – Person hours of USG-supported training completed in trade and investment (EG 2-1) are collected through daily participant training sign-in sheets and completed agendas. Only those participants who have completed at least 70% of the training are included in this indicator. As of this reporting period, the LOP target has been met. Capacity building training was provided on different WTO TFA provision topics, including material on the new provision focused on Perishable Goods. To date, nearly 34 percent of the participants who completed the training in trade and investment topics were women.

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LOP TARGET	4,000	ACTUALS							
% LOP TARGET ACHIEVED	106%	FY21 Q1 TOT		FY21 Q2 TOT		FY21 Q3 TOT		FY21 Q4 TOT	
		1,308		900		676		1,365	
ACTUALS (CUM)	4,249	PERSON HOURS MALES	520	PERSON HOURS MALES	672	PERSON HOURS MALES	536	PERSON HOURS MALES	1,091
POP ACTUALS	1,365	PERSON HOURS FEMALES	788	PERSON HOURS FEMALES	228	PERSON HOURS FEMALES	140	PERSON HOURS FEMALES	274
TOTAL INDIVIDUALS COMPLETING		69 (42 F; 27 M)		87 (7 F; 80 M)		109 (24 F; 101 M)		340 (71 F; 269 M)	
AGE OF PARTICIPANTS WHO COMPLETED THE TRAINING		15-19	0	15-19	0	15-19	0	15-19	0
		20-24	0 F; 1 M	20-24	0	20-24	0	20-24	0 F; 1 M
		25-29	1 F; 2 M	25-29	0	25-29	0	25-29	2 F; 0 M
		30+	41 F; 24 M	30+	7 F; 80 M	30+	24 F; 101 M	30+	64F; 234 M
		NA	0	NA	0	NA	0	NA	5 F; 34 M
TOPIC OF TRAINING		Public Budgeting for Ministry of Finance, Public/Private Dialogue for Enhancing Trade facilitation		**Trade:** AEO; Post Clearance Audit; Risk Management, Risk-Based Food Controls; Risk Management; Post Clearance Audit; Customs Valuation; Customs Induction		**Trade:** Customs Advance Rulings; Administrative Appeals; Export Guidelines for products in foreign markets; Yemen AEO expansion; Risk management for YCA; Yemen Broder		**Trade:** Customs Valuation; Advance Rulings Awareness; Administrative Appeals; Export Guidelines for Perishables Products in Foreign Markets; AEO **MoF:** Commitment	

Table 30: 1.3h: Person hours of USG-supported training completed in trade & investment (EG 2-1)				
		Module; Advanced Phytosanitary guidelines for risk-based food control & inspection **MOF:** Oil Revenue, Non-Oil Revenues Forecasting Model	Agency Cooperation **MoF:** Budget management & execution, tax policy, & debit management; Implementing treasury single account reforms	Control System; Cash Flow Forecasting; Registration of taxpayers & integrity the register; Tax Audit Planning & Techniques to Ensure the Accuracy of Reporting; Timely payment of taxes; Tax dispute resolution; Debt Management System & Financial Analysis; Debt Management Guidelines; Practical Application of Classification of Function & Government Finance Statistics; Cash Flow Forecasting - Financial Section; Public Debt Instruments; Financial Circular for Allotment, Commitment & Payment Management; Internat'l Classification; Treasury Single Account Reform; Cash Flow Forecasting
LOCATION OF TRAINING	Coral Hotel-Aden, Yemen +remote participants via zoom	Coral Hotel-Aden, Yemen +remote participants via zoom	Coral Hotel-Aden, Yemen	Coral Hotel-Aden-Yemen, Pragma office- Khormasker-Aden-Yemen +remote participants via zoom

OUTCOME 2: MACROECONOMIC FUNCTIONS OF KEY INSTITUTIONS

IMPROVED INTERMEDIATE RESULT 2.1: SME CAPACITY STRENGTHENED

Indicator 2.1a - Number full-time equivalent (FTE) jobs created with USG assistance (Archived EG 3-9) "Jobs Created." Data is collected from ERLP partner firms, using hiring lists and analyzing which jobs are attributable to the technical assistance and training provided through the program. Data and evidence for the jobs created medium-term outcome indicator are collected after each Partnership Agreement ends. Good progress towards the LOP target continued to be made during the period of performance. Indeed, the "soft" FY21 annual target of 300 FTE jobs created has been significantly exceeded, due in large part to the increased demand from Yemeni firms to partner with ERLP. To date, female employees filled nearly 27 percent of the jobs created by partner firms; and 61 percent of employees hired were youth. Most of the jobs were created by the health/medical sector partner firms.

Table 31: 2.1a: Number full-time equivalent (FTE) jobs created with USG assistance (Archived EG 3-9) "Jobs Created"						
LOP TARGET	1,500	ACTUALS				
% LOP TARGET ACHIEVED	35%		FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
ACTUALS (CUM.)	532	TOTALS	41	150	183	158
SEX OF JOB HOLDER		MALES	22	120	135	109
		FEMALES	19	30	48	49
AGE OF JOB HOLDER		15-19	0	2 F; 4 M	2 M	0 F; 2 M
		20-24	0 F; 5 M	12 F; 29 M	6 F; 38 M	12 F; 39 M
		25-29	0 F; 1 M	10 F; 37 M	25 F; 53 M	17 F; 35 M
		30+	2 F; 3 M	2 F; 44 M	13 F; 36 M	20 F; 33 M
		N/A*	17 F; 13 M	4 F; 6 M	4 F; 6 M	0 F; 0 M
SECTOR OF JOB		AG	0	34	43	78
		NON- AG	41	116	141	80
TYPE OF POSITION		PERMANENT	41	150	183	153
		SEASONAL	0	0	0	5
		OTHER	0	0	0	0

*Some jobholders are reluctant to provide their age or age range.

Indicator 2.1b - USD sales of firms receiving USG-funded assistance (EG.5-1) is collected from ERLP partner firms, using financial data collection forms that are sent out to firms throughout the lifespan of the PA. Firms in Yemen are often reluctant to share their financial data, whether it is information on profits or sales values, because they are concerned that the security of their staff, families and that they themselves would be at risk (hostage-taking, theft, etc.) if the information is shared with external stakeholders. Because of this, ERLP will also include monetized units sold in the sales data collected, as required. Analysis of sales actuals compared to baseline demonstrates an average sales increase of 35 percent for the partner enterprises reporting sales data. As a result, the LOP target continues to be exceeded.

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LOP TARGET	>10% over baseline	ACTUALS				
% LOP ACHIEVED	123%		FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
AVERAGE %	35%	TOTAL POP**	16%	38%	71%	25%
ACTUALS (Cum.)	68.5M$	ACTUALS POP	14.9M$	19.2M$	16.6M$	17.8M$

Table 32: 2.1b: USD sales of firms receiving USG-funded assistance (EG.5-1)							
BASELINE*	50.8M$	**QUARTERLY BASELINE**		12.9M$	13.9M$	9.7M$	14.3M$
FIRMS REPORTING / QUARTER				13	14	23	25
TYPE OF ENTERPRISE			**AG MSME**	3	3	6	6
			NON-AG MSME	10	11	17	19
EXCHANGE RATE (USD:YER)				1 USD = 598 YER	1 USD = 592 YER	1 USD = 857 YER	1 USD = 939 YER

* Baseline values are cumulative and are aggregated values from the previous year's quarter for the firms reporting sales in the current quarter.
** The total percentages reported for Q1, Q2, and Q3 have been changed from what was previously reported to correct a formula error.

Indicator 2.1.1a Number of private sector firms that have improved management practices or technologies because of USG assistance. ERLP continues to utilize an innovative data collection methodology piloted under the predecessor activity that includes evidence from technical consultant reports, MEL verification visits to SMEs, photographic evidence, and feedback from firms verifying the application of the management practices and/or technologies promoted through the program. Similar to the medium-term outcome indicator 2.1a above, initial results data became available in early FY21 as technical assistance and capacity building efforts by ERLP consultants began to have an impact on firm growth – as a direct result of the firms utilizing/applying what they have learned. Data and evidence of the application of the improved technologies and/or management practices are collected after each Partnership Agreement ends.

Around 30% of the ERLP partner firms have made improvements in strategic management practices as a direct result of international and local expert technical assistance and guidance. To date, ERLP is making good progress towards the LOP target, with the expectation that the number of partner firms that have demonstrated improved management practices or technologies will accelerate activity in years two and three.

LOP TARGET	80	**ACTUALS**			
% ACHIEVED	34%		**FY21 Q2**	**FY21 Q3**	**FY21 Q4**
ACTUALS	27	**TOTAL POP**	9	7	11
TYPE OF ENTERPRISES		**AG MSME**	2	3	3
		Non-AG MSME	5	4	8
AGRICULTURE SUB-COMPONENT		**LIVELIHOOD VC**	1	0	0
		FISHERIES VC	1	0	0
TYPE OF TECHNOLOGY OR MANAGEMENT PRACTICE APPLIED BY		**STRATEGIC MANAGEMENT**	3	0	6
		QUALITY & CERTIFICATION	2	1	2
		SOFT SKILLS TRAINING	0	0	0
		PRODUCTIVITY	2	1	0

Table 33: 2.1.1a Number of private sector firms that have improved management practices or technologies as a result of USG assistance					
LOP TARGET	80	ACTUALS			
% ACHIEVED	34%		FY21 Q2	FY21 Q3	FY21 Q4
PARTNER FIRMS		ENHANCEMENT			
		MARKETING/OUTREACH	2	2	1
		ICT	0	1	0
		HR MANAGEMENT	0	2	2
		OTHER	0	0	0

Indicator 2.1.1b - Number of firms receiving USG-funded technical assistance for improving business performance (EG 5.2-1) is collected through partnership agreements (PA) signed with each targeted firm and through partnerships with for-profit associations, microenterprises, and entrepreneurs. During the period of performance, an additional two agreements were approved (with a total commitment to add 75 FTE jobs) for a total of 1,396 expected jobs created. As a result, the total number of firms receiving ERLP support continues to exceed the LOP target, while the LOP sub-target for women-owned firms receiving assistance was significantly exceeded. In the context of Yemen ownership, women-owned firms include mixed ownership (where both males and females own the firm) and women entrepreneurs in coastal and fishing sectors.

Table 34: 2.1.1b: Number of firms receiving USG-funded technical assistance for improving business performance (EG 5.2-1)						
LOP TARGET	100 (30 women-owned)	ACTUALS				
			FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
% LOP TARGET ACHIEVED	247% (503% of women-owned)	TOTAL POP	23	132	41	51
ACTUALS (CUM.)	247	WOMEN-OWNED FIRMS	0	68	32	51
SME SUPPORT SUB-COMPONENT		JOB CREATION	16	10	5	0
		WORKFORCE DEVELOPMENT	7	30	4	51
		FISHERIES INTERVENTION	0	92	32	0
SECTOR/INDUSTRY		FISHERIES	1	93	32	0
		OTHER AG	2	1	4	25
		NON-AGRO	20	38	5	26
LOCATION OF FIRM		ADEN	19	23	22	0
		AL MUKALAH	4	109	19	51

Indicator 2.1.2a – Number of individuals with new or better employment following completion of USG-assisted workforce development programs (Archived EG 6-1): Data is collected from workforce development partner firms and other targeted entities (e.g., schools) using their official hiring lists and then cross-walking that data to pre-employment or job-skills sign-in sheets. Only when there was a match that proved that the new employee participated in the pre-employment training was the job seeker counted for this indicator. As of this reporting period, ERLP is making good progress towards the LOP target and has exceeded the "soft" annual target from the approved FY21 work plan. Approximately 53 percent of the job seekers who found employment through ERLP were women. Nearly 52 percent of successful job seekers were youth. Over 53 percent of the job seekers have found employment in the Health Sector because of ERLP support.

Table 35: 2.1.2a: Number of individuals with new or better employment following completion of USG-assisted workforce development programs (Archived EG 6-1)						
LOP TARGET	1,500	ACTUALS				
% LOP TARGET ACHIEVED	48%		FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
ACTUALS (CUM.)	713	TOTAL POP	146	314	89	164
SEX OF JOB HOLDER		MALES	93	171	13	57
		FEMALES	53	143	76	107
AGE OF JOB HOLDER		15-19	0 F; 10 M	3 F; 2 M	1 F	3 F; 8 M
		20-24	9F; 21M	30 F; 18 M	11 F; 1 M	17 F; 17 M
		25-29	13 F; 25M	51 F; 83 M	17 F; 4 M	11 F; 15 M
		30+	13 F; 20 M	52 F; 65 M	43 F; 8 M	74 F; 16 M
		N/A*	18 F; 17 M	7 F; 2 M	3 F	2 F; 1 M
SECTOR OF JOB		AG	7	46	31	26
		NON- AG	139	268	58	138

*Some jobholders are reluctant to provide their age or age range.

Indicator 2.1.2b – Percentage of recruited trainees who are retained in their jobs for at least six months. This indicator tracks whether the employees who were recruited or otherwise supported by ERLP are sustained in their jobs. Furthermore, this indicator tracks employees hired through ERLP workforce development activities, as per the contract requirements. In Q4, data collection focused on seven WFD partner firms and job seekers who found employment after the Al Mukalla Youth Capacity Building Career Fair. Approximately 34% of the recruited trainees left their initial employment to take better positions with another firm – potentially due to the training they received through ERLP. To date, ERLP is exceeding both the overall LOP target and the LOP sub-target for women. This significant result is due to the ERLP approach to partnership with firms, where their hiring needs are identified and "matched" with select job seekers who undergo customized workforce development training. Most of the retained trainees were hired by partner firms in the health industry – a priority sector within Yemen.

Table 36: 2.1.2b: Percentage of recruited trainees who are retained in their jobs for at least six months		
LOP TARGET	50% (30% W)	ACTUALS
% TARGET ACHIEVED	116% (180% W)	
TOTAL CUM.	58%	FY21 Q4
ACTUALS (POP)	58%	
% RETAINED	TOTAL %	58%
	% MALES	61%
	% FEMALES	54%
# EMPLOYEES	RETAINED	168
	HIRED	288
AGE OF EMPLOYEES RETAINED	15-19	0 F; 8 M
	20-24	21 F; 31 M
	25-29	41 F; 74 M
	30+	33 F; 49 M
	NA	17 F; 14 M
SECTOR OF EMPLOYMENT	Agriculture	0
	Non-Agriculture	266
	Mixed	0

Indicator 2.1.2c – Percent of individuals who complete USG-assisted workforce development programs (EG 6-3). This indicator focuses on pre-employment training to support the recruitment needs of targeted partner firms. Data for this indicator is collected from daily sign-in sheets. During the period of performance, the ERLP team conducted a total of fourteen training events, where 67 percent of events conducted covered topics such as CV writing, job interviews, communication, and reporting soft skills in order to prepare job seekers for a Job Fair Day, while the other WFD events covered topics such as health and safety, women empowerment, and upgrading skills for home-based businesses. Of the grand total of 953 participants (cumulative) who attended workforce development training sessions, 89 percent completed the course work, out of which 46 percent were women.

Table 37: 2.1.2c: Percent of individuals who complete USG-assisted workforce development programs (EG 6-14)						
LOP TARGET	70%	ACTUALS				
% LOP TARGET ACHIEVED	128%					
AVERAGE %	90%	FY20 Q4	FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
ACTUALS (POP)	93%					
% COMPLETED	TOTAL	73%	97%	88%	97%	93%
	% MALES	69%	96%	83%	0%	97%
	% FEMALES	78%	100%	94%	97%	90%

Table 37: 2.1.2c: Percent of individuals who complete USG-assisted workforce development programs (EG 6-14)						
# PARTICIPANTS	**COMPLETED**	78	65	447	64	329
	ATTENDED	107	67	513	66	352
SEX OF PARTICIPANTS WHO COMPLETED THE TRAINING	**# MALES**	43	48	270	0	170
	# FEMALES	35	17	177	64	159
AGE OF PARTICIPANTS WHO COMPLETED THE TRAINING	**15-19**	0	0 F; 7 M	0 F; 1 M	0	5 F; 8 M
	20-24	6 F; 9 M	6 F; 12 M	15 F; 18 M	9 F	23 F; 40 M
	25-29	10 F; 7 M	6 F; 20 M	49 F; 96 M	11 F	34 F; 71 M
	30+	11 F; 15 M	5 F; 9 M	109 F; 136 M	44 F	87 F; 39 M
	NA	8 F; 12 M	0	4 F; 19 M	0	10 F; 12 M

Indicator: 2.1.3.a: Total number of clients benefiting from financial services provided through USG-assisted financial intermediaries, including non-financial institutions or actors (EG.4.2-1). Data for this key Access to Finance indicator is collected directly from partner financial institutions. As of this period of performance, ERLP continues to significantly exceed the LOP target due to extending the targeted financial partners from an exclusive focus on commercial banks to include those financial institutions that focus on small and medium-sized enterprises as key clients.

During the last two-quarters, ERLP has supported partner financial institutions to roll out a credit application training program to manage risks better and establish internal SME lending units. As a result, the number of loans disbursed to small and medium enterprises has increased dramatically. Data reported in Q4 includes July-August reports received from the banks as there is a one-month data lag from the sources. Analysis of those banks that report client data by sex of recipient finds that approximately 22 percent of the loan recipients are female.

Table 38: 2.1.3.a: Total number of clients benefiting from financial services provided through USG-assisted financial intermediaries, including non-financial institutions or actors (EG.4.2-1)							
LOP TARGET	2,500	**ACTUALS**					
% LOP TARGET ACHIEVED	175%		**FY20 Q4**	**FY21 Q1**	**FY21 Q2**	**FY21 Q3**	**FY21 Q4**
ACTUALS (CUM.)	4,376	**TOTAL POP**	342	1,055	1,027	1,113	839
CLIENTS TOTALS BY FINANCIAL INSTITUTION		**TADHAMON BANK**	178	477	510	459	276
		AL AMAL MICROFINANCE BANK (AMB)	164	578	99	231	263
		AL ITTIHAD MICROFINANCE BANK	0	0	384	331	246
		YEMEN COMMERCIAL BANK (YCB)	0	0	34	12	5
		YEMEN INTERNATIONAL BANK (IBY)	0	0	0	80	27

Table 38: 2.1.3.a: Total number of clients benefiting from financial services provided through USG-assisted financial intermediaries, including non-financial institutions or actors (EG.4.2-1)						
	AL KURIMI BANK	0	0	0	0	22
CLIENT TOTALS BY SECTOR	**OTHER AGRO CLIENTS**	698 (Cum)				
	AGRO FISHERIES CLIENTS	45 (Cum)				
	NON AGRO CLIENTS	3,633 (Cum)				
CLIENT TOTALS BY GENDER	**MALE**	2,972 (Cum)				
	FEMALE	1,329 (Cum)				
	NA*	75 (Cum)				

*Some partner financial institutions do not collect data on the sex of the firm/client.

Indicator: 2.1.3.b USD value in loans provided to SMEs. Data for this Access to Finance indicator is collected directly from partner financial institutions. Approximately 78 percent of the loans provided to SMEs were received by non-agricultural firms. Approximately 8 percent of the loan value was provided to female clients. The total value of loans provided to SMEs lags behind the number of clients (indicator 2.1.3.a above) because of the shift by partner banks towards loaning to smaller firms. Nevertheless, the LOP target has been exceeded.

.							
LOP TARGET	$15,000,000	**ACTUALS**					
% LOP TARGET ACHIEVED	117%		**FY20 Q4**	**FY21 Q1**	**FY21 Q2**	**FY21 Q3**	**FY21 Q4**
ACTUALS (CUM.)	$17,624,385	**TOTAL POP**	$367,928	$1,402,584	$2,143,682	$8,238,118	$5,472,071
LOAN TOTALS BY FINANCIAL INSTITUTION	**TADHAMON BANK**		$322,764	$1,231,945	$1,285,40	$1,361,542	$909,538
	AL AMAL MICROFINANCE BANK (AMB)		$45,164	$170,640	$154,765	$180,191	$186,393
	AL ITTIHAD MICROFINANCE BANK		0	0	$447,069	$2,547,313	$329,605
	YEMEN COMMERCIAL BANK (YCB)		0	0	$256,449	$3,725,228	$3,678,581
	YEMEN INTERNATIONAL BANK (IBY)		0	0	0	$423,844	$158,787
	AL KURIMI BANK		0	0	0	0	$209,167
LOAN TOTALS BY SECTOR	**OTHER AGRO LOANS**		$3,863,252 (Cum)				
	AGRO FISHERIES LOANS		$78,812 (Cum)				

Table 39: 2.1.3.b: USD value in loans provided to SMEs						
	NON AGRO LOANS	$13,682,322 (Cum)				
LOAN TOTALS BY GENDER OF RECIPIENTS	MALE	$8,421,539 (Cum)				
	FEMALE	$1,330,770 (Cum)				
	NA*	$7,872,075 (Cum)				
EXCHANGE RATE (USD:YER)**		1 USD = 597 YER	1 USD = 598 YER	1 USD = 592 YER	1 USD = 600 YER	1 USD = 600 YER

*Some partner financial institutions do not collect data on the sex of the firm/client.
**The A2F team uses the official GoY Exchange Rate since the partner IFIs are required to use this rate. For other financial data reported by ERLP, the exchange rate data is collected from the Tadhamon International Islamic Bank, which comprises 24 branches spread over most Yemeni governorates and has more than 120 ATMs in the country.

INTERMEDIATE RESULT 2.2: SUSTAINABLE LIVELIHOODS SUPPORTED

Indicator 2.2a - Number of vulnerable households benefiting directly from USG assistance is collected from daily participant sign-in sheets for individuals participating in Sustainable Livelihoods programs (including market linkages and fisheries), directly from IFI partners for those who receive loans supported by the Access to Finance sub-component, and from employment records and sign-in sheets documenting participation in the SME and WFD activities. The total number of beneficiaries will not be used as data for this indicator, as many participants belong in the same household – particularly for the Livelihoods sub-components. As a result, household ownership by the ERLP direct beneficiaries will be used as the proxy for the number of households benefiting. ERLP is making good progress towards the achievement of the LOP target and is expected to exceed the target during FY22. To date, women-headed households comprise 54% of the ERLP direct beneficiaries, and therefore the women-headed households are likewise making good progress towards the LOP sub-target.

Table 40: Actuals for ERLP 2.2a: Number of vulnerable households benefiting directly from USG assistance					
LOP TARGET	10,000 (3,000 Women HH)	ACTUALS			
% LOP TARGET ACHIEVED	74% (71% Women HH)		FY21 Q2	FY21 Q3	FY21 Q4
ACTUALS (CUM.)	7,441 (2,122 Women HH)	TOTAL POP	3,013	2,815	1,613
WOMEN-HEADED HOUSEHOLDS			874	741	507
A2F SUB-COMPONENT		LOAN RECIPIENTS	2,388	1,128	777
SME SUPPORT SUB-COMPONENT		JOB CREATION	59	122	190
		WORKFORCE DEVELOPMENT	56	20	315
SUSTAINABLE LIVELIHOODS SUB-COMPONENT		FISHERIES	29	111	97
		MARKET LINKAGES	23	278	0
		LIVELIHOODS	458	1,156	234

Indicator 2.2b - Number of farmers and others who have applied improved technologies or management practices with USG assistance. Based on an innovative data collection methodology piloted under the ERLP predecessor activity, the MEL and Livelihoods teams continue to collect and verify the application of the improved management practices and technologies based on a sampling of beneficiary farmers, collecting photographic evidence, and farmer feedback during field visits to collect data. This data collection process identifies farmers who are applying at least one new management practice or technology and which technologies and management practices prove to be most relevant to the farmers. There is a data lag for this indicator, as it takes time for farmers and others to put into practice what they have learned – and for many of the ERLP value chains, this lag includes waiting for the relevant season (e.g., planting for some new practices, cultivating for others, and harvesting for some). More actuals are expected to be collected and reported in the future quarters as the farmers and others finish ERLP training and begin to apply what they've learned in practice.

ERLP is making good progress towards the LOP target and has met the "soft" work plan annual target for FY21. Data collected during this period of performance demonstrates that 492 farmers and others have applied improved technologies and management practices for an FY21 total of 615 farmers. The data demonstrates that farmers in the ERLP livestock value chain, honey value chain, and coffee value chain have been applying what they have learned through the ERLP livelihoods training. The other value chains will be sampled during FY22 to capture application throughout the planting, cultivating, and harvesting.

LOP TARGET	1,800	**ACTUALS**			
LOP % ACHIEVED	34%				
YEAR 1 TARGET	600		**FY21 Q2**	**FY21 Q3**	**FY21 Q4**
YEAR 1 % ACHIEVED	103%				
ACTUALS (CUM.)	615	**TOTAL POP**	64	59	492
SEX OF FARMERS AND OTHERS		**MALE**	50	41	334
		FEMALE	14	18	158
NUMBER OF MANAGEMENT PRACTICES / TECHNOLOGIES APPLIED		**CROP GENETICS**	4	0	8
		CULTURAL PRACTICES	17	17	173
		LIVESTOCK MANAGEMENT	19	42	192
		PEST AND DISEASE MANAGEMENT	1	0	20
		SOIL-RELATED FERTILITY & CONSERVATION	13	0	43
		IRRIGATION	7	0	30
		AGRICULTURE WATER MANAGEMENT (NON-IRRIGATION)	2	0	10
		CLIMATE MITIGATION	0	0	10
		CLIMATE ADAPTATION/CLIMATE	0	0	10

Table 41: Actuals for ERLP 2.2.b: Number of farmers and others who have applied improved technologies or management practices with USG assistance (Archived EG 3.2-17)				
	RISK MANAGEMENT			
	MARKETING AND DISTRIBUTION	10	27	99
	POST-HARVEST HANDLING & STORAGE	12	27	100
	VALUE-ADDED PROCESSING	0	0	0

Indicator 2.2c - Value of annual sales of producers and firms receiving USG assistance (EG.3.2-26) is collected from ERLP livelihoods partners, using financial data collection forms that are sent out to firms throughout the lifespan of the program. Producers and firms in Yemen are reluctant to share their financial data, whether it is information on profits or sales values, because they are concerned that the security of their staff, families, and themselves would be at risk (hostage-taking, theft, etc.) if the information is shared with external stakeholders. As a result, ERLP includes monetized units sold in the sales data. Overall, sales in FY21 increased over the baseline for ERLP partner-enterprises/entrepreneurs by 106 percent.

Table 42: Actuals for ERLP 2.2c: USD Value of annual sales of producers and firms receiving USG assistance (EG.3.2-26)						
LOP TARGET	>20% over baseline	ACTUALS				
% LOP ACHIEVED	106%		FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
AVERAGE %	43%	TOTAL POP % SALES OVER BASELINE***	N/A	46%	(16%)	211%
ACTUALS (Cum.)	698.6K $	QUARTELY ACTUAL	$1.4K	$449K**	$87.8K**	$160.4K
BASELINE*	489.4K $	QUARTERLY BASELINE	$0	$308.2K**	$105.2K**	$76K
FIRMS REPORTING / QUARTER			6	42	65	81
TYPE OF ENTERPRISE		AG MSME	6	42	65	81
		NON-AG MSME	0	0	0	0
EXCHANGE RATE (USD:YER)			1 USD = 598 YER	1 USD = 592 YER	1 USD = 857 YER	1 USD = 939 YER

* Baseline values are cumulative, as it aggregates the baseline values from the previous year's quarter for the firms reporting sales in the current quarter; ** Lagging data for coastal women was added to these quarters; ***The total percentages reported for Q1, Q2, and Q3 have been changed from what was previously reported to correct a formula error.

Indicator 2.2d - Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training (EG 3.2-1): Data for this indicator is collected through daily sign-in sheets. Good progress is being made towards the LOP target, with the “soft” work plan target for FY21 being significantly exceeded. Around 35 percent of participants in sustainable livelihoods training during the period of performance were female farmers, with the greatest female participation occurring in the livestock and Watermelon value chains (85 percent of the livestock, 21 percent of the Watermelon training participants). Youth participation in the ERLP livelihoods training across all the relevant agricultural value chains is around 32 percent.

Table 43: Actuals for ERLP 2.2.d: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training (Archived EG 3.2-1)

LOP TARGET	7,500	**ACTUALS**				
LOP % ACHIEVED	52%					
YEAR 1 TARGET	2,500	**FY20 Q4**	**FY21 Q1**	**FY21 Q2**	**FY21 Q3**	**FY21 Q4**
YEAR 1 % ACHIEVED	157%					
ACTUALS (CUM.)	3,937	487	1,311	781	785	573
SEX OF PARTICIPANTS	**MALE**	245	998	479	438	415
	FEMALE	242	313	302	347	158
VALUE CHAIN (NUMBER OF EVENTS)		Tomato (5); Coffee (5); Honey (5); Fish	Tomato (4); Coffee (12); Honey (10); Livestock (16); Fish (6); Onion	Tomato (3); Honey (5); Livestock (11); Fish (5); Onion (4)	Tomato (3); Honey (5); Coffee (6); Livestock (11); Fish (1); Onion (3); Watermelon (1)	Honey (3); Livestock (6); Fish (7); Watermelon (6)
LOCATION OF TRAINING		Khanfir-Abyan (5); Saum-Hadramout (5); Mawaset-Taiz (5); Al Sheher-Hadramout	Khanfir-Abyan (4); Hraydah-Hadhramout (5); Radfan – Lahij (5); Aden Gulf Co. - Aden (2); Buriqah-Aden; Coral Hotel - Aden; Mukallah City - Al Mukallah (2); Alrayda Wa Qusayer - Hadhramout (6); DesAlsharqyia - Hadhramout (5); Tuban - Lahij (5); Al-Madarribah – Lahj; Al-Mawasit – Taiz (8); Al Misrakh – Taiz (3); Al Ma'afer-Taiz	Khanfir-Abyan; Tuban-Lahj (2); Shibam - Hadramout (5); Khormeskar - Aden; Seyhout -Mahra; Des-Alsharqiya - Hadramout; Al Mukallah - Hadramout; Kaizen-Centre; Alsheher - Hadramout (5); Alwadea - Abyan (4); Sabr - Tuban-Lahj (2); Al-Madaribah - Lahj (4)	Khanfir-Abyan (3); Shibam - Hadramout (5); Al Mawaset - Taiz (3); Shamayteen - Taiz (3); Al Mukalla - Hadramout; Khormasker - Aden; Al Wadea -Abyan; Tuban -Lahj (7); Ghayel Bawazeer - Hadramout (4); Al Madaribah-Lahj (3)	Shibam-Hadramout (2); Radfan-Lahj (1); Al Ghedah-Al Mahra (6); Mukallah-Hadramout (1); Ghayl Bawazer-Hadramout (1); Tuban-Lahj (7); Al Sheher-Hadramout (3); Des Al Sharqiyah-Hadramout (1);

CROSS-CUTTING PERFORMANCE

Indicator C1 – Percentage of female participants in US-assisted programs designed to increase access to productive economic resources (GNDR-2). This indicator aggregates participant data across all sub-components. During the period of performance, the participation of women was higher in the ERLP

MSME activities and the WFD activities. To date, the overall percentage of female participants is exceeding the LOP target.

Table 44: Actuals for ERLP C1: Percentage of female participants in US-assisted programs designed to increase access to productive economic resources (GNDR-2)											
LOP TARGET	30%	**ACTUALS**									
% LOP TARGET ACHIEVED	123%	**FY20 Q4**		**FY21 Q1**		**FY21 Q2**		**FY21 Q3**		**FY21 Q4**	
AVERAGE %	37%	**TOT**	48%	**TOT**	24%	**TOT**	38%	**TOT**	39%	**TOT**	37%
COMPONENTS / SUB-COMPONENTS	**CBY/MOF**	N/A		61%		47%		32%		24%	
	AG	50%		24%		39%		44%		28%	
	ACCESS TO FINANCE SMEs	N/A		N/A		N/A		32%		N/A	
	ACCESS TO FINANCE LOANS	N/A		22%		39%		31%		33%	
	TRADE	N/A		12%		8%		14%		12%	
	MSME OWNERSHIP	N/A		0%		55%		83%		100%	
	JOBS CREATED/ IMPROVED	N/A		40%		22%		26%		30%	
	WORKFORCE DEVELOPMENT	42%		25%		40%		100%		43%	

USAID THIRD PARTY MONITORING OF ERLP

During the period of performance, USAID/YCLE completed three third-party monitoring remote visits to ERLP activities, for which it shared three reports with ERLP.

Table 45: July – September 2021 Third-Party Monitoring				
ERLP Component	**ERLP Event**	**TPM Visit Date**	**Date Shared With ERLP**	**Location of Monitoring**
SME- Access to finance	Invoice Financing Training for the Yemen commercial bank	June 16-17, 2021	July 13, 2021	Virtual/Remote
Trade	Export Guidelines Workshop	August 17, 2021	Sep 13, 2021	Aden Governorate / Khour Maksir District
Livelihoods	Dairy Processing Training for Livestock value chain	August 5, 11-12 & 18, 2021	September 14, 2021	Hadhramaut Governorate / Ash Shihr District

ERLP continued active collaboration with YCLE during the period of performance, including activity planning and logistics, "Means of Verification" data collection tool reviews, MEL and technical teams' meetings, TPM and remote visit preparation, report submission, and debriefs. Debriefs have been attended by USAID/Frankfurt and other USAID Program Office staff and USAID/Yemen and the YCLE and ERLP staff.

CONCLUSION

During the period of performance, a total of 18 indicators have been reported to USAID (or 72% percent of all proposed ERLP indicators). Overall, ERLP has made substantial progress during the performance period by exceeding or meeting many LOP and most "soft" work plan annual targets and is making good progress towards all ERLP results.

PERFORMANCE INDICATOR TRACKING TABLE

The ERLP MEL System maintains a performance indicator tracking table (PITT) to support regular updating of the indicator values and for analysis and reporting. The ERLP PITT includes baseline values and dates, targets, and actual indicator values for all performance indicators. To summarize LOP performance, the ERLP MEL team has added a short note explaining the performance data trends.

ERLP Performance Indicator		Baseline		FY '20	FY2021				Cum. Total	Progress to Target	LOP Target
		Date	Value	Q4 Actual	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual			
ERLP Activity Objective: Macro & Micro Economic Conditions Improved in Yemen											
Outcome 1: Macroeconomic Functions of Key Institutions Improved											
1.a	# of laws, policies, or regulations formally proposed, adopted, or implemented as supported by USG assistance	July-20	0	N/A	140 points	210 points	60 points	120 points	530 points	106%	5 (500 points)
Notes: Good progress continued during this period of performance, and the LOP target is met. Four policies/regulations/decrees have been fully adopted by counterpart GoY entities, and two regulations/decrees have begun being implemented.											
Intermediate Result 1.3: Trade Facilitation Policy Development and Implementation Strengthened											
1.3f	WTO Trade Facilitation Agreement provisions, recognized as substantive improvements and specified in conjunction with USAID, adopted (linked to EG 2.1-1)*	July-20	0	N/A	0	7 New	4 New, 7 Cont.	1 New, 8 Cont.	12	67%	18
Notes: ERLP continues to make good progress towards the LOP target, supporting one new additional WTO TFA provisions during the reporting period. During FY22, it is expected that the LOP target will either be met or exceeded.											
1.3g	# of new Authorized Economic Operators	July-20	3	N/A	0	0	2	0	2	10%	20

ERLP Performance Indicator		Baseline Date	Baseline Value	FY '20 Q4 Actual	FY2021 Q1 Actual	FY2021 Q2 Actual	FY2021 Q3 Actual	FY2021 Q4 Actual	Cum. Total	Progress to Target	LOP Target
	(AEOs) certified*										
Notes: The ERLP Trade team conducted several events (including a key awareness event in Mukallah) and tasks during Q4, and it is expected that there will be new AEOs certified in FY22. As a result, the LOP target is expected to be met.											
1.3h	Person hours of USG-supported training completed in trade and investment (EG 2-1)	July-20	0	N/A	1,308 788 W	900 228 W	676 137 W	1,365 274 W	4,249	106%	4,000
Notes: As of FY21 Q4, the LOP target has been met. It is expected that training in FY22 and FY23 will result in the LOP target being significantly exceeded.											
Outcome 2: Microeconomic Conditions Improved											
Intermediate Result 2.1: SME Capacity Strengthened											
2.1a	# full-time equivalent (FTE) jobs created with USG assistance (Archived EG 3-9) "Jobs Created"*	July-20	0	0	41 19 W	150 30 W	183 48 W	158 47 W	532	35%	1,500*
Notes: There is typically a 2–4-month lag in seeing the impact on job creation after the intervention begins; nonetheless, verified data demonstrates that ERLP continues to make early progress towards achievement of the LOP target and the FY21 "soft" work plan target (300) has been exceeded.											
2.1b	USD [value of] sales of firms receiving USG-funded assistance (EG.5-1)*	See note**	36.1 M	N/A	14.9 M	19.2 M	16.6 M	17.8 M	68.5 M	123%	>10% over baseline*
Notes: ERLP continues to significantly exceed the LOP target.											
2.1.1a	# of private sector firms that have improved management practices or technologies as a result of USG assistance (EG.5.2-2)	July-20	0	N/A	N/A	9	7	11	27	34%	80
Notes: There is a lag between the provision of technical assistance and the verified application of the results of the technical assistance. Nevertheless, ERLP is making early progress towards the LOP target and has met the "soft" annual target (26) for FY21.											
2.1.1b	# of firms receiving USG-funded technical	July-20	0	N/A	23	132	41	51	247	247%	100*

ERLP Performance Indicator		Baseline Date	Baseline Value	FY ’20 Q4 Actual	FY2021 Q1 Actual	FY2021 Q2 Actual	FY2021 Q3 Actual	FY2021 Q4 Actual	Cum. Total	Progress to Target	LOP Target
	assistance for improving business performance (EG 5.2-1)*				0 W	68 W	32 W	51 W	151W	503%	30 W*
Notes: ERLP has exceeded both the overall LOP target and the women-owned firm target because of adding microenterprises and entrepreneurs to the targeted small- and medium-sized enterprise beneficiaries.											
2.1.2a	# of individuals with new or better employment following completion of USG-assisted workforce development programs (Archived EG.6.1)*	July-20	0	0	146	314	89	164	713	48%	1,500*
					53 W	143 W	76 W	107	379 W	63% W	600 W*
Notes: Steady progress towards the ERLP LOP targets continues to be made, and the “soft” FY21 annual work plan targets (500 total, 200 W) have been exceeded.											
2.1.2b	Percentage of recruited trainees who are retained in their jobs for at least six months*	July-20	0					58%	58%	116%	50%*
								54%	54%	180%	30% W*
Notes: The LOP target has been exceeded, as well as the LOP sub-target for recruited female trainees.											
2.1.2c	% of individuals who complete USG-assisted workforce development programs (EG 6-14)	July-20	0	73%	97%	88%	97%	93%	90% (ave.)	128%	70%
				78% W	100% W	94% W	97% W	90% W			
Notes: ERLP continues to exceed the LOP target.											
2.1.3a	# of clients benefiting from financial services provided through USG-assisted FIs, including non-FIs or actors (EG.4.2-1)*	July-20	0	342	1,055	1,027	1,113	839	4,376	175%	2,500*
				77 W	312 W	397 W	264 W	279 W	1,329 W	156% W	850 W*
Notes: Both the overall LOP target and the sub-target for female clients have been exceeded, as of this period of performance.											
2.1.3b	USD value in loans provided to SMEs*	July-20	0	368k	1.4M	2.1M	8.2M	5.5M	17.6M	117%	15M*
				72K	201k W	386k W	393k W	277.5M	1.3M W	26% W	5M W*

ERLP Performance Indicator		Baseline		FY '20	FY2021				Cum. Total	Progress to Target	LOP Target
		Date	Value	Q4 Actual	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual			
Notes: The LOP target has been exceeded as of this period of performance, and good progress is being made towards the LOP sub-target for loans to women-owned firms. This excellent progress has been made due to the re-focusing of partner banks towards providing smaller loan packages to microenterprises, small firms, and other nontraditional loan recipients.											
Intermediate Result 2.2: Sustainable Livelihoods Supported											
2.2a	# of vulnerable households benefiting directly from USG assistance*	July-20	0	N/A	N/A	3,013	2,815	1,613	7,441	74%	10,000*
						874 W	741 W	507 W	2,122 W	71% W	3,000 W*
Notes: Overall, ERLP is making good progress towards the LOP targets and has exceeded the "soft" work plan targets (3,300; 1,000 W) for FY21. As a result, it is expected that the LOP targets will be achieved before the end of the activity.											
2.2b	# of farmers & others who have applied improved technologies or mngmt practices with USG assistance*	July- 20	0	N/A	N/A	64	59	492	615	34%	1,800*
						14 W	18 W	158 W	190 W	32%	600 W*
Notes: There is a data lag for this indicator, as many farmers and other participants in the livelihoods value chains need to align the new practices and technologies that they've learned through ERLP to seasonal farming practice. To date, the data has been collected from honey producers, coffee growers, and livestock value chain participants as those farmers are not as seasonally constrained. Nevertheless, ERLP is making early and steady progress towards the LOP targets and has met the overall "soft" work plan targets (600; 200 W) for FY21. It is expected that progress towards the LOP targets will accelerate in FY22 as more participants in the vegetable value chains begin to demonstrate the application of their knowledge gained from ERLP.											
2.2c	Value [USD] of annual sales of producers and firms receiving USG assistance (EG.3.2-26)*	See note**	376 k	N/A	1.4 K	449k	87.8 k	160.4 K	698.6 k	106%	>20% over baseline*
Notes: On average, sales by partner firms in FY21 have met the LOP target.											
2.2d	# of individuals who have received short-term ag. sector productivity / food security training (EG 3.2-1)	July-20	0	487	1,311	781	785	573	3,937	52%	7,500
				242 W	314 W	302 W	347 W	158 W	1,363 W		
Notes: ERLP is making excellent progress towards the LOP target and has significantly exceeded the "soft" FY21 annual work plan target (2,500). It is expected that the LOP target will be achieved in 2022.											
C1	% of female participants in the U.S. assisted programs designed to increase access to	July-20	0	48%	24%	38%	39%	35%	38% (ave.)	123%	30%*

ERLP Performance Indicator		Baseline		FY '20	FY2021				Cum. Total	Progress to Target	LOP Target
		Date	Value	Q4 Actual	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual			
	productive economic resources (GNDR-2)										
Notes: The LOP target for this indicator continues to be exceeded.											

** Contract required indicators and/or targets

*Baseline is rolling as new partner firms are added; for quarterly reporting, the quarterly baseline will be for the calendar year prior to ERLP assistance so that the quarterly sales can be compared accurately.

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Central Bank of Yemen

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Quarterly Bulletin
Economic and Monetary Developments

Issue No. 4 (September 2021)

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Central Bank of Yemen

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Foreword

The Central Bank of Yemen (CBY) is pleased to present the Quarterly Economic Bulletin – Issue No. 4 (September 2021). The Bulletin provides readers and researchers interested in economic and monetary developments in the Republic of Yemen with insights on major developments across all sectors. It also directly enhances the financial regulatory oversight processes in alignment with the Basel II and Basel III pillars.

This issue of the Bulletin reviews key developments during 2020 and updates from the first half of 2021 across critical macro-financial performance and policy areas, and it discusses their implications for the Yemeni economy. The first chapter looks at global and local macroeconomic developments. The second chapter outlines recent monetary and banking sector developments. The third chapter focuses on public finances, and the fourth on external sector developments.

While the ongoing war, which began in 2015, has resulted in a prolonged contractionary phase, the Yemeni economy witnessed favorable growth rates in 2018 and 2019, owing to a significant surge in oil production before plunging into a recession in 2020 under the impact of the COVID-19 crisis. The outbreak of the pandemic in early 2020 and the subsequent lockdowns and collapse in oil prices badly disrupted global markets and created severe recessionary pressures internationally. Oil price drops and the spread of the pandemic have had significant adverse effects on Yemen's economic activity, with real GDP estimated to have contracted by approximately 8.5 percent in 2020. In addition to these shocks, the January 2020 ban on newly printed banknotes in the region under Houthi control has limited the government's ability to pay salaries in this area and complicated monetary policy operations. This has increased the cost of financial transactions, reduced market transparency, and widened exchange rate gaps between Aden and Sanaa — to as much as 100 percent in some instances.

Inflationary pressures, triggered primarily by the higher prices of imports, remained strong. Around 90 percent of Yemen's basic consumable goods come from overseas, posing an ongoing macroeconomic management challenge. In line with the legal mandate of the CBY, as stated in Article 5 of the Central Bank Law, a concerted and sustained monetary policy response aimed at stabilizing prices and providing sufficient liquidity is needed to maintain the adequate funding of public and private sector needs. The monetary control measures adopted over the past two years represent an essential initial step in this direction.

Yemen's fiscal position has improved primarily due to increased oil exports during the last few years, although these remain far below pre-war levels. However, expenditure rationalization and fiscal deficit financing are still critical issues to be addressed through close coordination among all government entities. A small portion of the fiscal deficit was financed through domestic market borrowing, while the lion's share of the fiscal deficit was funded mainly through CBY monetary emissions, which were controlled overall in a manner that helped keep inflation under control. Enhanced public financial management, domestic debt capital markets development, and financial deepening will remain top reform priorities in the coming years.

Yemen's external position has continued to deteriorate since the outset of the war, which has led to a significant weakening of the value of the local currency. The only exception to this trend was in 2019, when drawdowns from a June 2018 Saudi deposit of USD 2 billion helped stabilize the Rial exchange rate. Reviving economic activity, boosting export earnings, building up a buffer of foreign reserves, and working to limit further debt monetization are the main pillars of our macro-financial policy over the upcoming period.

The high level of commitment and quality output from Bank management and staff, which have facilitated the smooth and efficient functioning of the CBY, merit deep appreciation. Moreover, we could not have published this Bulletin without the strong contributions of other government agencies.

God bless,

Ahmed Obaid Al-Fadhli

Governor

Executive Summary

The Yemeni economy witnessed improvements in 2019, [1] following the deep contraction at the start of the war in 2015. This contraction was primarily attributed to declines in the hydrocarbon sector, which makes up a significant share of domestic output. In 2020, the dual shocks of the COVID-19 pandemic and a steep decline in oil prices severely affected economic activity.

The economy is expected to recover gradually in 2021 and 2022. Meanwhile, inflation increased markedly in the first half of 2021, as restrictions were relaxed and demand accelerated, but supply was slower to respond. Basic commodity prices also rose significantly compared with their levels last year. Price pressures are expected to persist due to elevated food and oil prices, and to exchange rate depreciation, which raised the prices of imported goods.

As stated in the Central Bank of Yemen (CBY) Law No. (14) of 2000, achieving price stability is the primary objective of monetary policy. In this regard, the CBY is proactively steering monetary policy in a manner designed to maintain macro-financial stability, while providing adequate financing to ensure that critical public financing needs are met. It is operating in concert with relevant government institutions and with the assistance of the international community.

To attain low and stable inflation, the CBY attaches great importance to controlling the money supply. This is achieved by constructing a solid framework for monetary targeting and adopting a comprehensive toolkit of indirect and market-based instruments for liquidity management.

Inflationary conditions worsened somewhat in 2020 after relative stability in 2019. The significant depreciation of the Rial, the lack of foreign reserve buffers at the CBY, growing uncertainty, and increased dollarization contributed to inflationary pressures. Market surveys indicate that average food-price inflation exceeded 30 percent in 2020. The annual inflation rate was estimated at around 25 percent, up from an estimated average rate of 10 percent in 2019. Inflation is projected to remain at nearly 30 percent in 2021.

The CBY designed a robust monetary program for 2020 and 2021, the first since its relocation to Aden. This program helped rationalize money supply parameters and limited high inflationary pressures stemming from monetary creation.

Monetary aggregates have expanded at a reasonably stable clip during the last two years. Broad money grew by 15 percent in 2020 and 8.5 percent in 2019, down from a growth rate of 28.5 percent in 2018. Reserve/base money increased by 13.3 percent in 2020 and 11.5 percent in 2019, down from a growth rate of 28.3 percent in 2018. Narrow money (M1) increased by 15 percent and 10.6 percent in 2020 and 2019, respectively, compared with a 33.1 percent growth rate in 2018.

Currency in circulation, which accounted for more than 80 percent of narrow money and constitutes the main driver of M1 growth, grew by 15.1 percent in 2020 and 10.6 percent in 2019 — below the 36.6 percent growth rate in 2018. From the CBY balance sheet perspective, monetary

[1] In this report, all years discussed are calendar years.

expansion was contained through a 50.6 percent decline in net foreign assets in 2020. Concerning domestic assets, the overall net growth rate declined from 26.8 percent in 2019 to 18.8 percent in 2020. Net claims on the government grew by 18.3 percent in 2020 and 19.6 percent in 2019, against 27.3 percent in 2018. This constituted the major source of overall monetary growth.

The CY 2021 annual monetary plan projects broad (18.3 percent) and base money (19.1 percent) growth. Within this framework, the currency in circulation is projected to grow by 22.7 percent.

The monitoring of the annual monetary plan implementation revealed that the CBY successfully controlled the money supply growth over the first half of the current year. Base money rose by 4.1 percent over the first half of 2021 against a target of 9.5 percent semi-annual (or 19.1 percent on an annual basis). Currency issued grew over the same period by 6.2 percent, compared with a target of 11.3 percent on a semiannual basis, or 22.7 percent on an annual basis. Thus, the CBY's balance sheet expansion during the first half of 2021 indicates that the government is well on track to achieving its annual target.

The growth of base money is mainly attributable to the net effect of the increase in credit to the government in the form of direct financing of the budget deficit, together with the decrease of foreign assets associated with the disbursement of the remaining balance of the Saudi deposit. Net credit to the government increased by 5.7 percent (YER 284.3 billion), while foreign assets declined by 13.1 percent (YER 50.8 billion) during the first half of 2021. Broad money (M2) grew by 4.6 percent over the first half of 2021, well below the semiannual target of 9.1 percent, or the target of 18.3 percent annually considered in the annual monetary plan. Maintaining this pace will prevent any acceleration of currency emission during the current year and will help stabilize exchange rates and prices.

The deterioration of macroeconomic conditions since 2015 has severely affected the government's fiscal position. Consequently, fiscal consolidation through further expenditure rationalization and an increase in the revenue base from hydrocarbon and non-hydrocarbon activities remain the key macroeconomic policy priorities.

The fiscal deficit for 2020 is estimated at 782 billion Rials, an increase of 11.2 percent year over year (YoY) that partly reflects the impact of the pandemic on overall economic activities. Investment expenditures made up a negligible share, and the majority of expenditures were utilized to cover current spending needs. Expenditure containment efforts were intensified in 2020, with the importance of such efforts further underscored by the declining oil revenues due to the COVID-19 crisis.

Fiscal discipline, rationalization of public expenditures, improved efficiency, and the identification of noninflationary means of financing government expenditures are all urgently important for promoting sustainable fiscal consolidation and macroeconomic stability.

The external sector has continued to deteriorate due to the fall in oil exports and significant declines in remittances. At the same time, dependence on humanitarian aid has continued to increase significantly. The balance of goods and services registered a deficit of USD 7.2 billion in 2020, down from USD 8.7 billion in 2019. The current account deficit represented 3.4 percent of

GDP in 2020. The recent volatility of international oil prices dramatically highlights the importance of reducing Yemen's dependence on the petroleum sector.

The current account deficit continues to require significant levels of external financing. In 2019, as well as in 2020, the deficit was mainly financed through a drawdown of official foreign reserves in the amount of USD 890 million and USD 465 million, respectively. The same trend is expected for 2021, with the balance of payments gap estimated at approximately USD 1.4 billion. This trend is being driven largely by the negative impact of COVID-19 on remittances, which are estimated to have declined by more than 20 percent in 2020, in a further illustration of the contractionary impact of the crisis on economic activity and employment in the region, together with rising international food and fuel prices.

The drop in remittances is particularly evident with respect to the Kingdom of Saudi Arabia, which accounts for around 60 percent of Yemeni diaspora remittances. This decrease has dramatically reinforced the adverse economic impact of the pandemic spread and the related dampening of foreign aid inflows in 2020 and beyond.

External imbalances will need to be addressed through increased export earnings and progress toward economic diversification to restore macroeconomic stability. It is also hoped that recent improvements in the stability of the political economy and security conditions may help attract additional capital inflows over time.

CHAPTER I: Current Situation and Economic Prospects

I.1 World Economic Growth

The COVID-19 pandemic has severely impacted all parts of the world, with dire consequences for world economic growth and employment, especially in the services sector. In 2020, the world experienced the worst economic recession since the Great Depression of the 1930s.

According to the October 2021 International Monetary Fund (IMF) World Economic Outlook report, global growth is projected to fall by 3 percent in 2020, primarily due to the effects of the COVID-19 pandemic. Global growth is expected to rise by 6 percent in 2021, backed by continued policy support and vaccine rollouts. However, the recovery is likely to be uneven, depending on the effectiveness of vaccination programs, the extent of policy support, and the structural characteristics of economies.

Indeed, one and a half years into the pandemic, the global prospects are still highly uncertain. New virus mutations and the mounting human toll are constant concerns. The divergent rates of economic recovery across countries and sectors reflect differences in the pandemic-induced disruptions experienced and the extent of policy support. Thus, the global and local outlooks depend not just on the outcome of the battle between the novel coronavirus and vaccines, but also on how effectively economic policies deployed under these conditions of intense uncertainty can limit the lasting damage from this unprecedented crisis.

The economic disruptions caused by the pandemic were reflected in a slump in demand that led to weak price growth and deflation across the globe. The average inflation rate in advanced economies decreased to 0.7 percent in 2020 from 1.4 percent in 2019, while it remained close to 5 percent in emerging markets and developing economies. For 2021, inflation is projected to increase to 2.8 percent for advanced economies and 5.5 percent for emerging markets and developing economies (driven by strengthening demand, input shortages, and rapidly rising commodity prices) before reverting to pre-pandemic levels by mid-2022.

Table I.1 Global Growth Forecasts (%)

		Projections	
	2020	**2021**	**2022**
Global growth rate	-3.1	5.9	4.9
Growth rate (advanced economies)	-4.5	5.2	4.5
Growth rate (emerging and developing economies)	-2.1	6.4	5.1
Growth rate (Middle East and Central Asia)	-2.8	4.1	4.1
Growth rate (Middle East and North Africa)	-3.2	4.1	4.1
Growth rate (low-income developing countries)	0.1	3.0	5.3

Source: IMF, *World Economic Report*, April 2021.

I.2 Growth and Price Developments in Yemen

After contracting by an estimated 45 percent from 2014 to 2017, economic activity in Yemen began to improve in 2018, reflecting growth sparked primarily by the hydrocarbon industry. Real GDP increased by an estimated 1.4 percent in 2019, up from 0.8 percent in 2018, despite slowing global growth and tightening financial conditions.

Yemen's 2019 growth was accompanied by a decrease in the inflation rate from the 20-30 percent range recorded during 2015-18 to approximately 10 percent. Inflation in Yemen has traditionally resulted from both imported inflation (increases in import prices due to currency depreciation) and local factors, but the monetary policy adopted in 2019 has thus far been successful in controlling the money supply in a manner consistent with the pace of economic activity. In addition, the Rial exchange rate was stabilized after an exchange rate crisis in the fall of 2018 that saw the Rial depreciate to unprecedented levels. International and domestic economic conditions further eased inflation in 2019, including the slow growth in international prices for non-oil commodities and modest domestic demand, which played a role in cutting inflation by more than half.

The economic picture changed for Yemen in 2020, as it did for the rest of the world. As an oil-dependent state, Yemen experienced a significant negative impact from declining oil prices and the contractionary effects of the pandemic: The GDP contracted by 8.5 percent in 2020, and is projected to contract by 2 percent in 2021, before reverting to a positive growth rate of 1 percent in 2022.

Inflationary conditions also worsened somewhat in 2020 after relative stability in 2019. The annual inflation rate was estimated at 20-25 percent, up from an estimated average rate of 10 percent in 2019. The significant depreciation of the Rial, the related lack of foreign reserve buffers at the CBY, growing uncertainty, and increased dollarization contributed to increasing inflationary pressures. Inflation is projected to remain at around 30 percent in 2021. High inflation has direct and immediate costs for consumers, since roughly 90 percent of Yemen's total consumable goods are imported.

CHAPTER II: Monetary Developments

This chapter analyzes the development of base money and broad money aggregates in Yemen to show the linkages between money and other macroeconomic variables. To this end, we review the CBY balance sheet in detail, the commercial and Islamic banking survey, and the overall monetary survey.

The monetary survey was developed in 2019 as part of technical-assistance, capacity-building, and institutional-strengthening support given to the CBY by the United States Agency for International Development (USAID). Putting this tool at the disposal of the CBY was an important accomplishment. The CBY needs accurate reporting to make proper monetary decisions. The monetary survey will help it formulate and implement effective monetary policies by providing a thorough picture of the financial system.

The year 2020 brought positive news regarding Yemen's monetary policy. Money supply growth was contained in 2019 and 2020 following the CBY's adoption of a more appropriate monetary policy based on a monetary programming framework designed to ensure adequate economic absorptive capacity and money creation.

The impact of this ongoing reform has become evident in the significant decline of the currency issuance growth rate: This was 12.4 percent in 2019 and 15.1 percent in 2020, an improvement over 2018, when it was 35.8 percent, and 2017 when it was 37.6 percent. The money supply (M2) rose by 8.5 percent in 2019 and 15 percent in 2020.

II.1 Central Bank Balance Sheet

The CBY balance sheet reached 7,286.3 billion Rials in 2020, increasing by 727.5 billion Rials, and amounting to 11.1 billion Rials YoY. It continued to increase during the first half of 2021, growing by 731.4 billion Rials (or 10.8 billion Rials YoY), and reaching 7,482.6 billion Rials at the end of June 2021.

Table II.1 presents the CBY key balance sheet components.

- **Assets**

The CBY's net foreign assets (NFA) decreased by 305 billion Rials in 2020, a 50.6 percent YoY decline. NFA stood at 907.5 billion Rials (USD 2.269 billion) at the end of 2020. As of June 2021, it had decreased by 110.3 billion Rials YoY, or 13 percent, reaching a negative value of 958.3 billion Rials or USD 2.395.8 billion. As a result, the total external assets, as a share of total assets, fell to 4.5 percent as of June 2021 (from 5.3 percent in 2020 and 9.6 percent in 2019). There were two leading causes for these trends: First, Yemen's ongoing political instability slowed oil exports. Second, the steep decline in oil exports since the outbreak of the war deprived the country of its primary source of foreign assets.

Net claims on the government (NCOG) increased in 2020 by 767.4 billion Rials (18.3 percent YoY) and by 689.4 billion Rials in 2019 (19.6 percent YoY). As of June 2021, NCOG increased by 660.1 billion Rials YoY (or 14.4 percent) to 5,253.4 billion Rials.

- **Liabilities**

Base/reserve money grew by 13.3 percent over the 2020 calendar year against a target of 20.6 percent. More specifically, the currency issued grew by 15.1 percent, and bank reserves grew by 4.4 percent over the year. These increases are mainly attributed to two factors: (1) the net effect of the increase in loans to the government, in the form of direct financing of the budget deficit, and (2) the decrease of foreign assets as a result of the disbursement of the remaining balance of the Saudi deposit. As of June 2021, base money had increased by 492.1 billion Rials YoY or 13.6 percent, to a record 4,111.9 billion Rials.

Table II.1 Balance Sheet for the CBY (YER billion)

	Dec-19	Mar-20	Dec-20	Jun-21
Foreign assets	**628.4**	**522.0**	**387.8**	**337.1**
Domestic assets	**5,930.4**	**4,960.8**	**5,708.4**	**5,989.5**
Government	4,532.3	4,651.3	5,398.9	5,680.0
Public enterprises	309.5	309.5	309.5	309.5
Banks				
Fixed and other assets	1,088.6	1,103.5	1,190.1	1,156.1
Assets=liabilities	**6,558.8**	**6,586.3**	**7,286.3**	**7,482.6**
Base money	**3,484.7**	**3,516.3**	**3,948.2**	**4,111.7**
Banknotes issued	2,890.5	2,946.2	3,327.5	3,535.4
Banks	594.2	570.1	620.6	576.5
Government	330.6	262.8	429.7	426.5
Public enterprises	48.5	53.5	60.3	60.3
Social Security Fund	58.7	58.7	58.7	58.7
Certificates of deposit				
Foreign liabilities	**1,230.9**	**1,295.3**	**1,295.3**	**1,295.3**
Other liabilities	**1,405.4**	**1,399.6**	**1,494.1**	**1,529.9**
Capital and reserves	517.5	520.8	623.0	612.7
Revaluation account	214.4	214.4	259.8	301.7
Special drawing rights	83.8	83.8	93.5	93.5
Other liabilities	589.7	589.7	517.8	521.9

Source: CBY.

II.2 Consolidated Balance Sheet of Commercial and Islamic Banks

The consolidated balance sheet of the commercial and Islamic banks in Yemen totaled 4,408.9 billion Rials in 2019, an increase of 374.7 billion Rials, or about 9 percent, over 2018 (Table II.2).

- **Assets**

The NFA of the commercial and Islamic banks increased by 113.4 billion Rials (or 14.9 percent) in 2019 to a total of 873.2 billion Rials. This increase was due primarily to the 56.7 billion Rial (13.7 percent) YoY rise in correspondent accounts and to a 30.6 billion Rial (45.8 percent) YoY rise in foreign exchange. The total foreign assets rose by 87.2 billion Rials, or 10.6 percent, reaching 909.8 billion Rials. This was equal to over 20 percent of the total assets in 2019.

In 2019, bank reserves (cash in vaults and account balances at the CBY) increased by 60.9 billion Rials (8.5 percent) to 774.5 billion Rials. This increase resulted from a 61.5 billion Rial (85.6 percent) YoY increase in local currency held, and from a 0.6 billion Rial (0.1 percent) YoY decrease in reserves held with the CBY. Central Bank reserves as a share of total deposits equaled 23.8 percent in 2019.

Bank loans and advances increased by 161.6 billion Rials, or 7.5 percent, in 2019, reaching 2,319.4 billion Rials. The bulk of this increase came from loans provided to the government (primarily represented in treasury bills and Islamic *Sukuk*), which increased by 166 billion Rials (10.7 percent YoY). Advances for public institutions increased moderately, by 0.6 billion Rials, or 3 percent YoY. By contrast, private sector advances decreased YoY by 5 billion Rials (0.9 percent) in 2019.

- **Liabilities**

In 2019, total deposits grew by 222 billion Rials (about 7 percent) YoY to 3,249.3 billion Rials. This increase reflected growth across several deposit categories: Demand deposits increased by almost 12 percent YoY, earmarked deposits by 8 percent, savings deposits by 7.8 percent, and time deposits by 5.4 percent.

The net amount of other liabilities rose by 113.9 billion Rials (by over 18 percent) during 2019, reaching a total of 718.8 billion Rials. This rise reflected, in part, an increase in the capital and reserves of the country's commercial and Islamic banks, which grew by 42.6 billion Rials (14.6 percent YoY) in 2019, reaching 333.7 billion Rials.

- **Deposits**

CBY 2019 data indicate increases in deposits across the board. Time deposits rose by 41.7 billion Rials (over 5 percent YoY) to 815.7 billion Rials, or about 25 percent of total deposits; demand deposits increased by 69.7 billion Rials (almost 12 percent YoY) to 653.9 billion Rials, accounting for 20.1 percent of total deposits; saving accounts increased by 18.9 billion Rials (7.8 percent YoY) to total 260.9 billion Rials, equal to 8 percent of total deposits; and earmarked deposits increased by 3.7 billion Rials (8 percent YoY), making up 1.5 percent of total deposits. Government deposits increased by 9.8 billion Rials (43 percent YoY), equaling 1 percent of total 2019 deposits.

Similarly, deposits denominated in foreign currencies recorded an increase of 78.1 billion Rials, or 5.8 percent, in 2019, to a total of 1,436.1 billion Rials and a 44.2 percent share of total deposits. This increase reflected the stronger overall economic performance of Yemen in 2019.

- **Loans and advances**

The banking sector granted 578.2 billion Rials in credit to the private sector in 2019, a decline of 5 billion Rials, or less than 1 percent, from 2018 levels.

The credit to the private sector in 2019 was distributed as follows:

- Short-term loans and advances accounted for 18 percent of total nongovernment credit;

- Medium- and long-term loans accounted for 3 percent of total nongovernment credit;
- Investments from Islamic banks represented 26 percent of total nongovernment credit; and
- Nonperforming loans represented 53 percent of total nongovernment credit.

Table II.2 Balance Sheet for Commercial and Islamic Banks (YER billion)

	Dec-18	Dec-19
Assets	**4,034.2**	**4,408.9**
Foreign assets	**822.6**	**909.8**
Foreign currency	66.8	97.4
Banks abroad	414.3	470.9
Non-residents	0.0	0.0
Foreign investment	341.5	341.5
Reserves	**713.6**	**774.5**
Local currency	71.8	133.3
Deposits with the CBY	641.8	641.2
Gross Loans and advances	**2,157.8**	**2,319.4**
Government	1,554.8	1,720.8
Public enterprises	19.8	20.4
Private sector	583.2	578.2
Certificates of deposit	**1.0**	**1.0**
Treasury bills purchased from the CBY	**0.0**	**0.0**
Other assets	**339.2**	**404.2**
Liabilities	**4,034.2**	**4,408.9**
Deposits	**3,027.3**	**3,249.3**
Government	23.0	32.8
Demand	584.1	653.9
Time	774.0	815.7
Saving	242.0	260.9
Foreign currency	1,358.0	1,436.1
Earmarked	46.2	49.9
Foreign liabilities	**62.7**	**36.6**
Banks abroad	59.8	33.6
Non-residents	2.9	3.0
Borrowing from banks	0.0	0.0
Other liabilities	**944.1**	**1,123**
Loans from the CBY	5.6	13.5
Other liabilities	647.4	775.8
Capital		
Capital and reserves	291.1	333.7

Source: CBY.

II.3 Monetary Survey

A rise in net domestic assets, combined with a decline in NFA, led to an estimated overall rise in the money supply (M2) to 6,869.8 billion Rials in 2020, a YoY increase of 896.1 billion Rials (15 percent).[2] In addition, initial estimates indicate that, as of June 2021, broad money reached 7195.8 billion Rials, an increase of 4.6 percent during the first half of the current year, well below the semiannual target of 9.1 percent, or 18.3 percent annually, as considered in the annual monetary plan. Thus, preliminary indicators show that stable monetary expansion trends have continued through the second semester of 2021.

When analyzing the dynamics of money supply components in 2020, it is worth noting that narrow money (M1) increased by 511.6 billion Rials (15 percent) YoY, while quasi-money rose by 384.6 billion Rials (15 percent). Taken together, this represents an increase in money across all sectors of the financial system. The rise in narrow money reflected an increase in the currency in circulation and demand deposits. The upward trend in quasi-money was due to the increases that year in time and foreign deposits.

The predominance of currency in circulation, which accounted for 46.5 percent of the total money supply in 2020, is evidence that Yemen continues to rely heavily on cash as its primary means of financial intermediation. This reflects the ongoing institutional and access constraints characterizing the nation's financial system, and generates high costs at both the consumer and institutional levels. In this regard, the overreliance on cash limits intermediation capacity and prevents access to sophisticated payment systems. Table II.3 shows the overall composition of Yemen's money supply.

Table II.3 Decomposition of Broad Money

	Dec-18	Dec-19	Dec-20
Broad money (M2), billion Rials	**5,504.2**	**5,973.7**	**6,869.8**
Broad money, annual % change	28.5	8.5	15.0
Quasi-money, billion Rials	**2,420.2**	**2,562.6**	**2,947.2**
Quasi-money, annual % change	23.1	5.9	15.0
Quasi-money/broad money, %	44.0	42.9	42.9
Foreign currency deposits, billion Rials	**1,358.0**	**1,436.1**	**1,820.6**
Foreign currency deposits, annual % change	52.5	5.8	26.8
Foreign currency deposits, as % of total deposits	45.2	44.6	49.5
Narrow money (M1), billion Rials	**3,084.0**	**3,411.1**	**3,922.7**
Narrow money, annual % change	33.1	10.6	15.0
Narrow money, as % of broad money	56.0	57.1	57.1
Demand deposits, billion Rials	**584.2**	**653.9**	**728.4**
Demand deposits, annual % change	20.1	11.9	11.4
Demand deposits, as % of broad money	10.6	10.9	10.6
Currency in circulation, billion Rials	**2,499.8**	**2,757.2**	**3,194.3**
Currency in circulation, annual % change	36.6	10.3	15.9
Currency in circulation, as % of broad money	45.4	46.2	46.5

Source: CBY.

A significant fraction of Yemen's net monetary emissions has been utilized to finance the government deficit. In recent years, the deficit has spiked due to the deterioration of oil export revenues, alongside persistently high public wages that continue to represent the bulk of government expenditures. It should be noted that drawdowns from the Saudi Letter of Credit deposit, which was utilized to help finance urgently needed imports, helped the CBY bring broad money growth down to 8.5 percent in 2019 (from 28.5 percent in 2018) and to 15 percent in 2020.

II.4 Building a Solid Framework for Conducting Monetary Policy

The main mission of the CBY, as set forth in Law No. (14) of 2000, is to maintain price stability by keeping inflation rates low. In pursuing these objectives, the CBY plays a critical role in regulating the country's economic health.

To comply with its legal mandate regarding price stability, the CBY began targeting the growth rate of the money supply (broad money) as an intermediate target; base money, controllable by the CBY, is used as an operational target. There is a strong analytical foundation for this framework, based on empirical estimations conducted by the CBY with the technical assistance from USAID. It was determined that base money is positively and significantly correlated with inflation, which underscores the strong relationship between the monetization of the government deficit and high inflation. This further suggests that an increase in the money supply has a persistent positive effect on inflation rates. With this in mind, the CBY's mission looking ahead will be to smooth variability in the money supply to achieve price stability and provide an adequate volume of monetary resources to support inclusive growth.

The CBY emphasizes adherence to this monetary targeting framework for monetary policy operations in order to achieve macroeconomic objectives. Starting in 2020, it specified quantitative targets for broad and base money during 2020, using the monetary planning framework established with the assistance of external technical support, and closely monitored their trajectory to keep inflation in check.

For CY 2021, the annual monetary plan projected broad and base money to grow by 18.3 percent and 19.1 percent, respectively, consistent with the average inflation rate of approximately 25 percent. Designed with technical support from USAID, this plan was the second since the CBY relocated to Aden. The plans have focused on controlling the money supply in a manner consistent with the real economic needs of both the public and private sectors. These plans remain a core part of CBY's strategy moving forward. In the absence of a foreign reserve buffer, a strong commitment to the annual monetary-plan targets remains the only tool at CBY's disposal in its effort to contain inflationary pressures and stabilize exchange rate movements. The CBY remains committed to the effective implementation of its 2021 annual monetary plan.

The monitoring of the annual monetary plan’s implementation revealed that, overall, the CBY has been successful in its mission to control money supply growth over the first quarter of 2021. Indeed, during this year’s first quarter, base money rose by 1.4 percent, while broad money (M2) grew by 0.7 percent.

Under current macroeconomic conditions, and given how prices have soared since 2014, the CBY's plan to restore macro-financial stability relies on several indispensable objectives: tightening monetary policy and improving monetary impulse transmission to the real sector, addressing external imbalances by promoting private sector exports and competitive import substitution activities, and allowing greater exchange rate flexibility while building foreign reserves.

The CBY is working to set up a combination of well-coordinated monetary policy instruments to achieve its monetary policy objectives. The market-based toolkit of monetary control instruments will be designed to include open market operations, a discount window, and a structured reserve requirement system as the main pillars of the monetary policy operational framework.

Under this framework, the exchange rate will be allowed to adjust gradually, and the current system of multiple exchange rates will be gradually abandoned. Formalized interventions in the foreign exchange market, using a transparent and rule-based auctioning system, will smooth out the high exchange-rate volatility.

In addition, nominal and real exchange rate movements will be considered in designing monetary policies. The exchange rate channel works through changes in monetary flows, exchange rates, and aggregate demand and supply. Any excessive increase in the money supply will typically lead to a depreciation of the exchange rate, increasing the prices of imported goods and services and thereby raising domestic prices and inflationary pressures.

II.5 Exchange Rate Policy Developments

The US dollar exchange rate against the Yemeni Rial reached about 700 Rials per dollar at the end of 2020, up from 591 Rials per dollar at the end of 2019. The exchange rate crossed the 900 Rials per dollar threshold several times during the last quarter of 2020. This significant depreciation, in turn, led to a substantial shortage of foreign currency in the local foreign exchange market, which is needed to cover essential goods. Multiple shocks that hit Yemen's economy in early 2020 caused this dramatic depreciation; among them, the fall in oil prices, the decline in remittances due to the COVID-19 pandemic, and the depletion of the 2018 Saudi deposit. These shocks put serious downward pressures on the exchange rate, rolling back the progress made over the previous year.

The downward pressure on the exchange rate, which has worsened due to the pandemic crisis, persisted during the first three quarters of 2021, considering the lack of foreign reserves available to cover the widening balance of payments deficit. The Yemeni Rial depreciated to around 860 Rials per dollar at the end of the first quarter of 2021. During the second quarter, the exchange rate has crossed the 900 Rials per dollar threshold on several occasions. These trends have led to a substantial shortage of foreign currency in the local foreign exchange market, hindering the country's ability to finance its imports of essential goods. The exchange rate between the Rial and the US dollar surpassed YER 1,200:USD 1 as of end-September 2021, in the wake of the reescalation of violence in response to protests, strikes, and general civil unrest seen in most of the southern governorates since mid-September 2021.

The depreciation of the Rial is making it substantially more challenging for the people of Yemen to afford basic food, an already difficult prospect given the disruptions to market functionality due to over seven years of conflict. The cost of the national minimum food basket (MFB) in Yemen — an indicator of the cost of living — reached 56,283 Rials in June 2021, some 21 percent higher than at the start of this year.

In response to these downward pressures and to the accelerating depreciation of the Rial, the CBY approved a set of short-term measures to help further limit the demand for foreign exchange in the market:

- It adopted a new mechanism for oil-derivative-imports financing that requires importers to obtain the approval of the CBY to access foreign exchange resources. Under the new arrangement, importers are required to deposit their daily cash sales in local currency into their accounts in commercial banks, while the CBY provides foreign currency to be utilized to cover imports.
- It set a per-day, per-individual ceiling of 500,000 Rials (or the equivalent in foreign currency) for every financial transfer, and prohibited the use of foreign currency for payments in the domestic market.
- In cooperation with the security agencies and the Public Funds Prosecution, it intensified the periodic inspections of all exchange companies and facilities in the liberated governorates.

Nonetheless, these downward pressures on the exchange rate are expected to persist during the last quarter of 2021 due to a projected lack of foreign reserves available to cover the widening gap in the balance of payments. This will continue to affect Yemeni purchasing power, placing stress on consumers and institutions. Because of these challenging economic conditions, additional international support in the form of balance of payments assistance will likely be vital to Yemen's economic health.

Moving ahead, greater foreign-exchange management and pricing flexibility will enable the CBY to better absorb economic shocks (among them the pandemic's ongoing adverse effects, external demand shocks, negative terms-of-trade shocks, and natural disasters) and to deal more effectively with high current account deficits and exchange rate risk.

CHAPTER III: Public Finance

At the end of 2020, Yemen had a public deficit of 782 billion Rials, equal to nearly 5 percent of its GDP, compared with a deficit of 703 billion Rials (5.6 percent of GDP) at the end of 2019. Though economic conditions worsened in 2020 in the wake of the pandemic outbreak, greater attention to public finance management prevented excessive expenditures and held the fiscal deficit close to the previous year's level. For 2021, the overall deficit is at this point projected to be approximately 754 billion Rials, about 4.9 percent of GDP

Yemen's persistently high fiscal deficit must be addressed in the near term by maintaining tight controls on spending, given the limited public resources. Moreover, it is critically important to control spending in a manner designed to bring down inflation and contain additional depreciation pressures.

It will be essential to focus on fiscal consolidation in order to accomplish these objectives and effectively align public expenditures with available revenues. This should include cutting nonessential expenses, reshuffling and prioritizing public spending (in a way that frees up funds allocated to health-care spending), and minimizing tax evasion and fraud. Though under the purview of the Ministry of Finance, this process will require coordination across the government. Careful coordination with the CBY will be needed to avoid excessive monetary emission-based financing of the public deficit.

III.1 Public Revenues

Total revenues and grants slightly increased, by 8 billion Rials (0.9 percent YoY) in 2020, reaching 930 billion Rials. The increase resulted from the 31.7 billion Rial increase in non-oil revenues such as taxes and customs duties and from the 23.7 billion Rial decrease in oil revenues. Public revenues totaled 6.1 percent of GDP in 2020 (Table III.1). According to recent 2021 projections, total revenues could reach up to 1.49 trillion Rials as a result of the expected significant increase in oil revenues. In the first half of 2021, actual revenues collected amounted to 365 billion Rials.

- **Oil revenues**

Oil revenues declined to 330.3 billion Rials in 2020, a drop of 23.7 billion Rials, or 6.7 percent YoY. They accounted for 35.5 percent of total public revenues and 2.2 percent of GDP. In 2021, oil revenues could increase to 888 billion Rials, accounting for almost 60 percent of total revenues.

- **Non-oil revenues**

Non-oil revenues rose to 551.7 billion Rials in 2020, a YoY increase of 31.7 billion Rials (6.1 percent). They made up almost 60 percent of total public revenues and 3.6 percent of GDP. In 2021, non-oil revenues are expected to total about 500 billion Rials, representing an approximately 8 percent decrease compared with 2020.

The composition and shifts in non-oil revenues were as follows:

- Tax revenues (including customs duties) increased to 345.5 billion Rials in 2020, a YoY increase of 7.5 billion Rials, or 2.2 percent. Tax receipts represented over 37 percent of total public revenues and over 2 percent of GDP. For 2021, projected tax revenues will represent almost 19 percent of total revenue.
- Non-tax revenues (which include fees and profit transfers) increased in 2020 by 24.2 billion Rials (13.3 percent YoY), totaling 206.2 billion Rials, and representing 22.2 percent of total public revenues and 1.4 percent of GDP. It is expected that annual non-tax revenues will increase by about 11 percent in 2021.

Table III.1 Public Revenues and Grants (YER billion)

	Dec-18	Dec-19	Dec-20	Dec-21*	Jun-21**
Total revenues and grants	**743**	**922**	**930**	**1,491**	**365**
Oil revenues	**342**	**354**	**330.3**	**888**	**198**
Non-oil revenues	**377**	**520**	**551.7**	**509**	**167**
Tax revenues	224	338	345.5	280	162
Other revenues	153	182	206.2	229	5
Grants	**24**	**48**	**48.0**	**94**	**-**

* Budget Projections, subject to change.
** Actual values for the first half of 2021.
- = No data available.
Source: Ministry of Finance.

III.2 Public Expenditures

Public expenditures increased by 5.4 percent YoY during 2019-20, rising from just over 1.6 billion Rials in 2019 to just over 1.7 billion Rials in 2020. They accounted for 11.3 percent of GDP in 2020. Based on the 2021 projections, the total expenditure will likely increase to 2,246 billion Rials this year (Table III.2.a). As a result of the implementation of the CY 2021 budget, total public expenditures reached 551 billion Rials during the first half of 2021.

Current expenditures

Current expenditures totaled 1,663 billion Rials in 2020, a YoY increase of 128 billion Rials, or over 8 percent. For 2021, total current expenditures are projected to increase by almost 27 percent, totaling 2,111 billion Rials.

Capital expenditures

Capital expenditures totaled 49 billion Rials in 2020, a YoY decrease of 41 billion Rials, or over 45 percent. However, they remained a fairly marginal component of public spending, accounting for under 3 percent of overall budget expenditures in 2020. For 2021, capital expenditures are currently projected to increase to approximately 134 billion Rials.

Table III.2.a Public Expenditures (YER billion)

	Dec-18	Dec-19	Dec-20	Dec-21*	Jun-21**
Total expenditures	**1,652**	**1,625**	**1,712**	**2,246**	**551**
Current expenditures	**1,555**	**1,535**	**1,663**	**2,111**	**547**
Wages and salaries	821	854	878	1,048	213
Goods and services	308	120	199	364	150
Interest payments	8	30	255	208	20
Subsidies and transfers	389	492	281	440	141
Other expenditures	29	39	50	52	24
Capital expenditures	**97**	**90**	**49**	**134**	**4**

* Budget Projections, subject to change.
** Actuals for the first half of 2021.
Source: Ministry of Finance.

- **Overall balance**

The overall budgetary balance in 2020 revealed a public deficit of 782 billion Rials (approximately 5.1 percent of GDP), compared with the deficit in 2019 of 703 billion Rials (over 5 percent of GDP). The ratio of total revenues and grants to public expenditures was 54 percent in 2020, down from 57 percent in 2019. While still far from the 80 percent coverage ratio commonly considered the rule of thumb for emerging markets, these ratios nevertheless represented a significant improvement over the 45 percent ratio in 2018. For 2021, the overall deficit is projected to be approximately 754 billion Rials, or about 5 percent of GDP (Table III.3.b).

Table III.3.b Overall Balance (YER billion)

	2018	2019	2020	2021*	2021 H1**
Total public revenues and grants	743	922	930	1,492	365
Total public expenditures	1,652	1,625	1,712	2,246	551
Overall balance	-909	-703	-782	-754	-186

* Budget Projection.
** Actuals for the first half of 2021.
Source: Ministry of Finance.

III.3 Public Domestic Debt

Owing to the decline in public revenues since the reinitiation of civil conflict, internal public debt has increased from approximately 1,534 billion Rials in 2018 to 3,466 billion Rials as of June 2021.

The primary source of domestic public financing is direct borrowing from the CBY. This equaled 1,434 billion Rials in 2018, or 93.5 percent of the total public internal debt. Wakala deposits and certificates of deposit constituted the remaining portion (6.5 percent) of the domestic debt. By 2020 this percentage had fallen to just under 3.3 percent, reflecting the fact that the outstanding amounts of these deposits continued to roll over. By contrast, CBY financing of the government continued to increase in net terms during this time frame.

The same trend was evident during the first semester of 2021. In this regard, the internal debt stock rose to 3,466 billion Rials through June 2021, with about 97 percent financed directly through monetary emissions. The remaining 3 percent was financed through the rollovers of Wakala Sukuks and certificates of deposit. Table III.3 presents the volume and composition of Yemen's public internal debt for recent years.

Table III.3- Public Internal Debt (outstanding in YER billion)

	Dec-18	Dec-19	Dec-20	Jun-21
Internal public debt	**1,534**	**2,377**	**3,009**	**3,466**
CBY financing of the government (overdraft)	1,434	2,277	2,909	3,366
Commercial and Islamic bank financing of the government (Certificates of deposits and Wakala deposits)	100	100	100	100

Source: Ministry of Finance and the CBY.

The current situation poses significant challenges to the stability of public financial management. However, the Ministry of Finance is committed to achieving fiscal balance in the medium term, strengthening its institutional and governance structures, and enhancing its operational capacity to promote effective planning and the timely implementation of a sound fiscal policy framework. It is expected that the volume of outstanding domestic public debt will continue to rise through the end of 2021, with the CBY continuing to represent the predominant source of finance for this debt. There is an agreement between the government and the CBY to move strongly toward diversification of debt instruments in late 2021 and 2022. Indeed, the Ministry of Finance allowed the CBY to issue short-term securities (certificates of deposit and Wakala deposits) in 2021 for an envelope of 400 billion Rials and interest rates set at 18 percent for three months and 20 percent for six months.

CHAPTER IV: External Sector

The improvement in Yemen's political and security situation during 2019 played a fundamental role in boosting the national economy's performance and, more specifically, the external sector. This boost was reflected, in turn, in the status of the balance of payments as exports increased and foreign earnings rose.

In contrast, the widening balance of payments deficit witnessed during 2020 reflects a rapid and radical deterioration of economic fundamentals due to the adverse effects of the COVID-19 pandemic and the fall in oil prices. The sharp drop in foreign export earnings led to extensive utilization of available foreign reserves, which shrank precipitously, reflecting economic headwinds and further depreciating the national currency. The strong correlations of fiscal revenues and current accounts with oil prices increased the sensitivity of fiscal and external balances to fluctuating oil prices. Despite the increase in oil prices recently, the twin deficit will continue to be the most critical challenge to macroeconomic stability in Yemen in 2021 and onwards.

IV.1 Balance of Payments

Preliminary data indicate that Yemen experienced a deficit in the overall balance of payments of about USD 465 million in 2020. This deficit was reflected in the USD 465 billion decrease in the CBY's total foreign reserves in 2020, which fell to USD 937 million — only enough to cover 1.3 months of imports. The deficit in the balance of payments is primarily due to the triple deficits in the current, capital, and financial accounts.

All the balance-of-payment indicators reflected Yemen's challenging economic position heading into 2020. The deficit in the current account amounted to USD 644 million in 2020, equal to 3.4 percent of GDP; the capital and financial accounts each recorded small surpluses of USD 7 million in 2020. The total balance of payments deficit at the end of 2021 is projected to be just under USD 1,4 million.

Table IV.1 Key Balance of Payments Indicators (% of GDP unless otherwise indicated)

	2018	2019	2020	2021
Current deficit	2.1	3.6	3.4	6.2
Exports + Imports	43.2	52.4	50.7	49.9
Exports	5.6	6.9	6.2	7.7
Remittances	16.6	18.8	18.5	16.0
Humanitarian assistance	13.5	16.2	16.4	12.3
Imports	37.7	45.4	44.4	42.1
Oil imports	11.0	12.0	10.9	12.0
Food imports	9.1	12.9	16.5	15.6
Gross international reserves (USD million)	2,292	1,402	937	937
Foreign reserves coverage, in months of imports	3.1	1.6	1.3	1.2

Source: CBY.

The following section presents the primary indicators of the balance of payments in greater detail.

Current account

The deficit in the current account (transactions related to goods and services, income, and current transfers) was USD 644 million in 2020, equal to 3.4 percent of GDP, and indicating a YoY decline of 20.7 percent. The trade deficit improved significantly in 2020, totaling about USD 7.2 billion, compared with almost USD 8.7 billion in 2019.

- ***Exports of crude oil and gas***

Crude oil and gas exports declined in 2020 to USD 711 million, due to political instability and the worsening international economic conditions, from USD 1.1 billion in 2019, equivalent to a 35.5 percent YoY decrease.

- ***Non-oil exports***

The value of non-oil exports increased in 2020 by 1.5 percent to USD 468 million, a bright spot for Yemen and a reflection of early-stage work underway to diversify the country's exports.

Yemen's dependence on imported goods is reflected in the sector's share of GDP, which is well above global averages. The value of imports amounted to around USD 8.4 billion in 2020, a YoY decrease of almost USD 1.9 billion, or slightly over 18 percent.

- ***Imports of oil products***

At nearly USD 2.1 billion, the value of oil derivative imports decreased by USD 630 million, a YoY decline of over 23 percent from the 2019 figure of USD 2.7 billion.

- ***Food imports***

Food imports are a core part of Yemen's consumer spending. The bulk of basic goods are imported, which means that worsening global conditions have significantly affected consumer expenditure. At a total of USD 3.1 billion, the cost of food imports increased by over 7 percent YoY in 2020.

- ***Balance of income and transfers***

The net balance of income and transfers dropped to just under USD 6.6 billion in 2020, a YoY decline of USD 1.3 billion, or 16.5 percent. This decline, in turn, reflected a decrease in both humanitarian assistance and worker remittances. The decline in remittances appeared to reflect regional instability and the economic difficulties faced by the Yemeni diaspora due to the effects of the pandemic.

Capital and financial accounts

Yemen's capital and financial accounts each recorded small surpluses of about USD 7 million in 2020.

Overall balance

The overall balance recorded a deficit of USD 465 million in 2020, a YoY decrease of USD 425 million, or almost 48 percent. This was chiefly due to the low current account deficit, reflecting the decrease in oil prices in international markets. As a result, the drop in the CBY's gross foreign reserves was relatively small in 2020: USD 465 million, the equivalent of only 1.3 months of imports. The deficit in the total balance of payments for 2021 is projected to increase by USD 901 million, or 193.8 percent YoY, reaching almost USD 1.4 billion (Table IV.2).

Table IV.2 Balance of Payments, Actual and Projected (USD million)

	2019	2020	2021
Exports of goods and services	1,562	1,178	1,728
Hydrocarbon	1,101	711	1,260
Other exports	461	468	469
Imports of goods and services	10,256	8,404	9,437
Hydrocarbon	2,700	2,070	2,691
Food	2,902	3,114	3,488
Other imports	4,654	3,219	3,258
Balance of goods and services	**-8,694**	**-7,225**	**-7,708**
Incomes	-18	-19	-19
Transfers	7,900	6,600	6,331
Remittances	4,250	3,500	3,581
Humanitarian assistance	3,650	3,100	2,750
Use of donor grants			
Balance of incomes and transfers	**7,882**	**6,581**	**6,313**
Current account	**-812**	**-644**	**-1,396**
Capital inflows net	0	20	30
Financial inflows net	-740	-13	0
Errors and omissions	662	172	0
Overall balance	**-890**	**-465**	**-1,366**

Source: CBY.

The balance of payments deficit is expected to persist over the coming months as the effects of the war continue to reverberate. Unless the structural causes are addressed in the short term, this deficit will weaken the local currency. To combat this downward pressure and help stabilize the Yemeni economy, macroeconomic and structural policies that help revive private sector activity, boost export earnings, contribute to building up a buffer of foreign reserves, and limit debt monetization should be pillars of the government's economic policy moving forward.

To achieve macroeconomic stabilization, Yemen will need to mobilize additional external resources, while containing further exchange rate depreciations and curbing inflationary pressures in a difficult environment characterized by a significant rise in international food and fuel prices.

IV.2 Public External Debt

The lack of accurate data from public authorities and from the lending and donor countries on the size of the Yemen's external debt is a significant, ongoing barrier to improvements in the management of the nation's finances. To address this, a working group has been formed to collect data by communicating with lenders and to help restart Yemen’s Debt Management and Financial Analysis System (DMFAS). The group comprises representatives of the CBY, the Ministry of Finance, and the Ministry of Planning and International Cooperation, and is supported by experts from the Pragma Corp., financed by USAID and UK Aid.

The most recent IMF estimates of Yemen’s external public debt indicate that the outstanding balance increased by USD 23 million (0.3 percent YoY) to a total of almost USD 6.7 billion in 2019, which equaled 29.5 percent of the GDP for that year. Due to installments and interest paid, the balance of the debt to the International Development Agency (IDA) decreased in 2019 to just over USD 1.5 billion, a drop of USD 78 million (4.8 percent). The IDA debt represented 23 percent of the balance of the outstanding external public debt in 2019.

For the entire year of 2020, total debt service to IDA equaled USD 85.9 million, of which USD 74.8 million represented principal repayments, and USD 11.1 million represented interest payments. During January-June 2021, total debt service to IDA equaled USD 46.1 million, with USD 40 million in principal repayments and USD 6.1 million in interest payments.

Appendix: Statistical Concepts and Methodology

The Quarterly Economic and Monetary Bulletin, issued by the CBY, focuses on the developments in and projections for global economic conditions, as well as on local economic and monetary developments. This issue of the *Bulletin* highlighted the following topics in its four chapters:

I- Current Situation and Economic Prospects

The World Economic Outlook report, issued by the IMF, is the most reliable resource for diagnosing the development of global economic conditions and their prospects. We relied on data from Yemen's Central Statistical Organization (CSO), as available, to diagnose the conditions of the national economy.

II- Money Aggregates and Monetary Policy Developments

The CBY is the main source of the country's monetary and banking statistics. Within the CBY, the General Department of Central Accounts provides the General Department of Research and Statistics with the Central Bank's balance sheet, while the General Department for Banking Supervision provides the consolidated balance sheet for the commercial and Islamic banks and their various activities.

The General Department of Research and Statistics collects these data and periodically prepares them for publication in accordance with the 2000 *Monetary and Financial Statistics Manual*, issued by the IMF. The CBY treats the data it collects on the concerned institutions with strict confidentiality. The monetary data should be published in their final form, and these data are reviewed when any amendment is made related to the methodology used and the classification of the monetary data. The following is an introduction to the most important terms included in the monetary tables:

- Banks: All commercial and Islamic financial institutions operating in Yemen that accept deposits.
- Banking system: The CBY and the commercial and Islamic banks operating in Yemen.
- Government: The central government and the local councils.
- Social Security institutions: The General Authority for Insurance and Pensions, the General Organization for Insurance and Pensions, and the security and military retirement institutions.
- Public institutions: Public nonfinancial institutions and companies in which the government has an interest and/or voting power.
- Nongovernmental sector: All local sectors except government and social security institutions.
- Resident: A person who legally resides in Yemen on a full-time or part-time basis, or who has been in Yemen for at least one year, regardless of nationality, with the exception of international bodies and institutions and international students who reside in Yemen for more than one year.
- Nonresident: A person who usually resides outside Yemen and/or who has not completed one year of residency in Yemen, regardless of nationality, except for a family or

individual that has an economic base in Yemen and has permanent housing, even if this family or individual resides in Yemen intermittently.

- Net foreign assets: The external assets of the banking system minus the external liabilities of the banking system, based on the concept of residency. These are calculated for the CBY and the other banks in Yemen according to the external assets and liabilities listed on their balance sheets.
- Net government borrowing: The sum of the claims of the banking system on the central government and local councils, minus the total government deposits in the banking system.
- Claims on the nongovernmental sector: the total claims on public institutions and the local private sector.
- Other items net: The sum of the other assets of the banking system minus the sum of other liabilities of the banking system, representing items that are not included in the definition of net foreign assets, net government borrowing, or claims on the nongovernmental sector on the CBY balance sheet and on the consolidated balance sheet of the country’s commercial and Islamic banks.
- Currency issued: The cash issued by the CBY, consisting of cash circulating outside the banks plus the cash in banks' vaults.
- Money: Currency in circulation plus demand deposits in Rials in the banking system belonging to both the (local) private sector and public institutions.
- Quasi-money: Both savings and time deposits in Rials and deposits in foreign currencies in the banking system belonging to all sectors mentioned in the definition of money , in addition to the deposits from social security institutions.
- Money supply: The sum of money plus quasi-money, as well as the sum of net foreign assets, net government borrowing, claims on the nongovernmental sector, and other items net.
- Banks' deposits with the CBY, comprising the following:

    1) Reserve requirement: the minimum value that banks must keep with the CBY to meet the mandatory reserve ratio imposed on bank accounts.

    2) Current accounts: current accounts opened by banks at the CBY in local and foreign currencies (certificates of deposit in Rials are not considered part of these accounts).

- Bank advances: Credit granted by commercial banks in the form of loans, facilities, and discounted securities, in addition to financing provided to Islamic banks for their investment operations.
- Loans and advances granted to the private sector by banks: Among others, direct loans and facilities granted by banks to the private sector and banks' investments in the shares of companies.
- Loans and advances granted to the government by banks: agency deposits (alternatives to Islamic bonds), certificates of deposit, and government bonds.
- Exchange rate and monetary policy: The CBY strives to stabilize the national currency exchange rate — a monetary anchor point — against major foreign currencies

through effective monetary policies aimed at achieving a macroeconomic balance between supply and demand and at curbing price inflation. The CBY's General Department of Foreign Exchange and Exchange Affairs is the source of the relevant data and procedures.

III- Public Finance

The Ministry of Finance is the source of the state's general budget data. In addition to these data, we rely on data from the ministry's General Budget Department, which includes budget data on the following:

- Public revenues: oil and gas revenues; direct and indirect tax revenues, including customs duties; and non-tax revenues.
- Grants: all sums obtained as donations free of charge from allies and friendly countries.
- Public expenditures: current expenditures, including those under chapters 1, 2, and 3, according to economic classification, and development and capital expenditures, under chapters 4 and 5.
- Total balance: This represents the state's general budget and indicates the relationship between public revenues and overall public spending.

IV- External Sector

- Balance of payments: The Central Bank of Yemen Law No. (14) of 2000 makes the CBY responsible for collecting the balance-of-payments statistics. The Balance of Payments Department, under the General Department of Research and Statistics, is tasked with collecting the balance-of-payments data from various ministries and government agencies and from investment company surveys.
- External public debt: The CBY's Department of Foreign Loans and Aid is the source of external public debt data. In this regard, please note that the outstanding balance of the external debt represents the amounts withdrawn through external loans minus the installments paid on those loans plus the arrears on installment and interest payments.

Disclaimer

Beginning in August 2008, monetary and banking data were amended and updated in accordance with the 2000 *Monetary and Financial Statistics Manual*, issued by the International Monetary Fund.

In accordance with Article (45) of the Central Bank Law No. (14) of 2000, all institutional and individual data and/or information provided to the CBY is strictly confidential, to be used only for statistical purposes; and no information may be published that reveals the financial condition of any bank or financial institution.

The data in this report that came from sources such as ministries and government agencies are preliminary in nature, and thus subject to change.

We used projections made by the IMF when the relevant information and/or data were not available from national sources.

This issue of the *Bulletin* was published by the General Department of Research and Statistics at the CBY — Aden.

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ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP)—YEMEN

Updated FX Auctions Policies, Procedures, Regulations and Transitional Arrangements

ANNEX 02

September 2021

Prepared for the United States Agency for International Development, USAID Task Order No. 702792M00001

USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA

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1. GENERAL PROVISIONS

The terms and expressions used in this regulation shall have the same meanings assigned thereto in the Law of the Central Bank of Yemen (CBY) No. (14) 2000, the Banking Law No. (38) 1998, the Law No. (21) 2009, amended by Law No. (16) 2009, regarding Islamic Banks, and the Republican Decree No. (20) 1995 regarding Money Changers, as amended by Republican Decree No. (15) 1996.

1.1 Definitions

This regulation shall apply to all eligible commercial, Islamic and specialized banks and any branch of a foreign financial institution operating in the banking sector. This regulation shall also apply to eligible licensed money exchange companies and financial institutions licensed by virtue of the Law of the Central Bank of Yemen, as well as the instructions and regulations thereof to participate in FX auctions. The initially designated platform for FX auctioning is the Refinitiv platform with transitional arrangements, pending full-fledged implementation by all auction participants as outlined in this regulation. The CBY within its purview could introduce other platforms such as Bloomberg or migrate to Bloomberg or any other comparable platform it deems appropriate for implementation purpose sas well.

1.2 Scope

This regulation shall apply to all eligible commercial, Islamic and specialized banks and any branch of a foreign financial institution operating in the banking sector. This regulation shall also apply to eligible licensed money exchange companies and financial institutions licensed by virtue of the Law of the Central Bank of Yemen, as well as the instructions and regulations thereof to participate in FX auctions. The initially designated platform for FX auctioning is the Refinitiv platform with transitional arrangements until full-fledged implementation by all auction participants outlined in this regulation. The CBY within its purview could introduce other platforms such as Bloomberg or migrate to Bloomberg or any other comparable platform it deems appropriate in its implementation.

1.3 Objectives

This regulation aims to achieve the objectives of the Central Bank of Yemen in accordance with law No. (14) of the year 2000, to promote a sound banking system, improve the transparency and effectiveness of foreign currency trading, use market mechanisms for determination of the exchange rate, and provide foreign currency during periods when the interbank market is not capable of doing so. Central Bank of Yemen interventions will target periods where it is needed; the overall objective, however, is to develop the interbank FX market rather than become a key market player. CBY's primary role is regulatory. CBY's interventions will also be to maintain the stability of the Yemeni Riyal exchange rate against foreign currencies on the macro level. This regulation also aims to regulate FX activities of foreign currency, including mechanisms of verifying daily sales and purchases in accordance with allowed transactions, considering compliance with anti-money laundry and terrorist financing regulations.

2. CRITERIA AND PROCEDURES

2.1. The Central Bank shall send an invitation to the auction via the online Refinitiv system or similar in accordance with the example presented in Attachment No. (1). If the day falls on an official holiday, it shall be carried on a preceding business day.

2.2. Eligible bidders of the auction are banks and money exchange companies that operate under a special license from the Central Bank of Yemen.

2.3. Bidding will be using the Refinitiv online platform or similar; for entities that do not have a Refinitiv platform or similar, the CBY will be able to bid on their behalf under a strictly adhered to governance process to ensure auction integrity. However, all bidders are expected to have direct access to the designated platforms in the medium term.

2.4. Non-banking financial companies, money exchange companies, and individuals not licensed; could participate exclusively through commercial banks after entering into specialized agreements. The commercial banks, in this case, would be able to bid on their behalf

3. REQUIREMENTS FOR ENTERING AUCTIONS

3.1. Bidders shall meet the following requirements to be able to participate in auctions:

- 3.1.1. Submitting buy/ sell bids in line with auction guidelines directly on the Refinitiv platform or similar platform or with the CBY, who will place their bids on their behalf.
- 3.1.2. For the purpose of transparency and AML compliance monitoring, provide the Central Bank with information regarding the purpose of the foreign currencies to be purchased according to the data shown in Attachment (2)
- 3.1.3. Prepare accurate daily and monthly statements of the banks' or money change companies' foreign currency positions at the beginning of each day/month, according to the instructions of the Central Bank of Yemen as stipulated in Attachment (3). These position statements shall be submitted to the CBY before the auction date.
- 3.1.4. Bidders from licensed money exchange companies shall request commercial banks to cover their participation in the auction financially. Money exchange companies shall attach the letter of undertaking to cover them by banks according to Attachment (4) with the bidding sheet to the Central Bank.
- 3.1.5. Money exchange companies are prohibited from participating more than once in any given auction. They shall submit a written undertaking to the Central Bank according to Attachment (5), stating that it shall submit its bids in the auction covered by one commercial bank exclusively. It shall not be permissible to have multiple participations in a single auction due to the multiplicity of coverage from commercial banks.
- 3.1.6. Commercial banks covering qualified money exchange companies' bids in the auctions; shall submit a letter of authorization to the Central Bank of Yemen whereby it authorizes the Central Bank to settle money exchange companies' bank accounts from their participation in the auction from the money exchange companies' bank accounts at the Central Bank, according to Attachment (4).

3.2. The amount of each buy/ sell bid shall not exceed nor be less than the limit specified by the Central Bank in the Auction Announcement Attachment (1).

3.3. Commercial banks shall enter into agreements with non-banking financial institutions, money exchange companies, and exchange institutions ineligible to participate in the auction in order to submit the number of bids defined in the auction call.

3.4. Commercial banks and money exchange companies are obliged to notify the Central Bank of Yemen on a daily basis of all foreign transactions performed during the day for market transparency and AML compliance purposes.
3.5. Once the banks or money exchange companies submit their bids on the Refinitiv platform or similar or their bid to the Central Bank of Yemen to input on their behalf, they shall not have the right to cancel or alter their bids.

4. CANCELING BIDS

4.1. The Central Bank of Yemen shall not allow any bank or company that failed to comply with the provisions of Article (3) of this regulation and any pre-announced auction provisions to participate in the auction.
4.2. The Central Bank of Yemen shall decline the bids that have failed to meet the provisions of Article (3) of this regulation and any pre-announced auction provisions to participate in the auction.
4.3. The Central Bank of Yemen shall preserve the right to cancel particular bids and/or auctions only if it deems that the banks or money exchange companies submitted non-market or collusive bids in the auction or violated AML guidelines.
4.4. The Central Bank of Yemen shall notify banks or money exchange companies whose bids were canceled via the Refinitiv platform or, if bidding on their behalf, immediately after auction adjudication.

5. AUCTIONING

5.1. Auctions shall be submitted according to the forms referred to in Attachment (2) if the CBY is bidding on behalf of the institution submitting the bid, or the bidder will submit directly on the Refinitiv or similar platform if they have access.
5.2. Fulfilled buy bids shall be identified as in accordance with the CBY's chosen adjudication method, subject to it clearly being pre-announced to participants. Initially, adjudication must use a single price mechanism, evolving to multiple price mechanisms as/or if deemed appropriate from a market development perspective.
5.3. Fulfilled sell bids shall be identified in accordance with the CBY's chosen adjudication method, subject to it clearly being pre-announced to participants. Initially, adjudication must use a single price mechanism, evolving to multiple price mechanisms as/or if deemed appropriate from a market development perspective.
5.4. The auction settlement for banks and money exchange companies in foreign currency shall be made according to the banks' request. To either banks' accounts abroad, of which details are deposited at the Central Bank, maximum of two days from the auction date (T+2), unless it is a holiday at the bank or the correspondent banks, then it takes place after the holiday.
5.5. The auction settlement for commercial banks for Yemeni currency shall be made on bank accounts opened at the Central Bank (T+2), unless it is a holiday at the bank, then it takes place after the holiday.
5.6. The settlement of money exchange companies auction amounts shall be made on the accounts of the commercial banks by virtue of the letter of undertaking from the commercial banks to the Central Bank to settle the auction account of these companies on the accounts of commercial banks opened with the Central Bank. Attachment (4).

5.7. Auction outcome shall be published to banks and money exchange companies on the same day at the Central Bank of Yemen's webpage in accordance with Attachment (6) of this Regulation or using the Refinitiv or similar templates.

6. REFINITIV OR SIMILAR FOREIGN CURRENCY TRADING PLATFORM

6.1. The trading system used for foreign currency trading by the CBY and market players is the Refinitiv platform or similar.
6.2. The CBY within its purview could introduce other platforms such as Bloomberg or migrate to Bloomberg or any other comparable platform it deems appropriate in its implementation.
6.3. The auction shall be held on the platform according to the guidelines outlined in the preceding.
6.4. The integrity of bids, governance on bidding parties, and authorized staff to bid within each institution is guaranteed through the robust controls in place on the Refinitiv auctioning platform or other similar electronic platforms.
6.5. The CBY will have to clear approved bidders and persons during the initial phase of bidder on-boarding on the Refinitiv platform or similar and subsequently in the case of any changes.
6.6. The CBY will, at a later stage, secure the market tracker functions on the Refinitiv or similar platforms, which enable copies of any interbank FX transactions in the Yemeni system to be sent to the CBY. This will be a valuable source of deal flow in the FX interbank market when it is reactivated, in addition to the envisaged implementation of SWIFT Scope, which provides similar information on FX market activity.

7. THE CENTRAL BANK OF YEMEN'S RIGHTS AND RESPONSIBILITIES

7.1. The Central Bank of Yemen shall decide the amount of foreign currency to sell/buy in the auction and the type of auction.
7.2. The total bids by each participant shall not exceed 25% of the auction value. Any change in this value shall be notified to banks and licensed companies at the appropriate time by e-mail one business day before the auction, according to Attachment (8).
7.3. The Central Bank of Yemen shall maintain the confidentiality of banks' and companies' information and data relating to the auction.

8. BANK'S AND MONEY EXCHANGE COMPANIES' RIGHTS AND RESPONSIBILITIES

8.1. The bank or exchange house shall provide accurate data in relation to the auction and participate in the auction with integrity.
8.2. The bank or exchange house does not have the right to return or cancel its auctioning bid once the bid has been submitted.
8.3. The bank or exchange house shall notify the Central Bank of Yemen of any change in the bank's authorized signatory and e-mail address at least one day before the auction.

9. PENALTIES

9.1. The Central Bank of Yemen maintains the right to impose the following penalties on banks and money exchange companies that violate any provisions of this regulation:

9.1.1. For the first violation of the provisions of this regulation, the Central Bank of Yemen shall deliver a notification to the bank or the money exchange company and impose a penalty according to Article (74) of the Banking Law No. (38) in the year 1998, and according to chapter six of the Republican Decree No. (20) 1995 regarding Money Changers, as amended by Decree No. (15) 1996. In such case, the bank's account at the Central Bank of Yemen shall be debited without any dispute, including the money exchange companies that the banks covenant to cover.

9.1.2. In case of repeated violation of this regulation, the Central Bank of Yemen shall disqualify the bank or the money exchange company from five auctions in a row and impose a penalty.

9.1.3. In case of several violations of this regulation, the Central Bank of Yemen shall disqualify the bank or the money exchange company from participating in the auctions.

10. TRANSITIONAL PROVISIONS

The auction guidelines and procedures used and the proforma templates in parallel to the Refinitiv platform for the institutions which have access shall continue to be in force only until all bidders procure access to the Refinitiv online platform or similar and with a maximum of two years from the effective date of this regulation. The bidding requirements shall only be fulfilled thereafter through the Refinitiv or similar platforms.

Board of Directors – The Central Bank of Yemen

The following constitutes examples of forms to be used during transitional arrangements until full migration to the Refinitiv or similar electronic trading platform. Any representation of the number of bidders or any template is only for illustrative purposes.

Attachments and Forms:

1. Attachment No (1): Auction Announcement Form
2. Attachment No (2): FX Auction Bidding Sheet
3. Attachment No (3): Daily and Monthly FX Position Reports
4. Attachment No (4): Commercial Banks Coverage Letter Form
5. Attachment No (5): Commitment Letter Form
6. Attachment No (6): Auction Results Form
7. Attachment No (7): Paper Confirmation of Bid Form
8. Attachment No (8): Notification Form

11. ATTACHMENT (1): AUCTION ANNOUNCEMENT FORM

Announcement of Invitation to Forex Auction Sessions

The Central Bank of Yemen announces the holding of FX Auction for eligible banks and money exchange companies. The auction will be held according to the following details and the attached set of auction terms:

Day/date	Time: from-to	Currency	Sell bid	Buy bid	Fixed price	Multiple price	Value of auction	Maximum limit

Central Bank of Yemen

Auction Terms:

- All bidders must comply with the terms of the auction.
- Each bank or money exchange company is entitled to submit a pre-determined maximum number of bids in each auction.
- Each money exchange company must obtain financial coverage from a commercial bank for each auction and must attach the coverage letter with the bid form.
- Each commercial bank must authorize the Central Bank to settle the account of the bank or the money exchange company's bids that are covered in the auction from the commercial bank's accounts at the CBY.
- Incomplete bids or bids that are not in compliance with the terms of the auction pursuant to the Forex Auction Regulation and related instructions will be canceled, and the bank or company shall be notified of such cancellation.

12. ATTACHMENT (2): FX AUCTION BIDDING SHEET

1. Forex Auction Bidding Form/Banks (Example)

For the auction held on .... Commercial bank name....../

Buying amount: Selling amount:

1. Buying Bid

Bid number	Amount/ in Currency	Buy Price	Purpose		
			Customer's name	Imported item	Beneficiary's name and country
1					
2					
3					
Total					

2. Sell Bid

Bid number	Amount/ in Currency	Sell price
1		
2		
3		
Total		

We hereby authorize the Central Bank of Yemen to withdraw from our Yemeni currency or foreign currency accounts in the Bank to settle our obligations from bidding in this auction.

First authorized signatory:

Second authorized signatory:

Stamp:

2. Forex Auction Bidding Form/ Money Change Companies (Example)

For the auction held on .... Money exchange company name: ………….

Commercial bank issuing financial coverage name……

Buying amount: Selling amount:

1. Buying Bid

Bid number	Amount/ in Currency	Buy Price	Purpose		
			Customer's name	Imported item	Beneficiary's name and country
1					
2					
3					
Total					

2. Sell Bid/

Bid number	Amount/ in Currency	Sell price
1		
2		
3		
Total		

We hereby attach the letter of coverage issued by the above-mentioned bank to guarantee our participation in the auction and authorize the Central Bank of Yemen to settle our bids from its accounts with the CBY.

First authorized signatory:

Second authorized signatory:

Stamp:

13. ATTACHMENT (3): DAILY AND MONTHLY FX POSITION REPORTS

Example **Statement of balances in foreign currencies and Yemeni Riyal**

At bank/company/ …………. During the month ……/……./ 20……

Units in thousands

	Balances at the beginning of the month					Balances at the end of the month				
	Cash	Cheques	Local banks	External banks	Total	Cash	Cheques	Local banks	External banks	Total
USD										
GBP										
Euro										
SAR										
AED										
QR										
KD										
BHD										
OMR										
Others										
Value of foreign currencies in USD						Value of foreign currencies in USD				
Yemeni Riyal										

Signature of Responsible Director:

Stamp:

14. ATTACHMENT (4): COMMERCIAL BANKS COVERAGE LETTER FORM

Banks Undertaking to cover Money Exchange Company Entering Forex Auction

For the auction held on ..../…………..

Commercial Bank – Undertaker name………….

Money Exchange Company……………………......

No.	Auction Date	Buy Bid	Sell Bid	Amount value	Currency	Nature of the undertaking
1						**Cheque**
2						**Guarantee**
3						**Cash deposit**
	Total					

Commercial Bank:

Authorized signatory:

Stamp:

Date:

15. ATTACHMENT (5): COMMITMENT LETTER FORM

Money Exchange Companies' Undertaking in Forex Auction

For the auction held on:…………………………..

Money Exchange Company:…………………………

Commercial Bank Undertaking to Cover:………..

The above-mentioned money change company licensed to participate in forex auction hereby undertakes to participate in the auction once with a single bid form, covered by one specific commercial bank. It pledges not to participate in multiple participation covered by several banks in a single auction,

Money Exchange Company:

Signatory:

16. ATTACHMENT (6): AUCTION RESULTS FORM

FX Auction Results Publishing Form **For the auction held on ………………**

1. Forex Buying Bid

Accepted Price	
Auction Volume	
Total Accepted Bids	
Number of Participants	
Coverage Ratio	
Allocation Ratio	
Average Auction Price	
Highest Auction Price	
Lowest Auction Price	

2. Forex Selling Bid

Accepted Price	
Auction Volume	
Total Accepted Bids	
Number of Participants	
Coverage Ratio	
Allocation Ratio	
Average Auction Price	
Highest Auction Price	
Lowest Auction Price	

17. ATTACHMENT (7): PAPER CONFIRMATION OF BID FORM

Bidding Confirmation Form

For the auction held on ………………

No.	Name of Bank or Money Exchange Company	Name/Title of Bank Money Exchange Company Employee	Bank/ Money Exchange Company Employee Signature	CBY Employee Signature	Time of Submission
1					
2					
3					
4					
5					
6					

Stamp:

Foreign Currency Department

External Banking Operation Directorate

Central Bank of Yemen

18. ATTACHMENT (7): NOTIFICATION FORM

For the auction held on ....

Pursuant to the provisions of Article (7.3) of this Regulation, we hereby notify that the amount of one sell/buy bid in the auction shall not exceed ……..(amount/ currency….) and shall not be less than ……… (amount/currency) from …(date).

Central Bank of Yemen

ANNEX 03a

The Central Bank of Yemen

Request for Proposal

Automated Transfer Systems

Version 1.0

2021

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Control Page

Document Amendment Record			
Version No.	**Date**	**Prepared by**	**Brief Explanation**
1	24 October 2021	Pragma	First version for CBY review

1 Acceptance of RFP

By your acceptance of this RFP and by acting in any way upon it (inclusive of mere initial consideration), you agree (1) to keep the information contained herein confidential, (2) to provide information from the RFP only to those persons directly concerned with your decision regarding participation in the RFP and (3) not to use it for any purpose other than intended herein.

No person has been authorized to give any advice, information, or to make representations or warranties other than those contained in this RFP. If given or made, such advice, information, representations, or warranties must not be relied upon as having been authorized by the Bank or by any adviser or other person acting on its behalf.

This RFP comprises confidential information, and any party in possession of the same must take all measures necessary to maintain the confidentiality of the contents of this document, failing which said party shall be liable for such breach of confidentiality.

The proposals returned by interested vendors are intended to assist The Central Bank of Yemen in the selection of a preferred vendor and shall therefore be mere offers for business capable of acceptance by The Central Bank of Yemen within a period **60-days** after the Closing Date (as defined herein), or such longer period agreed upon between The Central Bank of Yemen and any preferred Vendor. Hence, no contract shall be inferred hereby, nor any invitation to do business. The Central Bank of Yemen bears no obligations to any party as a result of issuing this RFP, receiving responses, or interacting with any Company regarding the same.

While The Central Bank of Yemen has taken care to provide information to assist vendors in responding to this RFP, The Central Bank of Yemen makes no claim or warranty as to the accuracy, completeness, or adequacy of the assumptions or information contained therein, and it remains subject to further amendment or change without any notice to vendors.

In the event that The Central Bank of Yemen is unable to select a suitably qualified Vendor from the responses it receives to this RFP, it serves the right to cancel the invitation for proposals extended with no cost implication or other obligation being implied or accruing against The Central Bank of Yemen

By submitting any proposals in reply to this RFP (or taking any steps in doing so), you hereby agree to abide by the terms and conditions of this RFP.

Accordingly, we hereby agree that we will keep all the information confidential and will not, without your prior written comment, disclose the information to any person other than employees of The Central Bank of Yemen who are required in the course of their duties to execute their work.

2 Introduction & Overview

2.1 Statement of Confidentiality

The Vendor must agree not to announce, discuss or disclose to any third party; the existence of this RFP or any information regarding The Central Bank of Yemen's business or requirements other than to a third-party Vendor selected to assist in the preparation of the response to this document (i.e., the Proposal). In addition, these conditions will apply to any third-party Vendor involved in the response.

2.2 Background

2.2.1 The Central Bank of Yemen

The Central Bank of Yemen (CBY) is the newly established and internationally recognized Central Bank for the Republic of Yemen, based in Aden. As a relatively new organization, CBY is in the process of acquiring a new IT infrastructure, recruiting additional staff, and enhancing their skills. As part of this process, CBY has issued this RFP.

2.2.2 Current Environment - Payment instruments

The National Payments System in Yemen is characterized by the dominance of cash as a payment instrument. Other than cash, the main payment instrument used throughout the country is checks, which are used for a variety of payment purposes. Most government payments are made by check and cash. At present, check formats (and account numbering) are not standardized between the commercial banks, although not all banks use MICR encoding on their checks. The degree of check automation varies between banks. It appears that the level of check usage has declined in the last few years.

- ATMs & Debit Cards: Most banks have their own network of ATMs, mainly used for dispensing cash. There is no interbank electronic switch for either ATMs or EFTPOS, no interoperability.
- Mobile Payments: This service is provided by four banks, but the usage is still very low compared to the size of Yemen's population.
- RTGS: Currently, the Central Bank of Yemen doesn't have an RTGS system nor any central system for interbank settlement. The existing settlement arrangements are either cash or check-based only.
- ACH: Currently, the Central Bank of Yemen doesn't have an ACH system. All services and processing typically provided by an ACH system are not available in Yemen.

2.2.3 Current Environment

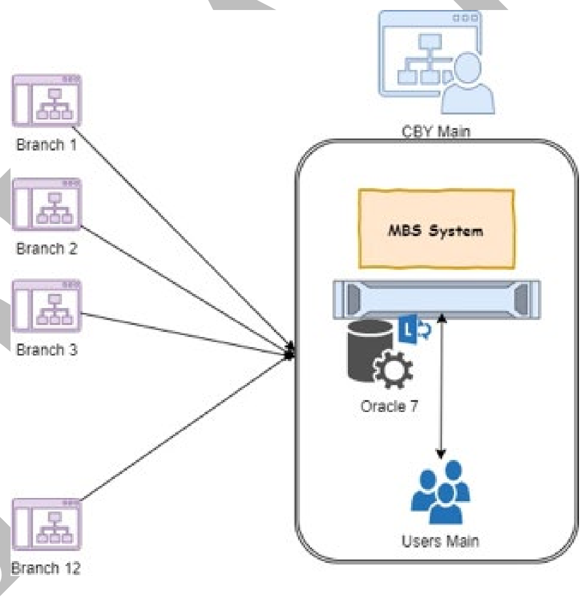
The CBY has 12 branches connected to the CBY main branch in Aden by a satellite network operated by a private company, Yah-Click. Although there is a network, there are no software systems used between branches and the headquarters, other than the Main Banking System (MBS). Each branch has its own copy of the MBS system, and at the end of each day, the branch system connects with the MBS system in the main site in Aden and updates its data. The satellite network is therefore used only for a few minutes at each of each working day.

End-users can connect to the MBS using a specially developed PS-Terminal. This is a software utility custom-developed by ProgressSoft, a company located in Amman, Jordan. It enables the end-user to connect to the server where MBS is installed. After connecting to the server using a username/password combination, the end-user can launch MBS and connect to MBS using another username/password combination. After the successful connection and successful login, the end-user can start doing their daily work using a text-mode user interface ("green screen").

The MBS systems and their databases are installed at the same type of server. The server's operating system is SCO UNIX Open Server version 5, which was released in 1995. The MBS data is stored in Oracle 7 database, which was released in early 1996. The MBS system was developed using the COBOL programming language.

The system is built using a single-tier architecture in which the application and its database are installed at the same hardware machine; the end users' client software needs connection to the same server to run the MBS application.

The following diagram shows a high-level system architecture.



Any solution proposed must easily fit into this existing environment.

2.3 Scope and Approach

2.3.1 Scope

This document defines the requirements for implementing an Automated Transfer System (ATS) as the major foundational element in the National Payments System for Yemen.

This system will be able to process through a single platform with two different components, both large value/time-critical payments, and retail payment instructions. This system will be known as the Automated Transfer System (ATS) and will include:

- Real-Time Gross Settlement System (RTGS): intended for large value and critical payment for the inter-bank and customers' transactions as well as meeting the needs of a modern payments system;
- Automated Clearing House (ACH): will provide netting and clearing facilities for the full range of high-volume low value (retail) electronic instruments, including direct debits, direct credits, electronic check records, and bulk transfers (e.g., for salaries) in Yemen.

Both elements will be tightly-integrated within a single system Automated Transfer System (the ATS) to ensure seamless clearing and settlement of all domestic interbank obligations on a same-day basis with finality and irrevocability of both payment and settlement. The ATS component will be interfaced with the in-house core banking systems operated by the system participants to provide fully automated Straight-Through Processing (STP). Within the Central Bank of Yemen, it will interface with the Central Bank's accounting and Core banking system and the future comprehensive Reserve management system (CRMS), FX system, money market system, and the Government of Yemen Ministry Of Finance Department treasury system.

2.3.2 Approach

This RFP is sent to a selected number of vendors. The Central Bank of Yemen will perform an intensive review of all proposals submitted. When the review process is complete, The Central Bank of Yemen will award the contract to the vendor whose technology, service, and price are most closely aligned with the bank's requirements listed in the RFP.

The Central Bank of Yemen will respond to any written request for clarification about this RFP. Copies of clarification will be distributed to all parties preparing a proposal.

2.4 The Selection Process

2.4.1 Selection Criteria

The team will conduct a preliminary evaluation of all responses using the following criteria:

- Company profile (services provided, market leadership, financial strength, sound reputation, and performance guarantees built into contracts);
- Proven track record of recognized service commitments within the industry and within the region;
- Conformity to and quality of RFP response;
- The flexibility provided in meeting the Bank's specific needs and in mapping such needs onto the service offerings;
- Vendor's staff experience & capabilities;

- Duration of the project;
- Value-added services provided by the vendor;
- The flexibility of contract terms and conditions; and,
- Price.

2.4.2 Presentations & Workshops

Vendors may be invited to give a presentation to the evaluation team sometime during the evaluation period and at the discretion of the Central Bank.

If required, the presentation and workshop will be held at a time and venue to be nominated by The Central Bank of Yemen and agreed with the respective vendors. The objective of the presentation will be to allow the vendors to present an overview of their solution and highlight the strengths and differentiating aspects of their offering. The presentations will also include time for discussions based on questions arising from the evaluation team's reading of the RFP responses.

2.4.3 Notification of Outcome of Proposal

A Letter of Acceptance, subject to negotiation of final contract and price, will advise the successful vendor in writing of the acceptance of their proposal. A Proposal shall not be deemed accepted until such Letter of Acceptance is delivered to the successful vendor.

The unsuccessful vendors shall be advised in writing that their proposals have not been accepted. Thereafter, we do not expect further discussion or correspondence with these vendors.

2.4.4 Timetable

The following timetable represents key dates for the RFP process stages. If variation occurs, vendors will be advised accordingly. Time frames will be as follows, and vendors must present an implementation schedule that complies with this, taking into account testing, etc.:

Activity / Milestone	Date to complete
Issue RFP	XXX
Proposal submission by vendors	XXX
Shortlist of one vendor	XXX
Notification of the outcome of the evaluation	XXX
Activity / Milestone	**Date to complete**
Pilot Launch	XXX
Full commercial launch	XXX

2.4.5 Proposal Validity

Vendors' proposals must be valid for **90 days** from the closing date of submission of proposals. The Central Bank of Yemen reserves the right to extend this period for a further **30 days** with the same terms and conditions, if necessary, and by informing the Vendor(s) in writing and in advance.

2.5 Proposal Due Date

The proposals by vendors to this RFP should be received by the contact point at The Central Bank of Yemen as indicated immediately below and before the "Proposal Submission" shown in Section 2.4.4 above. Responses received later than this date will not be considered.

2.6 Proposal Delivery

The proposal made regarding this RFP and all inquiries and correspondence regarding this document **should be placed in two sealed envelopes** (one containing the detailed proposals and one containing the commercial terms). Each envelope should clearly indicate what it contains. They should be addressed to:

Name	XXX
Address	The Central Bank of Yemen Aden Yemen
Telephone	XXX
Email	XXX

2.7 Communications between The Central Bank of Yemen and Vendors

Any inquiries or requests for clarification relating to this document should be directed by Email **only** to the following:

<The Central Bank of Yemen primary contact>

3 Instructions to Vendors

3.1 Responsibilities

3.1.1 Vendor Responsibilities

The Vendor shall allocate sufficient resources to ensure the objectives of this project are met in accordance with the highest professional standards.

3.1.2 Responsibilities

In order to complete the project in a timely and efficient manner, The Central Bank of Yemen will ensure that the Vendor has full access to all necessary The Central Bank of Yemen personnel, including senior managers, as required. The Vendor will also have full access to data and information as it may reasonably require. In addition, The Central Bank of Yemen will keep the Vendor informed of all material developments or proposals in relation to the business or operations of The Central Bank of Yemen, which may affect the project as a whole, and any of its component deliverables.

3.2 Proposal Guidelines

The Central Bank of Yemen requires one (1) hard copy of each proposal, one (1) separate copy of the financial proposal in a separate sealed envelope, and one (1) soft copy in Microsoft Word format. The hard copies should be loosely bound and clearly labeled as the Vendor's responses to this RFP. Please take all necessary precautions to ensure that the soft copy does not contain any computer viruses.

Any proposals from vendors in response to the RFP should be clearly marked as **"Private and Confidential – Proposal for The Central Bank of Yemen, ATS Services."** The financial details must be in a separate document clearly marked as: **"Private and Confidential – Financial Proposal for The Central Bank of Yemen, ATS Services."** The proposals are to be couriered or hand-delivered for the attention of the contact point named in Section 2.6 of this document.

3.3 Format of the Proposal

The Proposal should be in the following format:

- Covering Letter
- Executive Summary
- Background Information on the Vendor
- Overall Project Approach and Methodology
- Detailed Response
- Commercial Proposal (**in a separate sealed envelope**)
- Attachments

Each of these items is described in more detail below:

3.3.1 Covering Letter

A covering letter on the Vendor's letterhead and duly signed by an authorized representative of the Vendor. The letter must indicate that the proposal has been prepared and submitted in accordance with the terms and conditions in the RFP.

3.3.2 Executive Summary

The management summary should encompass an executive overview of the proposal, commenting on the major features of the proposal and highlighting key points for the attention of the Central Bank of Yemen evaluation team.

3.3.3 Statement of Conformance

The Vendor must clearly indicate their willingness to comply fully with the terms and conditions of this RFP. If the Vendor is not able or willing to fully comply, then the reason(s) for non-compliance must be clearly stated. **PLEASE NOTE THAT THE ABSENCE OF THIS STATEMENT MAY RESULT IN THE DISQUALIFICATION OF THE PROPOSAL**.

3.3.4 Vendor Information

Kindly provide the following information about your company. All information must be complete and accurate:

Company Background
Prospective vendors should furnish their latest annual report (as an appendix to the proposal), a representative sampling of their customer base, along with references that are aligned with the banking industry and our business needs:

- When and how were you established?
- Are you a privately or publicly held company?
- Are you an independent company or a member of a group or consortium? If you are a member of a group or part of a consortium, please supply full details of relationships between the parties and the roles and responsibilities of each.
- Please state major shareholders and their stakes and any planned major changes to the ownership.

Profitability / Financials
Please provide the following key financial figures and for the last five (5) years:

- Total Revenues (in **US Dollars**)
- Net Profits (in **US Dollars**)

Staffing
Explain the following:

- How many personnel does the company employ?
- How many are associated with the proposed product?
- How many technical people are associated with the development, implementation, and support for your proposed solution, and what is the average length of experience? Please specify for each area of the proposed solution.
- Identify where the staff are located (local, regional or other) to support The Central Bank of Yemen and their numbers, services provided, and skill levels.

Experience and Market Share
Indicate:

- The number and size of similar projects done in the past five (5) years.
- What is your experience in the GCC and the Middle East?
- What is your market share for your banking-related services in the GCC and the Middle East?

Reference Sites
Vendors are required to provide a list of customers in the GCC using the solutions proposed.

3.3.5 Proposal

The Proposal should address (but not be limited to) all the Key Requirements set out in this RFP. Vendors are required to describe the rationale for their proposed solution.

Where appropriate, vendors are encouraged to suggest the proposed approach and highlight the perceived benefits to The Central Bank of Yemen.

3.3.6 Approach & Methodology for the Project

Vendors should address and describe the following:

- Coordination
- Roles and responsibilities and required support from The Central Bank of Yemen
- Project Change Management plan
- Risk Assessment and Management
- Delivery Plan
- Implementation Strategy and Plan
- Support Strategy and Plan
- Handover Plan

3.3.7 Commercial Details

The vendor is asked to submit complete commercial information.

The Commercial Details must be **<u>in a separate sealed document</u>**.

One set of Pricing Tables must be provided for each alternative period option being proposed.

All prices should be in US Dollars and should be valid for a minimum of 90 days from the closing date for this RFP.

The Vendor should supply tables of rates, unit prices, and estimated workforce. Any other expenses that the Vendor expects to incur in providing the service to The Central Bank of Yemen (e.g., traveling, accommodation, etc.) should be included in the respective rates provided. The rates should be valid during the entire assignment period.

3.3.8 Detailed RFP Response

The requirements set out in the appendices to this RFP must be fully and accurately answered. In all cases, Vendors must show what input is needed from The Central Bank of Yemen. In addition, Vendors must clearly specify detailed deliverables.

3.3.9 Appendices

The vendor is asked to submit the following Attachments as an integral part of their response to this RFP:

- Outline Project Plan with major milestones & deliverables;
- An organization chart showing each team member and describing their role in the project(s);
- Terms & Conditions;
- Sample Contracts.

3.4 Documentation

The Central Bank of Yemen recognizes that the availability of comprehensive, well-organized, and easy-to-use documentation is critical to any project's short and long-range success. Therefore, documentation developed by the Vendor shall be supplied both in printed and electronic format to allow for easier modification in the future.

The Central Bank of Yemen anticipates that modifications and updates to the project documentation, both electronic and printed copies, will be required. Instructions shall be mutually agreed to manage changes and updates.

When major changes to a document are made, a complete revision of the document shall be issued and delivered in accordance with the agreed instructions for this documentation item.

4 RFP terms & Conditions

4.1 Right to Amend / Reissue

The Central Bank of Yemen may, at its discretion, reissue this Request for Proposal (RFP). At the same time, The Central Bank of Yemen reserves the right to amend or supplement the RFP, giving equal information, time, and cooperation to all invited vendors.

4.2 Right to Cancel

The Central Bank of Yemen's intention is to select the most appropriate solution. However, The Central Bank of Yemen reserves the right to not award a contract concerning required products and services and may reject any or all proposals received in response to this RFP. The Central Bank of Yemen has no obligation to explain to unsuccessful vendors the reasons for not proceeding with their proposals.

4.3 Cost of Proposals

The Central Bank of Yemen is not responsible for any costs incurred by vendors in preparing and submitting their Proposals to this RFP or any negotiations during the selection or preferred vendor appointment process.

4.4 Contingency Fees

By submitting a Proposal, each vendor certifies that no agreement has been made to pay any company or person any fee, commission, percentage, or brokerage fee contingent upon or resulting from the award of the contract.

4.5 Ownership of Proposals Submitted

All Proposals, associated documentation, and other supporting materials submitted in response to this RFP become the sole property of The Central Bank of Yemen and are not returnable.

4.6 Inclusion of Document into a Contract

The contract between the successful Vendor and The Central Bank of Yemen shall include all documents mutually entered into, specifically the contract instrument, the Request for Proposal, and the Request for Proposal response.

4.7 Vendor Assumptions

Any assumptions made by the vendor during this proposal's preparation must be included as a clearly marked statement indicating the vendors' assumption.

4.8 Division of project

The Central Bank of Yemen reserves the right to partition the work into sub-projects and offer it to vendors whom the company considers most suited to undertake the work. In such cases, the selected vendors must fully co-operate with other selected vendors to collectively fulfill the objectives and requirements for the project.

4.9 Subcontracting

Vendors are not permitted to sub-contract any part of the project without The Central Bank of Yemen's prior written agreement.

4.10 Pricing Currency

Prices quoted in vendor proposals must be in US Dollars and must be fixed for the validity period of the proposal.

4.11 Cost Liability

The Central Bank of Yemen shall not be liable for taxes, accommodation, equipment, transportation, traveling, and any other expenses incurred by the vendor's staff during the contract execution.

4.12 Return of Materials

Upon completion of the project, the vendor shall turn over all The Central Bank of Yemen-provided documents and all material, reports, product documentation, and work in progress documentation relating to this project.

4.13 Governing law

The laws and regulations of Yemen shall apply to awarded contracts.

.

5 Appendix A – Reference Sites

This section of the RFP asks for details of your reference sites, preferably in the Middle East or the GCC. It should be completed accurately and in full.

Seq.	Name of company	Project title	Project description	Contact name	Address, Phone number	Contract date	Implementation date
1							
2							
3							
4							
5							

6 Appendix B – Detailed Requirements

1
1.1
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1.12
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1.14

Business Requirements

Process interbank low value payments – DC

The proposed system must, as standard, have the ability to process low value Direct Credit payments quickly and securely.

Process interbank low value payments – DD

The proposed system must, as standard, have the ability to process low value Direct Debit payments quickly and securely.

Process interbank low value payments – IFT

The proposed system must, as standard, have the ability to process low value Instant Funds Transfer payments quickly and securely.

Process interbank high value payments – HVP

The proposed system must, as standard, have the ability to high low value payments quickly and securely.

Calculate net clearing position for same day multiple net settlements via RTGS

The proposed system must, as standard, have the ability to process same day multiple net settlement transactions quickly and securely.

User Interface

The solution proposed must support an easy to use interface in Arabic and English with integrated "help" screens.

Straight Through Processing (STP)

Provide an open standards API and/or web services interface for participants to establish online integration between participants' Core Banking Systems (CBS) and the ATS system. This must enable STP in which DC, DD or IFT payments input by customers of a participant via internet/mobile/bank branches channels can be sent directly to the ATS system. The API/web services must include online integration for STP of ATS payments to participants' CBS for payment authorization and posting.

Data Security

All payments and customer data must be stored in secured and encrypted databases in participant systems and in the central ATS system. All payment messages sent between participants and the ATS system shall be encrypted and digitally signed using PKI security keys.

Users supported

The system shall support the following types of users (with appropriate enforcement of the segregation of duties) for accessing the system and perform transactions:

Users of direct participants at head offices or branches with the following roles:

•Outbound Payment input/edit/repair

•Outbound Payment verify and/or authorization

•Inbound Payment Manager(with functions to review, return/refuse, dispute)

•Participant system administrator

Users of CBY as ATS System Operator with the following roles:

•ATS system officers (monitoring, clearing session operator, net settlement)

•ATS system administrator

•ATS Security Manager

•ATS Participant Support/Helpdesk

24x7 payment services

The system must be capable of running 24*7*365 with no need for regular or frequent down-time.

Support of e-Money clearing & settlement

In future Mobile Financial Services (MFS) are expected to grow. In future, CBY will require the clearing and settlement of these payments to be effected through the ATS and National payment systems of CBY. In the near future, when CBY expects to establish the regulations on Payment Service Providers (PSPs) operating e-Money/e-Payment schemes, the ATS system must provide system interfaces for the e-Money/e-Payment system of each PSP(s) which has obtained license or approval from CBY. The ATS system and its interface for e-Money/e-Payment systems must therefore support the following functions:

a). The interface shall allow the e-Money/e-Payment system to send interbank DC, DD or IFT payments based on customers' e-Money or e-Payment transactions, such as, but not limited to, the following:

- Bill payments
- P2P payment
- Purchase at merchant
- e-Commerce
- Top-up/loading e-Money/e-Wallet from customer's bank account
- Cash out from e-Money/e-Wallet

b). The customers of the e-Money systems are expected to maintain user/subscriber accounts with identification by mobile phone or email address. etc., for iniquitousness. The issuer of the e-Money will maintain trust accounts in one or more banks for the float balances of these user/subscriber accounts (for meeting CBY regulatory and interoperability requirements). These trust accounts need to be used for the funds transfer in e-Money/e-Payment transaction between merchants and customers. Accordingly, the e-Money/e-Payment system will send interbank payments to ATS system in case the merchants or customers use accounts at different banks than the trust accounts.

c). The ATS system must perform routing of the payments from e-Money/e-Payment system and support necessary processing which includes:

- Sending authorization request to the payer bank of the e-Money/e-Payment transaction to solicit a response for DC/IFT payment from the bank for authorized payments.
- Perform clearing and routing of authorized payments in accordance with the operating rules for DC or IFT payments.
- Arrange settlement via RTGS system.

The Bidder must describe if the proposed ATS system has an available system interface for connectivity with e-Money/e-Payment systems to process their initiated payments. The Bidder must then describe how the ATS system will support the functions described above for providing connectivity and clearing/settlement service to e-Money/e-Payment systems of PSPs in the near future. The bidder must include descriptions for the following minimum types of e-Money transactions:

- Bill payments by customers using e-Money in Mobile wallets, smart cards, etc.
- P2P transfer of e-Money between mobile wallets, stored value cards.
- Top-up e-Money instrument (e.g. e-Wallet wallet, cards) from a customer's bank account at a different bank than the PSP bank holding the e-Money trust account.
- Cash withdrawal from e-Money instrument (e.g. e-Wallet, cards) whereas the bank branch/ATM for cash withdrawal is different from the bank of the e-Money PSP.

Support of Direct & Indirect Participants

The system must support major corporate/ non-bank institutions as Indirect Participants which does not have settlement account in CBY but is allowed to connect with ATS system for sending and receiving ATS payment messages. The system should support the association of such indirect participants with a sponsoring direct participant who will perform settlement on behalf of the indirect participants.

Support of Corporate Gateway / Service Bureau

CBY may implement a "Corporate Gateway" in the near future after the ATS system is implemented. The Corporate Gateway will act as a Service Bureau for enabling corporates in Yemen to send their DC and DD payment batches to the ATS system via the Gateway. The corporate will include major utilities companies, telcos, government organizations, SMEs and various billers. They will become Indirect Participants in the ATS system. each Indirect Participant will be sponsored by a Direct Participant which will perform settlement of the DD/DC payments on behalf of the Indirect Participants.

Support of Electronic Bill Presentment & Payment services

The Bidder should describe if the ATS system also supports Electronic Bill Presentment and Payment (EBPP) Services which may be developed in future on a Corporate Gateway or on a country-level EBPP system.
The functions in ATS system to support EBPP service should include the following:
a) Customers of direct participants initiate enquiry of their bills via the delivery channels of the direct participants. ATS system will receive bill enquiry messages from the direct participants, and route the enquiry messages to the Corporate Gateway/EBPP system.
b) Corporate Gateway/EBPP system sends billing information responses to ATS system. ATS system routes the response messages to the respective direct participants for bill presentment to the customers.
c) When the customers make bill payments which require to be cleared through the ATS system, the ATS system should receive such bill payments via DC or IFT payment submissions from the direct participants.
d) After the clearing of DC/IFT for bill payments is completed, the ATS system should send the payment results to the EBPP system, in addition to direct participants. The EBPP system will then disseminate the bill payment results to the respective billers for their bills reconciliation.

Vendor Responses

2 Functional/Technical Requirements

2.1 Functional Architecture

2.2 ATS Participant System - Payment Input

2.2.1 Web-based Payment Entry

The ATS Participant system must provide web-based functions for an originating participant to prepare payment items. The web page functions must provide separate payment forms for input of DC, DD and IFT payments.

2.2.2 DC payment messages

The ATS system must support all common types of direct credit payment transactions. These transaction types include, but are not limited to, the following:
•Payroll payments
•Dividend payments
•Social Security Pension payments
•Social Benefits Children payments
•Standing Order credit instructions,
•IPO (Initial Public Offer) subscription and return (of over-subscribed) payment.
The system must also allow CBY to add new transaction types for ATS system in future without the need to request software changes.

2.2.3 DD payment messages

The ATS system must support all common types of direct debit payment transactions. These transaction types include, but are not limited to, the following:
•Utility bill direct debit payments
•Insurance Premium payments
•Re-Payment of loan instalments
•Re-Payment of mortgage loans
•Re-Payment of credit cards bills
The new ATS system should be capable of easily supporting other types of transactions in the future, if needed.

2.2.4 IFT payment messages

IFT payments will be sent on single payment basis by an originating participant to the ATS system. The ATS system shall process each IFT payment in real time, by switching it to the receiving participant. The receiving participant is required to perform Straight Through Processing (STP) of the credit transfer to the beneficiary immediately and to send back a response message to the ATS system within a guaranteed time period e.g. 30 seconds. The ATS system then sends the response to the originating participant within a similar time limit.

2.2.5 Payment Input Processing

The input function must perform format checking and business rules/ semantic checking on the payment message input by the user. The format checking and semantic checking should apply all validation rules in the ISO20022 message standards.
The input function must provide an efficient way to support input of a DC or DD payment batch with ‘bulk’ i.e. large number of individual payments.
The input function must allow users to save the content of a partially entered or completed entered payment batch or single payment. The function must generate a unique transaction reference number when the payment batch/message is saved into the system.
When a DC or DD payment batch or IFT payment message input and validation have been successfully completed, the system must forward the payment to a ‘payment verification’ queue or equivalent within the ATS Participant’s system.

2.2.6 IBAN based processing

Yemen has developed its IBAN number which has the following structure:
“MN”(country code) + 2 digits ‘check-digits’ + 4 digits ‘bank number’ + 12 digits ‘account number’
For example: IBAN number “MN001234123456789123”
The check digit algorithm is “A Mod 97”.
The system must perform the following validation of the IBAN numbers in a payment message:
•Format edit check and validate the check-digits of any Debtor account number and Creditor account number entered for all ATS payment types (DC, DD and IFT).
•At the various web-based payment entry pages for users, the system should be based upon the ‘bank number’ within the IBAN numbers to derive the BIC of the Debtor bank or the Creditor bank identification code and auto-fill at the payment entry pages. If the users enter/select a different BIC from the derived value in the IBAN number, the system shall flag an error on the payment and alert the payment initiation users to correct.

2.2.7 Payment Templates Creation

The input function should also allow users to create a list of payment templates for different customers of the originating participant. The function should then allow users to retrieve specific payment templates when a new payment is required to be input, such as to input a recurrent payment for a customer at periodic time. The input function should populate data existed in the template to the input form for the user to input only those new data required.

2.2.8 Payment Edit

A Payment Edit function must be available for an input user to retrieve a saved payment batch/single payment which has not yet been completed for input or validation.
The list of payments for editing must also include any payment which has been rejected by other users during the subsequent steps after payment input, or rejected by the Central ATS system after the payment is sent out by the originating participant in the following steps.
The Payment Edit function should provide the same input and validation functions as in the Payment Input function, for users to continue input or amend the payment batch/single payment until it is completed and then forwarded to verifier users.

2.2.9 Payment Verify

The Payment Verify Function must require a different user than the input users to review and verify correctness of a completed payment batch/payment message.
The function must also support key data verification, i.e. system must allow a participant to define specific fields as key data e.g. total payment amount of batch; receiving bank BIC, etc. The system will then hide those key data fields at the Payment Verify page; the verifier user is required to rekey the correct value for the key fields.
Within the verification function, the verifier user should have the following options:
1. To return a payment message/batch to the input user for making correction/amendment. The verifier should be able to input a narrative field on the web page to inform the input user about reason for the correction required.
2. To confirm the verification of payment message fields is successful. The system should mark a status of ‘verified’ and route the payment batch/payment to a ‘Payment Authorization’ queue (or equivalent) in the ATS Participant system, for an authorized user to authorize submission to the Central ATS system.

2.2.10 Payment Authorization

The Payment Authorization function must require a different user (than those input users) to retrieve a ‘verified’ payment batch/payment message/batch for submission authorization. The function must allow the authorizer user to review the payment(s) details and perform one of the following steps:
1. To return a payment batch or single payment to the input user for making correction/amendment. The authorizer must be able to input a narrative field on the web page to inform the input user about reason for the correction required.
2. To authorize a payment batch or single payment for submission to the central ATS system. The ATS Participant system must immediately create a digital signature for the payment batch or single payment. For a payment batch, i.e. ATS DC and DD payment batch, the participant system must insert the batch into an open file (i.e. file not yet sent to the Central ATS system) to be ready for file submission. For an IFT single payment, the participant system must immediately transmit it to the Central ATS System.

2.2.11 Payment file creation and submission

File Submission function must allow the payment authorizer to close a file and submit the file to the Central ATS system.
The File submission function should also allow the payment authorizer to move out specific batches to a pending folder before a file is closed. Likewise, the function payment authorizer may move a previous payment batch from the pending folder into an open file before closing and submission.
The function should create header and trailer record for the file with authentication information, including the originating participant identification; total number of batches; etc. The system should immediately send the file to the Central ATS system in an encrypted format and using secured FTP protocol.

2.2.12 Payment File Import Option

The ATS participant system must provide a web-based function for users of originating participants to import a payment file which has been prepared in accordance with the ATS file format and contained valid DC payment batches and/or DD payment batches.
The File Import function must perform at a minimum the following :
• Format validation of each payment message within each payment batch within the file. The validation should adopt the format checking rules and semantic (cross fields) rules as defined by the ISO20022 messages standard.
• Allow authorized users to review the summary and detailed information of the list of payment batches imported to the ATS participant system.
• Allow authorized users to edit the content of individual payment batches for correcting errors detected by the above validation check.

1.1.13 Flexible Workflow configuration

The Payment Input functions should support flexible workflow configurations. each Participant should be able to customize their workflows for the user functions of Payment Input/Edit, Verify and Authorize, with the participant's choices of the following schemes:
a)4-eyes checking scheme (i.e. Input-Authorize), or
b)6-eyes (i.e. Input-Verify-Authorize) checking scheme, or
c)Selection of 4-eyes scheme and 6-eyes scheme by an amount threshold e.g. to adopt 6-eyes scheme only for payment amount above a threshold.
d)Direct submission of IFT payment below an amount threshold after Payment Input and confirmation by teller users at bank branches of the participant.

2.3 ATS Participant System – Application Program Interfaces (APIs) & CBS Interfaces

2.3.1 APIs for outbound STP (DC,DD & IFT Payments)

The ATS Participant System must provide open standards APIs (Application Program Interfaces) which can be used by the originating participant to perform Straight Through Processing (STP) for ATS payment batches and payment messages captured through the delivery channels of the participant's core banking system (CBS).
The STP processing must cover processing of all types of outbound ATS payments i.e. DC, DD and IFT payment.
The customers of the originating participant will prepare payment information for the above payment types and submit through the CBS delivery channels (Internet banking, Mobile banking and branches services) of the originating participant. The delivery channels service of the participant will capture the payment information and format them into the required ISO20022 format for each payment type.
The APIs must have at a minimum, the following functions:
•Perform format validation of each payment message based on the format checking rules and semantic (cross fields) rules defined by the ISO20022 messages standard. If a payment message fails the validation, the API should report an error and move the message to a 'Repair' queue or equivalent in the ATS Participant system.
•Create a digital signature for each DC batch or DD batch or IFT payment which has passed format validation successfully. The digital signature shall be created using the PKI key pair of the participant, i.e. each accepted DC/DD batch or IFT payment is digitally signed by the participant.
•For DC batch and DD batch, the API should move them into a payment file and submit the file to the Central ATS System immediately.
•For IFT payment message, API should transmit it to the Central ATS System immediately.

2.3.2 Message conversion for customer initiated ISO20022 payments.

The STP function should provide an option of performing message format conversion for a payment originator who prepares payment messages in conformance with the ISO20022 format.
If Corporate Customers adopt the ISO20022 message format for payment initiation i.e. corporate customers prepare payment messages or batches, using the ISO20022 Pain message format, the STP function should be able to automatically convert the message from Pain format to the Pacs format if required by ATS system, i.e.
•Convert from Pain.001 to Pacs.008 for DC/IFT payment batches/messages
•Convert from Pain.008 to Pacs.003 for DD payment batches

2.3.3 APIs for Inbound DC & DD payments

The ATS participant system must provide APIs for receiving participants to perform STP of inbound ATS DC & DD payments through the participants' Core Banking System (CBS). The STP in participant's CBS includes:
•Checking the IBAN number of the Creditor customer (for DC) or the Debtor customer (for DD) of each payment is a valid customer account with active account status.
•Check that the Creditor name (for DC) matches the account name in CBS.
•For DD payment, additional check that the debtor customer account has sufficient balance for the payment amount.
The list of APIs for processing inbound payments must include at a minimum the following:
1."Download Inbound Payment File" API – for call by participant CBS to download all DC and DD payment batches for processing.
2."Return DC payment" API – for call by participant CBS to return a DC or an IFT payment which cannot be processed due to a reason amongst a list of approved return reason codes. The API should prepare a Return message and send back to the central ATS system.
3."Refuse DD payment" API – for call by participant CBS to refuse a DD payment which cannot be processed due to a valid reason amongst a list of approved refusal reason codes. The API must prepare a Refusal message and send back to the central ATS system.
4."Update Payment Status" API – for call by participant CBS to update the status of a DC/DD/IFT payment in accordance with the processing result in the CBS e.g. 'debited', 'credited'.
For those payments which are 'returned' or 'refused', the ATS participant system must highlight on the inbound payment monitor payment/dashboard, with alerting color and the reason code displayed.

2.3.4 APIs for STP Inbound IFT payment

The ATS participant system must provide APIs for receiving participant to perform STP of inbound IFT. The STP in participant's CBS includes checking the account number (IBAN) and account name matching.
The ATS participant system must wait for a response message from participant CBS for each IFT payment (i.e. whether 'accepted' or 'rejected') and forward the response message to the central ATS system.
The list of APIs for processing inbound IFT payments must include at a minimum the following:
1."Receive IFT payment" API – for call by participant CBS to receive a real time IFT payment from the ATS IFT Switch.
2."Send Response for IFT payment" API – for call by participant CBS to send either an 'Accept' or 'Reject' response in accordance with the account checking performed by the CBS.
3."Update Payment Status" API – for call by participant CBS to update the status of the IFT payment in accordance with the processing result in the CBS e.g. 'debited', 'credited'.
If the response message is a 'Reject', the participant must highlight the payment message (with alerting color) on the inbound payment monitor payment/dashboard, with the reason code displayed to alert user of the receiving participant.

2.3.5 System interface with Participant CBS

The ATS participant system must provide a standard (common) system interface for each participant to connect the core banking system (CBS) via the CBY VPN and using the APIs to achieve STP. The system interface must adopt open standards which include the following:
a). IP address-based connection.
b). Message-based communication should be performed using Web services protocol or a message queue (MQ) protocol.
c). Files sending and receiving must be performed using Secure FTP protocol.
d). Login and logout control with authentication required between ATS system and participant system.
e). Acknowledgement message (positive and negative) and timeout event functions must be implemented.
f). Sequencing check on message and file communication to detect and alert operators to any gap in transmission.
g). Encryption of data and hash number generation for data protection and integrity control.
h). "Keep Alive" messages must be implemented for each system to ensure the connecting counterpart stays online. If the ATS does not receive response for its "keep alive" message up to a user-controlled time limit parameter e.g. 5 minutes, the ATS system must send an alarm message to a console for informing CBY staff. Similar detection is expected to be performed by the participant CBS.

2.3.6 Separate interfaces for IFT and DC/DD

The system must provide separate system interfaces for IFT payments and DC/DD payments respectively i.e. the system provides two system interfaces to each participant for using STP API. This is required in order to ensure IFT payments to be processed in immediate mode without impact by high volume DC/DD payment batches.
Both system interfaces of each participant (i.e. interface for IFT payments and interface for DC/DD payments) shall be established over the same VPN connection of a participant but distinguished by different addresses or different ports assigned to be interfacing applications.

2.3.7 System Interface with CBY CBS

CBY shall have a role of being one of the participants in the ATS system. The Core Banking system of CBY shall have modules of payroll, purchase, etc. which need to send DC payments or IFT payments to other participants.
The ATS system must implement a system interface with the CBY CBS to enable various CBY departments to send and receive ATS payments using the CBY CBS and with STP.
The system interface must be based on the open standard interface provided to participants CBS. The system shall provide a list of APIs for outbound payments and inbound payments STP, to be adopted by the CBY CBS.

2.4 ATS Participant System – Payment Management

2.4.1 Outbound payment repair & resend

The ATS Participant system must provide functions for an originating participant to review any outbound DC, DD or IFT payments which have been rejected by the central ATS system. The functions must allow the participant users to repair a rejected payment by making correction and amendment on the payment message fields.
When the participant's repair user has completed correction, the participant must be able to resend the payment message through the Payment Verify and Payment Authorization steps above.
If an IFT payment is repaired, the system must immediately transmit it to the central ATS system for routing to the receiving participant again.
If a DC or DD payment is repaired, the participant system must allow the user to resend it via one of the following options:
a). To insert the repaired payment into another outbound batch for the same receiving participant, or
b). To create a single payment batch (DC or DD) for sending to the central ATS system.

2.4.2 Payment Search & Enquiry

The Payment management web page must allow authorized participant users to browse, list and search for one or more payment batches or payment messages by various criteria. The search criteria must support exact match of specific value, or selection of a range using ‘From’ value to ‘To value’ on at least the following search parameters:
•Creation date of a payment batch or payment message for input to the ATS Participant system
•Value date of payments
•Payment Status (including various status’, such as ‘Pending completion’, ‘Created’, ‘Verified’, ‘Submitted’, ‘System Accepted’, ‘System rejected’, etc.)
•Payment Types i.e. DC, DD or IFT
•Unique transaction reference numbers of payment messages
•Creditor account (IBAN) number
•Debtor account (IBAN) number
•Originating participant identification code (BIC)
•Receiving participant identification code (BIC)
•Payment amount
•Others message fields within the DC, DD and IFT payments on their own or in combination, etc.

2.4.3 Outbound DC/DD Payment Cancellation

The ATS Participant system must allow an authorized participant user to cancel a payment which has not yet been sent to the receiving participant. This will be performed when the payment had been sent to central ATS system by mistake, or the payment cancellation is required to reduce the net debit position of the participant, etc.
The system must check if the outbound payment (DC or DD) selected by the user is allowed for cancellation, based on a pre-defined list of status codes for payment messages. The pre-defined list should be business rule parameters configured by CBY system administrator for the ATS system.
The central ATS system must change the status of a cancelled payment to a ‘cancelled’ status. For cancelled DC payment or DD payment, the system must adjust the batch information which includes the number of payments and total amount in the payment batch which contains the cancelled one(s).
The system should have an option for a participant to copy a ‘cancelled’ payment for reusing the information to re-input to the system if necessary.

2.4.4 Download or print inbound payments

The inbound payment listing page must provide at least the following options for users to download or print individual DC or DD payments:
•“Download Inbound Payment File” option which must download an inbound payment file sent by the central ATS system to a specified folder location for processing by the receiving participant.
•“Download Inbound Payment Batch” option which must download one or more inbound payment batches selected by the user, to a specified folder location for processing by the receiving participant.
•“Download Inbound Payment Messages” option which must download a specific, or a selected range, of all inbound payment messages with ‘Received’ status to a specified folder location for processing by the receiving participant.
•“Print Inbound Payment Batch” option which must print the payment information for a selected DC or DD payment batch.

2.4.5 Inbound DC payment Return

The Inbound Payment Management Web pages must include a “Payment Return” function for Receiving Participant users to ‘select and click’ an inbound DC payment which needs to be returned to the Originating Participant. The user must be required to input /select a valid return reason for returning the payment.
The return reasons for selection shall support at minimum the following list:
•Account blocked
•Account Closed
•Account dormant
•Account number not exist
•Beneficiary account name not matched
•Beneficiary reported deceased
•Date Missing/invalid date
•Duplicate reference/duplicate payment
•Other: <receiving bank description>
The system must format the return item using the respective Return message format (ISO20022 standard Pacs.004), and then immediately send to the Originating participant of the DC payment.
Note: The system must allow an authorized system administrator to add new return reason codes using a table maintenance function in future after the system is operating in live environment. This must not require any software change to implement additional or changes to return reason codes in the system.

2.4.6 Inbound DD payment Refusal

The Inbound Payment Management Web pages must include a “Payment Refuse” function for Receiving Participant users to ‘select and click’ an inbound DD payment which needs to be refused to the Originating Participant. The user must be required to input /select a valid refusal reason for the payment.
The refusal reasons for selection shall include at minimum the following list:
•Account blocked
•Account closed
•Account dormant
•Account insufficient funds
•Account number not exist
•Date missing/invalid date
•DD already paid /duplicate reference
•Mandate record already expired
•Mandate record not active/suspended
•No mandate by Payer
•Other: <receiving bank description>
•Payer account name not matched
The system must format the refusal item using the ATS refusal message format (based on ISO20022 standard Pacs.004), and then immediately send it to the originating participant of the DD payment.
Note: The system must allow an authorized system administrator to add new return reason codes using a table maintenance function in future after the system is operating in a live environment.
No software change should be needed to implement any additions or changes to the reasons list.

2.4.7 Representment of Returned payment

The system must allow participants to re-present a returned DC or IFT payment to the receiving participant via the central ATS system.
The DC re-presentment function shall support at minimum the following:
•Allow users to make correction/amendment of the DC/IFT payment if necessary.
•Resend the payment as an IFT payment (for both DC original payment or IFT original payment), with a new system generated transaction reference whilst retaining the end-to-end reference or original customer reference in the returned payment.

2.4.8 Representment of Refused payment

The system must allow participants to re-present a refused DD payment to the receiving participant via the central ATS system.
The DD re-presentment function must support at minimum the following:
•Allow authorized users to make corrections/amendments to the DD payment if necessary.
•Resend the DD payment in a new DD batch, which may be either single payment batch or included with other DD payments. The original end-to-end reference or original customer reference in the original refused payment must be retained.
•The system shall have an option for a participant to select auto Representment in the next clearing session for refused DD payments with specific refusal reason e.g. account insufficient funds.
•The system shall have an option for a CBY system administrator to set a limit of the maximum number of times allowed for re-presentment of DD payment.

2.4.9 Payment Refund

The Payment Management Web pages must include a “Payment Refund” function for participant users to ‘select and click’ a settled payment for refunding to the payer/debtor customer (via the debtor bank). The settled payment can be either an inbound DC/IFT payment which has been paid, or an outbound DD payment which has been collected.
The refund function must support the following as a minimum:
•Generate an IFT payment type with the debtor, debtor bank, creditor, creditor bank and amount information filled automatically by the creditor/creditor bank, debtor/debtor bank and amount in the original payment selected for refund.
•Requests user to input a narration for explaining the reason of refund.
•Format the refund payment message using the ISO20022 standard message (Pacs.007) and send to the central ATS system for immediate processing.
Upon receiving the Refund message, the central ATS system must debit the originating participant of the Refund message and credit the receiving participant in the Net Clearing Positions for the participants. The central ATS system must then route the Refund message to the receiving participant for notification.

2.5 ATS Participant System – Position Monitoring

2.5.1 Real Time Positions Monitoring

The system must provide online screen functions for each participant to monitor and enquire in real time the total debit amount, total credit amount and net clearing position for all the intraday DC, DD and IFT outbound and inbound payments of the participant.
The total debit and total credit amounts must include real-time adjustments of any payments rejected, cancelled, returned, refused or refunded in the system

2.5.2 Daily Reports

The ATS participant system must provide online report request, report download and report reconciliation functions for each participant to use in daily operations. The types of reports available to each participant must include at minimum the following:
•Clearing reports for each clearing session
•Reconciliation reports for individual clearing session and all sessions in a business day
•Daily/monthly billing report for the participant
•Ad-hoc query report for listing specific payments by specific selection parameters.

2.6 ATS Participant System – Administration

2.6.1 Participant Own administration

Whilst CBY shall perform system administration at the system level, each participant must be allowed to perform administration of their own users records and own parameters at the participant level.
The ATS Participant system must provide an administration menu to include, at a minimum, the following categories of administration functions:
•Participant’s user records creation and maintenance
•Participant’s parameters maintenance
•Participant’s PKI certificates and keys management
•Risk management parameters such as debit cap limit adjustment request
The administration functions in the menu must only be provided to the admin users of a participant whose user profiles are created and authorized by the system administrator at CBY.

2.6.2 Participant User administration

The system must provide at minimum the following user administration functions to be performed by an admin user of a participant:
•Create user records with user Ids, initial passwords, user groups, roles, authorized function list and access right security for ATS users of the participant at their own head office or branches.
•The system must provide role-based security settings such that a default set of authorized functions and access rights is assigned to each created user based on the role of the user. The user roles for participant must include the following types as a minimum:
oPayment input/repair operator
oPayment verifier/checker
oPayment authorizer
oParticipant admin user
oPayment officer/controller (with a role to perform position monitoring, payment search and reconciliation).
•The access right settings for each user must include the allowable payment types, transaction types, allowable login times, permissible user groups/department/branches, etc.
•Modify or delete user records as when required.
•Disable or enable a participant user.
•Password reset for a participant user who has lost password.

2.6.3 Approval of maintenance changes

The system should provide an option for participants to adopt authorization step for user records maintenance and parameter maintenance changes.
The authorization of such maintenance changes must be performed by a different supervisor user than the maintenance admin user.
The maintenance authorization function shall allow the supervisor to view the changes (showing before image and after image of records), and to either approve or reject the change for applying to the participant system.

2.6.4 Participant Parameter Maintenance

The system must provide bank level/participant level parameter maintenance functions for the participant admin user to set up or amend the business configuration of the participant. The list of participant level parameters should include, as a minimum, the following:
•List of bank branches using the ATS system
•Options for participant's payment entry workflow such as choice between 4-eyes check or 6-eyes check for authorization
•Option to set transaction limits for requiring key verification of payments entered.
•System interface parameters e.g. FTP folder locations.

2.6.5 Participant PKI certificate management

The participant PKI certificate management functions should allow each participant to manage the bank level digital certificate and the public and private keys which are used for digital signing of payment batch/payment messages of the participant. The following minimum functions must be included:
•Public/private Keys generation
•Sending Certification request of public/private keys to a PKI Certificate Authority (CA) as nominated by CBY.
•Sending request for Certificate revocation or certificate renewal to a PKI CA.

2.6.6 Debit Cap Limit Monitoring

Each participant will have a debit cap limit on the cumulative net debit position of the participant's payments in a business day. each participant must arrange a prefunding reserve amount in the RTGS system so that the ATS system will synchronize the debit cap limit according to the prefunding amount via interface with RTGS (as described in section 5.2.12.)

The system must provide at a minimum the following functions for the admin user of each participant to review the debit cap limit of the participant:

•Enquiry of the current available debit cap limit, against the total net debit and total credit positions of the participant in real time.

•Listing of the current day history information of the debit cap limit, including the start-of-day debit cap limit allocation; utilizations for each clearing session; any intraday debit cap adjustments; the current available debit cap limit and any 'on-hold' amount of payments which exceed available debit cap limit.

•Decrease of the debit cap limit, if required by the participant. If the decrease will cause the reduced debit cap limit to become less than the current debit position of the participant, the system must reject the decrease request. When the decrease request is accepted, the system must send a notification message to RTGS as indicated in requirement no.8 of section 5.2.12 (Note that the debit cap limit can only be increased by adjustment from the interface with RTGS system after the participant has increased the pre-funding amount in RTGS system).

2.6.7 Administration message to CBY

The ATS Participant System must provide a function for participants to communicate with the ATS system operator, i.e. CBY by sending administrative messages.

The type of administrative messages must include the following:

•Request for an extension of the Reply period of a clearing session. This may be used in the case that a participant encounters an unexpected system problem for receiving inbound payments from ATS, which makes it impossible to complete checking all inbound payments by the scheduled finish time of the Reply period. CBY shall then review the request and if accepted, the CBY operator will adjust the finish time of the current clearing session using the Business Day Schedule management function.

•Free Text message. The participant can send free text messages to CBY for making enquiries, or to respond to system broadcast or specific message from CBY.

2.7 Central System - File Processor

2.7.1 DC & DD Payment File Validation

When the central ATS system receives a payment file from originating participants, the system must perform the following levels of validation on the payment file at a minimum:
•1st level – validates the file header and trailer information (including identification of originating participant, total no. of batches, checksum, etc.).
** If validation fails, the system shall immediate reject the entire file to the originating participant (with appropriate notification and rejection reason). The Originating participant must repair the file header/trailer in order to re-submit the file to ATS.
•2nd level – validation of each DC or DD payment batch for correctness and integrity via the following:
a)Perform authentication check on the digital signature associated with the batch, to verify if the batch has been authorized by the originating participant and the batch message content integrity is valid.
b)The following information in the Group header i.e. batch header must be correct:
i).Batch Id must be unique (not duplicated with a previous batch)
ii).No. of payments within the batch
iii).Total interbank settlement amount must equal to the sum of amounts of all payments within the batch.
iv).Originating participant BIC must be correct
v).Receiving participant BIC (must be a valid Direct Participant)
If the DC or DD batch header information fails any of the above validation, the system shall reject the entire batch and send a rejection message with reference of the failed batch to the originating participant. The system shall then proceed to process the next batch within the payment file.
•3rd level – validation of each payment message within each DC batch or DD batch via including the following:
a)Message fields syntax and semantic validation in accordance with the ISO20022 XML message rules for DC payment (Pacs.008) or DD payment (Pacs.003).
b)Check if the payment is a duplicated submission of a previous payment today or within a given number of previous days ("history days"), by using a combination of the originating participant ID and the various payment reference information as a search key for identifying the uniqueness of the current payment.
c)For each DD payment batch, matching of each DD payment against the ATS eMandate database must include the following steps as a minimum:
i)A mandate record can be found using the unique Mandate Reference Number (MRN) provided by the Creditor in the DD payment.
ii)The respective mandate record must be at 'Active' status;
iii)The value date of DD payment must be within the mandate validity period.
iv)The Debtor Agent and debtor account number in DD payment must match the same data in the mandate record.
v)The creditor bank and creditor account number in DD payment must match the same data in the mandate record.
vi)The DD payment amount must not exceed the ceiling amount of the mandate.
•If an individual DC or DD payment fails any of above level 3 validations, the system must perform the following:
oRemove the failed payment from the DC or DD batch. Accordingly the no. of payments and total amount in the batch header (Group header) must be adjusted.
oSend a rejection message for the failed payment (ISO20022 message Pacs.002) to the Originating participant, with a rejection reason included in the

2.7.2 IBAN number and BIC validation

The ATS system must use the BIC fields of the receiving participant as defined in the ISO20022 message for determining the routing address of each DC or DD payment batch.
For each DC payment batch, the BIC field for the receiving participant must match with the bank number embedded in the IBAN code for the creditor account field of each payment. Similarly for DD payment batch, the BIC field of the receiving participant must match with the bank number embedded in the IBAN code for the debtor account field of each payment.
The ATS system file processor shall perform the above validation check between BIC code and IBAN numbers. If there is a mismatch for any payment, the ATS system must automatically reject the payment and return it to the originating participant.

2.7.3 Acceptance of DC & DD batches

After a payment batch has passed the validation check without rejection of the entire batch, the system must mark an 'Accepted' status to each non-rejected payment within the batch.
The central ATS system must send a notification message about the list of payments accepted for each batch, to the ATS Participant system of the originating participant. This must be sufficiently detailed to allow the originating participant to review the status of all payments within all batches which have been processed by the central ATS system using an on online web page.

2.7.4 DC Message Flows

The proposal must include a diagram shat clearly shows each of the steps taken to process DCs.

2.7.5 DD Message Flows

The proposal must include a diagram shat clearly shows each of the steps taken to process DDs.

2.7.6 Future Dated Payments

The system must support processing of DC and DD payment batches with a future value date through the following at minimum:
• The system must define a parameter of "Number of future value dates" for which the system shall accept processing of DC and DD payments. For example, the parameter can be set as '3 days'.
• If the value date of a future DC/DD payment exceeds this parameter, the ATS system shall reject the payment.
• For accepted future valued payments, the ATS system must perform formats and eMandate validation in the same way as today payments, and accept/reject payments according to the validation results.
• For future valued payments which have been validated successfully, the system must move them to a segregated payment list/database table, and only roll in the payments to the 1st clearing session on the business day when the future value date is r each ed.
Note: The 'Number of Future Value Dates" parameter must be a system parameter which can be set up by an authorized CBY system administrator and amended at any time necessary. Changes to this parameter must be recorded in a secure, tamper-proof, log file and periodically reported upon.

2.8 Central System – IFT Switching

2.8.1 Real time IFT processing

Upon receiving an IFT single payment from an originating participant, the IFT Switch module of the ATS system must perform the following steps:
1. Authentication check on the digital signature of the originating participant associated with the IFT payment, to verify the payment has been authorized by the originating participant and the message content integrity is valid.
2. Syntax and semantic validation of the messages fields in the IFT payment, in accordance with the ISO20022 XML message rules for Pacs.008.
3. The IFT Switch shall further perform risk management checking on the current debit cap utilization of the originating participant (refer also to "Risk Management" requirement). If the IFT payment amount will cause the debit cap utilization to exceed the debit cap limit, the system shall reject the payment to the originating participant with reason of "Exceeding debit cap", for the originating participant to inform the customer.
If the IFT payment amount will not cause the debit cap limit to be exceeded, the system shall add the IFT amount as a 'blocked' position in the debit cap utilization of the originating participant.
4. If the above validation check and risk management check are successful, the IFT Switch should immediately route the payment to the receiving participant and wait for a response message from the receiving participant.
5. The IFT Switch will wait for a user-configurable period of time. If a response message is received within the time limit, the IFT Switch should route the response message back to the originating participant, for informing the payment result advised by the receiving participant.

2.8.2 IBAN number and BIC validation

The ATS system must use the BIC fields of the receiving participant as defined in the ISO20022 message for determining the routing address of each IFT payment.
Within the IFT payment message, the BIC field for the receiving participant must match with the bank number embedded in the IBAN code for the creditor account field.
The IFT Switch component(s) of the ATS system shall perform the above validation check between BIC code and IBAN numbers. If there is a mismatch for any IFT payment, the ATS system must automatically reject the payment to the originating participant.

2.8.3 Failed IFT payment processing

If the IFT payment fails in any of the validations, the IFT Switch must send a rejection message with the respective reason code to the originating participant. The IFT payment should be marked with 'System Rejected' status and stopped for further processing.

2.8.4 IFT Message Flow – normal processing

The system must perform the following within guaranteed times:
a).When the ATS system receives an IFT payment message from the originating participant, the system must guarantee to process and send the message to the receiving participant within 20 seconds (time - t1).
b).When receiving participant receives IFT message, they must guarantee to process and send response to the ATS system within 30 seconds (time - t2).
c).When ATS system receives response from the receiving participant, the system must guarantee to send the response to the originating participant within 10 seconds

2.8.5 IFT Message Flow -Time-out processing

When the ATS system has sent an IFT payment to the receiving participant, the receiving participant must guarantee to process and send response to the ATS system within 30 seconds. The ATS system/IFT Switch must set a timer with a 'Timeout' period to wait for the response.
If a response message is not received after the Timeout period, the ATS system must perform as shown in Figure 11 and as follows:
a).Send a rejection message to the originating participant with reason of "Timeout from Receiving participant"; The originating participant shall then inform the customer accordingly and wait for the customer to resend the IFT payment.
b).Send a 'Reversal' message using ISO20022 message type Pacs.007 or equivalent to the receiving participant. If the receiving participant has already accepted the IFT payment and credited to the beneficiary, the receiving participant shall reverse the credit transaction to the beneficiary and send a Reversal response to ATS system.
c).The ATS system must also 'unblock' the IFT payment amount from the debit cap utilization of the originating participant.
Note: The time limit for triggering 'Timeout' event in this requirement must be a system parameters (e.g. in the above description, the system parameter for Timeout is 30 seconds) which can be set up by an authorized CBY system administrator and amended at any time necessary.

2.8.6 IFT Message Flow – Option of 'Enquiry' after Timeout

If a response message from the receiving participant is not received after the Timeout period expires, the central ATS system must provide an option of sending an enquiry message to the receiving participant with a unique reference to the IFT payment for which the response message has timed out. The flow of a typical enquiry message and response is illustrated in Figure 12.
The enquiry message must be prepared using ISO20022 Camt.060 message format or equivalent.
The receiving participant must prepare a response message to include the 'Accept', 'Reject' or "Not Received" status of the IFT payment message for sending to the originating participant.
If the ATS system does not receive response for the 'Enquiry' message after a timeout period, the ATS system shall send a Reverse message to the receiving participant and a Timeout response message to the originating participant, in same way as requirement no.5 above.
The option for the ATS system to send an 'Enquiry' message must be a pre-defined system parameter which can be enabled or disabled for use by CBY.

2.8.7 IFT Message Flow – Reversal from Originating Participant for Response Timeout

In the event that the originating participant did not receive a response for an IFT payment from the ATS system after a "Participant's Timeout" period, the originating participant shall send a 'Reversal' request message to the ATS system. The "Participant's Timeout" period will be set by the originating participant based on the maximum time allowed for a response, which is the sum of t1, t2 and t3 as described in requirement no. 4 above, e.g. (20+30+10) = 60 seconds.
When the originating participant sends a 'Reversal' message (using ISO20022 Pacs.007), the ATS system shall process as shown in Figure 13 and indicated in the following:
a). The ATS system must check the status of the original IFT payment to determine if a Reversal message is allowed. The ATS system shall allow a Reversal message ONLY IF the status indicates that a response from the receiving participant for the original IFT payment has NOT been received. If the status shows that an "Accept' or 'Reject' response has been received and/or the original IFT payment has been settled, the ATS system must reject the 'Reversal' Request with the corresponding reason to the originating participant.
b). If the response message for the original IFT payment has not been received, the ATS system shall forward the 'Reversal' message to the receiving participant.
c). The ATS system must also adjust the net debit and net credit position of the originating participant and receiving participant due to the reversal.
d). When the receiving participant receives the 'Reversal' message, if the receiving participant has previously accepted and processed the original IFT payment, the receiving participant shall reverse the credit posting of the IFT payment to the beneficiary customer and send a response message to the ATS system to confirm the reversed status.
e). Accordingly, the ATS system must send the reversal response to the originating participant for informing the reversal status.
Note:
1. The ATS system must ensure that an originating participant shall not be allowed to reverse any previous IFT payment which has been successfully processed and/or settled.

2.9 Central ATS System – Clearing Engine

2.9.1 Sorting, Formatting and Routing to Receiving Participant

Towards the end of the Submission period of the current Clearing session, the Clearing Engine of the ATS system must sort all accepted DC and DD payment batches by the Receiving participants, and prepare the inbound payment files for each Receiving participant.
These must include the following functions as a minimum:
1. Sorting of all DC and DD processed batches by the receiving participants. For each processed batch, the system shall create the inbound payment batch by including those 'accepted' and NOT 'on-hold' status payments. The system shall adjust the total number of payments and total payment amount in the batch header accordingly (i.e. exclude rejected payments and 'on-hold' payments). The system shall then create a digital signature for each batch by using the PKI keys pair of CBY (the ATS System Operator) and the public key of the receiving participant.
2. Create an inbound payment file to store DC and DD payment batches sent by different originating participants to each receiving participant. The file header and file trailer must be created. The system should provide system parameters for defining the maximum number of batches within each file for sending to each receiving participant.
3. When the submission period ends, the system must send all inbound payment files to the participant systems of the respective receiving participants.
4. The system must send notification messages to the web-browser workstations of all Receiving Participants to inform the total number of inbound payment files and total number of DC or DD batches within these files.

2.9.2 ISO20022 Message Standards

The system must adopt the international standard ISO 20022 XML message formats for the transmission of all payment messages, response messages and enquiries messages.

2.10 Central ATS System – eMandate Management

2.10.1 eMandate Registration

The system must provide a web-based Registration application for a participant to input data for a Mandate Agreement (MA) into the eMandate database.
The system must support the registration by either Creditor Agents or Debtor Agents as participant in the MA.
The registration function must require authorized users input at minimum the following data of the MA:
(a) An identification code/number for the source MA signed between the Debtor and Creditor
(b) Contract number for the underlying service (e.g. utility) between Debtor & Creditor (optional for input)
(c) Mandate type – 'Recurrent' or 'One-off'
(d) Mandate recurring periodicity (if mandate is not 'One-off', e.g. monthly)
(e) Start date for Mandate validity (must be a future date)
(f) Expiration date for Mandate validity
(g) Currency per mandate
(h) Maximum amount allowed for DD payment value
(i) IBAN number of Debtor at Debtor Agent and name of Debtor
(j) Debtor Agent BIC identification
(k) IBAN number of Creditor at Creditor Agent and name of Creditor
(l) Creditor Agent BIC identification
After receiving input of required information, the function must generate a unique Mandate Reference Number (MRN) for the eMandate record created, and assign a status to the record as "Registered".
The function must send an online message to the counterpart participant to request approval action on the eMandate record registered.

2.10.2 eMandate Approval

The system must require the counterpart participant of a registered eMandate record to review and approve the eMandate record.
The system must provide an eMandate Approval function for participants to view a list of all registered eMandate records which are pending approval by the participant. The participants must be the counterpart of the participant which has registered the eMandate record,
The approval function must require the participant to perform either an ‘approve’ or ‘reject’ step on the mandate:
- If the eMandate record is ‘rejected’, the function must require the participant to input narrative information for the reason of rejection.
- If the eMandate record is ‘approved’. the function must change the eMandate status from ‘registered’ to ‘Inactive’

The system must change the status of all approved eMandate records from ‘Inactive’ to ‘Active’ on the ‘Start date’ of each eMandate record, i.e. on the date when the eMandate becomes effective.

2.10.3 eMandate Status Enquiry

The system must support at a minimum the following status of an eMandate record:
- Registered – when the mandate is issued and awaiting for approval;
- Inactive – when the mandate is approved but its validity period hasn’t begun;
- Active – when the mandate is approved and its validity period has begun;
- Expired – when the mandate is approved but its validity period has finished;
- Cancelled – when the mandate is cancelled by Creditor or Debtor Agent;
- Suspended – when the mandate is temporarily held by the Debtor Agent due to a dispute. The Debtor Agent needs to perform a ‘Resume’ action in order for the mandate to change to ‘Inactive’ or ‘Active’ status again.
- Closed — when mandate is executed if the mandate is “one off” type.

The system changes mandate status based on actions of a participant (approval, rejection or cancellation) or automatically (business day opening, direct debit execution).

2.10.4 eMandate Amendment

The system must provide an eMandate Amendment function for the Creditor Agent or the Debtor Agent to amend the following information in an eMandate record if needed:
- Maximum limit of DD payment amount
- Start date or Expiration date
- Debtor account number
- Creditor account number

The function must require the participant user to select an effective date of the amended information, which must be a future date from the current business day.
After an eMandate amendment has been made by a participant, the system must require the counterpart participant to review and approve the amendment, before applying the amended information and allowing it to become effective.

2.10.5 eMandate Cancellation

The system must provide an eMandate Cancellation function for the Creditor Agent or the Debtor Agent to cancel an eMandate record, with input of a valid reason.
The function must require the participant user to select an effective date of cancellation, which must be a future date from the current business day.
After an eMandate cancellation has been requested by a participant, the system must require the counterpart participant to review and approve the cancellation.

2.10.6 eMandate Suspend

The system must provide an “eMandate Suspend” function for a Debtor Agent to temporarily hold a mandate from being used by the system. This will be performed by the Debtor Agent when the Debtor has a dispute with the Creditor, and the Debtor requests the Debtor Agent to ‘suspend’ the Mandate in order to protect against DD payments to the Debtor being processed.
When the ATS payment processing system checks that the eMandate for a DD payment is in ‘Suspended’ status, the ATS system rejects the DD payment and sends it back to the Creditor Agent.

2.10.7 eMandate Resume

The system must provide an “eMandate Resume” function for a Debtor Agent to release a ‘suspended’ mandate record back to its previous status i.e. ‘Active’ or ‘Inactive’. The Debtor Agent will perform the “Mandate Resume” function when the Debtor has resolved a dispute with the Creditor, and is willing to accept DD payments again.

2.10.8 eMandate Enquiry & Report

The system must provide enquiry and reporting functions for Creditor Agents, Debtor Agents and CBY users to request at minimum the following information:
•Retrieve mandate records by various selection criteria, including Debtor Agent, Creditor Agent, Debtor identification no., creditor identification no., etc.
•View detailed information and audit logs of individual mandate records.
•Request a report of the list of mandate records retrieved, to be output to printer or downloaded as PDF file or data files.

2.10.9 Bulk Mandate Maintenance File Processing

The system should provide a function for accepting the uploading of bulk mandate management files by the participants. This will be used under some situation if a creditor has a very large number of debtors who have signed mandate agreements e.g. utility a company requires to submit mandate registration for a large number of their customers.
The system should support the use of the following ISO20022 message formats for participants to prepare and submit files for bulk mandate management:
•Pain.009 for Mandate registration/creation file (Submitted by Creditor Agent and require approval by Debtor Agents)
•Pain.010 for Mandate amendment file
•Pain.011 for Mandate cancellation file
•Pain.012 for the Acceptance Report (confirmation of acceptance or rejection) of all mandate maintenance files uploaded.

2.11 Central ATS System – Risk Management

2.11.1 Debit Cap Limit

The system must allow an authorized CBY administrator to set up a Debit Cap limit for each participant. The central ATS system must adopt the debit cap limits to perform intra-day liquidity risk management for each participant as follows:
1. The ATS system must accumulate in real time the total position of all debit payments amounts and total position of all credit payments amounts of each participant. This must be performed whenever the central ATS system has accepted a DC, DD or IFT payment from an originating participant; for which the total debit positions or total credit positions of both the originating participant and the receiving participant will be added according to the payment amount and depending on the debtor agent or creditor agent role of the participants.
2. The ATS system then calculates in real time the Net Clearing Position (NCP) of each participant based on the net of total debit position and total credit position of the participant. If the NCP is a 'debit' which exceeds the 'Debit Cap' limit of the participant, the central ATS system must 'stop' the DC or DD or IFT payment in step 1 above from further sending to the receiving participant. The system must then mark the status of the payment as 'On-hold'.
Note: In the multiple clearing sessions scenario, the system shall take into account of the amount of debit cap limit utilized in all previous completed clearing sessions of the current day, i.e. the system shall compare the NCP of the current clearing session with the debit cap limit minus 'utilized' amount as the "available debit cap limit" for the current clearing session.
3. The 'On-hold' status of a payment due to debit cap limit exceeded must be synchronized to the ATS participant system of the originating participant.
4. The total debit position and total credit position of each participant will be reset to zero at the start of the each business day.

2.11.2 Threshold for Debit Cap Limit

The system must issue an online alert message to a participant (irrespective of the participant's role as originating participant or receiving participant for a payment) and CBY when the intra-day net debit position of the participant reaches a pre-defined threshold percentage of the 'Available' Debit cap limit (e.g. 85%). This threshold should be user-defined and should require no programmatic changes.

2.11.3 Release of 'On-hold' payments

The central ATS system must check whenever the net debit position of a participant with 'on-hold' payments, becomes less than the Debit cap limit. This includes checking at the time of a new DC or IFT payment received and processed for which the participant is a Creditor agent, and at the time of a new DD payment is accepted for which the participant is a Creditor agent.
When the net debit position of the participant becomes less than the Available Debit cap limit, the system shall search and release any 'On-hold' payments with amount value within the available Debit cap.

2.11.4 Transaction Limits

The system must allow an authorized CBY administrator to define at a minimum the following transaction limits, which support risk management for credit risk to participants:
- Maximum value allowed for each IFT payment
- Maximum value allowed for each DC payment
- Maximum value allowed for each DD payment

If any payment exceeds the above limit for their respective type, the system must reject the payment to the originating participant with an appropriate explanation for the rejection and stop it from clearing and transmission to the receiving participant.

2.11.5 Operational Risk Management – Participant Suspend & Resumption

Transactions should be marked as ‘Suspended’ if a crisis happens to the participant which may cause it to fail to fulfil its ATS settlement obligation.
The function should also allow CBY to send a broadcast message to all other participants for information via the ATS system Dashboard.
The ATS system must perform the following actions for the outward and inward payments of the ‘suspended’ participant:

- Further presentment of DC, DD and IFT payments must be rejected by ATS system.
- Inward DC, DD and IFT payments for sending to the ‘suspended’ participant must be rejected by ATS system.

If the condition of the participant becomes stable again, the function must allow CBY to change the status of the suspended participant back to normal (‘Active’) status.

2.12 Central ATS System – Settlement Interface

2.12.1 Multilateral Net Settlement per Clearing Session

The system must support at minimum the following:

- At the scheduled end time of each Clearing Session, the system must prepare a Multilateral Net Settlement file to provide the net clearing position of each participant for settlement in CBY RTGS system. The net clearing positions must include the totals of all accepted DC, DD and IFT payments of each participant processed within the time interval of the current clearing session.
- The Multilateral Net Settlement file must adopt an XML file format based on the ISO20022 message type Pacs.009.
- The submission of the Multilateral Net Settlement file from the ATS system to the RTGS system, and the receipts of acknowledgement messages and response messages from RTGS must be automated.

2.12.2 Monitoring capability for the status and progress of the settlement in RTGS

The ATS system must show the status of net settlement of each clearing session in accordance with the response messages from the RTGS system, on the consoles of CBY and all ATS participant systems.

2.12.3 Multiple Same Day Settlement

Through configuration of the time schedule for net settlement for a clearing session within the same day, the system must be able to support same day settlement of all ATS DC, DD and IFT payments via the RTGS system.
The system must support multiple clearing sessions to be operated within the same day. The system must produce Net Settlement file at the end of each clearing session and send to CBY RTGS system for settlement. Accordingly the system must support multiple settlements within the same day.
The response message from RTGS system shall indicate whether the net settlement is successfully completed or rejected.

2.12.4 Inclusion of IFT payments up to an “IFT settlement delay time”

As described in section 0 for IFT payments, after ATS routes a payment to the receiving participant, the ATS system must wait for a response from the receiving participant before and up to a Timeout period. When a response is not received after the Timeout period, the IFT payment will be reversed.
Accordingly, when a settlement period for a clearing session starts, the ATS system must commence preparation of the net settlement positions resulted from all DC, DD and IFT payments, and wait until all IFT payments have either received response from receiving participants or an IFT payment may become reversed due to response not received after the above Timeout period.
Based on the above, the net Settlement file preparation function in the ATS system must wait for an “IFT settlement delay time” before finishing. The “IFT settlement delay time” must be a system parameter defined by CBY in accordance with the maximum waiting time for IFT payment response e.g. the “IFT settlement delay time” can be 1 minute.
After the “IFT settlement delay time” ends, the ATS system shall conclude the list of all IFT payments due for settlement. The ATS system then finalizes net clearing positions for all participants and produce the multilateral net settlement file for the current clearing session.

2.12.5 Guarantee Settlement via Pre-funding Collateral

The ATS system must be able to perform online enquiries with the CBY RTGS system for the purpose of achieving guaranteed settlement. The guaranteed settlement is based on pre-funding a reserve amount of each participant at RTGS system, and synchronizing the pre-funding amount with the Debit Cap limit in ATS system for each participant.
The online enquiry interface between the ATS system and the RTGS system shall process as follows:
At the start of day of each business day, as well as at the start of each clearing session of the ATS system, the ATS system will send a request message to the RTGS system for a report about the ‘available’ pre-funding reserve amount of each participant. The RTGS system must send a report with the information to the ATS system. ATS system then compares the pre-funding amount with the Debit Cap limit of each participant. If there is any difference, the ATS system will reset the Debit Cap limit using the pre-funding amount value reported by RTGS system.

2.12.6 Integration with RTGS system for enquiry on the ATS funds reserve of participants

During the Intraday period, the ATS system must be able to accept requests from participants for sending online messages to CBY’s RTGS system for enquiring the current pre-funding reserve amount in the participant’s settlement account.
Upon receiving the required response from the RTGS system, the ATS system must display the pre-funding reserve amount on the real time position monitoring page of the ATS participant system.

2.12.7 Intraday request of Debit Cap Increase initiated from RTGS participant

During the Intraday period, a participant may need to increase the Debit Cap limit in ATS system. For this purpose, the participant must increase the pre-funding reserve amount in RTGS system using functions in the RTGS system.
When an RTGS participant has increased (but not decrease) their pre-funding reserve amount, the RTGS system will send a notification message with the new pre-funding amount value to the ATS system.
The ATS system must be able to receive the notification message and increase the debit cap limit of the participant in accordance with the new value advised by RTGS based on new reserve amount.

2.12.8 Intraday Decrease of Debit Cap Limit (risk management)

The Debit cap limit of a participant may be reduced by a participant or by CBY for risk management purpose. During the intraday period, when the debit cap limit is reduced, the ATS system must send a notification message to the RTGS system for informing the amount of 'unused' Debit Cap resulted from the reduction.
This message is to allow the RTGS system to compare the current available pre-funding reserve amount in the RTGS with the 'reduced' unused Debit Cap amount; accordingly, the RTGS system will return the difference in the amount from the pre-funding reserve to the Settlement Account of the participant, to provide liquidity management in the RTGS system.

2.12.9 System Interface with CBY RTGS

The central ATS system must implement a system interface with the CBY RTGS system for sending settlement files and online communication. The system interface must adopt open standards which include the following:
a). The system interface shall be established over CBY's internal network connecting the RTGS system at CBY data center and the ATS system at the CBY data center. The system interface shall also be implemented for the ATS DR systems at the two backup sites of CBY.
b). The protocol for sending and receiving files such as net settlement files, etc. must adopt a secure FTP protocol.
c). Message based communication must be supported for online integration services, such as for ATS to enquire participant settlement account balances from the RTGS system. The message formats must adopt ISO20022 XML message types.
d). The protocols for message-based communication must adopt Web services or a message queue (MQ) protocol.
e). Login and logout control with authentication checks are required between the ATS and RTGS systems.
a). Acknowledgement messages (positive and negative) and timeout event handling must be implemented
f). Sequencing checking on message and file communication must be performed to detect and alert on any gap in transmission.
g). Encryption of data in transmission and generation of hash numbers for data protection and integrity control.

2.12.10 Settlement Enquiry

The ATS system shall provide console functions for authorized CBY users to monitor the status of all net settlement files which include settled status or rejected status.
The Enquiry function must also allow authorized CBY users to:
• review the content of a net settlement file, and
• review the rejection message from the RTGS system for the reason if a net settlement file has been rejected by RTGS.

2.12.11 Resend Unsuccessful Net Settlement

In an exception event when RTGS has rejected an ATS net settlement file for a specific clearing session e.g. due to technical error or financial issue with one or more participant; the ATS Settlement Interface module must provide at minimum the following functions for authorized CBY users to resend the net settlement file after the error condition is resolved.
a) A function to resend the previously rejected net settlement file from the ATS system to the RTGS system.
b) An optional function for CBY to re-generate a correct net settlement file for the clearing session. This will be performed if CBY has rectified errors in some ATS payment transactions which have caused the error on the net settlement file. The ATS system shall then re-calculate the Net Clearing Positions of all participants for the specific clearing session.
c) A function to send the re-generated net settlement file in (b) above to RTGS system for settlement.

2.13 Central ATS Systems – Reports & Billing System

2.13.1 Automatic generation of End of session Clearing Reports

At the end of each clearing session, the system must automatically generate at a minimum the following Clearing reports for each participant:
•Net Clearing Position Report for a Participant - to show the net debit or net credit amount for settlement by the participant for the current clearing session.
•Reconciliation Report of Accepted Payments for Participant – provides summary information of ATS DC, DD and IFT payments which have been accepted by the central ATS system and included in NCP for settlement. These payments must be divided into an Outbound payments report section and an Inbound payments report section. The summary information of each payment must include at minimum the following fields:
a.ATS unique reference no.
b.Debtor Agent BIC
c.Debtor IBAN
d.Creditor Agent BIC
e.Creditor IBAN
f.Payment Type – DC, DD or IFT
g.End to End ID
h.Payment Transaction Reference
i.Payment Currency and Amount
j.Date time of payment accepted by central the ATS system
k.Date time of submission to RTGS settlement
The report must also print the total number and total amount of payments by Inbound/Outbound, and by payment types.
•Reconciliation Report of Rejected Payments (system reject/return/refund) for each Participant. These payments must be divided into an Outbound payments report section and an Inbound payments report section. The summary information of each payment must include at minimum the following fields:
a.ATS unique reference no.
b.Debtor Agent BIC
c.Debtor IBAN
d.Creditor Agent BIC
e.Creditor IBAN
f.Payment Type – DC, DD or IFT
g.End to End ID
h.Payment Transaction Reference
i.Payment Currency and Amount
j.Date time of payment accepted by the central ATS system
k.Rejection reason – reason for Reject/Return/Refusal
The report must also print the total number and total amount of rejected payments by Inbound/outbound, and by payment types.

2.13.2 Reports & Data File for Participant Reconciliation

The system must provide the following options for participants to review the output of the above Clearing Reports of each clearing session:
• each report file will be exported automatically to a Report location in the ATS Participant System of each participant.
• each of the above reports will be produced in the following formats:
o PDF file format
o CSV or Excel data file format.
• The ATS Participant System must have Report Viewer function for each participant to perform the following action on each report:
o To print Clearing Reports in PDF format.
o To download a Clearing Report in data file format
The downloaded Clearing Report data files must enable the Participant to extract any specific list of payment for reconciliation within the participant CBS or for sending to corporate or government organizations for their reconciliation.

2.13.3 Other Daily Reports for Participants

The system must provide the following online reports for participants throughout the intra-day period:
• Payment (DC & DD) File submission activities for the current session.
• Debit Cap Limit Adjustment Report (to show if debit cap has been changed in current day).
• User Activity report to show the payment input/verify/authorize/repair/return/refuse/refund activities by users at head office or branches.
• List of rejected payments (including system reject, returned DC/IFT and refused DD).
• Lists of eMandate records with the participant as Debtor Agent and Creditor Agent separately.
• List of refund payment sent or received by the participant in current day.
• Net Settlement Report to show the net settlement amounts and settlement status of the participant for each clearing session within the business day.
• List of future dated DC/DD payment files/batches sent by the participant.
The Bidder must describe other reports which are available in the proposed solution for participants.

2.13.4 Supervisor Reports for CBY

The system must provide the following online reports for Central Bank/Clearing house user (i.e. CBY users) use in performing system administration and monitoring:
• Net Settlement Reports for a selected session and all sessions in a business day. The report shall show the net settlement amount of each participant and the net settlement status as reported in RTGS.
• RTGS Interface Report, to list the transmission time of each net settlement file and the response result from RTGS system for each clearing session.
• Debit Cap Limit Reports to show the limits for all participants, and the adjustment including start of day adjustment and any intraday adjustment requested by participants.
• Security Report to list any security violation detected by the system (including unauthorized user access, invalid digital signature in payments, etc.)
• Daily Clearing Session Reconciliation Report, to show the total number of files/batch/payments of DC, DD, IFT sent and received by each participant and the number of rejected payments, for each clearing session within a business day.
• List of future dated DC/DD payment files/batches sent by all participants.
• Listing of rejected payments of each participant, with reason codes of system reject/returned or refused by receiving participants.
The Bidder must describe other reports which are available in the proposed solution for CBY users.

2.13.5 Dynamic Ad-hoc Reporting Facilities for CBY and participants

The system must provide a dynamic ad-hoc report generation function to CBY and each participant. The function shall support at minimum the following:

• Provide comprehensive search parameters based on key data in DC, DD and IFT payments, such as Debtor account, Creditor account, originating participant, receiving participant, payment amount, payment type, value date, payment status, etc. The search methods should include exact match or selection of a range (from/to) of payments for reporting.

• Allow users to define flexible adjustments of report layouts and select necessary fields of retrieved payments for output to reports. The function shall also allow user to define output fields based on computation totals (counts and amounts) of selected fields.

• The report output must support options of "Print as PDF" and "Download as Data File".

The dynamic ad-hoc report function shall allow each participant to search their own payments only and not able to view other participants' payments. CBY user shall be allowed to search and report payments of all participants.

The Bidder must describe the facilities for dynamic ad-hoc report generation in the proposed solution.

2.13.6 Additional Reports for customization

In order to meet customization objectives, the successful bidder shall commit to provide the following services:

1.Review requirements for additional fixed reports (also referred as 'canned' reports) which may be requested by CBY and participants during the Software Customization Phase in the project implementation schedule.

2.During the User Acceptance Testing of the system, CBY and participant users will be able to review various reports with actual data output. From the review, the users may request customization to the report layout of specific reports. The successful bidder must perform report customization when it is requested at the UAT stage.

The system shall support a Report Writer tool which shall be provided to CBY and CBY users to design and build new reports for deploying in future after the ATS system is implemented. The system shall support the use of the Report Writer tool to extract ATS database information with a multiple-parameter selection capability. Such multiple parameters include time, amount, volume, specific participants, etc. The Report writer tool should be able to produce textual and graphical output based on data and statistics extracted from ATS databases.

The successful bidder shall provide functions and procedures for CBY users to design new reports and deploy them into the ATS system Reporting module.

2.13.7 Report Writer Tool for building new reports

The system shall support a Report Writer tool which shall be provided to CBY and CBY users to design and build new reports for deploying in future after the ATS system is implemented. The system shall support the use of the Report Writer tool to extract ATS database information with a multiple-parameter selection capability. Such multiple parameters include time, amount, volume, specific participants, etc. The Report writer tool should be able to produce textual and graphical output based on data and statistics extracted from ATS databases.

The successful bidder shall provide functions and procedures for CBY users to design new reports and deploy them into the ATS system Reporting module.

2.13.8 Report Writer tool for modifying existing reports

The Report Writer tool provided by the successful bidder should support modification of the layout in any existing fixed reports e.g. clearing report, net settlement report, to be made by CBY or CBY users, if required after the system is implemented, without requiring software development work from the successful bidder.

2.13.9 Statistical database with query and reporting facilities

The system must build and maintain a statistical database for all payment transactions processed by the system from an online history period up to the current day.
The number of days for system to maintain online history database shall be a user-maintainable parameter supported in the system, and it shall not be less than 2 years starting from the ATS Go live date.
The system shall provide online query and report function for CBY and participants to review various payment system statistics from the online statistical database.
The statistics output shall include various choices of charts, graphs and analytical figures on various information related to ATS payments, including but not limited to:
• Total number and total values of DD/DC/IFT payments required for CBY payment oversight over user-selected period.
• Moving trends of various payment information, such as growth rate of DC, DD payments, changes in annual turnover of retail payments, etc.
• Moving trends of behavior of a selected participant, a number of participants or all participants, such as the net debit/credit movement within a day; liquidity requirements throughout a month; number of rejected payments each month; etc.
The Bidder shall explain the types of statistical information available via reports, online query and dashboards, etc. in their ATS system product.

2.13.10 Integration with 3rd party DW and system for Payment Oversight

The Bidder must explain if the statistical database of the system support integration with a 3rd party data warehouse system which may be used by CBY and CBY for performing Payment System Oversight on National Payment Systems.
The Bidder shall describe how selected data from the statistics can be exported with an open format for enabling ETL (Extract – Transform – Load) operation by an external Data Warehouse and Business Intelligence system.

2.13.11 Billing System Configuration – Definition of types of fees

The system shall provide definition of different types of fees to be charged to participants, including at minimum the following:
• Transaction fee
• Participant membership fee
• Penalty Charges

2.13.12 Billing System Configuration - Transaction Unit Fees Tariff Structure

The system shall provide flexible table maintenance functions for CBY to set up different transaction fees based on a comprehensive range of user-maintainable parameters related to each payment type.
The function must support different transaction fee tables for each payment type i.e. DC, DD and IFT payment types.
For each payment type, the respective transaction fee table must support setting up different unit fees (fee rates) for the following parameters:
a). A range of different amount tiers for each payment type.
b). A range of different time periods when the payment is sent by the originating participant.
c). Different channels used by the customers of the originating participant e.g. Mobile phone, Internet. (The channel information shall be a XML field provided by the originating participant in the ISO20022 message).
d). Different volume tiers of payments processed by the participant e.g. the unit fee for DC/DD payment will be lower when the total volume of a participant exceeds a volume threshold.
e). Different "purpose" code of the payment e.g. Payroll, Utility bills and tax.
The transaction unit fee for each type above must support the following options:
• A fixed value
• A percentage of the payment amount
The system must allow CBY to setup transaction fees tables as above for applying to the:
• Originating participant only, or
• Receiving participant only, or
• Different fee tables applied to originating participant and receiving participant respectively.

2.13.13 Daily Transaction Fee Calculation

The system must calculate the daily total transaction fees of each participant based on the transaction fee tables and all the DC, DD and IFT payments processed by the participant.
The system shall perform the calculation automatically at the end of day period of each business day. After the calculation, the system shall produce the daily transaction fee report for each participant, to show the total amount, with a breakdown of sub-totals for each payment type (DC, DD, IFT) and all the different tariffs applied e.g. numbers of payments for each volume tier, amount tier, channel used, time periods received.

2.13.14 Membership fee calculation

Membership fee calculation must support as a minimum:
1. Fixed monthly fee per participant
2. Fixed annual fee per participant

2.13.15 Penalty Charge Calculation

The system Penalty Charge calculation should support as a minimum:
1. Definition of fixed unit fees for rejected payment (due to system rejected or participant returned/refused) for selected payment type (DC, DD, IFT) for selected reason codes.
2. Definition of penalty charges to be charged to either the originating participant or receiving participant.

2.13.16 Generation of Billing Reports

The system shall be able to generate at minimum the following list of Billing Reports:
a).Daily Transaction Fee Report for all participants, to print the total number of payments by payment types, volume tiers or value tier (as configured in the system) and the respective total transaction fee amount, per clearing session per participant. This report shall only be available to authorized CBY users.
b).Daily Transaction Fee Report as above for individual participant. This report shall be available to CBY and participants. each participant shall only be able to select their own billing report.
c).Daily Penalty Charge report for all participants, to print the number of payments charged for configured type of rejected payments, and the respective total penalty charge amount per clearing session per participant. This report shall only be available to authorized CBY users.
d).Daily Penalty Charge report for an individual participant as above, which shall be available to CBY and the owning participant.
e).Monthly Transaction Fee Report for all participants, to print the total transaction fee for each business day per each participant, with the monthly total fee figure.
f).Monthly Transaction Fee Report for an individual participant, to print the total transaction fee for each business day and the monthly total fee figure. This report shall be available to CBY and the owning participant.
g).ATS Membership report to show the membership fee for each participant for a time duration (from start date to end date) selected by user. This report shall only be available to CBY.
The system shall provide the following options of output of each report in the above list:
•Automatic generation for output as PDF and data file formats to designated folder locations in the Central ATS system and each ATS Participant system, for CBY and participants respectively to print or download.
•On-request generation of the reports by CBY or participants, with output options of PDF and data files.
The system should allow the CBY system administrators to configure the above output options for each type of billing report.

2.13.17 Daily Fees included in Settlement

The proposed solution must have the capability to produce an additional net settlement file for settlement of the daily calculated fees to be paid by each participant to CBY at the end of day period, after all clearing sessions of the current business have completed.
At the end of day period after the system has calculated the daily total transaction fee and total penalty fee of each participant, the system shall create the net settlement file automatically with the following entries:
• each participant shall have a debit entry with amount being the sum of the daily transaction fee and penalty charge.
•CBY (which is also a participant) shall have a credit entry with amount being the sum of all the debit entries for the daily fees of all participants.
The system shall then send the net settlement file for daily fees to the RTGS system automatically as the last net settlement file for the current business day.

2.14 Central ATS System – System Monitoring & Administration

2.14.1 24x7 Operations Monitor

The ATS system must operate on a 24x7 non-stop time basis, to accept and process payments transmitted from any participant at any time. For this reason, the system must monitor the connectivity with all participants via the following functions to ensure that the connections are always 'on':
a)The ATS Participant systems shall exchange 'Keep-alive' messages continuously with every system interface of every participant. The 'Keep-alive' messages shall be sent and received on a regular time interval which is configurable by CBY system administrator e.g. the time period of every 1 minute.
b)A Participant connections console must show on 24x7 time basis, the status of the following communication channels for each participant:
•System interface from the participants' CBS to the ATS system for DC & DD payment transmissions.
•System interface from the participants' CBS to the ATS system for IFT payments.
•List of participant users with active https communication sessions with the ATS system.

2.14.2 Alert Message for Disconnections

In the event that a Keep Alive message is not received from any interface of any participant for over the threshold number of 'Keep Alive' period, the ATS system shall send an alert message on the ATS system console for CBY. The system shall also be able to send the alert message via other channels such as E-mail, or SMS. The threshold for generating alert of disconnection shall be system parameter to configured by CBY e.g. The threshold can be 5 "1 minute Keep-Alive period" i.e. 5 minutes.

2.14.3 ATS System Monitoring Dashboard

The system must provide Real-time system monitoring dashboards with various visual displays for CBY system operators to view.
The dashboards must show, at a minimum, the following information in real time (or near real time):
•Status of connectivity with each participant (with coloring scheme to highlight any disconnection with different outage durations).
•System exception/error messages.
•Alarm/warning message which require supervisory attention.
•Comparison charts with statistical figures for total numbers and total values of payments accepted/rejected /settled by payment types for different participants.

2.14.4 Participant Administration

The system must provide administration functions for Add/Modify/Enquire of participant profiles and parameter information. The system must include at minimum the following information for each participant:
•Participant Bank Identification Code (BIC)
•Participant Bank Number (as used in IBAN field)
•Participant bank name and address (Head office)
•Participant Type, including:
o'Direct' participant
o'Indirect' participant (for participants without a CBY account for settlement)
o'e-Payment System' participant for 3rd party systems operated by PSPs such as Mobile Payment System, e-Money system, e-Commerce System. etc.
•Sponsoring Participant – for use by Indirect Participants which must have a Sponsoring participant for performing settlement.
•Various options or parameters for business rules applied to the participant by CBY.
•Debit Cap Limit of the participant.
•Any security information for use in authentication, encryption or decryption of the data sent and received by the participant e.g. hash key for system interface of the participant.

2.14.5 Flexibility of system functions and future development

The business processing rules in the ATS system must be designed to be highly parameter driven. The system must provide well-defined maintenance functions for the authorized system administrators to add, view and modify business parameters, including various limits, choices of different validation rules, operating hours, etc. to adopt different processing rules for coping with possible business changes in future without requiring software changes. The Bidder must describe a list of business parameters which are available in their proposed system for ATS system administrators to set up and customize for implementing business rules and process flows in Yemen. The maintenance function for these parameters should provide options of making changes effective in real time or to be effective in a scheduled date.

2.14.6 System Broadcast Function

The system must provide an online facility for authorized CBY System Operators to send a broadcast text message to all participants (including all Originating Participants and Receiving Participants). The broadcast message should be 'pushed' to a Web page used by participants for monitoring ATS activities. The broadcast message will be used by CBY to inform all participants of any urgent operational arrangement e.g. to inform an urgent closing of a clearing session due to unexpected situation.

The system must allow participant users to retrieve all previous broadcast messages which have been sent by CBY during a time period.

2.14.7 System Parameters

The system must provide a comprehensive list of system parameters which are used by the system to establish system configurations and processing schemes at a system level or at a participant level. These system parameters must be configurable by the system administrator for system tuning or coping with changes in operations activities.

System parameters for the following must be available:

•Maximum no. of payments allowed in each DC or DD batch

•Maximum no. of payment batches allowed in a file for submission.

The bidder must provide a sample list of the system parameters which are available to the admin users of CBY and/or participants for performing system configuration.

2.14.8 Admin Message Communication with Participants

The central ATS system must provide a function for CBY to communicate with specific participants by sending and receiving administration messages required to support daily operations.

The administration message communication functions provided to CBY must include at minimum the following:

•Receive "Request for Session Extension" from a participant. This may happen if the participant encounters an unexpected system problem and therefore not able to complete checking all payments by the scheduled finish time of the current Reply period. If CBY accepts the request, CBY shall adjust the finish time of the current clearing session using the Business Day Schedule management function.

•Receive Free Text messages for enquiry from a participant.

•Send "Free Text message" to selected participants for providing instructions, or reply to enquiry from a participant.

2.15 Central ATS System – Security & Fraud Detection

2.15.1 Authentication & Non-repudiation

The system must adopt industry standard PKI security functions to perform payment message encryption and digital signature authentication.

The system must be able to adopt PKI digital certificates and processes for PKI key pair generation/management under a PKI CA infrastructure operated by CBY.

2.15.2 Security Policy Administration

The system must provide functions for authorized CBY Administrators to create User IDs and profiles for the authorized users in each participant.
The User ID creation function will set up the following information, as a minimum, for an authorized user of a participant:
•Unique user ID and password credential. The password must be maintained based on a password policy, with the following minimum requirements:
o passwords must be of minimum length with alphanumeric characters
o locking of user ID after certain un-successful password input
o password must have an expiration date
o password history check so that previous passwords cannot be reused
•User name and national identification information of user
•Contact information, including telephone no, email address
•List of authorized functions on the ATS Participant system functions menu
•Access Rights or Access Control List to different types of data

2.15.3 Fraud Detection

The system must be able to detect at minimum the following kinds of frauds and reject processing of payments:
•Duplicate payments – duplicate transmission except for re-submission of rejected/returned/refused payments.
•Invalid DD payments without a valid and active eMandate record.

2.15.4 AML Compliance

The system must allow authorized CBY users to set up AML checking rules, such as setting up a list of AML blacklisted creditors. If a match with the blacklist is found with any ATS payment, the system must perform the following functions:
•Reject the ATS payment to the originating participant for their compliance action.
•Produce an AML report to report the incident (e.g. of payments received for blacklisted customers) to CBY and the relevant participant.

2.16 Central ATS System – Dispute Management System

2.16.1 Dispute initiation

The system must provide webpage functions for a participant to initiate a dispute on a settled payment in which the participant is the Debtor agent i.e. the payment has been debited from the participant.
The dispute initiation functions must provide at minimum the following:
•Define a limit on the maximum number of history days for which settled payments are allowed to be retrieved for dispute.
•Allow the participant to search for the dispute payment from a list of settled payments up to the maximum no. of the history day's period. The disputed payment can be a payment within DC batch, DD batch or an IFT single payment.
•Allow the participant to select a 'dispute payment' function and require the participant to input narrative information for the dispute reason. The system must also allow the participant to include an attachment image file or document file for supporting the dispute reason. The system then creates a dispute record to include the dispute payment information and the dispute reason.
•Send a dispute request message to a recipient participant which is the counterpart i.e. Creditor Agent of the disputed payment via a console page on the ATS Participant system.

2.16.2 Dispute Record Review

The system must make a dispute record visible to both the initiating participant and the recipient participant of the dispute payment.
The system must set a limit on the maximum number of days for dispute response to be provided by the recipient participant.
The recipient participant must be allowed to view all information in the dispute record, including the disputed payment, dispute reason and any supporting documents attached with the dispute record. The system must then require the recipient participant to send either an 'Agree' response or 'Disagree' response to the initiating participant before reaching the maximum no. of days for response. The system must require input of narrative information by the recipient participant for each response.
The system must detect if any dispute record has not had a response sent after the maximum no. of days for response has expired. For such dispute records, the system must send a supervisory message to a console page of CBY System Supervisor. CBY Supervisor will then review the dispute record and determine if the recipient participant or the initiating participant has failed to comply with the CBY operation rules for Dispute Management.

2.16.3 Dispute Resolution – Refund Payment

For a dispute record which is replied with an 'Agree' response by the recipient participant, the Dispute Management System (DMS) must require the recipient participant to prepare a Refund payment for dispute resolution.
The DMS must provide a Refund payment entry page which has populated the payment information of the disputed payment, including at minimum the following, for the recipient participant to review and approve:
•Payment amount of disputed payment.
•Creditor Agent and creditor information should be filled by the initiating participant and the debtor customer information in the disputed payment.
•The Refund payment must adopt ISO20022 Pacs.007 (FIToFIPaymentReversal) message format.
The DMS should allow the recipient participant to amend information on the Pacs.007 Refund payment if necessary.
When the recipient participant approves the Refund payment, the DMS must immediately send the Refund payment to the ATS Clearing Engine for real time clearing and transmission to the initiating participant.
The ATS Clearing Engine must include the Refund payment in the net clearing position of the initiating participant and the recipient participant respectively, such that the settlement of the Refund payment will be included in the net settlement file of current clearing session.

2.16.4 Dispute Resolution – Case Closure

If a recipient participant has sent a response and the initiating participant then agrees to close a dispute, the DMS must allow the initiating participant to update the dispute record with a 'Closed' status.

2.16.5 Dispute Arbitration

In the event that recipient participant does not agree with the dispute and the initiating participant does not agree to close the dispute, the DMS must allow the initiating participant to submit the dispute record to an authorized CBY supervisor for arbitration. The DMS then sends an arbitration request message to a console page of the CBY System Supervisor.
The DMS must provide functions for authorized CBY System Supervisors to review a list of all dispute records by different initiating participants and recipient participants. The functions must allow CBY Supervisor to prepare text message for the decision of arbitration on the dispute. The function should then send the text messages to the DMS page of both the initiating participant and recipient participant.

2.17 RTGS Requirements

2.17.1 Provision of queue prioritizing mechanism

In the event of insufficient balance, transfers should be queued by the RTGS system which is expected to manage the queue. The control of queuing should be managed either by participating banks (for their items only) or centrally by the CBY (for all items regardless of the participating bank).

2.17.2 Prioritization scale participants may use to specify a priority level to each transfer request

The system must allow each participant to allocate a priority to each transaction. The priority they assign must be one from a set of priorities defined and approve by CBY.

2.17.3 Option to by-pass prioritization queue

The application should provide a participant with the ability to request that the next executable transfer instruction in the queue be processed when an un-executable transfer instruction is queued. That is, the FIFO principle may be by-passed.

2.17.4 Ability to re-order transactions on the queue

The application should provide a reordering mechanism for a participant to change the order of items in their queue. CBY should also be able to re-order transactions.

2.17.5 Participant has option to cancel its queued transactions

The application is expected to give a participant the option to cancel its queued transactions. Authorized staff of the CBY should be able to cancel or re-order the queue of individual participating institution upon request from the participant or when needed.

2.17.6 CBY has option to cancel any queued transaction(s)

The CBY shall have the option to cancel all queued transaction as required.

2.17.7 Liquidity Optimization mechanism(s)

The proposed solution should offer participants a tool to assist them to optimize and manage their liquidity.

2.17.8 Efficient gridlock resolution capabilities

Gridlock refers to a situation where the inability of a payment transfer to be settled as a result of inadequate funds in the paying bank's settlement account, blocks a substantial number of settlements of other participant banks. The system should be able to detect such occurrences and offer the best algorithm for resolving this problem.

2.17.9 Provision to configure a specific time during which government transactions will be processed

CBY may wish to allocate a certain time, or times, of day when government transactions will be processed. The system should have a parameterized feature that offers this capability.

2.17.10 Ability for the participant to reserve a portion of liquidity for time critical (high priority) payments

The system should allow participants to allocate and reserve a portion of their liquidity to cover only payments categorized as High Priority. This facility should be parameterized and easily used by participants. The CBY must have a view of these reserved amounts and should have the ability to override them if necessary.

2.17.11 Ability to schedule payments for a future settlement date

	All transactions should be settled on specified value dates. The system must accept current and future value dated transfer instructions for processing. Transfer instructions should be transmitted to the settlement engine at the CBY when the value date is reached. For current value date transfer instructions that fail to be settled by the end of the day, the system must provide an option either to cancel the instruction or to carry them over the next value date.
2.17.12	**Algorithm to monitor compliance with reserve level requirements**
	The proposed solution should include, as standard, a flexible and comprehensive algorithm to monitor participants' reserve levels and to ensure that these levels are maintained according to CBY's directions. The reserve level algorithm should be configurable by CBY.
2.17.13	**Intraday liquidity facility against collateral of a Participant**
	The application must support an intraday liquidity facility for participants offered against collaterals. The collaterals for the facility will be topped with a margin. The facility shall be liquidated on or before the close of the RTGS operating hours and the collaterals returned to the participant. The service for the intraday facility must include an option for charging for the facility. The intraday facility service will be initiated and approved by the participating bank while the CBY shall have the privilege to either grant or refuse the applications.
2.17.14	**Option to charge for an intra day facility**
	The system must support the charging of intra day facilities by CBY in a flexible manner.
2.17.15	**Repurchase Agreement capability**
	A repurchase facility service for end of day account balancing shall be provided by the proposed solution.
2.17.16	**Automatic sweeping of balances from Participants' settlement accounts on RTGS to their current accounts at CBY**
	The system shall allow the automatic sweeping of balances between participating institutions' settlement accounts on RTGS and their current accounts in CBY. It will also have the option to interface directly with the CBY core banking application and update on real time basis the mirror settlement accounts of the participants. This should be parameterized to allow for operational flexibility.
2.17.17	**Monitor & provide notifications including but not limited to:** **1.The possibility of an account balance below the minimum level;** **2.A payment order larger than a specified amount;** **3.Details of payments rejected due to insufficient funds.**
	The solution should monitor & provide notifications including but not limited to: 1.The possibility of an account balance below the minimum level; 2.A payment order larger than a specified amount; 3.Details of payments rejected due to insufficient funds. The system must notify the sender of each message at the time of sending that the message is provisional until it has been accepted and settled. This notification will be sent via the RTGS network to the sender.
2.17.18	**Support settlement of transactions in YER and key international and regional currencies including USD and SAR.**
	The system shall support settlement of transactions in Yemeni Rials and key international currencies.
2.17.19	**Multiple sub-accounts for each participant with each account in a different currency**

	The proposed solution must fully support multiple currencies. For example, the system must allow all participants to set up multiple accounts, with each account being in a different currency.
2.17.20	**Exchange rates defined by CBY at any time**
	The solution must allow CBY to configure and re-configure exchange rates as needed.
2.17.21	**Currency Department separate access to the system**
	The system must allow CBY to define a separate, closed user group from members of its staff working in the Currency Department.
2.17.22	**Automatic & efficient management of the business day processes**
	Predefined start of business and cut-off times are to be automatically controlled by the system.
2.17.23	**Ability for CBY to override automated business day processes**
	Predefined start of business and cut-off times are to be automatically controlled by the system, but with the ability for manual/automated override by CBY to support cut-off-time extensions.
2.17.24	**Supports different cut-off times for banks and third-parties**
	It is expected that there will be different cut-off times for third party payments versus inter-bank settlements such that after-hours movements between banks is allowed for position management. The proposed solution must support this.
2.17.25	**System Integration**
	The system shall seamlessly integrated into various systems including but not limited to: cheque clearing, ePayment switch, ATS, securities, SWIFT, CBY's accounting system etc.
2.17.26	**Support for secure batch file upload of payment instructions**
	The RTGS solution must have the ability to receive and process secure batch files of payment instructions from recognized participants.
2.17.27	**Comprehensive & flexible Realtime validation of input data**
	The system should be able to validate all input data. The validation must include checks for allowable formats and values. Related fields must be checked before transactions are processed. Errors must be identified clearly to allow participants to correct input data immediately.
2.17.28	**Supports Maker / Checker Function**
	For all key functions in the system, a Maker / Checker function must be available and configurable by CBY.
2.17.29	**Flexible billing supporting at least: transaction fees, periodic charges (e.g. annual maintenance fee), operating hour's extension request fees and penalties**
	Billing is expected to include, transaction fees, periodic charges (e.g. annual maintenance fees), operating hours extension request fees and penalties. The billing service must allow the option for CBY to define either flat charges, tiered charges or percentage charges.
2.19	**RTGS System – Security & Fraud Detection**
2.19.1	**Authentication & Non-repudiation**

All transactions must be strongly and automatically authenticated by the system so as to ensure non-repudiation of payments.

2.19.2 Security Policy Administration

The RTGS system should give CBY the ability define a set of RTGS-specific users who have no access to other parts of the proposed solution.

2.19.3 Fraud Detection

This solution should include fraud detection functions, with the capacity to detect duplicate payments.

2.19.4 AML Compliance

The proposed software should give CBY and the Participants the ability to conform to international standards and best practice in the field of AML. Suppliers should explain how this is achieved.

2.20 Other Requirements

2.20.1 Multi-Language

The system must support both English language and Arabic language for use in all input data and output data covering all Graphical User Interface (GUI) pages/screens, reports produced , as well as data in system interfaces or API. This support must include the following:

The Supplier must maintain language files which provide mapping between English language and Arabic language for the texts in all GUI screens and all report pages. These texts cover all field labels, information message and help messages for each GUI screen, and the report title and all report field labels for each report. The Supplier must perform the translation between English and Arabic of these texts during the software customization phase, such that both English version and Arabic version of each GUI screen and each report are available when the customized ATS software is installed in the test environment.

The Supplier must also provide utility tool or screen functions for CBY users to review the mapping in the language files for all data field/row/column/heading labels and narratives used by all the GUI screens and output reports of the ATS system. CBY users must be able to input or edit texts in Arabic language to the language files for correct translation of all the labels and narratives between English and Arabic language.

The system must allow ATS users to select either English version or Arabic version of each report screen and each report page.

The system must accept input of text data in either English language or Arabic language for all GUI screens, system interfaces and APIs. The system shall then store the text data in their input language format. Accordingly, the system shall support search of the stored data using the input language i.e. to enable searching by Arabic text for data stored in Arabic language.

2.20.2 Multi-currency payment system

The system must have multi-currency support for all payments received and processed by the system. This includes the support of the local currency YER (Yemeni Rial) and any future foreign currencies to be used by ATS payments.

The system must allow input of different currency code for different payment, and calculate the clearing positions for payments in each currency. The system must produce individual net settlement file for each currency and send to the RTGS system for settlement.

2.20.3 Audit logs

The system must produce audit logs for all system activities and transactions processed, covering ATS payments processing, file submission and responses, system administrations, user access with successful logins and unsuccessful login, etc. The system must safe-keep all the audit logs and made them available for retrieval and reporting to show a full list of audit trail records for payments and users' activities.

2.20.4 Future ISO20022 version upgrade

The Bidder must commit to modify the application software for upgrading ATS message format from a current version of the ISO20022 message type to a new version of the ISO20022 message type standard, The upgrade to a new version of ISO20022 message type will be required when the new version is released by ISO20022 organization and when CBY decides to adopt the new version in the ATS ISO20022 Message Formats for Yemen.

Vendor Responses

3	Hardware & Software Requirements	
		Vendor Responses
3.1	**Hardware, Database and Network Infrastructure**	
3.1.1	**Technical Architecture**	
	The Bidder shall provide a technical architecture diagram for the proposed solution, illustrating and describing the types of host servers and communication equipment for implementation at the ATS Data Centers at the production site and the backup site, and how they function and interact with each other and with external systems in participants e.g. participants' core banking system, and in CBY e.g. the RTGS system.	
3.2	**System Requirements**	
3.2.1	**Resilience**	
	The live system will be installed on servers at both sites. The equipment at each site should be sufficient to run the entire system should the other site become unavailable, but in normal operation CBY expects that the systems at the two sites will be coupled in such a way that a failure of any single server (for example) will have no effect on the operation of the system.	
3.2.2	**Failover**	
	The proposal must explain in detail how suitable failover procedures will be developed and tested to allow for situations of multiple failures or complete unavailability of one site.	
3.2.3	**Test System**	
	The vendor should provide a test and training system which will be installed at the central site. This will be used as required for testing of changes to the software, training of staff, etc	
3.2.4	**Hardware, System Software, Middleware**	
	CBY intends to procure the required hardware and associated components itself, according to the recommendations which will be agreed with the system provider. The system provider must therefore give full details of all recommended hardware, system software, middleware and any other products and equipment necessary to run the system.	
3.2.5	**Hardware Specifications**	
	The hardware should consist of the following functional elements: 1.Application and data Servers; 2.Database Servers; 3.Web Servers; 4.Data Storage equipment as needed 5.Work stations 6.Any other hardware (e.g. rack(s)).	
3.2.6	**DBMS**	
	The system provider should provide a description of any special facilities of the database management software which are utilized by their application, for example automatic database replication to facilitate high availability.	
3.2.7	**Participants' Components**	
	The solution provider in addition to software required at CBY must specify in detail all software products (required and optional) that may need to be installed by each participating organization, including requirements for Straight through Processing.	
3.2.8	**Other software needed**	
	In addition to server operating system(s), System provider should clearly specify in detail any other system software and middleware items that will be required to run the ATS. (e.g. Oracle licenses)	
3.2.9	**Network Support**	
	The proposed system shall support the following Networking standards: ›All host applications must support TCP/IP connectivity and communications with external systems. ›Secured communication sessions using HTTPS/SSL must be adopted for connectivity of all users to ATS system. ›Secured FTP protocols must be supported for file transfer between external systems in participants' premises and CBY premise. ›High performance core switches must be supported and implemented for routing all network traffic amongst host servers within the local networks in the Production Data Centre and the backup sites' Data Centre. ›High performance and scalable Firewall devices must be implemented. ›Virtual LAN segments must be implemented for the local network connecting all host servers and interface components within the Production Data Centre and all backup sites Data Centers used by CBY. ›The host servers in the Production site and all backup sites must establish connections with all participants over the VPN operated by CBY for the ATS system. ›Backup links must be supported and implemented for each participant and each external system to connect with the ATS system.	
3.2.10	**Design & Operations Standards**	
	The design and operations of the system must be compliant with international standards. These include at minimum the following standards: ›Principles of Financial Market Infrastructure (PFMI) for Payment System as published by the Bank for International Settlement (BIS) ›ISO20022 global messaging standards as defined by iso20022.org, including funds transfer messages and communication messages for Payment Business Area ›PKI security standards for authentication and non-repudiation checking of payment messages integrity. ›Internet Protocol version 6 (IPv6) must be supported.	
3.2.11	**Scalability**	
	The ATS solution shall be designed to provide scalability in the following areas: a)Vertical Scalability – the hardware servers and network devices must support vertical upgrade including addition of CPUs, memory, ports, etc., to provide increased performance capacity for coping with increasing growth of transaction volumes for processing. b)Horizontal Scalability – including the following: ›Multiple instances for key application software components, including file processors, web user function components, ATS clearing engines, etc. must be available and deployed to provide increased transaction throughput rates for coping with increasing growth of transaction volumes. ›Replication of physical or virtualized servers, including webserver, application servers, must be supported for deploying additional servers to provide load balancing and cope with increasing number of users and increasing transaction volumes.	
3.2.12	**High Availability & Redundancy**	
	The server system solution shall be designed to provide for high availability as follows: (a)The system availability must meet a minimum of 99.99% in a year. (b)The host servers and equipment must be deployed in a High Availability (HA) system configuration in the Production Data Centre. The HA system configuration must include the following: ›Redundant key host servers including database servers must be installed in a cluster system such that the two redundant severs can run in either active/active or active/passive mode for each one to act as a hot standby of the other. The HA cluster must connect with networked disk arrays which enable data to be mirrored between severs in the cluster, and immediately accessible to the hot-standby without discrepancy in the event to switching from primary to hot-standby. ›Redundant web servers, application servers and interface servers must be deployed to provide hot standby of the software components running in each server. ›The software components of the application system must support multiple instances for separate deployment in redundant servers. ›Redundant network equipment and backup communication links must be supported and implemented to provide high availability.	
3.2.13	**Data Recovery Times**	
	The data recovery times due to any equipment failure at the Production site with High Availability configuration shall achieve 'zero' time based on the use of redundant equipment. The data recovery time in the event of having to switch the operation of the system to a backup site system due to fatal site failure in the Production site, shall not exceed 30 minutes.	
3.2.14	**Failover & load balancing**	
	The ATS software must support deployment in a network infrastructure which includes Failover and Load Balancing design features. Within the network infrastructure, all network equipment and devices, including firewall, core switches and routers, will have primary unit and redundant unit. The ATS software running in host servers must continue delivering services in the event of a network primary unit failovers to a redundant unit. In addition, the ATS software must be able to handle network traffic sent and received through both the primary unit and the redundant unit working in a load balancing configuration.	
3.2.15	**Future version support**	
	The supplier should indicate their commitment to supporting future versions of operating system software and other their-party components essential to the operation of their proposed solution.	

4 Operational Requirements Evaluation

Vendor Responses

4.1 Session Operations

The system shall establish clearing sessions to process DC and DD payments.
An ATS clearing session shall have the following characteristics:
a). The clearing session shall have a user-defined start time and finish time.
b). A list of business periods for different allowable events must be available in the ATS clearing session. These shall include at minimum the following periods:
i. Submission Period, which allows the following processing events:
1. Submission of DC and DD payment files/batches from originating participants
2. Resend of system rejected payments or payments refused /returned in previous session
3. Cancellation of submitted payments in current session
4. Refund payments allowed to be sent
ii. Return Period, which allows the following processing events:
1. Immediately when submission period ends - transmission of payment batches by the central ATS system to receiving participants.
2. Receiving participants to send any return items for DC payments received.
3. Receiving participants to send any refusal items for DD payments received.
iii. Settlement Period, in which the ATS central system performs the following:
1. Immediately when a return period ends, the ATS central system prepares final clearing positions of all participants and sends clearing reports to all participants to inform them of their multilateral net clearing positions.
2. Prepares a net settlement file in accordance with final clearing positions of all cleared payments in current session and sends it to the RTGS system
3. Waits for settlement results from the RTGS system and sends messages to all participants when result is a successful completion.
The start time, finish time and timing of an ATS business period above for a clearing session in an ATS business day shall be flexible, defined by user-controlled parameters which can be defined and amended whenever necessary by CBY system administrator on the ATS system.
The system shall assign a unique clearing session number to each clearing session when it is started.

4.2 Clearing and Settlement for IFT payments

The system shall accept IFT single payments sent by participants for real time processing at any time on a 24x7 basis. This shall be irrespective of any clearing session operations.
The system shall include the interbank settlement amount of an IFT payment after it is successfully processed into the clearing positions of the participants in the current clearing session. In case that there is not an active (started) clearing session, the system shall accumulate the IFT settlement amounts into the clearing positions of the originating participant and the receiving participants for the next available clearing session.
The settlement for the IFT payments shall accordingly be performed in the settlement period of the respective clearing session via the net settlement file sent to RTGS system.

4.3 Multiple clearing sessions for 24x7 Availability

The system must be able to operate multiple clearing sessions based on daily session timings/hours which are defined by user-configurable parameters for the CBY administrators to set up.

4.4 Flexible Business Day Schedule Configuration

The system shall define a flexible ATS business day schedule for operations.
EATS business day schedule will be started with a new value date, and comprise the following components:
a) Start of Day Adjustment – For ATS participants, the position (debit and credit) account shall be reset, and the debit cap limits shall be adjusted based on reserved funds collateral reported from the RTGS system.
b) 1st Clearing sessions will start after the start of day adjustment is completed.
c) Multiple clearing sessions shall be started at times defined in the business day schedule.
The system shall be flexible to support options of:
i). Allowing next clearing session to start when the submission period of current session finishes i.e. overlapping of clearing session; or
ii). Enforce the next clearing session to start only after the current clearing session with settlement period finishes.
d) End of Day Period, which include the following events:
i). Final settlement via RTGS
ii). End of day Reconciliation and statement reports transmission to all participants
iii). Rollover of any outstanding 'On-hold' payment items due to debit cap exceeded to the next business day.
e) Automatic Archive of current day payments to online history database
The system shall provide functions for authorized CBY system administrators to set up and maintain a business day schedule through a GUI. The start times and finish times for each component above i.e. Start of day Adjustment, each clearing session, End of Day period, shall be system parameters which can be adjusted or amended by appropriate CBY users if necessary for any business day.
The system shall support definition of multiple configurations to be used as business day schedule templates, including at minimum the following:
• Business day schedule for normal working days from Sunday to Thursday
• Business day schedule for normal Friday extending to the start of Sunday in the next week.
• Business day schedule for Special Days, such as during a religious season.

4,5 Automatic and Manual options of Session and Business Period Operation

The system shall operate the business day schedule with automatic start and finish of a clearing session and operation events in accordance with the defined business day schedule parameter.
The system shall operate the business day schedule with automatic start and finish of a clearing session and operation events in accordance with the defined business day schedule parameter.
The system shall also provide an option for an authorized system operator to change from automatic operation to manual operation, such as:
• To change the finish time of a business period within a clearing session to 'manual mode'. The system shall then continue the business period operation until the system operator manually 'closes' the period.
• Following from the step above, the system shall adjust/shift the start and finish times of all not yet started business periods immediately after the current business period is manually 'closed'

4.6 End of Day - Final Settlement Option

The system shall have an option for CBY to merge a multiple of unsettled net settlement files from previous clearing sessions of the current business day into a single net settlement file for final settlement. This may be necessary in order to consolidate the net settlement positions of participants which have both debit position and credit position in different unsettled net settlement files, thereby reducing the liquidity requirement on the participants.
The system shall perform at the minimum the following for meeting the above requirement:
• When the End of Day business period starts, the system shall check if any net settlement file of the current business day has not yet received successful settlement response from the RTGS system, i.e. 'unsettled' net settlement file.
• If there is more than one 'unsettled' file, the system shall provide an option to merge the number of 'unsettled' multilateral net settlement files (Pacs.009) into a consolidated final net settlement file (i.e. as a merged Pacs.009), and then send it to the RTGS system.

4.7 Rollover of 'On-hold' Payments

When any DC or DD payments remain pending with 'On-hold' status at the End of Day period (e.g. due to insufficient debit cap limit of a participant for the payment), the system shall automatically roll over these pending payments to the next business day.
When the 1st clearing session of the next business day starts, the system shall release these 'pending' payments and perform validation and clearing processing for these payments again.

4.8 Calendar Maintenance

The system must use the Gregorian calendar as the system calendar for the business day schedule and value dates in the ATS system. The system must be loaded with Gregorian calendar for at least from 5 years ago up to 10 years in future.
The system calendar shall support both options of import or manual input of the list of all non-working days to the system calendar, including all public holidays and weekend days (normal Saturdays and Sundays).
The system must adopt the system calendar for performing related payment validation, which include at minimum the following:
• To check that value date of payments in the system cannot be a non-working day.
• After today's business day has completed End-of-day period, to automatically select the next non-working day as the value date of the next business day.

4.9 Option of supporting Hijri Calendar

The Bidder should advise if the proposed solution has an option to support the use of the Hijri calendar in the system.

4.10 Sudden Holiday Schedule

There may be a sudden holiday as announced by local authority, without an advanced notice. In which case, the authorized CBY administrators may determine to convert a normal business day to an un-scheduled holiday.
The system must support unscheduled sudden holidays in the following scenario:
• When an unscheduled sudden holiday is announced before the ATS Start of Day activity for the business day of the 'sudden holiday', the system shall allow authorized CBY administrators to set up the next business day as a 'Non-working day'.
• When an unscheduled sudden holiday is announced after the ATS Start of Day activity for the business day of the 'sudden holiday' has started, the system shall allow authorized CBY administrators to change the current business day as a sudden 'Non-working day'. The system shall then provide the following options of adjustment the business day schedule of the current day:
a) 1st option - automatically extend the current clearing session and settlement schedule for all outstanding payments to the next non-working day.
b) 2nd option – allows authorized CBY administrators to manually configure the finish time of current business period/clearing session, and the start/finished times of the remaining clearing sessions for the current business day.
In both options above, the system must automatically carry forward the clearing and settlement of ATS payments with a value date falling on the 'sudden' holiday to the extended clearing and settlement schedule.

4.11 Additional Option for IFT settlement

The Bidders should describe if the system has an option for CBY to define a different net settlement schedule for IFT payments than the settlement schedules of DC/DD payment batches.
This option should enable CBY to define more frequent net settlement periods for IFT payments. For example, IFT net settlement may be scheduled to be performed every hour, whilst DC/DD net settlement is scheduled to be performed every 4 hours.
In this option, the IFT payments will be separated from DC/DD payments for preparing the net settlement files and sending to RTGS. The system should generate separate net settlement files for IFT payments and separate net settlement files for DC/DD payment batches in accordance with their respective settlement periods schedule.

4.12 Hardware and Software Central Management

The equipment and software provided shall support at minimum the following:
a) Centralized software changes
b) Centralized configuration changes
c) Exception reporting of equipment errors
d) Performance reporting of equipment
e) Backing up of equipment configurations

4.13 Equipment Management

All equipment shall be equipped with systems management software to facilitate the management of these systems. The management software shall possess at minimum the following features: -
a) System health monitoring through interrogation of a diagnostic processor
b) RAID and other device configuration
c) Performance monitoring capability
d) Diagnostic capability

4.14 Equipment Maintainability

The equipment and software provided shall support at a minimum the following:
a) Hot swappable of components
b) Ease of replacement of modular units
c) Visible or audio indicators to indicate operational status i.e. Alarm, Non-Operational & Operational

4.15 Physical and software configurations

The equipment provided shall support at minimum the following:
a) Prevention of unauthorized software configurations on equipment and user devices.
b) Prevention of unauthorized changes to the hardware configuration of equipment and user devices e.g. removal of equipment components such as network cables.

5	Security Requirements Evaluation	
		Vendor Responses
5.1	**PKI data encryption & digital signatures**	
	The system must use Public Key Infrastructure (PKI) public keys and private keys of participants to perform data encryption and create digital signatures at the participant level for all payment batches and payment messages which will be transmitted over communication lines between ATS system and participants. The PKI encryption and digital signing function must adopt the latest industry- standard cryptographic technologies such as RSA, SHA-2, AES, etc. The algorithm used for digital signing must use keys with length of minimum 1024 bits.	
5.2	**Authentication & non-repudiation check**	
	The system must perform authentication and non-repudiation checks of payment batches or messages received by any participant.	
5.3	**PKICA Infrastructure support**	
	The system shall adopt the digital certificates and secured procedures in an industry-standard PKI-CA infrastructure which will be established in CBY. This shall include at minimum certificate request message, key management process and certificate management process in the PKI-CA infrastructure.	
5.4	**Basic PKI Key Generation Tools**	
	As the PKI-CA infrastructure needs to be developed in Yemen in the near future, there may be a situation that the PKI-CA system is not yet available during the implementation period of the AFT system. Accordingly, the Supplier must include “basic essential tools” for PKI key generation and certification, including the following: •Function for each participant to generate PKI key pair (public key and private key). •Function for CBY to certify the public key of each participant and distribute public key information to all participants.	
5.5	**PKI Key Management**	
	As the vendor is required to propose a centralized platform for hosting the AFT software for all participants, the system must support a mechanism for participants to store their private key in the participant own secured media such as a security token or equivalent under the physical security control of the participant.	
5.6	**Secured Users’ Communications**	
	All users’ communications with the ATS system shall be encrypted using https/SSL or https/TLS (as a higher standard than SSL) secured sessions. The secured session must be established using web-browsers which support minimum of 128-bit encryption (e.g. Internet Explorer, Chrome, Firefox).	
5.7	**Secured File Transfer**	
	All payment files for submission or downloading must be transferred using SFTP secured protocol or the equivalent between participants and the ATS system	
5.8	**Data Security**	
	The system must protect all data that may be viewed or retrieved by participants in the ATS participant systems and the central ATS system, to achieve confidentiality for the data owner/user including at minimum the following: a).Any participant shall be prohibited to access or view payment message data and customer information which do not belong to the participant. b).The system shall provide user group security settings for each participant to define the read /write/delete access rights of the participant users to the data and transactions of the participant. c).All passwords for users and system interfaces as created in the system must be stored in encrypted form without clear text in any storage system and device	
5.9	**Audit Logs**	
	The system must produce audit logs for each transaction processed by the system. The audit logs shall include clear information of timestamps, actions taken, initiating user / system and data changed or new data added. The system must safe-stored all audit logs produced and be able to provide them in future for review or retrieval for investigation.	

6	**Business Continuity Requirements Evaluation**	
		Vendor Responses
6.1	**DR systems at a backup site**	
	The production ATS system must be supported by a Disaster Recovery (DR) system for providing business continuity in case a critical site failure occurs to the production system. The a DR system proposed shall include the following a DR system installed at a Government backup site in Raqqa city The Supplier shall recommend the hardware and software required for the DR system to be installed in the backup site. The Supplier shall supply the same software in the production system for the backup sites and ensure that the DR system shall deliver all the functions same as the production system.	
6.2	**Real time mirroring/journaling for warm-standby**	
	The DR system shall be available as a “Warm Standby” to the production system at any time of ATS operations. The warm-standby capability shall be established using real-time database mirroring or journaling or equivalent technology to be implemented by the Supplier . The ATS application software must therefore support: a).The database of the ATS production system must support real-time mirroring or journaling of database updates to the ATS databases at the DR system. The real time mirroring or journaling function must be performed over WAN communication lines of CBY. b).The ATS application system must be able to be restarted based on the ATS database at the DR Site. The ATS application shall then deliver its normal functions for live operations to users using the DR system. The Bidder shall advise how the proposed solution will meet the above requirements.	
6.3	**Procedures for Switching to DR systems**	
	The Supplier must prepare handy procedures with clear console functions for activation of the DR system in the backup site. The DR system must be able to be activated in a minimal time not exceeding 30 minutes from the time a decision to switch to DR system is authorized. CBY will decide on which of the DR systems (i.e. either DR system at the Government backup site or the DR system at the remote backup site) will be activated depending on the failure situation. The Bidder shall describe the steps required and the benchmark elapsed time for switching from ATS Production system to an ATS DR system based on proven cases in their reference sites.	
6.4	**Procedures for Restoration to Production Systems**	
	The Supplier must prepare handy procedures with clear console functions for restoring ATS operations from the DR system to the Production system, when the production site resumes its normal condition. The Bidder shall describe the steps required and benchmark elapsed time taken for restoring from an ATS DR system to an ATS Production system based on proven cases in their reference sites.	
6.5	**Recovery from Cold Backup**	
	In addition to DR system, the Supplier shall provide a robust procedure and/or tools for restoring a full ATS system from a ‘cold’ backup medium of the ATS software and ATS database. This procedure shall meet an extreme requirement of business continuity when CBY needs to re-install an ATS operation environment from scratch.	

7 Implementation Requirements Evaluation

7.1 Implementation Schedule

The successful bidder shall be required to be responsible for the following tasks in the Implementation Schedule:
a). Project kick-off meeting by Supplier & Employer
b). Prepare Project Management Plan and QA plan
c). Business analysis workshops
d). Produce ISO20022 message formats specification for ATS payments
e). Define detailed software customization and system parameterization
f). Prepare Interface specification with CBY systems
g). Software Customization & interfaces development
h). Finalize hardware and network infrastructure specification
i). Installation of customized software in Test & DR environments
j). System testing and Commissioning
k). User Acceptance Testing (UAT) for Functional & Integration
l). Implement interfaces to CBY's CBS
m). Perform Technical Testing - performance stress, HA/Failover, Security
n). Prepare Market Rehearsal (MR) Plan
o). Install tested software to pre-production for MR
p). Support Participants MR Testing and ATS Certification
q). Disaster Recovery Testing
r). Delivers final system documentation
s). Develop a Training plan
t). Business training to CBY and participants' users
u). Technical training to CBY and participants' IT team
v). Define data archival and migration requirements
w). Migration of Data to ATS pre-production environment & live environment
x). Support ATS Go-live with DC/IFT/eMandate - parallel run with LVPS
y). Support Full Go-live of DC/IFT/DD
z). Supplier Post-implementation 3-months onsite Support
aa). Supplier Handover of ATS system to CBY
In addition, the Supplier shall provide necessary support to CBY and participants for the following tasks in the Project Plan:
a). Mandate templates, Direct Debit Rules & DD Scheme Formulation
b). Draft Rules & Regulations for ATS Operations
c). Data Centre Outfit for Prod site and Backup site
d). Preparation of test plan and test data for UAT
e). Participants software development for STP system interface with ATS system using APIs of the Supplier
f). Develop new procedures for Business Process Reengineering
The Bidder must describe how they would perform and support the project tasks listed above to enable them to discharge their responsibilities.

7.2 Supplier Implementation Team

The Bidder shall provide an appropriate number of staff with adequate skills and experiences for implementation of the ATS system and associated infrastructure, to form a Project Team with inclusion of the following members:
a) Supplier Project Manager
b) ATS & Payment Domain Expert
c) Solution Architecture of the proposed ATS solution
d) Technical Architect who will implement and support the hardware and network infrastructure
e) Database Administrator with required certification on the proposed RDBMS
f) Lead software developer who will provide application support in the acceptance testing and future operations.

7.3 Documentation

The Supplier shall provide the following system documentation during the project implementation period for acceptance by the CBY:
a)Project Management Plan with detailed project schedule (in Microsoft project file format), to be produced when project kick-off commences.
b)Regular Project Status Reports including Risk & Issues registers
c)Regular updated Project Schedule
d)QA Plan and QA checklist/reports
e)System Architecture Design document
f)Functional Specifications with detailed Message Flows
g)Specification of ATS payment files, batches and messages using ISO20022 message formats
h)Software Customization and Parameterization Specification
i)Interface Specifications between the ATS and:
oCBY's Core Banking System (CBS)
oParticipant CBS (including APIs specifications for Straight Through Processing)
j)Hardware, system software and network/IT Infrastructure Specification for CBY
k)Hardware, software and networking requirement for ATS Participants
l)Hardware, software and network Installation Procedure Document
m)System Security and Key Management Manual
n)User Manuals (Technical & Functional) for the Supplied ATS System
o)Data Dictionaries for the ATS Database Tables
p)IT Operations, Maintenance and Trouble-shooting Manual
q)Business Continuity Plans including:
oACH System Disaster Recovery (DR) Plan
oSystem Recovery from Backup Media
r)Sample UAT plan and sample test data
s)Technical Test Plan including Performance Stress Test, HA /Failover Test and Security Test
t)Data Migration & Archival Plan
u)Sample Market Rehearsal & Participant Certification Plan
v)Training Plan & training materials (including presentation file, notes and handouts)
w)System Performance Testing Report
x)Parallel Run and Production Go-Live Plan
y)Post-implementation Support Strategy and Procedures
Documentation shall be produced in English language and delivered in electronic format.
The Supplier shall deliver draft versions of above documentation in accordance with the related project activities in the expected implementation timetable. The Supplier must perform updates of the documents based on review feedback from the CBY and/or information identified from Operational Acceptance Test. The Supplier then delivers the final versions of the documents after the acceptance testing phase has completed and before the operational acceptance certificate is issued.

7.4 Software customization and parameterizations

When the project is kicked off for commencing the implementation schedule, the Supplier must conduct onsite business analysis activities including workshops/meetings with CBY and the participants, to produce various design specification documents for software customization and all system interfaces development.
The "Software Customization and Parameterization Specification" document shall include description of all software customizations to be performed by the Supplier , as well as a list of system parameters to be used for defining local customized information of the ATS system in Yemen.

7.5 ISO20022 Message Specifications for ATS & RTGS

When a bidder is selected as the contractor, the successful bidder must provide support to a “CBY and Participant Working Group” to develop a detailed “ISO20022 Message Specification” for the ATS system in the Yemen. This shall include the following tasks:

- Immediately after signing of the ATS Contract, the successful bidder must submit a detailed specification document for all the ISO20022 message formats and payment file/batch formats adopted in their ATS system product.
- The successful bidder shall support the Working Group to review all the ISO20022 message formats in the specification, and discuss any customization or local information required by the Working Group on the message formats.
- Based on the discussion, the successful bidder shall then update the specification document to provide a complete “ISO20022 Message Specification for ATS System in Yemen”. The complete document shall also include details about payment file formats such that the document shall be adopted by all participants for developing their banking systems/Core Banking Systems to prepare ATS messages and payment files in the according formats for achieving Straight Through Processing (STP).

7.6 Customization to include existing message information

During the customization development, the Supplier must review the payment message format in the existing LVPS, and include a mapping of all needed data in the existing message format to the appropriate data fields in the ISO20022 Message Specification for ATS System. Where necessary, the Supplier shall perform software customization to adopt these existing and needed data in ATS IFT and DC payments.

7.7 Hardware installation & infrastructure

The bidder shall propose specifications of the list of hardware, network, database and system software as the components for the IT infrastructure of the ATS application.

When the hardware and software infrastructure components are supplied and delivered by the Supplier the Supplier must perform installation of the hardware and infrastructure at all the hosting sites of the CBY, comprising a Production site and the backup site. Along with installation, the successful bidder must perform configuration, tuning, connectivity and commissioning of the hardware and software infrastructure components.

7.8 Software Installation & Commissioning

The Supplier shall be required to perform installation of the customized ATS software and its updates to various system environments required to prepare for acceptance testing, and future production operations of the ATS system.

The system environments for software installation must include at minimum, the following:

- Test environment for UAT functional and integration test
- Test environment for Technical test and system interfaces with CBY's RTGS, CBY's CBS and all participants’ CBS.
- Training environment for business users at CBY and all participants
- Pre-production environment for staging purpose and support purposed
- Live environment in preparation for Go-live
- Disaster Recovery environments for the backup site.

7.9 Acceptance Testing

CBY, with the assistance of the Supplier, will perform the following tests (where relevant) on the ATS system following Installation to determine whether the supplied system meet all the requirements mandated for Operational Acceptance.
a)User Acceptance Test for all functional requirements
b)Integration Test between CBY's ACH, RTGS system and CBS system
c)Technical Test including performance stress test, HA/Failover test and Security tests.
d)Market Rehearsal Test
e)Disaster Recovery Test
f)Parallel run of ATS daily clearing sessions.

7.10 Acceptance Testing Support

The Supplier must provide the following support to all testing in the Operational Acceptance Testing phase:
• Supplier project team must support the CBY and the ATS participants in setting up the ATS application for testing, establishing access by users and integration with interfacing system.
•Provide staff onsite support in all testing sessions and provide assistance to resolve any issues on the installed system which prohibits a test case from being executed.
•Provide fixes on any system issues identified by the test results within timeframe agreed with the CBY's project team which will meet on-time completion target of the respective test.

7.11 UAT Plan and Testing Support

The Supplier shall provide sample test plan with test scenario/test cases and relevant test data (such as test payment messages) to the CBY for review and preparation of the final UAT plan.

7.12 Market Rehearsal (MR) Test

The main purpose of the MR test shall be to simulate the future live operation of the ATS system for all participants to perform testing of all mandatory processing scenarios in a pre-go live environment.
The Supplier must support the MR testing via the following services:
•Install the latest updated software with necessary configurations on the environment to be used for MR testing.
•Assist CBY to perform daily operation of MR system to simulate future live operation.
•Provide fixes on any system issues identified by the test results within timeframe agreed with the CBY's project team which will meet the on-time completion target of the respective test.

7.13 Performance Stress Test

The Supplier shall provide the following services for the test:
•Propose a test plan for testing /demonstrating the suppled system shall meet the performance targets as described in this RFP document,
•Provide reference information about performance benchmark tests carried out in other successful site of implementation by the Supplier
•Provide software tool/utility programs which may be used to simulate a large number of users and/or high transaction volumes to create stress on various components of the system. The Supplier shall then assist with the running of these tools and utility program to execute the performance stress test.
•Capture the results of performance tests which may include system response time, transaction throughput rates, etc. over test period of time.
•If performance targets are not met in the testing, the Supplier shall carry out necessary tuning on application software and/or infrastructure component to improve processing rate and system performance of the proposed solution.

7.14 Failover Test

The Supplier shall provide the following services for the test:
•Propose test plan with test cases which can demonstrate successful failover of key software and hardware components, to meet the HA requirements of the ATS system. The test plan and test cases shall be agreed with the Employer.
•Conduct the HA Failover test on the ATS system components in accordance with the agreed test cases, to achieve successful testing of the HA capability of the system.
•Support failover tests carried out from the participants for their communication lines and their system interfaces to the ATS.
•Resolve any issue encountered during the failover tests.

7.15 Security Test

The Supplier shall provide the following services for the test:
•Proposed test plan with test cases which shall demonstrate the system for meeting requirements of:
oInformation security requirement section of this document
oSecurity control on access to functions and data based on user profiles security settings and application security settings.
•Assist the CBY's team to prepare test data which cause security violation and demonstrate the system performs sufficient security protection.
•Rectify any issue identified during testing to ensure the system shall meet all security requirements.

7.16 Disaster Recovery Test

The Supplier shall provide the following services for the test:
•Assist the CBY's team to develop test plan by reviewing all possible disaster scenario, and advising the appropriate procedures and system for disaster recovery.
•Install and configure the DR system to be ready for performing the DR test. Establish the real time data mirroring or journaling function from production system to DR system. These shall include testing of DR system in backup site.
•Rectify any issue identified during testing to ensure the DR system shall meet the disaster recovery requirements and enable the ATS system to achieve service level objectives defined in this document.
•Provide training and support to CBY and participants on the proper procedures for switching ATS operations from the production system to the DR system, as well as procedures for restoring ATS operations from the DR system to the Production system.

7.17 Change Control & Configuration Management System

The Supplier shall provide effective change control and configuration management tools and procedures for the ATS system. The change control/configuration management tools and procedures shall be adopted by the Supplier during the period of ATS operational acceptance testing, and in during the post-implementation warranty, support and maintenance period:
These tools and procedures shall meet the following requirements as a minimum:
•When new hardware or new software releases/upgrades are required to fix a problem, or introduce new functions, the Supplier shall follow a rigorous procedure which avoids security exposures and ensures processing integrity and service reliability.
•Equipment changes must be notified in advance to all related parties, and must follow well-defined installation procedures.
•Software changes must be certified, tested by users, controlled and scheduled with approval from CBY for applying them to the ATS system.
The Supplier shall also provide documentation and demonstrate the source version control system to ensure the correct versions of new application software shall be released for emergency program fixes and normal releases.

7.18 Data Migration

Data migration for the ATS system is required from a test environment to pre-production environment and then to the production environment.
A pre-production environment is a controlled environment for maintaining the latest version of tested software and tested configurations which have been signed off by CBY for migrating to the production environment for live ATS operations.
The Supplier shall be required to conduct data migration from the test environment to the pre-production and production environment after UAT testing is complete. The migration shall cover at a minimum:
•ATS database tables for participants' static information, system user profiles, eMandate records, all business rules and system parameters.
•ATS application software executables, patches (if any), database schema, etc.
The Supplier shall perform migration with clear audit logs available for checking and safe-keeping to meet audit requirements.

7.19 Hardware & Network Migration

The Supplier is required to jointly develop migration process for the servers and network with the CBY to:
a)develop specialist tools and functions to facilitate migration;
b)develop special features to enable migration (in certain cases);
c)provide details on the deployed equipment and software as required;
d)perform server implementation and/or network deployment to the satisfaction of the CBY.

7.20 Go-live onsite support

The Supplier must arrange their implementation team members to be onsite during the period when pre-go live parallel running commences, continuing to Go-live of the ATS system.
During the pre-Go live and Go-live support period, the Supplier's staff for onsite support during the above period must include at minimum the following members:
•Software Expert with expertise on ATS application software support
•Hardware and network engineer with capability to advise and recommend configuration in the host servers, network, HA system and DR system infrastructure required by the ATS software.
•A Support Team Leader with capability to manage the support team activities to respond to problems encountered on the ATS system.
The Supplier shall advise the proposed number of staff members and how they will provide the support services during this period.

7.21 3 months' Post-implementation onsite support

During the 3 months post-implementation onsite support period, the Supplier must assign ONE support staff with adequate skills to provide support to the ATS system hardware and software in the ATS live system operation. The Supplier 's onsite support staff must work full time in the CBY premise, such that the support staff will attend to any ATS system problem in the presence of CBY support staff and provide skill transfer to CBY staff.
The Supplier 's support staff must be capable to respond to a problem notification and provide resolution promptly to meet the SLA requirements as described in this document.
The Supplier shall advise the qualification and level of experiences of their staff that will be proposed to the 3 months post-implementation onsite support duty.

Vendor Responses

8	**Training Requirements Evaluation**	
		Vendor Responses
8.1	**Training approach**	
	The Supplier shall adopt the following actions and approaches for all the training courses: a).Establish a training environment for the ATS system with user functions, processes and system outputs available to all trainees. b).Tailor the training program which must include hands-on training in addition to class-room training. c).Provide training materials which include presentation files, hands-out, documents in both electronic format and hardcopies shall be provided to the trainees. d).Adopt a train-the-trainer approach such that the trainees shall be trained to a capacity that they will be able to conduct the subjected training to other staff in their own organizations. e).The training shall include sufficient knowledge and skill transfer (functional and technical knowledge) to enable CBY and participants' trainees to perform the expected responsibilities that are assigned to them. f).Training courses shall be conducted in English language. Training in Arabic language is also desirable.	
8.2	**Training on ISO20022 message standards (participants and Central Bank)**	
	The ISO20022 message standard is new to all participants. The Supplier shall tailor a training course about ISO20022 standards based on the Supplier's experiences and the list of ATS ISO20022 message types which are supported by the proposed system. The following contents shall include at minimum: •Overview of ISO20022 standard for financial industry, with the objective and benefits of the standard •Walkthrough of the structure, fields and formatting rules of each type of ISO20022 message which shall be supported in the proposed ATS system. •Detailed message flows based on ISO20022 messages for all the business schemes supported in the proposed system. The Supplier should advise any further recommended contents. The Suppliers must be able to conduct this training course to the following number of trainees: •At least 5 trainees from CBY •At least 5 trainees from each participant	
8.3	**Business Training on ATS functions for participants**	

	The Supplier shall tailor a detailed training course on all the functions available in the ATS Participant system. The contents must include at minimum the following: •An overview on the end-to-end payment processes supported by the future ATS system of Yemen, covering all payment types (DC, DD and IF) and their settlement. •Details about each system function for ATS participant's use. •List of reports and tools for reconciliation, payment search and investigation. •Any participant level administration functions available to a participant, which may include their own user administration, head office and branches parameters, etc. The Supplier should advise any further recommended contents. The Supplier must be able to conduct this training course to the following number of trainees: •At least 5 trainees from CBY •At least 5 trainees from each participant	
8.4	**Business Training on ACH & RTGS Clearing Sessions, Settlement and System Administration for CBY**	
	The Supplier shall tailor a detailed training course about the system functions provided to CBY for performing system operations and monitoring of the ATS system. The contents must include at minimum the following: •An overview of the operation process and supported roles for the central bank or clearing house in the ATS system. •Details about ATS system functions for the central bank/clearing house, including daily clearing session operations, settlement function, system monitoring and system administration. •List of security administration functions to implement security policy and security administration for participants. The bidder should advise any further recommended contents. The Contractor must be able to conduct this training course to least 10 trainees from CBY.	
8.5	**Technical Training for participants on participant site, STP API and online integration**	

The Supplier shall tailor detailed training course(s) to the IT team/technical staff of participants at minimum on the following:

- Hardware, software and networking requirements at participants' sites for user connections and online integration with ATS system.
- List of online integration options available, such as API, web services, file import/export, message based communications.
- Walkthrough of all message flows and transaction processing in the system interfaces between participant systems and the ATS system, to enable Straight Through processing (STP) of outbound payments and inbound payments.
- Review of details about all message formats and file formats defined by the ATS system for participants to adopt in the system interfaces, API, file import/export/transfer, etc.
- Description of security requirements to be established for ATS workstations, network and system interface by the participants.
- Trouble-shooting guide and any tools for participants to investigate a system problem symptom which may occur at the participant user session, API and system interfaces to the ATS system

The bidder should advise any further recommended contents.

The Supplier must be able to conduct this training course to the following number of trainees:

- At least 5 trainees from CBY
- At least 5 trainees from each participant

8.6 Technical Training on Data Centre Operations on the ATS systems

The Supplier shall tailor a detailed training course to the CBY operational staff on the data center operations for the host servers, network equipment and infrastructure of the ATS system. The contents shall be include at minimum the following:

- An overview of the IT and network infrastructure of the ATS system covering the CBY site and participant sites.
- Training on the procedures of all ATS host servers operations, covering system start-up/shutdown, system monitoring, system administration, backup/restore, data archive, software installation, etc.
- Network equipment and firewall security configuration and operations.
- Any regular maintenance procedures required.
- Any performance tuning functions or tools.
- Trouble-shooting guide and any tools for investigation of problem in the IT and network infrastructure.

The Supplier should advise any further recommended contents.

The Supplier must be able to conduct this training course to at least 10 trainees from CBY, including system administrator and network manager.

8.7	**Technical Training for DBA on High Availability, Performance Tuning & Security**	
	The Supplier shall tailor a detailed training course about the hardware, software and network infrastructure for implementing High Availability and Disaster Recovery system of the ATS. The contents shall be include at minimum the following: •An overview of the HA system and DR system infrastructure for the ATS. •Procedures for implementing the HA system including active/active or active/passive servers, redundant components, database cluster and automated procedures for failover, etc. •Support procedures during failover processing and restoration. •Disaster Recovery (DR) plan, DR system configuration and procedures for activating DR system and subsequent restoration from DR system. •Responsibilities of DBA for installation, support, tuning and problem management of the ATS database. The bidder should advise any further recommended contents. The Contractor must conduct this training course to at least 5 trainees from CBY, including DBA.	
8.8	**Technical Training on Application System Support of ATS for CBY**	
	The Supplier shall tailor a detailed training course about ATS application support to be carried out by CBY technical staff. The contents shall be include at minimum the following: •An overview of the system architecture of the ATS system, covering software architecture, system interfaces, hardware and network infrastructure. •Trouble-shooting and problem determination procedures, including system log file review, system parameter settings, etc. to respond to problem/issue reported by business users on the ATS system functions •Procedures for software change management, covering production support, version control, release of patches/upgrade of the ATS application software. The Supplier should advise any further recommended contents. The Supplier must conduct this training course to AT least 5 trainees from CBY.	
8.9	**Technical Training on Report Generation Tool for ACH & RTGS systems (Central Bank)**	

The Supplier shall tailor a detailed training course on report generation tools available in the system for CBY to design and implement new reports based on the database schema of the ATS system. The contents must include at minimum the following:

• An overview of the ATS database schema available for CBY to build new reports.
• Functions and procedures of a modern report generation tool which is supported by the Supplier for users in CBY to create new reports on an ad-hoc basis, including changing layout in reports, generating new statistical information, etc.
• Procedure to deploy new reports with schedules for automatic generation, definitions of authorized users and/or report recipients, etc.

The Supplier should advise any further recommended contents.

The Supplier must be able to conduct this training course to at least 5 trainees from CBY.

8.10 Knowledge Transfer

Throughout the implementation schedule, the Supplier shall support technology transfer to the project team members and future operational staff in CBY and participants and support staff for various types of project tasks such as the following:

• Hardware and Software installation and operations
• Implementation of system interfaces to CBY's CBS
• Implementation of APIs for participants’ online integration

The technology transfer is to meet an objective of capacity building of staff in CBY and participants, such that the respective staff will be able to provide 1st line support and communicate with the Supplier efficiently on problem solving or future system development requirements.

The Supplier shall describe the approach and extent which will be adopted to meet the technology transfer requirement.

9 Project Management Requirements Evaluation

9.1 Governance

The Supplier shall describe the preferred governance arrangements for a successful delivery of the ATS Implementation Project. The Supplier shall include their proposed arrangements for the following:

- The project management methodology which meets industry standards and has been adopted by the Supplier for achieving successful ATS system implementation in similar projects.
- The Suppliers' own internal project organization structure which will be established for governance of successful project implementation. The Supplier 's own structure shall include at a minimum:
  - The roles from their top level management, a designated project director and a project manager who will be assigned responsibility throughout the project.
  - Number of visits which the top management person of the Supplier will commit for meeting with the Employer's project management team during the project duration.
  - Escalation procedure available to the Employer and contact information of senior/top management of the Supplier
- A Project Steering Committee structure which is recommended for setting up to be chaired by the CBY's representative, and with committed members from senior management from selected banks, related departments from CBY the Project Steering Committee.

9.2 Preliminary Project Plan

The Supplier shall provide a Preliminary Project Plan; to include as appropriate, but not be limited to the following issues:

a) Project Objectives

b) Project Management and Staffing Plan, including :

• ATS Project management organization structure with responsibility for the planning, execution/coordination and ongoing monitoring of all the project phases and project tasks.

• A Supplier Project Manager and the Supplier project team comprising at minimum a solution architect, domain expert(s), software developer, DBA and hardware/network expert, etc. to be responsible for implementation activities of the Supplier. The Supplier project manager must report to the ATS project management organization structure above.

• A recommended project team structure from CBY, including project manager and project coordinator, and staff personnel with required technical skills and business skills.

• A recommended project team structure from each participant, including project manager, project coordinator, and staff personnel with required technical skills and business skills.

c) Implementation Schedule showing the phases, milestones and key tasks that will meet the stated time frame for the project.

d) Key Task, Time, and Resource Schedule. The Supplier shall clearly describe the period durations within each project phase and project activities where the Supplier project manager and technical staff will be onsite to carry out and/or support the activities. The Supplier shall also describe the resource levels such as the minimum number of staff of relevant expertise for each onsite duration.

e) Technical and/or Operational Support Plans

f) Training Plan

g) Risk and Issue Management Plan

h) Pre/post Commissioning/Operational Acceptance Testing Plan

i) Warranty Service Plan

j) Post-Warranty System Maintenance Plan

9.3 Quality Assurance Certification

The Supplier shall show proof of Quality Assurance (QA) standards established across both the organizational and project levels, including at minimum the following:

• QA methodology for software development on the ATS system products and their system interfaces with external parties

• QA methodology for support procedures to problems reported during acceptance testing and in future production operations

• QA on project management and project progress

The Supplier shall have achieved one or more industry certification of its QA system/standard, such as ISO 9001 certification and/or Capability Maturity Model (CMM) certification.

9.4 Quality Management Plan for the project

The Supplier shall include a proposed Quality Management Plan for the ATS project which is based on the Supplier’s QA methodology and describes the following:

- QA procedures and checklists to be applied at each phase of the project
- Role of a QA manager/expert within the Supplier's team.

Vendor Responses

10 Support Requirements Evaluation

10.1 Service Availability

The production system must meet a 99.99% system availability level, based on the support of a High Availability system and a disaster recovery system. The system availability level shall be measured by the uptime of the system throughout normal operation hours with application system services available for use by participants.

10.2 Service Level

The Supplier shall meet the following service levels at a minimum:
Response Time for Fault notification –. The maximum response time for the Supplier to respond to a fault reported by the CBY to the contact information of the Supplier's support, shall be in accordance with severity levels as follows:

Severity Level of Fault	Maximum Response time
1	30 minutes
2	1 hour
3	2 hours
4	3 hours

“Severity Level 1" means a problem with the ATS system which has a critical business impact and causes the ATS service to be inaccessible by all system participants;
"Severity Level 2" means a problem with the ATS system which has significant business impact and causes the ATS service to be inaccessible by more than half number of system participants;
"Severity Level 3" means a problem with the ATS system which has some business impact and causes some of the system functions cannot be accessible or function correctly for all system participants;
"Severity Level 4" means a problem with the ATS system which has minor business impact and causes some system functions cannot be accessible or function correctly by some of the participants.
Restoration Time – this is the length of time for the Supplier to fix a problem or establish a workaround to resume business continuity. The maximum times for restoration to be committed by the Supplier shall be in accordance with the severity levels described above in the following:

Severity Level of Fault	Maximum Restoration time
1	2 hours
2	4 hours
3	1 day
4	2 days

10.3 Production Hardware and Software Support

The Supplier shall provide the hardware and software maintenance services that provide for the following:

1. Support services via a support hotline or web helpdesk shall be available 24 hours a day, 7 days a week.
2. Software fixes shall be delivered along with documentation about change impact and change control procedures, for applying to pre-production environment for testing before releasing to production environment.
3. An Internet Help Desk shall be provided to all participants to log a problem of accessing the ATS system's functions.

10.4 Software Warranty and Maintenance Services

CBY has the following requirements:

1.The period of software warranty service without charge to the Employer shall be duration of three years from commencement date of Operational Acceptance.

2The Supplier shall commit to provide software maintenance services based on the recurrent annual fee for maintenance, for a period of three years after the end of the warranty period.

3.During the software warranty period and the software maintenance period, the Supplier shall provide the following services to the CBY for the ATS system:

•Provide any software bug fixes or patches which are available for resolving errors identified in the current version of the application software.

•Provide any upgrade or new version of the application software which has been released by the Supplier.

10.5 Knowledge and Expertise

The Supplier shall describe the expertise and work location of their staff for providing ongoing support services.

10.6 Local presence/local partner for 1st line support.

The Supplier must commit to establish local presence for providing 1st line support and local contact point in Yemen. This requires the Supplier to establish local office with support staff stationed, or the Supplier shall engage their local IT service company partner in Yemen to provide the local support services.

The Supplier must describe information for the following:

•How they will establish the local presence for providing support services to the Employer for ATS system implementation and operations.

•The minimum number of local presence support staff and their skill sets which must be sufficient for performing the 1st line support role on the ATS system.

10.7 Fault and New Feature Request Management

	The Supplier shall describe their internal fault reporting, fault escalation and feature request processes. This description should include but not limited to: •Fault resolution •Fault escalation •Feature requests •Requested or Identified Feature development
10.8	**Ongoing engineering services**
	The Supplier shall describe in detail what and how ongoing engineering services such as technical consultancy could be delivered in the areas such as: architecture design, capacity planning, new interfaces development and implementation, new feature implementation, etc.
10.9	**Best Practice Operational Expertise**
	The Supplier shall describe at a minimum how the following Employer processes would be best supported for ATS system operations. 1. Fault Management 2. Fault reporting and escalation 3. Performance reporting and analysis 4. Security management 5. Configuration management
10.10	**Online Support**
	The Supplier shall describe any online support of, but not limited to the following areas: 1. Minimum Requirement 2. Technical advice and assistance 3. Knowledge-base, information sharing 4. Service Level Reporting 5. Fault status tracking

Vendor Responses

A	**COST EVALUATION**	**All Figure are in US Dollars**
A.1	**One-time Initial License Fee**	
A.2	**Monthly Recurring License Fee**	
A.3	**License Options & Flexibility**	
A.4	**Monthly Support Costs**	
A.5	**Total Implementation Costs**	
A.6	**Other Costs**	
A.7	**3-year Total Cost of Ownership**	

ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP) – YEMEN

WHITE PAPER -

PROPOSAL TO THE CENTRAL BANK OF YEMEN FOR AMENDING YEMEN'S AML/CFT REGULATIONS TO INCREASE COMPLIANCE WITH INTERNATIONAL STANDARDS

ANNEX 04

September 2021

Prepared for the United States Agency for International Development, USAID Order # 72027920M00001

USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

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INTRODUCTION

When compared to the better-practice recommendations of the Financial Action Task Force (FATF),[1] Yemen's current anti-money laundering and countering the financing of terrorism (AML/CFT) controls exhibit a significant number of deficiencies. Following its last MENAFATF mutual evaluation in 2008,[2] the country adopted several reforms that substantially improved its Law on AML/CFT (the AML/CFT Law) as well as the principal set of regulations for implementing the law (the AML/CFT Regulations).[3] Nevertheless, while these reforms were a major step forward, there were still elements of the legal/regulatory regime that were inconsistent with international standards.

To further improve the AML/CFT regime, in January 2021, the CBY issued two new circulars[4] addressing certain deficiencies. The circulars required banks and other supervised financial institutions (FIs) to adopt a modern risk-based approach for identifying AML/CFT risks and to establish and implement specific criteria for determining the true beneficial owner of accounts, particularly the accounts of companies and other legal entities.

However, there are still issues identified in the MENAFATF evaluation that remain to be addressed. These will require amendments to the current AML/CFT regulations. New provisions are needed requiring the CBY and FIU to conduct detailed reviews of the AML/CFT risk management strategies and procedures of banks and FIs. Amendments to the AML/CFT regulations are also required to strengthen the independence of the FIU; the MENA/FATF evaluation noted that the FIU does not have the degree of independence needed to exercise its functions in a manner that is immune from political influence.

This paper proposes certain amendments to the current AML/CFT regulations. The proposed regulatory amendments have been formulated in a manner that is compliant with the AML/CFT Law; therefore, their adoption and implementation does not require any change to that law.

The regulatory changes outlined in this study would vastly improve the conformity of Yemen's AML/CFT regulations with international norms, allowing the CBY to develop a much more robust AML/CFT oversight and enforcement regime, and increase FIU operational independency and autonomy. The proposed amendment will also enable the CBY to provide more comprehensive AML/CFT circulars to Yemen's banks and FIs that would require them to develop and enforce more stringent AML/CFT control mechanisms. These, in turn, will improve financial integrity and deter money laundering, terrorist funding, and other financial crimes across Yemen's financial system.

Finally, it must be emphasized that the adoption and implementation of the proposed regulatory amendments is only a first step, as additional measures are needed to address other serious weaknesses in Yemen's AML/CFT regime. These include under-developed institutional arrangements within the CBY, an inadequate number of properly trained personnel dedicated to AML/CFT monitoring and enforcement, insufficient guidance and instructions issued by the CBY, and

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[1] FATF is an intergovernmental organization founded in 1989 on the initiative of the G7 to develop policies to combat money laundering. In 2001, its mandate was expanded to include terrorism financing.

[2] In 2008, MENAFATF rated Yemen either partially compliant or non-compliant with 43 of its recommendation

[3] In 2010, Law No. (1) of 2010 on AML/CFT (the "AML/CFT Law") was adopted; and later that year Presidential Decree No. (226) promulgated the implementing regulations (the "AML/CFT Regulations"). The law was amended by Law No. (17) of 2013, and amendments to the regulations were issued in 2014 by Presidential Decree No. (2) of that year.

[4] Circulars number (2), (3) of 2021 addressed to banks and financial institutions

other public authorities responsible for AML/CFT matters, and the spotty compliance of banks and FIs.

OVERVIEW OF RECOMMENDED REGULATORY AMENDMENTS

In the first half of 2020, USAID's Yemen Economic Stabilization and Success (YESS) program, the predecessor of the current ERLP program, conducted an assessment that identified four major areas where Yemen's current AML/CFT regulations are inconsistent with FATF recommendations:

1. The current regulations do not establish a system for the regular review of AML/CFT risk management strategies and procedures of banks and FIs.
2. There is no requirement that AML/CFT supervisory bodies routinely update the information on the beneficial owners of legal persons.
3. The definition of shell companies needs to be reformulated as it does not currently comply with the FATF definition of such entities.
4. The current regulations do not provide the FIU with the degree of independence required by FATF.

STEPS REQUIRED TO OBTAIN ADOPTION OF AMENDMENTS

Article 51 of the AML/CFT Law specifies that the AML/CFT Regulations must be submitted by the National Committee on AML/CFT (the "National Committee"), approved by the Council of Ministers, and then issued by Presidential decree.

Therefore, the CBY should:

1. Finalize the proposed set of amendments to the AML/CFT Regulations.
2. Submit the proposed amendments to the Chairman of the National Committee.
3. Meet with the Chairman to review and explain the amendments and to assist him with obtaining the approval of the Council of Ministers; and
4. Following Council of Minister approval, work with the President to obtain the issuance of a Presidential Decree promulgating the amendments.

I. AMENDMENTS OF AML/CFT RISK MANAGEMENT STRATEGIES

The CBY's Circular No. (2) of 2021 requires all banks and FIs to routinely prepare an annual assessment identifying all current and potential AML/CFT risks and to immediately update that assessment whenever their risk monitoring procedures indicate that there has been a material change in any such risk. The circular also requires all banks and FIs to establish an AML/CFT risk mitigation strategy and related procedures. Finally, the circular requires every bank and FI to promptly submit its assessment, strategy, and procedures to the CBY's Bank Supervision Department (BSD) and the FIU.

However, the regulations do not currently require that the AML/CFT risk management strategy and procedures developed by a bank or FI must be reviewed and approved by the BSD or FIU. Therefore the regulations need to be amended to establish such a requirement.

It is proposed that Article 30 bis of the AML/CFT Regulations be amended to add a third paragraph reading:

> *"The Supervision Department of the CBY shall establish and implement a system that provides for the prompt and regular review of all AML/CFT risk management strategies and procedures established by banks, financial institutions, and DNFBPs. The Supervision Department shall also issue such circulars and instructions as may be needed to ensure the thorough and proper implementation of these regulations."*

II. AMENDMENTS OF INFORMATION UPDATES ON THE BENEFICIAL OWNERS OF LEGAL PERSONS

MENA/FATF has criticized Yemen for not taking any steps to establish a flexible and prompt mechanism for its competent authorities to obtain sufficient, accurate, and up-to-date information on the beneficial owners of legal persons. Therefore, the AML/CFT regulations should be amended to mandate such a mechanism.

It is proposed that Article 30 bis of the AML/CFT Regulations be amended to add a fourth paragraph reading:

> *"The Supervision Department of the CBY has the authority and responsibility to obtain and maintain sufficient, accurate, and up-to-date information on the beneficial owners of legal persons. To ensure that such information is available to it, the Supervision Department shall have the authority to: (i) require every covered entity to routinely obtain and provide to the Supervision Department up-to-date and accurate information on its beneficial owners and the beneficial owners of any legal person that is a customer of the covered entity or that does business with the covered entity; and (ii) require every legal person that is a customer of a covered entity or that does business with a covered entity to provide the covered entity with up-to-date and accurate information on its beneficial owners, which the covered entity shall immediately transmit to the Supervision Department. The Supervision Department shall also have the authority to access and obtain any and all information held by any other competent authority on the beneficial ownership of a legal person, as well as such information held by the legal person itself."*

III. AMENDMENT TO THE DEFINITION OF SHELL COMPANIES

Yemen's AML/CFT Law prohibits the establishment of shell banks and off-shore branches of foreign shell banks. It also forbids Yemeni financial institutions from dealing with any financial institution that does not physically exist in its state of registration or is not under effective supervision in that state. Yemeni financial institutions are also prohibited from dealing with counterpart financial institutions that provide services to an internationally banned financial institution.

Yemen's regulations, however, do not explicitly prohibit the establishment of shell companies. Without such a prohibition, it is possible to establish in Yemen an instrumentality that has as a principal purpose the concealment of the identity of its beneficial owners. Shell companies are companies that have no independent operations, significant assets, ongoing business activities, or employees. They are widely used to launder the proceeds of criminal activities. Other instrumentalities such as front companies and bearer shares, while problematic, are used less frequently.

Yemen's AML/CFT Regulations should be amended to prohibit banks and FIs from doing business with shell companies or having such companies as clients.

Proposed amendments to Articles 2 and 6 of the AML/CFT Regulations:

> *It is proposed that the term "Shell Financial Institutions" in Article 2 of the AML/CFT Regulations be changed to "Shell Companies," and that the Arabic term be changed from Jawfaa to Sowariya (شركة جوفاء الى شركة صورية) to be consistent with FATF terms.*

IV. AMENDMENTS TO ENHANCE THE INDEPENDENCE OF THE FIU

The AML/CFT regulations fail to specify the reasons that may justify the dismissal of the Head of the FIU. The rules of the Egmont Group require that national legislation must specify that the head of an FIU may only be removed for certain specific reasons.

The operational independence and autonomy of the FIU is a fundamental condition for an effective AML/CFT framework. An FIU that is not properly and lawfully immunized from political influence can significantly inhibit the FIU's efforts to conduct effective AML?CFT operations. In addition, an FIU that is subject to political influence will have less credibility with the private sector and domestic law enforcement. Such credibility is critical to the FIU's ability to gather the domestic information it needs and to exchange information with other national FIUs. Furthermore, if the FIU is potentially subject to political influence, there may be negative downstream effects on the quality and scope of its investigations into AML/CFT activities and predicate offenses (such as corruption and organized crime).

Key FIU regulatory fault-lines have been identified in Yemen's mutual evaluation reports, which have highlighted several common jurisdictional shortcomings related to FIU operational independence and autonomy. These issues are related to the appointment and dismissal of the Head of FIU, which can make him subject to political influence and impair the FIU's independent decision-making capability.

The procedures for the appointment and dismissal of the Head of the FIU should be apolitical, timely, and based on merit. The independence of the Head of the FIU is critical to the success of the FIU. As such, it is important that the appointment and dismissal procedures be free from political influence, lead to the best candidate being appointed, and permit his dismissal only for certain explicitly specified reasons.

Article 30 of the AML/CFT Law stipulates that the FIU must be an independent unit established by a decision of the Council of Ministers based on the proposal of the Governor of the CBY. The law also provides that The FIU shall consist of a chairman and members. However, neither the AML?CFT Law nor the AML/CFT Regulations specify the reasons that may justify the dismissal of the Head of the FIU, which exposes him to substantial job insecurity and, therefore, potential political influence. This, in turn, can negatively affect the independence the FIU must have to effectively carry out its duties.

It is therefore proposed that Article 43 of the AML/CFT Regulations be amended to add the following paragraph:

The Head of the FIU may not be dismissed except by a decision of the Prime Minister that is based on a recommendation of the Governor of the Central Bank. Any such decision or recommendation must be substantiated by evidence that convincingly demonstrates that the Head of the FIU:

- *Has seriously failed to carry out the duties of his position, as determined by an independent investigative committee appointed by the Prime Minister.*

- *Has been convicted by a court of a crime that involves fraud or that requires mandatory imprisonment.*
- *Has been declared bankrupt by a court and has not been rehabilitated.*
- *Has become unable to perform his duties due to a physical or mental illness as determined by an independent panel of three medical physicians appointed by the Prime Minister.*

ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP) – YEMEN

PROCEDURES TO ANALYZE REQUESTS FOR ASSISTANCE (RFA) AND JUDICIAL APPEALS

ANNEX 05

September 2021

Prepared for the United States Agency for International Development, USAID Order # 72027920M00001

USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

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INTRODUCTION

In addition to the STR reports, the Financial Intelligence Unit "FIU" receives requests for assistance (RFA) from local and international bodies, and it also receives judicial letters received through the Yemeni judicial references, according to which the requesting party requests the FIU to provide it with information about the ongoing operations on the accounts of concerned banks and financial institutions and/or their clients.

Accordingly, the current procedures were prepared to assist the FIU of Yemen in analyzing RFAs, to be adopted for information exchange outside the Egmont Group.

RFAS RECEIVED FROM COUNTERPART FIUS:

When the FIU receives an RFA, the following procedures shall be followed:

1. In the event that the request does not include all the basic information, especially the nature of the offense, the details of the reasons for suspicion and its relationship to money laundering, corruption, or terrorist financing operations, details of the names of suspects, details of the suspicious operations and their relationship to accounts opened with Yemeni financial institutions, the detailed information must be requested from the requesting FIU within one week from the date of receiving the RFA.

2. In the event that the RFA is accepted, the FIU will analyze it for preparation of taking one of the following decisions:

   i. Informing the requesting body, within **a maximum period of one week** that the subject matter of its request falls outside the jurisdiction of the FIU, in the following cases:

   - Funds/operations that are not the result of one of the predicate crimes enumerated in Article (3) of Law No. (1) of 2010 or are not related to corruption.
   - Funds/operations of the subject matter of the request that took place before the date of the issuance of Law No. 1 of 2010

   ii. Informing the requesting body, within **a maximum period of one week**, that the FIU has taken a decision not to respond to its request for the following reasons:

   - Lack of basic information to be provided in the request, despite repeated requests for such information.
   - Based on the principle of reciprocity in the event:
     - The inability of the requesting body to respond to similar requests from the Yemeni FIU in accordance with the memorandum of understanding signed with it.
     - Failure to respond to a similar request previously directed by the FIU in Yemen
   - The case in request concerns the state's sovereignty, security, public order, or basic interests.

3. Informing the concerned authority, within **a maximum period of one week** that the FIU will wait to respond to the case until the signing of a memorandum of understanding between both FIUs.

4. With the exception of the cases enumerated in clauses (1,2,3) above, the FIU conducts its investigations regarding the accounts or information subject of the request, and takes one of the following decisions in their regard:

   - In the event that the subject of the request is related to a specific bank account or transaction, and the results of the investigations reveal that there are no operations or accounts as mentioned in the request, the FIU takes a decision to inform the requesting body about the results of the investigation within **a maximum period of one month from the date of receiving the request.**

   - In the event that the subject of the assistance request is related to a bank operation or an account and the results of the investigations reveal the existence of accounts or operations related to the request for assistance, it is up to the FIU to provide the requesting body with the information, within a **maximum period of one month from the date of receiving the reques**t. This information includes, for example, but not limited to:

     – The name of the person subject of the request appears in the FIU's database (without mentioning the details if the source of information was another FIU or a local bank, and this body did not give the FIU in Yemen the consent to share the information with other parties).

     – The presence of any companies, real estate registered on the ownership of the name being sought.

     – The name of the concerned person was not found on the database of law enforcement or judicial authorities.

     – Travel history of the person from/to Yemen, if available.

A PROPOSED WORKING METHOD FOR INTERNATIONAL JUDICIAL APPEALS RECEIVED THROUGH THE YEMENI JUDICIAL AUTHORITIES

1. The role of the Public Prosecutor's Office when receiving international judicial appeal:

   Upon receipt of a judicial appeal, the Public Prosecutor's Office examines the application in accordance with applicable international treaties and conventions and agreements of joint judicial cooperation, taking into account the principle of reciprocity and cooperation between states.

   As a result of the study, a decision is made:

   – To reject the request for judicial appeal for legal reasons such as the absence of a joint cooperation agreement or in accordance with the principle of reciprocity,
   – To accept the request and start analyzing it.

   While the request is processed, if the judicial appeal is found to be related to the crime of money laundering or financing of terrorism, the Public Prosecutor's Office makes one of the following decisions:

a. If the elements of the money laundering offense provided in Law No. 1 of 2010 are not available, it is decided to process the application without providing the FIU with a copy of the file.
b. If money laundering crime elements are available, it is decided to refer the file to the FIU with the identification of requests, the information required from the FIU.

2. The role of the Financial Intelligence Unit:

   Upon receipt of judicial appeal by the Public Prosecutor's Office, the FIU will make one of the following decisions:

   a. The request will be rejected because of its incompetence if the required information was outside the scope of the FIU's powers specified in Law No. 1 of 2010 and its applied regulations; in such case, the FIU sends its response to the Public Prosecutor's Office with the legal explanation on which it was based within **a maximum period of one week from the date of receiving the request.**
   b. Study the file and send requests to the banks and financial institutions to provide the required information and documents **no later than two weeks** from the date of receiving the FIU request.
   c. Analyze the information and documents that will be received from banks and financial institutions and send the result of the analysis and received documents to the Public Prosecutor's Office **within one month from** receiving the request from the Public Prosecutor's Office.
   d. If the information requested by the judicial appeal requires a request for assistance to a peer FIU, a letter will be sent to the Public Prosecutor's Office that the FIU in Yemen has sent a request for assistance to the peer FIU and the information shall be provided as soon as they are received.
   e. FIU of Yemen must follow up on the case with the public prosecutor's office to obtain a copy of its final decision in the case to update the FIU's database.

THE ROLE OF FIU IN DISSEMINATING INFORMATION

Based on recommendation number 40 of the Financial Action Task Force (FATF) on international cooperation, the FIU is only obliged to share information only "**For Intelligence Purposes Only**" with its counterparts from the FIUs in general and the FIU's of the Egmont Group in particular.

Therefore, requesting documents that are subjected to bank secrecy act requires the follow-up of standard judicial procedures for the exchange of documents and evidence between States.

ECONOMIC RECOVERY AND LIVELIHOODS PROGRAM (ERLP) – YEMEN

TEMPLATE FOR MOUS BETWEEN FIU AND REGIONAL AND INTERNATIONAL COUNTERPARTS

ANNEX 06

September 2021

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USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

MODEL MEMORANDUM OF UNDERSTANDING

Between

Financial Intelligence Unit of Yemen and

Financial Intelligence Unit of

____

On the Cooperation and Exchange of Financial Intelligence
Related to Money Laundering and Terrorism Financing

The **Financial Intelligence Unit of Yemen**, and the **Financial Intelligence Unit of------------** -each hereinafter referred to as a "Party" or collectively as "The Parties," desire, in a spirit of collaboration and mutual interest, to cooperate with each other in the exchange of information concerning money laundering and terrorism financing to effectively prevent and combat money laundering, terrorist financing, and related criminal activities.

The Parties agree that this memorandum of understanding (hereinafter referred to as the **"Memorandum")** is a statement of intent and does not create any legally binding obligations on the parties or supersede domestic laws and regulations.

To that end, they have reached the following understanding:

1. The "Parties" will cooperate, on the basis of reciprocity, as outlined in Annex I, to exchange information in their possession concerning financial transactions suspected of being related to money laundering or criminal activities connected with money laundering and terrorism financing. To that end, the "The Parties" will exchange spontaneously or upon request any available information that may be relevant to the investigation by the Parties into financial transactions related to money laundering and terrorism financing and the persons or companies involved. Any request for information will be justified by a brief statement of the underlying facts, including at a minimum the reason for the request, the purpose for which the information will be used, and enough information to enable the receiving Party to determine whether the request complies with its domestic laws, regulations and the international laws.

2. (a) The information or documents obtained from the respective Parties will not be disseminated to any third party, nor be used for administrative, prosecutorial, or judicial purposes without the prior written consent of the disclosing "Party."

   (b) If a Party is subject to legal process or proceedings that would require the disclosure of information it has received from the other Party, the Party subject to such process or proceedings will immediately notify and seek the express consent of the other Party to disclose the information.

3. The Parties will not permit the use or release of any information or document obtained from the respective Parties for purposes other than those stated in this Memorandum, without the prior written consent of the disclosing Party.

4. The information acquired in application of the present Memorandum is confidential. It is subject to official secrecy and is protected by at least the same confidentiality as provided by the national legislation of the receiving Party. The confidentiality obligations under this Memorandum shall continue to bind the Parties notwithstanding the termination of this Memorandum.

5. Where the requested Party desires feedback on how the information it provided was used, it shall request this explicitly. When the requesting Party is not able to obtain this information, it should reply stating the reasons why the requested feedback cannot be provided.

6. The Parties will jointly arrange, consistent with the legislation of their respective countries, for acceptable procedures of communication and will consult each other with the purpose of implementing this Memorandum.

7. Communication between the Parties should take place in English. Request for information will be submitted in writing, through ESW or by Fax, or by Email

8. The Parties are under no obligation to give assistance if:

   (1) Judicial proceedings have already been initiated concerning the same facts as the request is related to, and the assistance would impede in any manner these judicial proceedings.

   (2) Such assistance could threaten state security, public order, and the essential interests of the Parties' jurisdictions, or contradict the domestic laws, regulations, or international laws. If any Party refuses to execute the request for information, it shall inform the other Party of the reasons for such refusal.

9. Any dispute or difference arising out of the interpretation or application of the provisions of this Memorandum shall be settled amicably through consultation between the Parties.

10. This Memorandum may be amended at any time by mutual consent.

11. This Memorandum is revocable at any time. The termination will become effective as from the reception of the written notification from the other Party. However, any request for assistance made prior to the aforementioned notice termination shall be honored by the Parties under the terms of this Memorandum of Understanding.

12. This Memorandum will become effective upon its signature by the Parties.

Signed in the English language (this English text being the agreed authentic text, and each party taking responsibility for establishing translation in their own language).

On behalf of FIU -Yemen

____

Date

Place

On behalf of FIU-

____

Date

Place

ANNEX I

Information for exchange on the basis of reciprocity			
Type of Information	**Yes**	**No**	**Remarks**
• **FIU**			
1. Information and FIU analytical reports on physical &legal persons available in the FIU database			
2. Suspicious Transaction Reports [STRs], Requests of Assistance [ROAs] & Spontaneous Disclosures (if authorized by the issuing FIU) received by the FIU			
3. Preventive measures (suspension, freezing etc.)			
• **Financial Institutions**			
4. Customer accounts data, including identity data & KYC			
5. Customer transactions data			
6. Customer transactions analysis			
7. Nature and description of business relationship			
• **Law Enforcement**			
8. Citizenship records & passport details			
9. Law enforcement records (before court trial)			
10. Criminal records (convictions)			
11. Records of confiscated property			
12. Border crossing information			
13. Travel Visa Records			
• **Customs**			
14. Records on Export- Import of goods			
• Financial Regulators			
15. Banking licenses and compliance reports			
16. Insurance & reinsurance licenses and compliance reports			
17. Stock Market licenses and compliance reports			
18. Money Remittance licenses and compliance reports			
19. Currency Transaction licenses and compliance reports			
20. Gambling licenses and compliance reports			
21. Civil & administrative measures			
• **Tax Authority**			
22. Income & taxes filings			
23. Penalties & tax criminal records			
• **Real Estate Register**			
24. Land/property ownership records			
• **Company Register**			
25. Company registers (existence, good standing, bankruptcy etc.)			

26. Trustees, directors, members of companies			
27. Legal owners of companies			
• **Vehicles Register**			
• **Social Security**			
28. Social Security Information			
29. Dissemination of the information to law enforcement and/or			
30. Dissemination of the information to judicial authorities to be			

ECONOMIC RECOVERY AND LIVELIHOODS PROGRAM (ERLP) – YEMEN

AML/CFT TRAINING PROGRAM FOR FINANCIAL INSTITUTIONS

ANNEX 07

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USAID/Yemen - Economic Recovery and Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

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INTRODUCTION

The financial industry, including banks and other financial institutions (FIs), has a core role in preventing money laundering and terrorist financing. Strong financial crime management practices are a powerful device for combatting AML/CFT financial crimes. Adopting and implementing the best AML/CFT practices is necessary to identify those involved in organized crime and terrorism and prevent them from carrying out such activities.

Money laundering and terrorist financing schemes are rapidly evolving, and the technological development of new payment methods creates new mechanisms that can be used to implement such schemes. Financial institutions have difficulty keeping up with such technological developments and adapting their AML/CFT programs accordingly.

Regular training is essential to ensuring that the staff of banks and FIs are aware of the evolving nature of money laundering and terrorism financing risks. Unfortunately, those institutions often dedicate insufficient resources to such training. Failing to prioritize AML/CFT training indicates that the institution has not understood the value of having properly trained staff to carry out the institution's AML/CFT responsibilities. Requiring regular training on the evolving nature of money laundering and terrorist financing is essential for ensuring the proper management of those risks.

OBJECTIVES

The objective of this guide is to assist the management and staff of banks and FIs understand that there are distinct AML/CFT responsibilities that need to be assigned to different personnel within the institution and that the specific training any given manager or staff member requires depends on their specific responsibilities within the institution's AML/CFT system. The target audience of this guide includes senior managers, compliance officers, auditors, and other personnel involved in the design and delivery of AML/CFT training.

REGULATORY OBLIGATIONS AND GUIDANCE ON AML TRAINING

AML/CFT regulations generally require that banks and FIs develop and implement internal policies, controls, and procedures based on model risk management practices. These policies, controls and procedures should cover customer due diligence, reporting, recordkeeping, and internal controls. An institution's staff must receive ongoing training to identify and carefully scrutinize transactions and operations that potentially involve money laundering or terrorist financing. Depending on the size and nature of the institution, such policies, controls, and procedures should also include, where appropriate, the appointment of a senior compliance officer and the establishment of an independent audit function to test the AML/CFT system.

RISK-BASED APPROACH IN AML TRAINING

The establishment and implementation of a modern FATF-compliant risk-based approach ("RBA") is a fundamental requirement and the first recommendation of FATF. Such an RBA must be used to identify and assess money laundering/terrorist financing risks. A properly formulated RBA provides for the application of appropriate measures to mitigate each identified risk. A sound RBA also ensures that resources are efficiently allocated, with more resources dedicated to high-level risks and fewer to low-level risks.

A robust AML/CFT RBA requires a bank/FI to implement a mandatory and ongoing employee training program that focuses on risk identification and mitigation. The results of an institution's initial risk assessments should provide the starting point for creating a prioritized training program. The key issues for training should relate directly to the specific AML/CFT threats identified. In addition, the training program should seek to address the most obvious areas where needed skills and expertise are lacking. A well-formulated RBA will prioritize training on the high-level risks that have been identified and defer training on lower-level risks.

It should be noted that AML/CFT training is not just an exercise to satisfy a regulatory requirement. The training also serves to protect the 'institution's reputation and its relations with other institutions. For example, correspondent banks and many institutional investors are required to conduct due diligence on a bank's AML/CFT controls before entering into a relationship with that bank.

BASIC AML/CFT TRAINING PROGRAM

Training is an essential part of financial institutions' AML/CFT effort. It helps to generate a culture of awareness among staff. The minimum standards of training are as follows:

- Training must be provided for all personnel whose duties require knowledge of the AML/CFT law and regulations.
- New hires should be given training immediately during the orientation phase.
- Employees' specific responsibilities require tailored training.
- Training should encompass information related to applicable business lines.
- The AML/CFT compliance officer should receive periodic training that is relevant.
- The board of directors and senior management should be trained concerning changes and new developments in the laws and regulations and CBY circulars.

Training should be ongoing and incorporate current developments and changes to the regulations and instructions issued by the CBY. Changes to internal policies, procedures, processes, and monitoring systems should also be covered during training. Financial institutions should document their training programs. Training and testing materials, the dates of training sessions, and attendance records should be documented and saved for review afterward.

TRAINING NEEDS ANALYSIS—TNA

When thinking about the recent money laundering incidents, it is evident that the basic training plan cannot be considered adequate to support the staff and the organization in AML/CFT efforts. Training is a valuable tool to generate a culture of awareness among the employees, senior management, and the board. Knowing the signs of potential money laundering and terrorist financing is undoubtedly one of the most important capabilities that staff within financial organizations should have. Accordingly, thorough training and awareness programs help ensure that staff knows what they are looking for in a suspicious transaction.

TNA is a systematic approach that helps assess training needs within the organization and sets training priorities. The TNA process has three steps.

STEP 1: PREVIOUS TRAINING PROVISIONS

In the first phase, work out what training has already been completed using several resources (data from training and testing materials, AML/CFT risk assessment and analyses, internal audit reports, etc.). That information helps reveal what the employees in business lines and other functions already know and future training needs.

STEP 2: FUTURE TRAINING OBJECTIVES AND PLANNING

In the second phase, the training needs must be established based on information gathered during the previous phase regarding employees' skills and knowledge. It is reasonable to find out the upcoming reviews and inspections of regulators and correspondent banks in this phase.

Training regarding an organization's internal policies, procedures, and processes is necessary if the regulation has changed and the organization's policies and procedures have been updated.

The training goals must be determined in this phase, and the training plan for the next training period must be approved. An efficient AML/CFT training program meets the standards set out by the lawmaker and regulator. Efficient training should also seize staff's attention to suspicious activity and understandably describe each responsibility in AML/CFT processes. Therefore, to clarify the training objectives, it would be recommendable to pose the following questions:

- Who to train?
- What to train?
- How to train?
- When to train?

STEP 3: DELIVERY OF FOCUSED PLAN

Having worked out what training has already been done and what needs to be done, the list of training requirements can be drawn up by mapping the existing training provisions to current and future provisions. The training program content shall contribute to achieving the agreed learning objectives.

Financial Institutions that apply the TNA process can show commitment to their AML compliance culture. It also helps employees understand and adhere to the FI's AML/CFT compliance requirements that apply to their daily activities.

PLANNING AND DEVELOPING AN EFFECTIVE AML/CFT TRAINING PROGRAM

The first step in designing an effective training program is to identify the target audience. Most areas of the institution should receive AML training, and the target audience should include most of the employees. An effective AML/CFT training must be adequately planned to address material needs in the organization. Training should be designed with the right mix of general education and targeted information. Effective and efficient training begins with TNA.

WHO TO TRAIN: TARGET AUDIENCE

At a minimum, the bank's training program must provide training for all personnel whose duties require knowledge of the AML/CFT law and regulations. The training should be tailored to the person's specific responsibilities. In addition, an overview of the AML/CFT requirements typically should be given to new staff during employee orientation.

The compliance officer should receive periodic training that is relevant and appropriate, given changes to regulatory requirements and the activities and overall AML/CFT risk profile of the bank.

The board of directors and senior management should be informed of changes and new developments in the regulations. However, the board of directors may not require the same degree of training as banking operations personnel. They need to understand the importance of AML/CFT regulatory requirements, the ramifications of non-compliance, and the risks posed to the bank. Without a general understanding of the laws, the board of directors cannot adequately provide AML/CFT oversight.

WHAT TO TRAIN: THE TOPICS TO BE TAUGHT

Well-planned training should satisfy legal, regulatory, and policy requirements and support staff in understanding their roles and responsibilities. The content and frequency of the training must comport with business lines and functional and regulatory requirements. The training must cover general applicability and local and business-specific requirements and address how these requirements apply to specific job functions and responsibilities.

Effective training should present real-life money laundering schemes, preferably cases that have occurred at the institution or similar institutions, including, where applicable, how the pattern of activity was first detected, its impact on the institution, and its ultimate resolution.

The training program should reinforce the board and senior management's importance on the bank's compliance with the AML/CFT laws and ensure that all employees understand their role in maintaining an effective AML compliance program. Boards of directors and senior management should understand their responsibilities regarding the institution's AML/CFT program. A better understanding of their responsibilities can be derived through training modules.

HOW TO TRAIN: WAYS OF COMMUNICATION

Different kinds of AML/CFT issues might need various forms of communication to the staff. When those issues are identified, someone must decide on the best way to communicate them. Training is communication. Sometimes a memo or e-mail message will accomplish what is needed without formal, in-person training. New hires should receive training different from that given to veteran employees.

Determine the needs that should be addressed. There may be issues uncovered by audits or exams or created by changes to systems, products, or regulations.

"One size fits all" training does not work. Financial institutions are not alike, and differences in business lines, customer bases, products and services, regions, sizes, and volumes must affect organizations' training plans and deliveries. A portfolio of targeted training content reflects the maturity of financial institutions' educational strategy, meaning organizations' understanding of everyone's roles and their exposure to the ML/TF risks.

Targeted training can consist of different layers, such as:

a) a shared module with key regulatory/corporate messages

b) a suite of targeted training for specific functions; and

c) an evolutionary awareness training package

WHEN TO TRAIN: DELIVERY METHODS

Modern training takes place outside the classroom. Beyond classroom training, an organization's AML/CFT training program is limited by resources and needs. Training sessions can be system-enforced when the system delivers the necessary credentials to access the screen or when "training messages" appear on the screen while logging in.

Digital technologies have revolutionized AML training administration. Training and testing materials, the dates of training sessions, attendance records, and training completion information can be maintained by using digital technology.

AUDIT'S APPROACH AND EXPECTATIONS FOR TRAINING PROGRAM REVIEW

The task of financial institution's auditors is to determine whether the following elements are adequately addressed in the training program and materials of a bank:

- The importance of the board of directors and senior management places on ongoing education, training, and compliance
- Employee accountability for ensuring AML/CFT law and regulations compliance
- The comprehensiveness of training, considering specific risks of individual business lines
- Training of personnel from all applicable areas of the bank
- Frequency of training
- Documentation of attendance records and training
- Coverage of bank policies, procedures, processes, and new rules and regulations
- Coverage of different forms of money laundering and terrorist financing as it relates to identification and examples of suspicious activity
- Penalties for non-compliance with internal policies and regulatory requirements

ESSENTIAL TRAINING MATERIALS

EXPLAIN THE CRIMES OF MONEY LAUNDERING AND THE TERRORIST FINANCING

i. Criminal proceeds indicate criminals generate a profit by illicit acts such as illegal arms sales, smuggling, organized crime, including drug trafficking and prostitution rings, embezzlement, insider trading, bribery, and computer fraud schemes (predicate offenses cited in AML/CFT law number (1) of 2010).

ii. Money laundering is the processing of criminal proceeds to "legitimize" the illegal gains through disguising their origin, changing the form, or moving the funds to a place where they are less likely to attract attention. This process is of critical importance, as it enables the criminal to enjoy these profits without jeopardizing their source. An explanation of the three (3) stages of money laundering should also be included. These are:

    a. Placement or moving the funds from direct association with the crime;

    b. Layering or disguising the trail to stop detection; and

    c. Integration or making money available to the criminal, with its occupational and geographic origins hidden from view.

iii. Terrorist Financing is the provision of funds for terrorist activity, which may be raised from legal sources such as personal donations and profits from businesses and charitable organizations and criminal sources identified above.

AML/CFT LAWS

i. **Full understanding of Yemeni's AML/CFT applicable laws, regulations, CBY circulars.**

ii. **Legal requirements:** The laws require certain businesses to file specific reports and maintain records on certain transactions to help prevent money laundering and terrorist financing. The businesses must obtain documentation that may be used to prosecute money launderers and those who commit terrorist acts or facilitate the commission of terrorist acts.

INTERNAL POLICIES/PROCEDURES AND CONTROLS

An effective training program includes training on policies and procedures that demonstrate the commitment to prevent and detect money laundering and terrorist financing and addresses non-compliance with laws and regulations. The training on policies and procedures should include:

a. A methodology for identifying risks the reporting entity may face.
b. Customer due diligence measures to be adopted for: individuals, businesses, corporations, beneficial owners.
c. Due diligence measures for the following categories of customers: non-resident, PEPs, sanctioned territories, and cross-border transactions
d. Processes for new business relationships
e. CDD measures required for persons and FIs from other countries that do not sufficiently comply with the FATF Recommendation
f. Identification and definition of "Tipping-Off."
g. Guidance on how to detect suspicious transactions
h. A process on how to bring suspicious activities/transactions to the CO's attention
i. Highlighting the limit for submission of an STR to the FIU
j. Thresholds for handling currency and other negotiable instruments
k. Explanation of the crimes of money laundering and terrorist financing
l. Requirement for transaction monitoring
m. Procedures for dealing with Correspondent Banking Relationships (if applicable)
n. Measures for dealing with Wire Transfers (if applicable)
o. Procedures for dealing with Shell Banks (if applicable)

A. CUSTOMER IDENTITY VERIFICATION/KYC: It is a crucial component of risk-based AML/CFT. Banks and FIs must know **who** they are dealing with and the risk they present in order to deploy appropriate AML responses. An AML checklist should prioritize identity verification through customer due diligence (CDD) measures, with enhanced due diligence (EDD) measures for higher-risk customers.

In practice, CDD should accurately establish verification procedures for:

- New and continuing business relationships; A customer's personal information, including their name, address, and date of birth.

- Beneficial ownership of a company where that owner is not the customer or client.
- The nature of the business in which the customer is involved

A sound Customer Due Diligence (CDD) program is the best way to prevent money laundering. The more the concerned employee knows, the better the money laundering abuses can be prevented.

Main Elements of a CDD training Program:

i. Full identification of customer and business entities, including the source of funds and wealth when appropriate.

ii. Development of transaction and activity profiles of each customer's anticipated activity.

iii. Definition and acceptance of the customer in the context of specific products and services.

iv. Assessment and grading of risks that the customer or the account presents.

v. Account and transaction monitoring based on the risks presented.

vi. Investigation and examination of unusual customer or account activity.

vii. Documentation of findings.

Each new customer who opens a personal account should be asked for:

1. Legal name and any other names used (such as maiden name).
2. Correct permanent address (the full address should be obtained; a postal box number is usually insufficient).
3. Telephone and fax numbers and e-mail addresses.
4. Date and place of birth.
5. Nationality.
6. Occupation, position held, and name of employer.
7. An official personal identification number or other unique identifier contained in an unexpired, official, government-issued document (e.g., passport, identification card, residence permit, driver's license) that bears a customer's photograph.
8. Type of account and nature of the banking relationship.
9. Signature

The Reporting Entity should verify this information by at least one of the following methods:

1. Confirm the date of birth from an official document (e.g., birth certificate, passport, identity card).
2. Confirm the permanent address using an official document (e.g., utility bill, tax assessment, bank statement, letter from a public authority).
3. Contact the customer by telephone, letter, or e-mail to verify the information supplied after an account has been opened (a disconnected phone, returned mail, or incorrect e-mail address should warrant further investigation).
4. Confirm the validity of the official documentation either by physical verification of the original or through certification by an authorized person (e.g., embassy official).

Other documents of an equivalent nature may be offered as satisfactory evidence of a customer's identity. For corporate entities (e.g., corporations and partnerships), the following information should be obtained:

i. Name of Reporting Entity.
ii. Principal place of its business operations.
iii. Mailing address.
iv. Names of primary contact people or those authorized to use the account.
v. Contact people's telephone and fax numbers.
vi. Some form of official identification number, if available (e.g., tax identification number).
vii. The original or certified copy of the Certificate of Incorporation, Memorandum, and Articles of Association.
viii. The resolution of the Board of Directors to open an account and identify those who have authority to operate the account, including beneficial owners.
ix. Nature and purpose of business, and its legitimacy.

The Reporting Entity should verify this information by at least one of the following methods:

i. For established corporate entities, review a copy of the latest report and accounts (audited, if available).
ii. Conduct an inquiry by a business information service or obtain an undertaking from a reputable firm of lawyers or accountants (or, in some countries, verifying officers) confirming the documents submitted.
iii. Use an independent information verification process, such as by accessing public and private databases.
iv. Obtain prior bank references.
v. Visit the corporate entity, where practical.
vi. Contact the corporate entity by telephone, mail, or e-mail.

A written Customer Identification Program (CIP) must be included within the Reporting Entity's AML compliance program, and the training program must focus, at a minimum, on policies, procedures, and processes for the following:

i. Identifying information required to be obtained (including name, address, taxpayer identification number, and, for individuals, date of birth) and risk-based identity verification procedures (including procedures that address situations in which verification is not possible).
ii. Complying with recordkeeping requirements.
iii. Checking new accounts against prescribed government lists, if applicable.
iv. Providing adequate notice about customer identification requirements.
v. Covering the Reporting Entity's reliance on other financial Reporting Entity or third parties, if applicable.
vi. Determining whether and when suspicious transaction reports should be filed.

vii. Conducting a risk analysis of customers for account opening purposes, considering the types of accounts offered, methods of account opening, and the Reporting Entity's size, location, and customer base.

viii. Opening new accounts for existing customers.

ix. Obtaining the board of director's approval, either separately for the CIP or as part of the AML compliance program.

x. Conducting audit and training programs to ensure that the CIP is adequately incorporated.

xi. Verifying that all new accounts are checked on a timely basis against prescribed government lists for suspected terrorists or terrorist organizations.

B. DETECTING AND RESPONDING TO RED FLAGS AND SUSPICIOUS ACTIVITY

"Red flags" are suspicious activities that indicate potential money laundering, terrorist financing, or other illegal activity. It is important to note that customers are not necessarily doing something illegal just because their activities mirror one or more red flags. However, due to the suspicious nature of these activities, an Associated Person who detects a red flag should closely examine the facts and circumstances pertaining to the suspicious activity to determine whether the customer's seemingly suspicious activity can be justified. Red flags or any other suspicious activity that cannot be justified based on the initial review of the facts and circumstances must be reported to the Designated Principal or AMLCO for a more thorough investigation by the Firm. Associated Persons are reminded that they are the first line of defense in the Firm's efforts to detect and prevent money laundering and terrorist financing.

Common Examples of Red Flags

Through the Firm's training efforts, Associated Persons will be advised to look for certain red flags relevant to the Firm's business. Examples of red flags are listed below. The list is not exhaustive, so Associated Persons are expected to exercise professional judgment in identifying other activities that may be unusual or indicative of potential money laundering.

1. **Customers – Insufficient or Suspicious Information**

- Provides unusual or suspicious identification documents that cannot be readily verified.
- Reluctant to provide complete information about nature and purpose of business, prior banking relationships, anticipated account activity, officers and directors, or business location.
- Refuses to identify a legitimate source for funds or the information is false, misleading, or substantially incorrect.
- Background is questionable or differs from expectations based on business activities.
- Customer with no discernible reason for using the Firm's service.

2. **Efforts to Avoid Reporting and Recordkeeping**

- Reluctant to provide the information needed to file reports or fails to proceed with the transaction.
- Tries to persuade an Associated Person not to file required reports or not to maintain required records.
- "Structures" deposits, withdrawals, or purchase of monetary instruments below a certain amount to avoid reporting or recordkeeping requirements.

- Unusual concern with the Firm's compliance with government reporting requirements and the Firm's AML policies and procedures.

3. Certain Funds Transfer Activities

- Wire transfers to/from financial secrecy havens or high-risk geographic locations without an apparent business reason.
- Many small, incoming wire transfers or deposits are made using checks and money orders. Almost immediately withdrawn or wired out in a manner inconsistent with customer's business or history. May indicate a Ponzi scheme.
- Wire activity that is unexplained, repetitive, unusually large, or shows unusual patterns with no apparent business purpose.

4. Certain Deposits or Dispositions of Physical Certificates

- The physical certificate is titled differently than the account.
- The physical certificate does not bear a restrictive legend but should have such a legend based on the history of the stock and/or volume of shares trading.
- The customer's explanation of how he or she acquired the certificate does not make sense or change.
- The customer deposits the certificate with a request to journal the shares to multiple accounts or sell or otherwise transfer ownership of the shares.

5. Certain Securities Transactions

- The customer engages in prearranged or non-competitive trading, including wash or cross trades of illiquid securities.
- Two or more accounts trade an illiquid stock suddenly and simultaneously.
- The customer journals securities between unrelated accounts for no apparent business reason.
- The customer has opened multiple accounts with the same beneficial owners or controlling parties for no apparent business reason.
- The customer transactions include a pattern of receiving stock in physical form or the incoming transfer of shares, selling the position, and wiring out proceeds.
- The customer's trading patterns suggest that he or she may have inside information.

6. Transactions Involving Penny Stock Companies

- The company has no business, no revenues, and no product.
- The company has experienced frequent or continuous changes in its business structure.
- Officers or insiders of the issuer are associated with multiple penny stock issuers.
- The company undergoes frequent material changes in business strategy or its line of business.
- Officers or insiders of the issuer have a history of securities violations.
- The company has not made disclosures in SEC or other regulatory filings.
- The company has been the subject of a prior trading suspension.

7. Transactions Involving Insurance Products

- Cancel an insurance contract and direct funds to a third party.
- Structure withdrawals of funds following deposits of insurance annuity checks signaling an effort to avoid AML/CFT law reporting requirements.

- Rapidly withdraws funds shortly after a deposit of a large insurance check when the purpose of the fund withdrawal cannot be determined.
- Cancel annuity products within the free look period, which could be legitimate but may signal a method of laundering funds if accompanied by other suspicious activities.
- Opens and closes account with one insurance company and then reopens a new account shortly after with the same insurance company, each time with new ownership information.
- Purchases an insurance product with no concern for investment objective or performance.
- Purchases an insurance product with unknown or unverifiable sources of funds, such as cash, official checks, or sequentially numbered money orders.

8. Activity Inconsistent With Business

- Transactions patterns show a sudden change inconsistent with normal activities.
- Unusual transfers of funds or journal entries among accounts without any apparent business purpose.
- Maintains multiple accounts or maintains accounts in the names of family members or corporate entities with no apparent business or another purpose.
- Appear to be acting as an agent for an undisclosed principal but is reluctant to provide information.

9. Other Suspicious Customer Activity

- Unexplained high level of account activity with very low levels of securities transactions.
- Funds deposited to purchase a long-term investment followed shortly by a request to liquidate the position and transfer the proceeds out of the account.
- Law enforcement subpoenas.
- Large numbers of security transactions across several jurisdictions.
- Buying and selling securities with no purpose or in unusual circumstances (e.g., churning at customer's request).
- Payment by third-party check or money transfer without an apparent connection to the customer.
- Payments to third-party without apparent connection to customers.
- There is no concern regarding the cost of transactions or fees (e.g., surrender fees, higher than necessary commissions).

C. RECORDKEEPING PROCEDURES

Based on FATF recommendations, banks and FIs must maintain records of transactions, and identification data must be kept for a minimum of five (5) years. All necessary records on domestic and international transactions to enable them to comply swiftly with information requests from the competent authorities. Such records must be sufficient to permit reconstruction of individual transactions (including the amounts and types of currency involved, if any) to provide, if necessary, evidence for the prosecution of criminal activity.

Concerned entities must train their employees on the types of records that must be kept related to their business (for example, identification, transaction records, and reports) and state how they will be kept, i.e., electronic or written form. The format must allow easy retrievability of records when requested by the FIU.

Types of records to keep:

a. Transaction Records
b. Know Your Customer (KYC) Records

c. AML/CTF Programs
d. Correspondent Banking Relationships

USAID ECONOMIC RECOVERY AND LIVELIHOODS PROJECT (ERLP) IN YEMEN

REPORT ON CY 2021 & 2021 OIL AND NON-OIL REVENUE FORECASTS AND VAT FISCAL IMPACT ON CY 2022 REVENUES

ANNEX 08

September 2021

Prepared for the United States Agency for International Development, USAID Task Order No. 702792M00001
USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)
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Abbreviation and Acronyms

ERLP	Economic Recovery and Livelihoods Project in Yemen
GCC	Gulf Coordination Council
GDP	Gross Domestic Product
GST	General Sales Tax
MOF	Ministry of Finance
MOM	Ministry of Oil and Minerals
USAID	United States Agency for International Development
VAT	Value Added Tax
YER	Yemeni Rial

1. Introduction

This report presents updated oil and non-oil revenue forecasts for CY 2021, considering recent macroeconomic trends, updated non-oil revenue actuals for Jan-July 2021, updated oil production figures for Jan-August 2021, and changes in international oil prices. The report will also present recent changes to the value-added tax (VAT) fiscal impact micro-simulation model to reflect more sophisticated modeling capabilities and generate further fine-tuned fiscal estimates arising from VAT implementation.

During year 1, the Economic Recovery and Livelihoods Project in Yemen (ERLP) established and continued developing two separate models to forecast petroleum and non-petroleum revenues for CY2021. The models were designed based on extensive consultations with the Ministry of Finance (MOF) and the Ministry of Oil and Minerals (MOM).

The oil revenue estimation model uses separate calculations for each of the seven individual petroleum projects. The model builds on production data (by field/by month), cost of production data (by field, by month), and international oil prices to project total monthly revenues from petroleum activities. During Q4, the ERLP updated total non-oil revenues for CY 2021, utilizing actual petroleum production data for Jan-August 2021 and updates in international brent price forecasts until September 2021.

The non-oil revenue estimation model (covering taxes, customs, and other revenues) draws on key macroeconomic indicators to generate buoyancy and elasticity measurements, in addition to actual monthly data used to generate full-year non-oil revenue estimates for CY 2021. During Q4, ERLP revised the CY 2021 non-oil revenue estimates, utilizing recent macro-economic updates and actual revenue receipts for Jan-July 2021.

Concerning further development of VAT projections, the ERLP conducted several consultations with senior staff from the MoF and Tax Authority to discuss underlying VAT assumptions, such as the value of sales, input-tax deduction related compliance rates, and the unified rate to be implemented. In Q4, the ERLP utilized updated data and assumptions to assess the fiscal impact of VAT on the CY 2022 non-oil estimates, which will be discussed later in the report.

2. CY 2021 & 2022 Non-oil Revenue Forecasts

a. Economic Context

Real GDP contracted by 5.0 percent in 2020 and is projected to record -2.0 percent in 2021, according to ERLP estimates. Inflation continued to rise in CY 2021 and is projected to reach 27 percent, four percentage points higher than in 2020. This increase follows an ongoing economic and humanitarian crisis, coupled with the adverse effects of the Covid-19 pandemic. Moreover, ERLP projects real GDP growth of 2-3% in CY 2022, as the economic activity continues to gain traction and recovery from the Covid-19 crisis resumes.

b. CY 2021 Jan-July Non-Oil Revenue Actuals

As the summary table 1 below indicates, despite increased economic and political turmoil, the Tax Authority collected more revenues in Jan-July 2021, compared to the same period last year, reaching around YER 300 billion, up from YER 203 billion, constituting an almost 50% increase. A post-Covid-19 consumption rebound and improved revenue collection and administration performance drove a 136 percent increase in sales tax revenues, a 36 percent increase in income tax, and a 16 percent increase in customs.

c. CY 2021 Non-Oil Revenue Full Year Projections

The ERLP fiscal team updated the CY 2021 non-oil revenue full-year estimates, accounting for actual receipts for Jan-July 2020, Jan-July2021, and CY 2020 full-year actuals. Such a methodology is beneficial because it incorporates previous actual collection trends into the estimation process to generate more realistic and accurate revenue forecasts.

Building on improved tax collection and economic activity for Jan-July 2021, the CY 2021 full-year estimates were revised upwards from the previously estimated YER 630 to YER 864. As summary table 1 below indicates, compared to CY 2020 actuals, it is projected that non-oil revenue will grow by almost 37%.

d. CY 2022 Non-Oil Revenue Full Year Projections

Given improved and revised CY 2021 non-oil revenue estimates and a projected real GDP growth rate of 2-3%, ERLP projects that CY 2022 non-oil revenue estimates will reach around YER 1.4 trillion, as shown in summary table 1 below. The ERLP utilizes tax buoyancy and elasticity measurements as inputs for generating the CY 2022 non-oil revenue estimates.

Table 2 below shows the estimates of buoyancy & elasticity for 2017 – 2021 calculated by the ERLP team. The results indicate that elasticity rates are generally low compared to an average of peer countries. This is in addition to a narrow tax base due to a relatively weak tax administration and the inability of the government to collect due taxes from the unliberated areas. However, it is projected that elasticity and buoyancy measurements will improve moving forward as tax policy reforms, such as the VAT, excises tax, and fisheries reforms, begin to gain traction in the coming period.

e. Table 1: Summary of CY 2020, 2021 & 2022 Non-Oil Revenue (Million YER)

million YR

	2020 Actuals	2021 Estimates	2022 Estimates	Jan-July 2020	Jan-July 2021
Total Non-Oil Revenues	**632,504**	**864,001**	**1,416,131**	**203,685**	**301,601**
growth rate		*3 6.6%*	*6 3.9%*		*4 8.1%*
Total Tax Revenues	**263,009**	**391,856**	**865,350**	**131,940**	**234,474**
growth rate		*4 9.0%*	*1 20.8%*		*7 7.7%*
Total Central & Local Government	**230,246**	**361,226**	**841,311**	**77,364**	**130,472**
growth rate		*5 6.9%*	*1 32.9%*		*6 8.6%*
Total Central Government	**224,820**	**354,290**	**832,925**	**75,051**	**124,589**
growth rate		*5 7.6%*	*1 35.1%*		*6 6.0%*
Income Tax	**96,752**	**130,373**	**297,287**	**49,758**	**65,387**
growth rate		*3 4.8%*	*1 28.0%*		*3 1.4%*
Sales Tax	**127,623**	**223,361**	**534,746**	**25,029**	**58,981**
growth rate		*7 5.0%*	*1 39.4%*		*1 36%*

Other Taxes	**446**	**556**	**892**	**264**	**221**
growth rate		*2 4.8%*	*6 0.4%*		*- 17%*
Local Government Taxes	**590**	**604**	**788**	**314**	**498**
growth rate		*2 .4%*	*3 0.4%*		*5 8.4%*
Common Taxes	**4,836**	**6,331**	**7,599**	**1,999**	**5,385**
growth rate		*3 0.9%*	*2 0.0%*		*1 69%*
Total Customs	**115,278**	**131,790**	**154,583**	**54,428**	**63,089**
growth rate		*1 4.3%*	*1 7.3%*		*1 5.9%*
Dividends	**248,062**	**332,875**	**386,489**	**13,828**	**1,145**
growth rate		*3 4.2%*	*1 6.1%*		*- 92%*
Other Revenues	**6,156**	**7,480**	**9,709**	**3,489**	**2,892**
growth rate		*2 1.5%*	*2 9.8%*		*- 17%*

f. Table 2: Estimates of buoyancy & elasticity for the period 2018 – 2021

	Buoyancy	Elasticity
Income Tax	1.90	4.34
Sales Tax	4.86	-11.16
Other Taxes	4.52	-0.09
Customs	5.46	-7.47
Dividends	-0.67	-9.06

3. CY 2021 & 2022 Oil Revenue Forecasts

a. Context

There are two oil revenue regimes in Yemen for the seven existing oil fields, one for the SOE projects, which are under the supervision of the Yemen Oil and Gas Corporation, and the other for privately owned projects (both foreign companies and jointly owned). The revenue system for the two SOE projects (Petro Masila and SAFER) is relatively simple and direct. In this regime, all sales revenue is transferred to the government, and the government covers all costs.

The government's take from each privately-owned project involves a different regime. The government receives revenue from three sources: (a) royalty payments; (b) a share of "profit oil" ; (c) and a share of project profits (for the jointly owned projects). The rates for each type of payment vary according to the terms of the Production Sharing Agreement (PSA) for each project. In addition, the rates vary with the level of production from each project. Furthermore, each PSA imposes limits on the operating and capital expenses that can be recouped.

The oil revenue estimation model utilized by the ERLP uses separate calculations for each petroleum project. The model builds on production data (by field/by month), cost of production data (by field, by month), and international oil prices to project total monthly revenue from petroleum activities.

b. Actual Oil Production in Jan-August 2021

By the end of CY 2020, the MOM generated the 2021 total projected production for each oil field. Moreover, ERLP was able to gather actual production data for Jan–August 2021. As table 3 below indicates, actual oil production for Jan–August 2021 was 12 million barrels, constituting around 46% of the full-year production projection of 25.8 million Barrels.

In addition, table 3 below illustrates that in the period Jan–August 2021, production levels decreased by 13%, compared to the 13.6 million barrels produced in 2020 during the same period. In addition, Jan-August 2020 production constituted around 62% of the actual output of the full year. These figures further indicate that this year's production for the period Jan–August is lower than last year's, in terms of the actual oil production and its share of full-year production. Decreased production levels are mainly attributed to lower production efficiency stemming from the ongoing security constraints.

c. Table 3: CY 2020 & 2021 Jan-August Oil Production (Million Barrels)

	Jan-August 2020	Full Year 2020	Jan - August as % of full-year 2020	Jan - August 2021	Full Year 2021 projections	Jan - August as % of full-year 2021	% Change Jan-August 2020 & 2021
Safer block 18	4.0	5.9	67%	2.3	5.9	39%	-42%
PetroMasila block 14	6.6	10.7	62%	6.7	12.0	56%	1%
Block 5 (gana)	-	-		-	1.8	0%	
Occidental block	-	-		-	-		
Block 4	0.0	0.0	74%	0.0	0.0	111%	-20%
Cavali block 9	0.9	1.8	51%	1.0	2.4	44%	13%
OMV Block S2	2.1	3.6	59%	1.9	3.7	51%	-11%
Total	**13.6**	**22.0**	**62%**	**11.9**	**25.8**	**46%**	**-13%**

d. International Brent Price

The model uses a forecast of future oil prices published by the U.S. Energy Information Administration (EIA) in its Short-Term Energy Outlook. The Outlook forecasts the price of the Brent oil benchmark for each month in 2021. The historical sales data produced by the MOF were compared to historical International Brent prices to determine any consistent differences between Yemeni sale prices and Brent prices. No consistent variation was observed, so the model assumes that all 2021 production will be sold at Brent prices. The average brent price for 2020 was around $40/barrel, whereas the average price for 2021 is approximately $68/barrel.

e. CY 2021 Oil Revenue and Production Projections

During Q4, ERLP updated total oil revenue for CY 2021, utilizing actual petroleum production data for Jan-August 2021 and updates to international brent price forecasts through September 2021. Based on the lower production levels in CY 2021, the ERLP revised the full-year production estimate downwards to reach 20.4 million barrels, compared to the previous estimate of 25 million barrels.

Consequently, CY 2021 government oil revenues were revised downwards to $900 million compared to the previous estimate of $1.2 billion. However, as indicated in Table 4 below, CY 2021 oil revenues significantly increased compared to CY 2020 actuals which stood at around $408 million. This improvement in government oil revenue is mainly attributed to an increase in the average brent price from $40/barrel in 2020 to $68/barrel in 2021. Therefore, despite lower production compared to CY 2020, government oil revenue has increased in CY 2021 from YER 245 billion to YER 538 billion, constituting a 120% increase.

f. Table 4: CY 2020 & 2021 Oil Revenues

Million $

	2020 actuals	2021 Estimates
Total Production (Barrels)	22,037,710	20,495,308
Royalties (Gross Income*Royalty Rate)	12	21
Gov Share of Profit Oil	392	868
National Companies' Share	5	8
Total State Share	409	898
	Million YER ($/YER 600)	
Royalties (Gross Income*Royalty Rate)	7,016	12,690
Gov Share of Profit Oil	235,367	521,018
National Companies' Share	2,824	4,799
Total State Share	245,207	538,506

4. VAT Implementation & Its Fiscal Impact on CY 2022

a. Background

In CY 2021, Yemen's non-oil tax revenue (including Customs) accounts for 4.7 percent of GDP (YER 846 billion), compared to an average of around 17 percent of GDP for middle-income and developing countries. Sales tax receipts represent only 26 percent of total non-oil revenues and a mere 1.3% of GDP, indicating the need to continue implementing effective fiscal policy and tax administration reforms to significantly address shortcomings within the tax system and increase revenue.

However, as previously mentioned, tax collection and revenue administration improved over 2021, making it possible to resume paying civil servant wages and pensions, thus increasing household purchasing power. This improvement has occurred because of increased economic activity and a series of tax policy and administrative reforms implemented by the Yemeni government with significant ERLP technical/training support. Key tax administration reforms included the implementation of newly designed procedures to detect non-compliant large taxpayers and a systematic approach of cleansing taxpayer databases.

b. Context

During ELRP's inception, a two-year time frame for the transition towards a full-fledged VAT system was introduced. This plan draws upon key features of VAT systems applied in more than 170 countries worldwide, including some countries from the GCC and the MENA region. An implementation roadmap was discussed jointly with the MOF and the Tax authority.

The first step towards implementing a VAT system is the detailed review of key VAT policy parameters, which will constitute the base of the draft legal framework. Throughout Q3 and Q4, the ERLP consulted continuously with the MOF and Tax Authority on policy parameters, such as tax rate, input-tax deduction compliance rate, registration, and registration threshold.

The assessment of these parameters requires a quantitative analysis of the fiscal impact of implementing a fully-fledged VAT system on budget estimates. Therefore, ERLP developed a micro-model to calculate the budgetary impact of VAT on the CY 2022 revenue estimates. The analysis is based on the newly revised CY 2021 sales tax projections, which, as indicated previously, stood at around YER 223 billion, constituting a mere 1.3 percent of GDP.

The fiscal impact of VAT implementation and a detailed description of the micro-model components are presented hereafter.

c. VAT Fiscal Impact Model: Input Data

After several consultations with the MOF and Tax Authority, the ERLP team generated the input data. As indicated in Table 5 below, the data includes three main categories: (a) value of sales, (b) sales tax, and (d) tax rate for CY2021. Moreover, the data consists of the breakdown by sales tax subcomponents for imported and domestic goods and services.

ERLP requested the percentage of inputs of total sales value for each item (domestic good and service). This information is essential while calculating the fiscal impact of implementing a VAT system. Taxes paid on inputs should be fully deducted in a VAT system. However, given the logistical challenges and the lack of developed information technology at Tax Authority, ERLP did not receive accurate data for this variable that could be used with confidence in our analysis.

Instead, as indicated in Table 5 below, ERLP calculated a proxy for the percentages of total input in each item based on the data of peer countries, such as Egypt. In Egypt, when migrating from sales tax regime to VAT regime in the year 2016/2017, MOF computed the inputs based on the ‘input-output table’ in addition to an indicative sample of tax returns at the Egyptian Tax Authority. ERLP used these percentages as an average for the same items in Yemen. This proxy could be replaced with updated data collected and computed by the Tax Authority in the future.

d. Table 5: CY 2021 Sales Tax Revenue Under the Current GST System

	2021 Current GST Tax System			
Sales Tax Items	CY 2021 Total Value of Sales	Current Tax Rate	CY 2021 Sales Tax	Percent of inputs
sales tax on hydrocarbons	170.5	5%	8.5	20%
sales tax on imported cigarettes	0.0	90%	0.0	0%
sales tax on domestic cigarettes	37.8	90%	34.1	12%
sales tax on industrial products	533.9	5%	26.7	25%
sales tax on imported cars and means of transportations	69.5	5%	3.5	0%
sales tax on imported machines and electrical devices	104.8	5%	5.2	0%
sales tax on imported medicines and medical devices	1.4	5%	0.1	0%
sales tax on imported devices other than electrical and medical	1.1	5%	0.1	0%
sales tax on imported spare parts	0.0	5%	0.0	0%
sales tax on imported material for consturction and electricity	70.7	5%	3.5	0%
sales tax on imported goods	709.8	5%	35.5	0%
sales tax on telecommunication services (fixed and mobile phones)	79.6	5%	4.0	30%
sales tax on touristic services	0.8	5%	0.0	45%
sales tax on other services	2,043.4	5%	102.2	40%
Total	**3,824**		**223.4**	
GDP			**1.3%**	

e. VAT Fiscal Impact Model: Main Parameters

The VAT fiscal impact model consists of key parameters that constitute the base of the model. The first main parameter is the VAT rate. Based on ERLP's recommendations, the VAT rate should increase from the current sales tax rate of 5 percent to 12 percent when implementing a fully-fledged VAT system. The model currently uses a 12 percent rate as the main parameter for all items imported and domestic.

ERLP agreed with the authorities that the registration in the VAT system would be gradual through several phases. The first phase would include large taxpayers and then move in two to three years to the medium taxpayer, gradually reaching all taxpayers in five years.

ERLP assumed that the compliance rate at the beginning of the implementation would be 95 percent for large taxpayers. This parameter is subject to changes given the actual implementation of the system in the near future.

The third parameter is nominal GDP. The fiscal impact is calculated as a percent of GDP in CY2022 data.

f. Table 5: Main parameters of the VAT Micro-Simulation Model

VAT Rate	**12%**
VAT Compliance Rate	**95%**
GDP	
2021	17,864
2022	21,555

g. VAT Fiscal Impact Model: Main Outcomes in CY2022

Based on the VAT fiscal impact model, a VAT system at a 12 percent rate, assuming full deduction of input tax and a 95 percent compliance rate, would generate an additional 0.6 percent of GDP of revenues in CY 2022, which is around YER 122 billion. It is noteworthy that ERLP will incorporate the fiscal impact of VAT implementation in total non-oil revenue in CY 2022 preliminary estimates after extensive consultations with the counterparts taking place in the coming period.

h. Table 6: CY 2022 VAT Revenue Under the Proposed VAT System (YER Billions)

	2021 Current GST Tax System				**2022 Proposed VAT System**			
Sales Tax Items	CY 2021 Total Value of Sales	Current Tax Rate	CY 2021 Sales Tax	Percent of inputs	New VAT Tax Rate	CY 2022 VAT Tax Reciepts	CY 2022 Net Impact	% GDP
sales tax on hydrocarbons	170.5	5%	8.5	20%	12%	15.6	7.03	0.0%
sales tax on imported cigarettes	0.0	90%	0.0	0%	90%	0.0	- 0.00	0.0%
sales tax on domestic cigarettes	37.8	90%	34.1	12%	90%	28.5	- 5.59	0.0%
sales tax on industrial products	533.9	5%	26.7	25%	12%	45.7	18.96	0.1%
sales tax on imported cars and means of transportations	69.5	5%	3.5	0%	12%	7.9	4.45	0.0%
sales tax on imported machines and electrical devices	104.8	5%	5.2	0%	12%	11.9	6.71	0.0%
sales tax on imported medicines and medical devices	1.4	5%	0.1	0%	12%	0.2	0.09	0.0%
sales tax on imported devices other than electrical and medical	1.1	5%	0.1	0%	12%	0.1	0.07	0.0%
sales tax on imported spare parts	0.0	5%	0.0	0%	12%	0.0	0.00	0.0%
sales tax on imported material for consturction and electricity	70.7	5%	3.5	0%	12%	8.1	4.53	0.0%
sales tax on imported goods	709.8	5%	35.5	0%	12%	80.9	45.43	0.2%
sales tax on telecommunication services (fixed and mobile phones)	79.6	5%	4.0	30%	12%	6.4	2.37	0.0%
sales tax on touristic services	0.8	5%	0.0	45%	12%	0.1	0.01	0.0%
sales tax on other services	2,043.4	5%	102.2	40%	12%	139.8	37.60	0.2%
Total	**3,824**		**223.4**			**345.0**	**121.7**	0.6%
GDP			**1.3%**			**1.9%**		**0.6%**

ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP) – YEMEN

REPORT ON THE IMPLEMENTATION STATUS OF THE DMFAS SYSTEM

ANNEX 09

September 2021

Prepared for the United States Agency for International Development, USAID Order # 72027920M00001

USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

INTRODUCTION

A debt management system is the backbone of a sovereign debt management office. Maintaining public debt data systematically and accurately helps governments track and meet their debt obligations on a timely basis. A previous review of the Yemeni public debt database status showed a debt management system was needed to ensure that public debt data are saved and recorded reliably. Doing so will allow systematic and efficient debt tracking.

Yemeni authorities evaluated several proposals for debt management systems in this regard, and ultimately decided to install at CBY the UNCTAD's Debt Management and Financial Analysis System (DMFAS), which was previously installed in Sanaa. MOF and MOPIC will also have access to the system on a read-only basis.

DMFAS software is designed to help countries manage their external and domestic public debt. DMFAS software can be used to monitor debt obligations such as government, government-guaranteed and on-lending debts, as well as grants. It can also be used to monitor private non-guaranteed external debt. It is one of the world's leading systems in the area of debt management and analysis.

Currently, DMFAS version 6 (DMFAS 6) is being installed in countries that request the system. DMFAS 6 is the sixth major release of the DMFAS Program software since 1982. DMFAS 6 is accessible from commonly used web browsers, with a customizable user interface and enhanced security.

ACTIVITIES COMPLETE TO PREPARE FOR DMFAS 6 INSTALLATION:

1- Acquire the Hardware and Software Prerequisites

ERLP assisted the CBY IT department in deciding on the computer equipment to be used for DMFAS 6 implementation. ERLP followed the guidelines outlined in the DMFAS 6 Hardware and Software Requirements set by the DMFAS Program at UNCTAD. CBY has shared the specifications of the equipment with the DMFAS Program for validation.

ERLP also helped the CBY IT department meet the software specifications set by UNCTAD. ERLP helped CBY obtain a 70% discount from the Oracle company to renew CBY's Oracle license. This license is used for other CBY systems and will also be used now for running DMFAS 6.

2- Introductory Training before DMFAS Installation

ERLP also trained MOF, CBY, and MOPIC debt management staff on important debt-related issues; including debt management guidelines, debt instruments, and the role of MOF in debt management. In addition, ERLP delivered introductory training on DMFAS 6, including a system overview describing its modules, main functions, and features was delivered. The staff now -- even those who did not have a previous base in debt management -- are now familiar with the necessary debt management essentials, and with the operational requirements for the software system they will be using. Additional sessions needed as preparation for the official UNCTAD DMFAS 6 training will be conducted during Q1 of Y2.

3- Sharing Information and Updating the Database

Since the beginning of ERLP Y1, MOPIC, MOF, and CBY debt management staff have made strong efforts to share the available external debt data, and obtain missing data from creditors or other sources. In this regard ERLP has provided an excel template with the fields to be filled to facilitate data transfer to DMFAS, when the installation process occurs.

4- Official Approval sent to UNCTAD for DMFAS Installation

With the guidance of ERLP, CBY decided on the best suitable proposal and sent the official approval to UNCTAD requesting the implementation of the system; with follow-up training activities to be conducted in Cairo. UNCTAD is preparing the necessary paperwork and working to settle financial arrangements (expected to be finalized during the course of November). Subsequently, the DMFAS 6 software technical training and the system's installation are expected to take place before end-2021. It is expected that, on a best efforts basis, by early 2022, DMFAS 6 will be functional. In addition, a DMFAS 6 basic functional training program will be undertaken.

CONCLUSION

The DMFAS 6 installation at CBY will help the Yemeni government manage its sovereign debt obligations. CBY has already made the necessary core preparations for DMFAS 6 installation. CBY has provided the necessary hardware and software requirements for the system's installation as well. CBY staff are capturing all the available external debt data on excel files following a template coordinated with ERLP to facilitate the transfer to DMFAS 6. In addition, the staff working on DMFAS 6 in CBY, MOF, and MOPIC are getting the necessary introductory training by ERLP specialists. While data entry will be centralized at CBY, MOF and MOPIC will be able to access the system on a read-only basis; where they will be able to see all the entered data and use the reporting and analysis modules found in the system.

ECONOMIC RECOVERY AND LIVELIHOODS PROGRAM (ERLP) IN YEMEN

Strategic Options for the Current Government Overdraft Balance and Alternative Government Financing Options

ANNEX 10

September 2021

this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Contents

LIST OF ACRONYMS

CBY	Central Bank of Yemen
ERLP	Economic Recovery and Livelihoods Program
GDP	Gross Domestic Product
GOY	Government of Yemen
LT	Long-term
MOF	Ministry of Finance
MoU	Memorandum of Understanding
PFM	Public Financial Management

INTRODUCTION

During the last thirty years many countries have reformed their central bank legislation in order to limited central bank financing of the government, as this was viewed as a chronic source of inflation. Diversifying debt instruments helps attract a larger number of investors, which leads to the injection of more liquidity into the financial market, enhancing the depth of the market. In addition, diversifying debt instruments can reduce interest rates, and thus reduce the public debt service borne annually by the budget. The development of debt securities and Sukuk markets is one of the most important means of diversifying the sources of financing for investors in the financial market.

DOMESTIC DEBT IN YEMEN

In Aden, domestic debt management activities mainly take place at the Central Bank of Yemen in coordination with the Ministry of Finance. In 2018, MOF authorized the CBY to issue debt instruments (namely Certificates of Deposits, Agency Deposit Certificates "Islamic Sukuk," and government securities) for the total amount of 100 billion riyals. Hence, in 2018 CBY issued Certificates of Deposits and Agency Deposit Certificates with short-term maturities of 3 months. These instruments were renewed quarterly with a total value of 100 billion riyals per quarter until Q3, 2021.

Following are the details of the break-down of these instruments in 2021: (amounts in billion Riyals)

Instrument	Balance Mar-21	Interest Rate	Balance Jun-21	Interest Rate	Balance Sep-21	Interest Rate
Certificates of Deposit	17.3	27%	17.3	27%	17.3	27%

Instrument	Balance Mar-21	Profit	Balance Jun-21	Profit	Balance Sep-21	Profit
Agency Deposits	82.7	23%	82.7	23%	82.7	21%

After more than six years of fragile and unstable political economy and security conditions - further aggravated by the economic turbulence associated with the COVID Crisis – Yemen continues to face a pressing fiscal deficit situation. To finance its needs, the government has had to significantly increase its recourse to central bank financing over that time. The government has a huge overdraft balance that has been continuously increasing over recent years, and has reached 3,406 billion riyals as of September 30, 2021. This balance is registered in the Central Government debit account.

Below is a table with the government's overdraft balance through September 2021: (amounts in billion Riyals)

	Balance Mar-21	Balance Jun-21	Balance Sep-21
Central Bank financing of the government (overdraft)	3.172	3.366	3.406

Below is a table summarizing the GOY's internal debt data - December 2018 till September 2021: (amounts in billion Riyals)

	Dec-18	Dec-19	Dec-20	Sep-21
Internal public debt	**1,534**	**2,377**	**3,009**	**3,506**
Central Bank financing of the government (overdraft)	1,434	2,277	2,909	3,406
Commercial and Islamic bank financing of the government (Certificates of deposits and Agency deposits)	100	100	100	100

The current status of the government's overdraft balance at CBY does not comply with Article 32 of the CBY Act (Law no. 14 of 2000), which states that:

"The bank shall not grant any loans or financial assistance to the government or any of its agencies."

"In exceptional circumstance, the Bank may grant temporary financing to the government in the form of emergency loans, but only if such loans are consistent with the monetary policy objectives of the Bank, and do not cause the total outstanding overdraft to the government to exceed the equivalent of 25 percent of the annual average budget's ordinary revenues for the previous three years. The maturity of such loans shall not exceed six months."

Moreover, the government has not been following a basic debt portfolio diversification strategy. Only two debt instruments are used (Deposit Certificates and Agency certificates), and both are short-term instruments.

Hence, there are two main issues to address. First, to try to limit the government's overdraft balance at CBY. Second, to diversify the government's financing options.

BETTER PRACTICE COMPLIANT DEBT MANAGEMENT STRATEGY

Sound public debt management strategy entails establishing and executing an approach for managing the government's debt which helps raise the required amount of funding at the lowest possible cost over the medium to long run; and in a manner consistent with a prudent degree of risk. It should also meet other key public debt management goals the government may have set, such as developing and maintaining an efficient market for government securities.

Governments should also seek to ensure that their payment obligations are met at the lowest possible cost, while meeting expenditure needs and satisfying risk containment objectives.

THE GOVERNMENT'S OVERDRAFT ALTERNATIVE:

Based on ERLP's engagement with CBY and MOF on debt management strategy and issues, CBY has requested ERLP assistance in finding the best solution to limit further increases in the government's overdraft balance at CBY. Given prevailing conditions, the best option available would likely be for the government go issue a long-term bond to CBY with a low-interest rate, close to the real GDP growth rate. The fiscal sustainability logic behind this approach is further explored below.

GOVERNMENT FINANCING OPTIONS:

A government can finance its deficit by borrowing externally or domestically, long term or short term, at a fixed interest rate or floating interest rate. However, it should be recognized that different kinds of borrowing have different costs and risks. Moreover multiple debt management objectives can be pursued simultaneously. For example, borrowing domestically and according to market conditions can help develop domestic financial markets more generally, and support the creation of a savings culture in the country. In addition, internal debt instruments provide rapid deficit financing inflows, are generally neutral in terms of their direct balance of payment impact, and involve no direct foreign exchange risk. However, internal debt issuance may be associated with higher nominal interest rates, shorter maturities, and limited market absorption capacity for many relatively shallow developing country capital markets.

External debt issuances typically entail relatively lower nominal interest rates, larger amounts, and longer-term maturities. However, they have drawbacks as well; including foreign exchange risk and exogenous interest rate risk. The choice of which type of instrument to pursue will depend significantly on the objective of the financing – for instance whether it is to increase foreign exchange reserves and/or to finance the balance of payment deficit, in which case an external debt issuance instrument would presumably be preferred. Additional rationale for external debt issuance might entail the insufficiency of domestic savings to lengthen fixed-rate maturities, interest in diversification of the investor base, or a focus on enhancing the issuer's status in the international markets.

In the case of Yemen, the only viable and practical option t hand at the moment is domestic borrowing. Therefore, this analysis will concentrate on different domestic instruments and financing options.

SUGGESTED INSTRUMENTS TO BE USED

I. CONVENTIONAL INSTRUMENTS

SHORT TERM INSTRUMENTS:

Currently, in Yemen, the CBY issues Certificates of Deposit and Agency Deposits. Both issuances have a maturity of three months and are rolled over.   ERLP’s fundamental recommendation with regard to these securities is to diversify their maturities to include six and twelve month issuances. In addition, Treasury bills can be used to help establish the short-end frame of reference for the yield curve, i.e., three, six, and twelve months.

MEDIUM TO LONG TERM INSTRUMENTS:

ERLP has also recommended that consideration be given to introducing Government Treasury Bonds with maturities of two and three years, respectively, and then to further lengthen the maturity of the treasury bonds to five years (after development of the domestic market and depending on the response and feedback of market participants on the introduction of a new instrument of longer maturity). These bonds could be set at a fixed or variable interest rate. The structure of the investor base will help determine the relative cost of different types and maturities.

From the discussions with the authorities, the team understood that Yemen issued Treasury Bonds for three years in 2018 and 2019 at a fixed interest rate of 17 percent; in order to help cover the government deficit. However, these bonds were at below-market interest rates, and the sale of these bonds was confined to government institutions. This is contrary to best practice-- government securities should be issued at market rates in the domestic market and to all eligible investors in the market-place.

SYNDICATED LOANS:

Another option that could be considered is the usage of syndicated commercial loans in domestic currency, at the market rate. The market rate could be fixed or floating (related to a margin over a benchmark market rate).

Usually, these loans are for shorter maturities than government securities. The degree of flexibility established in the terms of these loans depends on the negotiating power of the borrower. In addition, these transactions typically involve sometimes costly fees and commissions.

II. ISLAMIC INSTRUMENTS[1]

Moreover, if the authorities see more demand for Islamic instruments, they can issue Islamic Sukuk for maturities between 2-3 years under different forms; such as Musharaka, Ijara (Rent or lease), or Istisna'a, Murabaha and Mukawala. The choice between different Sukuk Forms will depend on the kind of assets available to the authorities, the different projects that need financing, and the available real estate and buildings used for Ijara financing. For example, the value of land and buildings needs to be fixed to finance it through Ijara; while road projects could be financed through Mukawala after determining the exact level of financing to be requested or needed.

With the guidance and assistance of ERLP, the authorities can make constructive choices on how the government financing requirement could best be met; while taking into effective

1See attached Annex on different forms and definitions of Sukuk.

account institutional constraints and potential risks. Such an approach to decision-making can help strengthen the debt management function, enhance analytical capacity and help reduce operational risk; even when institutional and financing capacity is seriously constrained.

III. INSTRUMENTS TARGETING RETAIL INVESTORS:

To promote instrument diversification, Yemen could consider issuance of instruments targeted to retail investors, households, and other non-professional investors, such as savings bonds, with an option that could be redeemed by the bondholder on demand. This would require a serious public education program, in order to inform the investing public in simplified language about these instruments and their inherent risks.

IV. POTENTIAL GUIDELINES FOR ESTABLISHING AN ALTERNATIVE DEBT ISSUANCE APPROACH

Limiting further overdrafts and proposing an alternative debt issuance approach is critical for permanently restoring macro-financial stability in Yemen. The Pragma team considers this a very important step towards limiting the government borrowing from CBY, which has previously resulted in significant inflationary and exchange rate depreciation pressures. To this end, an agreement between the MOF and CBY should be reached with the assistance of Pragma/ERLP experts to put in place an action plan that can gradually reduce the recourse to direct financing of the fiscal deficit through debt monetization.

Given current macroeconomic conditions, it would likely not prove realistic to return immediately to the limits established for direct government borrowing in the Central Bank of Yemen Act (Law no. 14 of 2000). Therefore, it would be best for the proposed MoU between the CBY and the MOF to take into consideration the following high priority objectives:

- Restructuring of the outstanding government debt on the CBY overdraft account, and replacing it with a long-term bond. This in turn should incorporate terms and conditions that effectively reflect the financial constraints already faced by the government, without inducing further curtailment pressures for important public expenditure activities.
- Imposition of new limits (other than the legal limits set by the CBY Act -- 25% of ordinary annual revenue per year) should be temporarily established as needed, and should be suspended once government fiscal balance is restored.
- A gradual transition towards non-inflationary sources of financing should be encouraged, by supporting effective recourse to domestic bond markets.

The following provides specific recommendations to design a robust MoU and ensure its compliance with central banking best practices and sound PFM management principles.

Restructuring the current outstanding overdraft

The accumulated overdraft equaled approx. 2.9 trillion Rials in 2020, and 3.3 trillion Rial as of June 2021. It has represented the primary source of deficit financing, equivalent to around 93% of current domestic debt outstanding. Since the civil conflict reignited, the overdraft provided to the government has continued to increase, while public revenue has declined significantly over that same timeframe.

These developments suggest that an orderly program of restructuring of the CBY overdraft to the government will be a necessary adjunct to adjoining fiscal stabilization measures; and the implementation of sound market-based monetary and exchange management policies. This, however, should be introduced over an extended time frame; and without introducing hard budget constraints that could lead to dramatic cuts in essential expenditures (salaries, social transfers, investment spending) -- and/or create further debt-servicing difficulties for the government.

In this regard, CBY and MOF should agree upon the terms of restructuring for the overdraft through the issuance of an LT bond in a flexible and realistic way; designed to ensure debt sustainability and enhance transparency. For instance, the bond's maturity could be set at up to 30 years to reduce pressure on the government's fiscal position, while the interest rate could be fixed close to the real GDP growth rate to ensure debt sustainably in the long run (for example, in the 5% range).

Binding practices should be avoided, like the earmarking of a portion of the revenues from the oil sales for the redemption of the long-term government bond (as has been considered recently by CBY); as this would likely introduce considerable uncertainty regarding revenue availability to meet critical public spending purposes. It could also introduce considerable uncertainty into the forward-looking public expenditure planning and management process. Bond redemption could be achieved under this type of scenario by retaining a portion of the CBY annual profit for that purpose before the transfer of the remaining amount to the Treasury account.

Limiting the future recourse to overdraft financing

The situation in Yemen is currently marked by a notable shortage of liquidity, and the lack of a functioning domestic bond market to provide needed financing for public and private sectors. This has led to an extremely heavy reliance of the government on monetary emissions to finance its deficit position. In this regard, the persistent liquidity shortage since the outset of the war (compounded by the pandemic), the deterioration of the value of the Rial in the exchange market, and the limited capacity of the government to repay its debt (including the suspension of principal repayments since 2016), could undermine the attractiveness of any new issuances. The long-term development of an active bond market in Yemen is critical to support economic recovery and expansion, and provide poverty-reducing social and physical infrastructure services.

That said, the central bank can play a key role in helping jumpstart bond market development. CBY can help facilitate the placement of government securities issuances; by allowing commercial banks to utilize these securities as collateral to promote the efficient conduct of open market operations. CBY could, in this manner, improve the liquidity and attractiveness of government securities in the secondary market. The repurchasing of bonds by the CBY would be carried out only for fine-tuning monetary purposes to avoid monetizing the debt through repurchase agreements between the Central Bank and commercial banks. It would, in this sense, need to be carried out in a manner that is consistent with the net monetary emission targets established in the annual monetary plan.

ERLP's current best guesstimate for the magnitude of the volume of government securities issuances (all categories included, short to long terms, using conventional and Islamic instruments) that could be effectively absorbed is around 50% of the current annual public deficit (around 400 billion Rial per year). When all other options have been exhausted, government borrowing from the CBY should be employed as last resort financing. Considering these guiding principles, the team recommends that technical details for a plan of this nature are collaboratively discussed with CBY and MOF (under the aegis of the Joint Treasury and Debt Management Committees). Furthermore, the details must be consistent with the CBY monetary emission curtailment objectives and the fiscal re-balancing realities characterizing the current macro-fiscal environment. This would culminate in the draft and submission of an appropriately framed MoU to the Prime Minister's office for approval.

CONCLUSION

This paper addresses two main objectives -- restructuring the GOY's current outstanding overdraft by transforming it to a long-term bond, and limiting the future recourse to overdraft financing by diversifying debt instrument options. This in turn would entail developing bond and Sukuk markets that would attract a larger number of investors, and could lead to injection of more liquidity in the financial market.

ERLP is well-positioned to provide effective guidance and assistance to the Yemeni counterparts to achieve these objectives successfully. ERLP specialists have previously helped the counterparts form a joint debt management committee; consisting of members from MOF, CBY, and MOPIC. Through this committee, ERLP will try to promote a shared vision on how best to solve this critical issue.

ANNEX 1: DIFFERENT FORMS AND DEFINITIONS OF SUKUK

Source: The Sukuk Handbook, A guide to Structuring Sukuk, Second Edition, Latham& Watkins

Summary of Common Sukuk Structures

The following brief definitions provide an introduction to the eight most common Sukuk structures. Each of the case studies later in this Handbook provides additional detail on these structures.

Sukuk *al-ijara*

Some commentators regard the *ijara* Sukuk as the classical Sukuk structure, and it has become the most commonly used structure by issuance volume since 2008. This structure's popularity stems from its uncontested *Shari'ah*-compliance and investors' familiarity with the sale and leaseback structure. *Ijara*'s nature as a sale and leaseback agreement makes it suitable if the issuing company has unencumbered commercially leasable assets, such as real estate, ships, or aircraft. The rental payments can be either fixed or calculated with reference to a market rate, such as LIBOR or EIBOR.

Sukuk *al-wakala*

The *wakala* structure is useful if the underlying assets available for use to support the issuance of the Sukuk comprise a portfolio of assets or investments, in contrast to a tangible asset or assets. Thus, provided that the overall Sukuk portfolio includes a minimum of 30 percent of tangible assets (or more, depending on *Shari'ah* approvals), the originator may use assets that would otherwise be considered non-tradable debt arrangements, such as *Murabaha* or I*stisna'a* contracts, as part of the investment portfolio comprising the Sukuk assets.

The structure is similar to the *mudaraba* structure (described below) in that the agent, or *wakeel*, selects and manages the underlying businesses or investments on behalf of the investor to ensure an agreed profit rate. However, in contrast to the *mudaraba* structure, the *wakala* structure allows the investor (*rab al-maal*) to receive only the agreed-upon profit return according to the pre-agreed profit share ratios established between the investor and the originator (*mudarib*). On the other hand, the wakeel may keep any profit above this agreed-upon profit return as an incentive fee.

Sukuk *al-mudaraba*

The *mudaraba* structure, similar to the *musharaka* structure (described below), is suitable if the originator does not own an actual tangible asset or does not have sufficient funds to purchase such asset to permit an *ijara* to be structured on a sale and leaseback arrangement. *Sukuk al-mudaraba* is particularly fitting for development financing as this structure is connected to a project's profitability. The *mudaraba* was the most frequently employed structure prior to the AAOIFI Statement. However, like the Sukuk *al-musharaka* structure, *mudaraba* has decreased in popularity after the AAOIFI Statement's criticism of purchase undertakings used in this type of structure. The *mudaraba* structure has been revived recently, as it has proved particularly useful for the issuance of Tier 1/Tier 2 capital Sukuk — which has become more prevalent as financial institutions prepare to implement the Basel Committee on Banking Supervision's revised rules relating to capital requirements, commonly known as Basel III.

Sukuk *al-musharaka*

The *musharaka* structure is also suitable if the originator does not own an actual tangible asset or does not have sufficient funds to purchase such asset to permit an *ijara* structured on a sale and leaseback arrangement. Hence, the *musharaka* structure is used to mobilize funds for establishing or developing a project or financing a business activity. Otherwise, the *musharaka* is similar to the other structures in that it requires the performance of an underlying asset to generate profits for investors. It can be implemented to provide for regular payments throughout the life of the financing arrangement and allow for flexible tailoring of the payment profile and method of calculation. The *musharaka* was among the most commonly used Sukuk structures prior to the AAOIFI Statement. However, the AAOIFI's criticism of purchase undertakings at face value in *musharaka* has led to a decline in the usage of this structure.

Sukuk *al-Istithmar*

The *Istithmar* structure is an investment structure that may be instrumental if the originator's business does not comprise any or very few tangible assets, for example, Islamic financial institutions that derive their rights to receivables from various Islamic contracts with their customers. The rights under these contracts can be sold together in a portfolio, which forms the underlying basis for Sukuk, as long as the contracts are not construed as trading in debt.

Sukuk *al-manafa'a*

In the *manafa'a* structure, the underlying asset is the capacity of, or rights to, commercial activities, allowing for the use of intangibles in Sukuk. In circumstances in which the issuer does not hold unencumbered tangible assets or is commercially unable or unwilling to utilize them in a Sukuk structure, the *manafa'a* structure may allow issuances based on available intangible assets. Airtime vouchers (representing minutes of airtime) are one of several intangible asset classes used as underlying assets for Islamic financing transactions introduced into the market over the last few years. Other asset classes include intellectual property rights, tariffs due on electricity meters, and receivables on petrochemical marketing contracts.

Sukuk *al-istisna'a*

The *istisna'a* structure is a contractual agreement for the sale of goods or commodities to be produced in the future. Hence, the *istisna'a* structure is especially suitable for financing large infrastructure projects. When a subcontractor needs to be involved, the suitability of the *istisna'a* structure will depend on the permissibility for the contractor to enter an additional *istisna'a* agreement with the subcontractor.

Sukuk *al-Murabaha*

The Sukuk *al-murabaha* is an alternative structure that may be employed if no tangible underlying assets can be identified in the originator's business or operations. In a typical *murabaha* structure, the issuer acquires commodities as a trustee on behalf of the Sukuk holders and sells those commodities to the originator on deferred payment terms.

The *murabaha* structure does not enjoy great popularity because the Sukuk do not constitute negotiable instruments capable of being traded in the secondary market at a premium; *Shari'ah* considers the underlying *murabaha* as representing a monetary debt receivable.

The Sukuk is constituted by entitlements to shares in *murabaha* receivables from the originator as the purchaser of the *murabaha*. Therefore, trading this Sukuk in the secondary market would amount to trading in debt, which the *Shari'ah* prohibits. This view is widely shared in the GCC and Pakistan. However, due to Malaysian jurists' more liberal interpretation of *Shari'ah* on the issue of trading in debts, Malaysia allows the trading of Sukuk *al-murabaha*. *Murabaha* may also be tradable in the GCC and Pakistan if they account for a small part of a larger portfolio of Sukuk assets, which includes tradable instruments, such as *ijara, musharaka,* or *mudaraba*.

Even though *murabaha* accounts for a small fraction of the total number of Sukuk issued, the structure is favored for smaller deals involving buy-to-hold investors who are more likely to accept uncertainties regarding the negotiability of their certificates.

ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP)—YEMEN

ADJUSTMENTS IN CY2021 BUDGETARY ALLOCATIONS, FROM A BUDGETARY EFFICIENCY/TRANSPARENCY PERSPECTIVE

ANNEX 11

September 2021

Prepared for the United States Agency for International Development, USAID Task Order No. 702792M00001

USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)
The Pragma Corporation, 116 East Broad Street, Falls Church, VA

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ERLP experts have undertaken an analysis of adjustments in CY 2021 budgetary allocations to determine the effectiveness of controls put in place at the aggregated level by ERPL from a budgetary efficiency and transparency perspective. To conduct the analysis, ERLP compared budget allocations for January-June 2021 with budgetary allocations over the July-December 2021 period.

Overall, the analysis confirms that the mechanisms put in place with the assistance of the ERPL team to help control spending have worked well at the aggregate level and have been successful in allowing MOF to remain within the parameters of the targeted overdraft financing levels. Looking ahead, this effort will shift now to a more concentrated analysis of more disaggregated levels of the budget classification system, which will help support better budget prioritization and expenditure control processes.

1. General assessment

Analysis undertaken by ERLP appears to confirm that little intra-year change is taking place in the overall expenditure composition at aggregate levels. At the same time, several examples that have been examined seem to indicate that changes occur either below the sub-chapter level or by shifting funds from one budget user to another. This is especially the case for transfers to Governorates and economic entities (SOEs and hospitals). As allocations are not sufficient to cover all budget user needs, it appears that prioritization, instead of taking place at the budget planning level, often effectively takes place at the budget execution level. This is clearly a suboptimal outcome.

A typical case is the Electricity Company of Hadramawt, which received a one-off transfer of 5 billion in Q2 of 2021 to cover salary arrears that had been probably building up for months. Meanwhile, other branches of the company did not receive any support because of overriding budgetary limitations. This leads to ad-hoc, politically driven budget management solutions. In response, ERPL is putting in place a strategy designed to help eliminate this sort of situation. This will work at two levels. At the level of MOF, the 2022 budget will be more realistically framed, and better prioritized at the planning stage. It will be based on a better disaggregation of expenditure categories that will provide a more accurate picture of budgetary realities. Moreover, at the level of primary and secondary budget users, better commitment control and expenditure tracking will help prevent the build-up of arrears; budget execution reforms will be implemented to improve payment predictability and transparently prioritize them.

In practice, cash constraints provide very little space for increasing spending within the year, even when the cash requests are critical for service delivery or simply for activity sustainability (as in the case of hospitals). The release of funds is conditioned on cash availability, and despite significant recent ERLP-supported improvements in cash flow forecasting, in the absence of annual and quarterly cash plans by budget entities, budget execution remains unpredictable. The information provided in the table below seems to indicate that budget spending is under control since no major overall adjustment was made during the second half of the year. However, this does not capture the accumulation of arrears nor the lengthy delays in payment that occasionally occur. To remedy this situation, ERPL is developing several mechanisms designed to make budget execution more predictable (covered in the budget implementation section of the report) and has also provided recommendations for establishing a focused arrear prevention/management strategy.

Overall, at this point, ERPL is shifting its focus from the initial core focus on expenditure control at the aggregate level to a second stage focus on facilitating better budget preparation with sound expenditure prioritization parameters, accompanied by enhanced expenditure control at the disaggregated level of the budget classification.

2. Detailed analysis of available data

During Q3, ERLP experts conducted an initial analytical review of the adjustments in CY 2021 budgetary allocation. For this review, ERLP compared budget allocations for January-June 2021 with the projected budget for July-Dec.

Table xx. Budget allocations in 2021, in billions of YER

	Jan-Jun 2021	Jul-Dec 2021
Salaries and wages	414.8	412.6
Social contributions	4.6	2.2
Goods and services	76.5	141.6
Subsidies, grants, and social benefits	182.1	220.7
Capital expenditure	20.6	22.4
Debt repayment	26.2	18.1
Unallocated	19.4	37.5
Total	**744.1**	**855.1**

These numbers indicate that overall funding for the central ministries and agencies from July to December 2021 has increased to 855.1 billion YER, from 744.1 billion YER from January to June 2021.

Increases in allocations have been made to different line ministries and agencies in the following manner:

- The Ministry of Foreign Affairs and the operations of Embassies abroad – by 23.1 billion YER (increasing from 3.1 billion YER to 26.2 billion YER mostly related to goods and services).
- The Ministry of Higher Education, Scientific and Technical Research and Vocational Training – from 145 million YER to 24.4 billion YER. This increase mostly comprised of transfers (scholarships) of 24.1 billion YER in the second half of 2021.
- The Parliament - from 0.3 billion YER to 3.3 billion YER; this allocation is not distributed by Chapters.
- The Ministry of Public Health by 1,3 billion YER. from 5 billion YER to 6.2 billion, mainly for goods and services.
- The Ministry of Oil and Minerals – by 35.1 billion YER for goods and services,

- The Ministries of Defense and Interior, and the Agency of Political Security – by 10 billion YER for goods and services.

The allocations for central appropriations have been increased from 198.8 billion YER to 210.8 billion YER -- or 12 billion YER. These allocations include funding for payment obligations carried forward from 2020, government contingency reserves, and allocations for transfers to governorates.

Allocations have been reduced for some entities, including the following:

- National Information Center – by 4.5 billion YER, mostly capital expenditures, and subsidies,
- Presidency of the Council of Ministers – by 4 billion YER.
- Central Organization for Control and Accountability – by 3.6 billion YER – in the capital expenditures, grants, and subsidy areas.
- Presidency – by 1.4 billion YER, mainly in the grants and subsidy areas.

The line-item budgeting currently being undertaken provides for a limited analysis of input costs, which only allows for a weak link to be established with outputs and outcomes for governmental operations. ERLP will later carry out a comprehensive follow-up review to support the MOF in undertaking the final ex-post review of the CY 2021 budget and moving forward.

3. Corrective measures being taken

Overall, our initial analysis conducted on a random sample of budget users appears to demonstrate that deviations from the authorized spending plan remain at an acceptable level. This analysis confirms that the government's efforts to contain the deficit at the targeted level are relatively effective. However, it also underscores serious ongoing deficiencies in the budget planning and budget execution phases. ERLP is taking a number of follow-up actions in this regard to help improve the situation:

- The new budget classification scheme should help improve considerably budget planning processes and outcomes. At present, the expenditure categories at the sub-chapter level of the classification system that is used for budget control purposes are too broad and do not effectively capture needed expenditure composition details. Greater detail in the budget classification scheme will provide MOF with better information on and control over spending patterns while allowing for enhanced budget analysis and planning processes.
- CY 2022 budget preparation is based on a sound expenditure prioritization process that will introduce objective criteria for budgetary allocation in a manner that helps the government move away from an almost sole emphasis on political bargaining processes.
- Efforts are being initiated for the 1st time to establish more realistic budget planning parameters for the electricity and water sectors. The initial stage should incorporate rigorous planning processes for determining the purchasing requirements for fuel supplies needed for electricity generation, which should be presented directly to MOF and related to improved financial and operational performance parameters.

- A plan is being implemented to improve budget execution in general and commitment control management most particularly. Commitment control management should allow MOF to monitor the complete payment cycle. Commitment reports will give advance notice regarding cash management decisions that need to be made in order to meet priority cash needs. It will also facilitate effective monitoring of the volume of transactions being processed from the purchase orders to the final payment stage and measure average delays in payment execution.

- ERLP has proposed an arrearage inventory/prevention strategy based on systematic arrears reporting. Once the stock of arrear is fully identified, arrears can be ranked by order of priority, and a practical arrearage management strategy can be effectuated, including gradual liquidation linked to progress in revenue collection efforts and deficit reduction.

- ERLP is also proposing, after the approval of the 2022 Budget, that budget users be requested to present an annual financial and procurement plan and a quarterly cash management plan.

USAID ECONOMIC RECOVERY AND LIVELIHOODS PROJECT (ERLP) IN YEMEN

New Budget Preparation Process

ANNEX 12

September 2021

Prepared for the United States Agency for International Development, USAID Task Order No. 702792M00001
USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)
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1. Introduction and Outline of a New Budget Process

The present note has a twofold descriptive purpose: (i) to present a rationalized process for the preparation of the CY 2022 budget, that will be the first annual budget since the Government of Yemen moved to Aden, and (ii) to define procedural reforms that need to be implemented for adopting good practices in budget preparation. Given current institutional and related human resources constraints, a simplified budget preparation process has been developed.

There is now an agreement that the budget document that will be produced will have all the qualities and attributes of a unified budget document.[1] Notably, (i) the document will cover in detail revenue collection, taking into account reforms in revenue management. (ii) The overall expenditure ceiling will be based on the fiscal principles established in the budget circular. (iii) Major Macroeconomic assumptions will be made explicit. (iv) Allocation of ministries ceilings will be made to reflect clear sectoral prioritization decisions. (iv) Detailed allocation below sub-chapters will reflect an organized and transparent prioritization process as well.

The budget preparation process that is recommended entails three core phases:

- Phase 1: Construction of the country expenditure ceiling and release of a Pre-Budget Statement
- Phase 2: Disaggregation of the expenditure ceiling by line ministries and budget users
- Phase 3: Detailed budgeting at the level of sub-chapters of the budget classification

ERLP has strongly recommended the official adoption by MOF through a ministerial decree of the proposed budget classification scheme. Looking ahead, complete and effective implementation of the new classification system will, in turn, require significant training, as well as updating of Excel tools used by budget users.

2. Rationale for Moving from Expenditure Plans to an Orderly Annual Budget Process

Having an annual budget based on a clear macroeconomic framework and on strategic prioritization of spending needs is critical for establishing a sound Public Financial Management System and enlisting the support of the international donor community for budgetary support purposes. Moving away from expenditure plans would be a sign that the Government is committed to better practice compliant fiscal management and intends to implement the reforms necessary for ensuring macroeconomic stability and promoting fundamental fiscal efficiency and equity objectives for Yemen.

a. Main Characteristics of a Budget

A Budget is not simply a tool to allocate resources to budget users. It has a number of critically important efficiency and transparency features:

- A budget is an instrument to adjust expenditure to available resources within the context of a deficit that (i) that must be financed through a financial plan, (ii) must be part of a multi-year fiscal policy, and (iii) must demonstrate sustainability;

[1] The MoF had long argued for a self-contained expenditure plan, but ERLP specialists have consistently dialogued regarding the need for a unified, integrated budget document for CY 2022. Recent discussions at the Prime Ministerial level by ERLP specialists appear to have solidified government support to move in this direction.

- A budget is meant to achieve a number of core economic and fiscal policy objectives, including promoting inclusive economic growth, increasing employment, controlling inflation, prudently managing public debt.
- A budget should be linked to an inclusive and sustainable pro-growth economic policy that prioritizes certain critical sectors of the economy that are key to the removal of binding growth constraints; and which simultaneously seeks a balance between broad-based economic development goals (infrastructure, energy, transport, etc.), and human capital development objectives (education and health);
- A budget must be comprehensive and should include all Public Sector revenue and spending;
- Budgetary spending must be linked to measurable objectives that should be quantified, including the improvement in the quality, coverage, and cost-efficiency of vital public services;
- Budget deficits must be financed through a transparently formulated and responsible borrowing plan, which avoids excessive monetization and related inflationary pressures.

Moving towards a unified budget and related deficit financing proposal will be essential for restoring citizen and business confidence in the economy and lessening speculative pressures on the exchange rate. This underscores the importance of the ROYG, demonstrating that it has a clear plan to restore fiscal sustainability through a unified budget and (eventually) a Multi-year Expenditure Framework.

b. Characteristics of CY 2022 Budget

While existing legislation requires the budget to be approved by the Houses of Representatives (not readily realizable under current political economy and security circumstances), this issue can easily be resolved by referencing the budget document by an equivalent name such as a "National Annual Revenue and Expenditure Plan." This name states clearly that the budget is annual, covers both revenue and expenditures, and covers the whole country.

The following are the main envisaged features of the budget plan:

- Like previous Expenditure Plans, the National Annual Revenue and Expenditure (or Budget) Plan, will not require approval by the House of Representatives;
- The Annual Revenue and Expenditure (or Budget) Plan will include revenue estimates and revenue targets for each type of revenue;
- The Revenue and Expenditure (or Budget) Plan will cover the whole country but will allocate only funds that be spent;
- The Revenue and Expenditure (or Budget) Plan will prioritize expenditures in accordance with clear fiscal and economic objectives, in a manner that helps promote the efficient reconstruction of infrastructure, improvement in the delivery of critical social services, and inclusive economic growth;
- A well-defined deficit financing plan will be included in the budget presentation; and
- The Revenue and Expenditure (or Budget) Plan will use a new presentational approach that demonstrates how the ROYG is adopting/utilizing modern budgeting methods.

Presenting a revenue forecast along with an expenditure plan is critical to demonstrating progress toward fiscal sustainability. A Revenue Plan is critical to ensure institutional accountability for meeting revenue collection targets and encourage earnest while a substantial eMOF and Tax Authority efforts to improve the tax policy and administration framework. It will also play a critical role in promoting fiscal sustainability and thereby enhancing prospects for donor financing support during the crucial transitional phase of the fiscal reform and adjustment process.

3. Economic and Fiscal Policy

Initial budgetary guidance sent out earlier this year has set very ambitious economic and fiscal objectives for the CY 2022 budget. The Annual Revenue and Expenditure (or Budget) Plan must be securely linked to these objectives:

a. Economic Objectives

In order to reach the economic objectives, responsible ministries and institutions must be clearly identified. When the achievement of an objective requires the collaboration of several ministries, a lead ministry must be designated, and a coordination mechanism put in place to ensure consultation and cooperation with other line ministries involved in achieving the objective.

The major economic objectives include:

Economic Objectives	Lead Ministry	Line-ministries
Resuming full production and export of oil and gas from current oil and gas fields and encouraging the return of foreign companies working in the field of oil and gas.		
Raising the investment program allocations in the general budget (investment and capital spending) to appropriate expenditure levels.		
Directing aid and donor interventions towards development activities that generate employment opportunities and support economic activity, while directing relief and humanitarian interventions to enhance livelihoods and develop sustainable economic sustenance activities.		
Supporting small, medium, and small enterprises in the fields of agriculture, fisheries, industry, and business incubators.		
Supporting the export sector, especially agricultural and fisheries commodities and raw materials, and addressing key obstacles that hinder exports, especially to the markets of the Gulf Cooperation Council countries.		
Initiating the reconstruction of the infrastructure impacted by the war and mobilizing sufficient funding resources from regional and international donors.		
Providing access to a financing mechanism for supporting imports on a larger scale to stimulate production in the various economic sectors.		
Strengthening institutional capacity to mobilize revenues, especially tax and customs.		

Build institutional capacity to produce statistical data, periodic surveys, and track development indicators in general.		
Improve access to education generally.		
Improve access to basic health services generally.		
Improve access to water generally.		
Expand the production and use of alternative energy for electricity, trade, and production purposes, especially in the industrial and agricultural sectors		
Executing a number of externally funded emergency projects with rapid development impact, especially from regional financial funds, and obtaining new funding.		

The final budget circular (currently in the last stage of refinement/approval) should designate a lead-ministry for every economic development objective and identify related ministries and institutions that must cooperate in their attainment. It should also provide detailed instructions of how ministries should provide/demonstrate the linkage between key economic policy objectives and the expenditure plan.

b. Fiscal Objectives

ERLP specialists have held extensive discussions with MOF, CBY, and MOPIC officials on core fiscal policy objectives, including maintaining a deficit target in the 4-5 percent of GDP range. With prospective increases in oil and (to a lesser degree) non-oil revenues as currently envisaged for CY 2022, the ROYG should have additional fiscal space next year. The budget should, in turn, demonstrate clearly how this fiscal space will be used to support the economic development priorities articulated in the budget. This further underscores the criticality of a sound ex-expenditure prioritization process moving ahead.

c. Investment Objectives

Original budgetary guidance from MoF set an investment objective of 25% of total expenditure representing both an economic and fiscal objective. Considering that investment in 2021 was only 1.5% of the total budget and probably in the range of 3% after considering off-budget donors' projects, moving to the 25% range might result in a dramatic increase in the budget deficit; unless massive savings are made on other expenditures.

ERLP has, in this regard for practicality and time-urgency reasons, recommended the preparation of a list of prioritized projects that could be quickly implemented this year, based on clearly favorable qualitative socio-economic feasibility criteria and/or prior conduct of a rigorous cost/benefit analysis. Along with a list of projects that could be implemented next year after proper feasibility studies are carried out. A typical implementation cycle, in an efficient fiscal planning environment, would include the investment proposal development stage (one month), review of the proposal (one month), feasibility study (minimum three months), procurement (three months), contract negotiation (one month), mobilization (one month), and implementation. This signifies that a project would require at least nine months of preparatory work (this is a minimum timeframe assuming a serious cost/benefit analysis exercise is carried out).

In general, sound investment prioritization processes entail the application of sound rate of return principles for major physical infrastructure investments; and rigorous cost-efficiency standards for major social infrastructure projects. ERLP envisages the provision of significant technical/training assistance in this area moving ahead.

4. Reform Objectives of CY 2022 Budget

A number of reforms in budget preparation procedures are envisaged for the CY2022 budget process:

- The new budget should use the revised budget classification/chart of accounts that is being prepared;
- Intensive efforts are being applied to bring off-budget expenditures in-budget. This means essentially bringing in budget donor-funded projects managed under MOPIC. Therefore, we expect that MOPIC budget submission will include a detailed list of donor projects.
- Public participation in the budget review process through targeted public outreach activities will be encouraged.

5. Outline of the Budget Preparation Process

Without a previous annual budget and complete expenditure reporting, and given political economy constraints/exigencies, establishing the budget baseline is more difficult than usual. This militates in favor of maintaining a streamlined/simplified budget preparation process, as outlined below:

- **Agreement on the budget preparation calendar and the budget circular**: The first step of budget preparation is to establish a timeline with milestones that can be controlled. The three-phase budget preparation process can be used as a framework if clear responsibilities are assigned to all stakeholders.
- **Pre-budget statement:** In order to meet the criteria of good governance and budget transparency, countries are requested to publish a pre-budget statement that sets macroeconomic and sectoral targets. The elements of the pre-budget statement are already in the first part of the draft budget circular.
- **Annual Budget Framework:** The first step of the budget preparation process is the annual budget framework, which allows the calculation of expenditures and of the budget deficit based on revenue projections. ERLP is working with MoF to finalize these projections, which will include the key assumptions underpinning the forecasting process.
- **Medium-Term Expenditure Framework:** Due to a very compressed timeline and data limitations, preparation of a three-year MTEF will be undertaken on a preliminary and pilot basis in the health and education sectors. The core purpose of the MTEF is (i) to demonstrate the sustainability of the Government's fiscal policy and (ii) to set multi-year targets for revenue collection, aggregated spending, and budget deficit. The MTEF is more than a table of numbers; it must set fiscal objectives and rest on well-identified economic assumptions that should be periodically revised.
- **Country budget ceilings**: The country budget ceiling depends on two core parameters: the revenue forecast and the targeted deficit. The targeted deficit is a function of GDP estimates and related deficit financing forecasts, as well as revenue projections. The overall budget ceiling will be disaggregated by expenditure categories to build the Annual Budget Framework.
- **The Annual Budget Framework:** The MTEF is part of the Medium-Term Expenditure Framework (MTEF) that will be published with the budget. It will be used for disaggregating the expenditure ceilings by expenditure categories**.**

- **The disaggregated budget users' expenditure ceilings**: These ceilings are allocated to line ministries, municipalities, and other budget users, and disaggregated between three main expenditure categories: salaries, non-wage operational expenditures, and investment.
- **Detailed budget by budget user**: This budget is prepared by the budget users themselves. It consists essentially in (i) breaking down the line "non-wage operational expenditures" into the expenditure categories of the budget classification and (ii) allocating to projects funds from the investment envelope.
- **Budget submission to the Cabinet:** This is the last step. What is essential at this stage is to agree on the budget presentation format while keeping in mind that a budget is a public document. A budget is more than a set of tables. It must come with a narrative that justifies the fiscal policy adopted and the policy choices made in budget allocation.

6. Calculation of the National Expenditure Ceiling and Annual Budget Framework:

The Annual Budget Framework is the key tool that should be used to calculate of the budget ceiling.

ANNUAL BUDGET FRAMWORK / EXPENDITURE CEILING		
	FISCAL ITEMS	**AMOUNT**
A	**TOTAL REVENUE**	
A1	Oil Revenue	
A2	Non-oil revenue	
A3	Foreign grants	
B	**TOTAL EXPENDITURE / EXPENDITURE CEILING**	
B1	Salaries	
B2	Non salary reccurent operational expendures	
B3	**Transfers and subsidies**	
B4	**Interest and capital repayment**	
B5	Investment	
C	**BUDGET DEFICIT**	
	Deficit/GDP ratio	
	GDP	

a. Calculation of the Expenditure Ceiling:

In order to calculate the expenditure ceiling, only two numbers are required: The GDP forecast and the revenue forecast.

The Budget deficit can be calculated from the GDP forecast. What is needed is the deficit expressed as a percentage of the country's GDP. ERLP is recommending a deficit calculation in the 4-5 percent of GDP range. This, in turn, reflects both a realistic estimate of expenditure needs in relation to prospective revenue availability, balanced by deficit-financing limitations and minimum macroeconomic stability requirements. Choosing the deficit/GDP ratio is, of course, also a political decision that optimally should/will be guided by sound fiscal principles, with the objective of improving Yemen's fiscal sustainability. Considering that monetization of the deficit will be gradually supplanted (with ERLP support) by the effective planning and issuance of treasury bonds, the absorptive capacity of the domestic banks is also being taken into consideration in proposing deficit targets.

The next stage in the process is to calculate the expenditure ceiling. This number is given by the very simple formula:

$$\text{Total Revenue} + \text{Deficit} = \text{Expenditure Ceiling}$$

$$A+C = B$$

At the moment, the revenue forecast stands at around 1,200 trillion rials. A deficit of 5% of GDP would add 1,078 billion, representing a 47% budget deficit. A 4% ratio would bring down the budget deficit to 863 billion or 42% of the total budget. A 4-4.5 percent target seems more viable in principle at this point, from a fiscal sustainability and macro-stability perspective.

b. Disaggregation of the Expenditure Ceiling by Expenditure Categories:

A subsequent stage is to disaggregate the expenditure ceiling by expenditure categories:

- Total salary is a total number that the Ministry of Civil Service calculates. We expect the wage bill in 2022 to be comparable to the wage bill of 2021, after some small adjustment for inflation. A special provision should be made for salaries and other compensations arrears.
- Transfers and subsidies cover transfers to sub-national Governments, electricity companies, and other subsidies. The number should remain stable and should not be significantly increased at this point, particularly as reform efforts to improve the financial and operational performance of the state electricity company are initiated in earnest.
- Interest and capital repayment requirements can be readily calculated. It includes interest on the consolidated overdraft that will be converted into bonds, interest on new bonds to be issued to cover the new deficit figure, and interest on the residual overdraft.
- What is left will need to be split between non-wage operational expenditure and investment. It is important to ensure that what is allocated as recurrent operational expenditure is sufficient for ministries to provide basic services and avoid further service delivery degradation. It is assumed that the largest portion of the fiscal space will go to operational expenditure. In addition, it will be important to incorporate donor spending for capital projects within the budget to the maximum degree possible as well.

6. Calculation of Line Ministry and Other Budget User Ceilings

The most critical aspect of this aspect of the budget planning process, under current institutional circumstances, is to ensure that ministries receive sufficient funding to maintain basic services. In this regard, some countries apply a ratio between wage and non-wage expenditure to gauge expenditure adequacy. This ratio is specific to each sector and can vary from country to country. In other cases, some countries allocate non-wage operational expenditure as a percentage of the total budget.

The cross-sectoral allocation of resources is fundamentally a political economy decision, informed by in-depth qualitative assessments of sectoral service delivery status/shortfalls.

In this regard, it would appear clear that health and education represent two top priority sectors. Electricity and water infrastructure also appear very important, while other infrastructure sectors would tend to assume subsidiary importance.

7. Preparation of Detailed Budgets by Line Ministries

The preparation of a detailed budget by recurrent expenditure categories at the level of sub-chapters in the budget classification should, in the first instance, be principally the responsibility of line ministries. The role of the Ministry of Finance is, however, an important oversight role through a challenging process that requests ministries to justify their choice in terms of policies. For the capital budget, again, investment prioritization decisions within sectors should be tied to rate of return calculations for physical infrastructure projects and cost-efficiency parameters for major social infrastructure programs.

8. Presentation of the Budget to the Inter-ministerial Committee

A Budget is more than a set of tables and must be accompanied by a narrative that explains the objectives, the underpinning assumptions, and the expenditure prioritization mechanism.

- Statement of fiscal and economic policy: This statement should cover the main fiscal objectives of the Government in terms of revenue collection, highlight the main reforms introduced to enlarge the tax base and improve revenue management, define the main economic objectives pursued by the budget, and indicate the principles used for sector prioritization and investment prioritization with expected outcomes.
- Economic assumptions underlying the budget preparation: This section should review the key assumptions (e.g., oil prices, inflation/exchange rate, real and nominal GDP growth….) used for developing the budget.
- Budget Summary: This is essentially the Annual Budget Framework presented in this concept note under section 6. It should cover revenue, expenditure ceiling, expenditure by main categories, and the anticipated budget deficit.
- Presentation of the revenue forecast: This section should present the revenue plan for oil and non-oil revenue, tax collection by tax and for customs, and other revenues.
- Presentation of the country expenditure ceiling: This section should justify the expenditure ceiling in terms of impact on the economy, fiscal sustainability, and inflationary risks (mitigated by recourse to treasury bonds).
- Presentation of ministries and budget users' expenditure ceilings: This should feature a disaggregation into wage, non-wage operational expenditure, and investment. The ceiling of the Ministry of Finance will also include transfers and interest payment as part of its operational expenditure.
- Presentation of the budget by ministries and sub-national Governments: This section includes one table for each direct budgetary institution.
- Consolidated budget by expenditure categories: This table is the consolidation of the tables presented in the previous section.
- Financing strategy for covering the budget deficit: This section should explain the new Government policy regarding debt management (e.g., consolidation of CBY overdraft into treasury bond issuances and the planned issuance of new bonds). A table should present bond issuances by maturity and interest rate, the cost of the past consolidated overdraft, and the prospective cost associated with new borrowing. This section is very important, as proper communication by the Government on its new borrowing policy can reduce inflationary pressures and restore confidence in the national currency.

USAID ECONOMIC RECOVERY AND LIVELIHOODS PROJECT (ERLP) IN YEMEN

PROPOSAL FOR A NEW BUDGET CLASSIFICATION SCHEME

ANNEX 13

September 2021

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USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)
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The budget classification System used presently in Yemen was introduced in 2006 through decision No. 64 of the Ministry of Finance, amended by ministerial resolution No 355 in 2009, and the Ministerial Decision No 6 of the year 2012; as well as the job classification system for public expenditures for the state's general budget, issued by the Ministry of Finance's Decision 145 in 2008.

Conscious that the budget classification was not meeting its reporting requirements and was falling short of international standards, in 2012, MOF appointed a commission in charge of developing a new GFS compliant budget classification to be introduced by 2015. However, the commission was unable to complete the work, and the 2006 classification has remained in general use.

The Pragma/ERLP team has resumed work on the classification. The lowest level of classification under the economic classification system has been carried out. The revision of higher levels of classification (chapters and sub-chapters) has just been completed and will shortly be submitted for approval to the Ministry of Finance.

The new classification pursues three objectives: (i) to be fully GFS compliant at all levels of the classification structure for reporting and accounting purposes, (ii) to improve budget preparation by introducing clearer expenditure categories, especially those that are highly significant in terms of budgeting, and (iii) to facilitate expenditure prioritization through better linkage with sector policies.

1. Rationales for introducing a new budget classification

There are at least five good reasons for considering revisions of the budget classification scheme:

1. ***To facilitate budget preparation:*** a new modernized budget preparation process needs to be introduced with two levels of budget preparation, one at the level of chapters by MOF and one at the level of sub-chapters by line-ministries. Efficient expenditure allocation requires the budget classification system to support the policy formulation process by main expenditure categories, notably through expenditure ceilings. Introducing ceilings by main expenditure categories requires a certain level of budgetary coherence and sufficient details to allow linkage of expenditures to certain activities.
2. ***To allow detailed budget analysis:*** The purpose of expenditure analysis is to ensure that budget execution does not deviate from the policy objectives set in the strategic economic plans and the sector development plans. The budget analysis also allows MOF to anticipate the needs of line-ministries by monitoring projects and programs. When expenditures are not properly classified, either details are lost, or MOF must spend time to reclassify expenditures in ad hoc reports, and the task can easily become enormously time-consuming.
3. ***To support expenditure control and budget execution reporting:*** MOF does expenditure control at the level of sub-chapters, and if those sub-chapters are ambiguous and their scope not well defined, non-authorized expenditures or miss-labeled expenditures can easily slip into them.
4. ***To meet international reporting standards (GFS and COFOG)***: GFS standards are a set of classification standards recommended by the IMF and published in the Government Finance Statistics (GSF) Manual that apply to both the budget classification and the chart of accounts. The GFS standards provide a definition of main budget aggregates and set rules for their calculation, consolidation, and presentation to be used in financial reporting. GFS standards ensure that all reporting entities (budget users) provide financial data based on the same definition and the same set of compilation rules across the Government within a country, as well as across countries for international comparison purposes. COFOG is another system of expenditure classification by functions of Government (General Public

Services, Public Order, Economic Affairs, etc.) established by the United Nations and made part of the GFS Manual. COFOG is used for policy analysis, GDP calculation, and reporting by international standards for international comparisons.

5. ***To facilitate the transition toward an IFMIS and proper financial accounting system***: Presently, there is no separation between the budget classification and the chart of accounts, as MOF does only budgetary accounting, and financial accounting has not yet been introduced. The lowest level of the budget classification (band) is used as a chart of accounts. Whereas the purpose of the budget classification is to enable budget control and to perform budgetary accounting, and the purpose of the chart of account is to perform financial accounting. In practice, MOF does only budgetary accounting and does not report on its financial position (See next section). As a result, it will be important to eventually introduce a Financial Management Information System (FMIS) capable of performing financial accounting functions in parallel with budgetary accounting processes.

2. Limitation of the present recording system

All transaction control and recording are done at present on Excel Spreadsheets. This use of Excel renders it very difficult to efficiently automate the linkage between the lowest level of the classification categories and the upper levels. The lowest level of expenditure recording is done by budget users who communicate to MOF only aggregated data at the level of sub-chapters, making policy-focused expenditure analysis difficult.

The current classification scheme is used for budgeting, budget control, and budgetary accounting. There is no double-entry accounting at present, resulting in a large number of errors and misclassifications. And there is no financial accounting for purposes of monitoring stocks, like inventory or debt. Commitment control is done at the level of sub-chapters.

Although the new budget classification provides more details, monitoring budget execution and performing expenditure analysis will be much easier after an automated budget planning and tracking system is implemented.

Considering the Excel System's limitations, the approach we have adopted is not to change the chapter structure but to add more lines at the sub-chapter level. These additional lines should make budget preparation easier and strengthen budget control.

3. Main changes

The major changes being introduced are referenced below:

Chapter 1 provides a more detailed disaggregation of employee compensation.

Chapter 2 is where most of the key changes occur. The number of sub-chapters goes from 5 to 9. Fixed capital consumption is not a budgetary concept but a chart of accounts concept. However, some small amounts are sometimes recorded. It has been decided to retain it with code 2.0, which will not interfere with the flow of other sub-chapters until the quality of underlying accounting structures and processes is improved. The increase in the number of sub-chapters will help capture details on professional services, utilities and telecommunication services, and travel expenses. Other property-related expenses other than interest that will be covered include spending on maintenance, rejuvenation of oil fields, and other extractive activities.

Chapter 4: the line supplies have been moved to Chapter in accordance with GFS principles. The line fixed asset acquisition, which did not previously provide any detail, has now been disaggregated into eight categories (Buildings, Vehicles and transportations equipment, ICT equipment, Other equipment, Other fixed assets including weapons systems, Inventories, Valuables, Non-produced assets). This is in line with the IMF manual of Government Statistics.

Chapter 5: the payment of interest on loans has been moved to chapter 2, where it more properly belongs. A new category for capital participation has been introduced. This line will be used mainly for SOEs.

EXISTING BUDGET CLASSIFICATION		**PROPPOSED NEW BUDGET CLASSIFICATION**	
Chapters	**Sub-chapters**	**Chapters**	**Sub-chapters**
Chapter 1	1.1. Salaries, wages (ujur) 1.2. Social contribution	Chapter 1: Compensation to employees	1.1. Salaries, 1.2. wages (ujûr) 1.3. Allowances 1.4. Other employment benefits, excluding employer social benefits 1.5. Compensation to employees in kind 1.6. Social contribution
Chapter 2	2.1. Goods and Services 2.2. Maintenance 2.3. Interest 2.4. Fix capital consumption 2.5. Expenses on properties and other benefits (fawa'id)	Chapter 2: Non-salary recurrent spending	2.1. Supply and consumable 2.2. Maintenance expenditures 2.3. Professional services 2.4. Utilities and communication 2.5. Travels 2.6. Reception 2.7. Miscellaneous operational expenditure 2.8. Interest on loans and capital repayment 2.9. Other properties expenses other than interest 2.0. Fix capital consumption
Chapter 3	3.1. Subsidies 3.2. Grants (manah) 3.3. Social transfers	Chapter 3: all transfers	3.1. Energy subsidies 3.2. Other subsidies 3.3. Transfers to sub-national governments and grants 3.4. Pensions and other social benefits 3.5. Other transfers
Chapter 4	4.1. Fix asset acquisition 4.2. Supply	Chapter 4: Capital expenditure	4.1. Buildings 4.2. Vehicles and transportations equipment, 4.3. ICT equipment 4.4. Other equipment

			4.5. Other fixed assets, including weapons systems 4.6. Inventories 4. 7. Valuables 4.8. Non-produced assets
Chapter 5	5.1. Local Lending and Acquisition of Domestic Financial Assets 5.2. Foreign Lending and Acquisition of foreign Financial Assets 5.3. Paying off domestic loans and amortizing domestic securities other than shares 5.4. Paying off foreign loans and amortizing foreign securities other than shares	Chapter 5: Lending and acquisition of financial assets	5.1. Lending 5.2. Capital participation 5.3. Acquisition of other domestic financial assets 5.4. Foreign Lending and Acquisition of foreign Financial Assets

USAID ECONOMIC RECOVERY AND LIVELIHOODS PROJECT (ERLP) IN YEMEN

PROCEDURAL REFORMS FOR EFFECTIVE CITIZEN ENGAGEMENT IN THE BUDGETING PROCESS

ANNEX 14

September 2021

Prepared for the United States Agency for International Development, USAID Task Order No. 702792M00001

USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA

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INTRODUCTION AND RATIONALES

International good practice standards underscore that governments should consult citizens and civil society during the budget cycle to help ensure public support for a transparent budget process taking into account citizens' preferences. In this regard, a budget is not only an economic instrument for fostering economic growth and allocating resources to public services. It is also a political instrument that can be used to strengthen democracy by ensuring that the budget considers citizens' preferences beyond the programs of political parties.

Increasingly, donors and investors are requesting the disclosure to the public of timely and comprehensive fiscal information to assess macroeconomic risks and enhance accountability, legitimacy, integrity, inclusiveness, and quality of budget decisions. All of these, in turn, represent institutional elements that ultimately are critically important for developing trust between the government and its citizens.

Procedural reform for effective public participation in fiscal planning and budgeting must consider three key sets of issues:

- Effective communication on the fiscal planning and budgeting process by the government and information dissemination;
- Consultation with the civil society on the financing of policy priorities;
- The design of a legal or regulatory framework to support the consultative process.

A. Communication to the public of fiscal data and budget transparency

1. The Open Budget Index

Among several indexes that donors and investors look at to assess the country's risks, such as the Ease of Doing Business Index, or the Human Development Index, is the Open Budget Index (OBI). This is calculated every year by the Internal Budget Partnership (OBP), an organization supported by the OECD. The OBI is published annually in the **Open Budget Survey (OBS). The latter** is an independent, comparative, and fact-based research instrument that uses internationally accepted criteria to assess public access to central government budget information. It examines formal opportunities for the public to participate in the national budget process and the role of budget oversight institutions such as the legislature and auditors in the budget process.

In the absence of an annual budget, the OBS has been unable to rank Yemen for the past two years. However, even before the start of the civil war, Yemen was ranked at the bottom of the list of 117 countries assessed annually or bi-annually, despite sporadic efforts to improve the OBI.

Until 2015, three types of documents used to be made public: the enacted budget, the in-year reports, and the year-end report. The Audit Reports used to be made public, but only after considerable delay and doubts about their completeness and sincerity. As a result, they could not be considered by the OBI. The Executive's Budget Proposal was published sporadically, and in 2015 an effort was made to publish a citizen budget, although again with considerable delay. This effort was not renewed in 2016.

2. International requirements for budget transparency

International good practices are defined in the IMF Transparency Code published in 2014 and revised in 2019. The Code recommends that governments publish eight budget reports at various points in the budget cycle. These documents should cover the four stages of the budget cycle: (i) formulation, when the executive branch puts together the budget plan; (ii) approval, when the legislature debates, alters and approves the budget plan; (iii) execution, when the government implements the policies in the budget; and, (v) auditing and legislative evaluation, when the national audit institution and the legislature account for and assess the expenditures made under the budget. We present below the eight reports with a brief description of their requirements**.**

- **The Pre-Budget: Statement:** Discloses the broad parameters of fiscal policies in advance of the Executive's Budget Proposal; outlines the government's economic forecast, anticipated, revenue, expenditures, and debt
- **The executive's Budget Proposal:** Submitted by the executive to the legislature for approval; details the sources of revenue, the allocations to ministries, proposed policy changes, and other information important for understanding the country's fiscal situation
- **The enacted Budget:** The budget that the legislature has approved
- **The Citizens Budget:** A simpler and less technical version of the government's Executive's Budget Proposal or the Enacted Budget, designed to convey key information to the public
- **The in-Year Reports:** Include information on actual revenues collected, actual expenditures made, and debt incurred at different intervals, issued quarterly or monthly.
- **The Mid-Year Review:** A comprehensive update on the implementation of the budget as of the middle of the fiscal year includes a review of economic assumptions and an updated forecast of budget outcomes
- **The Year-End Report:** Describes the situation of the government's accounts at the end of the fiscal year and, ideally, an evaluation of the progress made toward achieving the budget's policy goals
- **The Audit Report:** Issued by the supreme audit institution, this document examines the soundness and completeness of the government's year-end accounts

Complying with international requirements for budget transparency represents an important opportunity for the Government of Yemen to improve the country's public image with a modicum of effort at a very low cost. It will help the government in consolidating its legitimacy.

It should be remembered that in calculating the OBI, the timeliness of the disclosure is as important as the disclosure itself; and that in Yemen, timely and accurate information will remain a challenge for the near future.

3. Recommendations to the Government

Improving fiscal transparency can be readily achieved moving forward. However, it will likely take more than one budget cycle, considering the current absence of an IFMIS capable of supporting comprehensive, accurate, and timely reporting. Due to this consideration, we propose to focus the effort during the 2021 budget cycle on reports related to the first phases of the budget cycle: budget formulation and budget approval.

Objectives for CY 2022

- **The Pre-Budget Statement** could be a quick win, as the first draft of the budget circular prepared by the ERLP team can be read as a Fiscal Policy Paper. ERLP is currently working on a draft of that circular, which, with limited adjustments, can also be presented as a Pre-Budget Statement and made public after being endorsed by the authorities.
- **A consultation of representatives of the civil society based on the pre-budget statement.** MOF can choose these representatives, and the purpose of the consultation will

be mainly for information. The number of participants could be around 20, chosen among the press and various relevant organizations, including the representation of women.

- **The Executive's Budget Proposal** should be easy to make public irrespective of a vote of the House of Representatives, which, due to present circumstances, might be unable to meet. This executive budget proposal, also called a Revenue and Expenditure Plan, after formal endorsement by the Cabinet, would become the official budget of the country
- **The citizen budget** will be prepared with support from the ERLP Team.
- **The Mid-Year Review** is of particular importance, as it will be a means of assessing the quality of the first budgeting process and will offer a chance to make some corrections in the budget. It is quite possible that by June 2022, the economic environment may have changed, leading to a revision of the assumptions underpinning the budget. Should these assumptions change, the new assumptions should be published with the revised budget.

By any objective standard, if MOF can meet these core transparency objectives during CY 2022, great progress will have been made. We understand that considering current institutional circumstances, the likelihood of a vote on the budget by the House of Representatives might be a difficult objective to achieve. Other key milestones such as the envisaged in-year reports, end-year reports, and the audit report could be implemented by CY 22 or CY 23. The comprehensively of this report will, of course, be facilitated if progress can also be made on IFMIS development.

4. Means of publication

Usually, the most common way of publishing fiscal reports is via the official gazette and the Ministry of Finance's website. In the case of the ROYG, at present, we would most likely rely on an official publication of MOF that could be distributed to the press and a range of representatives of civil society. A Facebook page for publishing the citizen budget and short budget statements may also be worth considering.

B. Public Participation

1. Rationales

Developing a transparent budget is important to improve the government's credibility and trust with the population. However, to meet international best practices, it is recommended that civil society be engaged at all stages of the budget cycle. Budget decisions such as what taxes to levy, what type of public services to prioritize, what infrastructure needs to be built, and how much debt the country can take on are decisions that deeply impact societal well-being and equity. Therefore, it is critical that governments inform and engage the public on the vital budgetary decisions that impact their lives and those of their families.

2. Public engagement strategy

The development of an inclusive public engagement strategy requires time and efforts that go beyond one or two budget cycles. No full-fledged public engagement strategy can be holistically effectuated until the budget cycle has been restored and a reliable reporting system is implemented. Restoring the budget cycle and developing the reporting framework are critical priorities on the PFM Agenda and will help support the effective implementation of a proactive public engagement strategy.

In this regard, the fact that MOF is putting in place a new budget formulation and execution process offers a unique opportunity to introduce public reports alongside internal reports and develop the appropriate regulatory framework for supporting budget transparency and public engagement. The public engagement strategy should within this context be composed of two fundamental components:

- A robust information dissemination strategy (already addressed in the first part of this concept note) and
- A proactive communication strategy.

For CY2021, the focus should presumably be 1st and foremost on the information dissemination strategy in anticipation of developing a realistic, multi-faceted communication strategy before starting to engage civil society during the early stages of CY 2022.

In this regard, a good communication strategy not only requires identifying the range of institutional actors to be engaged but also providing them with training on the fundamentals of budget planning and budget execution processes.

3. Communication policy and good practice for public engagement in Yemen

Developed countries use a range of sophisticated means of engaging the public in the budgeting process. These may include surveys, press conferences, consultation with think tanks, focus groups, neighborhood councils, social media, and Citizen Relationship Management systems, among others. Not only are all these means not all available to the ROYG at present, but defining who represents the civil society might well represent a challenge and a source of institutional contention under the current political economy and security circumstances.

To effectively engage the public, MOF must prepare a communication and information dissemination strategy and have at least one person dedicated to implementing that strategy. MOF also needs to ensure that for CY2022 sufficient funding has been allocated for the implementation of the communication strategy. The strategy itself should essentially be two-pronged. The first should be directed to the general public, and the second should be directed to major civil society representatives and key institutional 'influencers.'

The communication and engagement strategy should at a minimum cover the following points:

- Identify the different components of public opinion (influencers, public opinion leaders, discussion forums, etc.) and the targeted groups (professionals, sector representatives, youth, women, minorities, etc.);
- Identify the media outlets at both community and national level;
- Mainstream the discussion in the media, and create a narrative around transparency and budget processes that is of interest to the public and specific targeted groups;
- Through the use of influencers and opinion leaders, ensure that the targeted groups widely know key milestones of the budget calendar;
- Strengthen inter-sectoral collaboration between ministries to foster proper information flow;
- Build the capacity of the media for communication around fiscal themes;
- Launch campaigns involving the youth, influencers, social movements, and women groups to take on budget literacy and transparency;
- Co-opt key institutions and organizations representative of civil society to foster a mainstream discussion on public participation and transparency.

4. Illustrative activities

Illustrative activities may include the following:

- Create a Facebook page dedicated to budget planning and reporting;
- Consider creating a website with the new Ministry of Finance;
- Formalize open participation mechanisms that allow the public and the government, including members of the House of Representatives and the Office of the Auditor-General, to establish a dialogue on the budget and its implementation, notably around key issues such as revenue collection, effective provision of major public services, and changes in the macroeconomic situation;
- Maintain a robust dialogue with civil society, including through sharing and communication meetings at each of the four stages of the budget process (formulation, approval, implementation, and end-year reporting), within the framework of the budgetary orientation debate and quarterly implementation reports;
- Set up an institutional platform to collect contributions from influencers, think tanks, employers, and government agencies.

5. The regulatory framework

Optimally provisions for budget transparency and public engagement can best be included in the PFM law or in a special Budget Transparency and Accountability Law. As the PFM legal framework in Yemen is largely outdated, it may be premature to attempt to develop a rigorous legal framework in this regard. As a result, we recommend using the Budget Circular for defining the new policy and having the budget circular supported as needed by a presidential decree to make the new dispositions binding on all institutions.

6. Envisaged Next Steps

- Prepare and immediately and release as soon as possible the Pre-Budget Statement based on the recommended Budget Circular;
- Incorporate within budget circular that will enshrine the principal elements of the budget transparency and public engagement policy;
- Work with MoF to help organize an initial consultation with civil society by inviting a limited number of representatives to a presentation of the pre-budget statement.

USAID ECONOMIC RECOVERY AND LIVELIHOODS PROJECT (ERLP) IN YEMEN

A Note on the Electric Subsidy Scheme

ANNEX 15

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USAID/Yemen Economic Recovery and Livelihoods Program (ERLP)
The Pragma Corporation, 116 East Broad Street, Falls Church, VA

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1. Subsidy Mechanism

Electricity subsidies are not recorded as subsidies but transfers from the Ministry of Electricity and Energy to the Electricity Company, recorded in the company's books under chapter 1 (Salaries) and Chapter 2 (good and services) of the budget classification. Each branch of the Electricity Company collects and records the collection of electricity bills. The branch turns to the Ministry of Electricity and Energy to use its own approved budget lines or requires a supplementary budget from the Ministry of Finance if the collection is insufficient in covering operating costs. It is not always possible to distinguish between salaries of the Ministry staff and salaries of the Company staff.

The Ministry of Finance does not have access to detailed information regarding these transfers, and there is no mechanism to verify the utilization of funds. No information is readily available at this point on customer arrears, recovery rate, number of meters, and local consumption, and analyzing the social impact of the subsidies is difficult.

KSA also provides fuel at a subsidized price. In this case, the GOY does not pay the subsidy but covers it in the budget if the program is discontinued. Under the current phase of the program being supported by KSA – an 18-month program valued at $131.4 million - a total of approx. 909,591 tons of Diesel and 351,304 tons of heavy fuel oil are expected to be provided to Yemen. ERLP budget specialists will work with our electricity sector and M&E specialists to provide targeted recommendations designed to facilitate the proper recording of the transactions and tracking of the shipments; as well as being the subsidization program to enhance electricity sector pricing and investment policies, which will over time, help rationalize the provision of untargeted budgetary support (or subsidies) from the budget to the electricity company.

2. Data Available

To generate urgently needed information needed to establish the level of on-budget transfers/subsidies to the electricity sector, ERPL has collected the following information from the Ministry of Energy:

1. Supplementary financing to the Ministry of Energy to support salaries in the branches and commissions of the Electricity Company for the year 2020
2. Supplementary financing to the Ministry of Energy to support the purchase of materials, fuels, and other goods and the maintenance of power station for the year 2020
3. Supplementary financing to the Ministry of Energy to support salaries in the branches and commissions of the Electricity Company for the first three quarters of the year 2021
4. Supplementary financing to the Ministry of Energy to support the purchase of materials, fuels, and other goods and the maintenance of power station for the first three quarters of the year 2021

3. Brief Data Analysis

From the data we collected, it appears that in 2020, the Ministry of Finance subsidized salaries for a total amount of 3,12 billion rials in six governorates. Three Governorates did not receive salary subsidies: Aden, Lahij, and Shabwah. In the first quarter of 2021, 1.247 billion rials were transferred to the Aden branch, but no other transfer was recorded during the following two quarters. Lahij and Shabwah continue to receive nothing. The total spending on salaries for the first three quarters of 2021 was 7.091 billion -- more than double the 2021 total. The difference can be explained by a transfer of 5.0 billion in payment of salaries to Hadramawt. In the 2020 report, Hadramawt does not appear at all. This underscores that the 2020 report is likely incomplete or does not reflect the accumulation of salary arrears.

Further, the transfer is a round number, perhaps alluding to the absence of reliable data regarding local payroll. If we exclude the transfer to Hadramawt, the total salary transfer for the first three quarters of 2021 represents 67 percent of the previous year's total but is less than the transfer for the first three quarters of 2020 (2.338 billion). Unless revenue collection has increased (highly unlikely), this could signal that the growth of salary-related debts is accelerating.

Transfers for goods and services are paid either in rials or in US dollars. Transfers in rials equaled 16.948 billion, and transfers made in dollars represented about 45.318 million. Notably, the biggest beneficiary is Hadramawt, which received 9.072 billion YER in transfers for goods and services.

4. Sustainability

The present energy generation and distribution structure are clearly unsustainable, as massive budgetary transfer leakages appear to be continuing unabated annually, with little/no commitment to tariff increases and other related financial and managerial improvements and related sectoral restructuring measures required to promote greater financial sustainability. Moreover, at 1st glance, subsidies appear to be distributed based largely on cash availability and political bargaining. This situation, in turn, tends to generate significant inequality in access to electricity across governorates and between urban and rural areas.

Sustainability fundamentally requires the ability to pay for operational costs and needed investments. Looking ahead, the ERLP budget team will be working closely with the electricity sector specialist to help outline the potential budgetary impact (on the expenditure and revenue side) of critical reform measures required to enhance the operational and managerial efficiency and augment the financial sustainability of electricity sector service provision activities over time. This will also include establishing a game-plan for setting up an SOE budget planning and monitoring unit to tie future budgetary transfers to annual and multi-year performance enhancement measures and related performance targets.

5. Social Impact

The Ministry of Electricity clearly gives high priority to Aden. All efforts are made to keep a steady electricity supply, sometimes to the detriment of other Governorates. There is clearly an unbalance between regions that presumably is linked to their political weight. Due to the absence of transmission lines and low generation capacity, entire areas of the country are frequently left in severe brown-out/black-out situations. This has a devastating impact on small businesses and agricultural activities. It also leads to small-scale investment in inefficient micro-generation units.

6. Initial Recommendations

A prerequisite for a transition from untargeted production subsidies towards direct income transfer support is better control of generation and distribution costs through better accounting and reporting and improved payment collections to ensure operational sustainability. The present reporting system does not allow measurement of the size of the problem. Improved reporting on payment collections is essential.

As payments are made in cash, a portion of them may well be 'leaking' out of the collection/reporting system without appropriate controls in place. Overall, the public electricity company has little incentive to enhance financial oversight and improve operational efficiencies, given the completely untargeted and politicized nature of the transfer/subsidy process.

As noted above, a critical next step will be establishing a multi-year financial and operational reform strategy for the electricity sector and developing an accompanying SOE budget planning and monitoring unit and system for recalibrating the sectoral budget transfer strategy and related monitoring processes over time. ERLP budgetary and sectoral specialists will be working together in this direction moving ahead.

ECONOMIC RECOVERY & LIVELIHOODS PROGRAM (ERLP) – YEMEN

MANUAL ON BETTER PRACTICE-COMPLIANT BUDGETARY ALLOTMENT, COMMITMENT CONTROL, AND PAYMENT AUTHORIZATION PROCEDURES

ANNEX 16

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USAID/Yemen - Economic Recovery & Livelihoods Program (ERLP)

The Pragma Corporation, 116 East Broad Street, Falls Church, VA 22046

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List of Acronyms

CBY – Central Bank of Yemen

FMIS - Financial Management Information System

ICT - Information and Communications Technologies

JCMT - Joint Committee for the Management of the Treasury

MOF – Ministry of Finance

SU – Spending Unit

Introduction

The purpose of this manual is to introduce an improved comprehensive process of budget controls and to improve the conditions for budget execution. This manual complements the Public Financial Regulations (regulations) issued by the Ministry of Finance (MOF).

The following terms shall be used with the following definitions in the context of this financial circular to execute government financial policy:

Appropriation - an authorization to a government spending unit (SU) granted by the State budget and the financial regulations issued by the MOF in a specific amount allowing the MOF to issue allotment and authorize payments for specific purposes from the revenues of the State budget.
Allotment – an authorization to a SU to conduct expenditure commitment activities according to the procedures of this manual or other regulations of the MOF and to make payments to close the liabilities from the State budget funds based on an appropriation
Financial plan - a request of a spending unit containing a breakdown by months of the resources provided in the budget for a spending unit and use of the resources to receive an allotment from the MOF
Commitments - contracts signed, purchase orders issued, instructions to provide services, or any similar activities which establish a liability for the SU requiring payment from the State Budget to settle such obligations
Commitment authorization - a specific authorization by the MOF for the SU to issue a purchase order or conduct a similar action to create a commitment
Spending unit – a line ministry, a governorate, a unit with authority to collect revenue or incur expenditure from the State budget represented by its head in all aspects of the financial management

An efficient budget execution process is divided into several phases: i) Budgetary Allotment, ii) Pre-Commitment/Commitment (an administrative reservation of funds in anticipation of their use), iii) Payment Authorization/Verification, and iv) Accounting & Reporting. In Yemen, the budget execution cycle does not follow this standard pathway, and it varies based on the type of expenditures (current expenditure vs. capital expenditure) listed in the budget.

General Responsibility for Expenditure Controls

Each SU's responsibility is to maintain an internal control system to manage its financial affairs, including expenditure commitments. The SU achieves these objectives by assigning specific responsibilities and authorities to their officers regarding decision-making on administrative and financial management matters.

The MOF appoints the following key staff of the SU (MOF representatives)to perform various financial management activities:

- Finance director
- Chief accountant
- Procurement officer
- Cashier

The MOF representatives work closely with the staff of the SU to ensure the latter's provision of government services according to its mandate. The MOF representatives assist the SU in preparing budgets, conducting the financial affairs and procurement, collecting revenues, processing expenditure, completing accounting and financial reports.

It is the responsibility of the SU officers to make the critical decisions and the responsibility of the MOF representatives to advise on the legal execution of the financial management tasks.

The head of the SU appoints the staff responsible for decisions related to financial management. During the expenditure cycle, the SU manager is responsible for preventing the staff from conducting illegal activities while processing financial transactions. Wrongful actions committed by the staff do not relieve the head of the SU from bearing responsibility for the staff member's actions even if the staff member is proven guilty, as the wrongdoing is a reflection of poor management and rule enforcement by the SU manager.

The regulations of the MOF establish the responsibility for the MOF representatives assigned to the SU while conducting the financial management activities in the SU.

Budget Appropriation

A budget appropriation is a prerequisite for starting the budget expenditure process. An appropriation is established through a budget law passed according to the requirements of the Financial Law of Yemen (Law No 8 of 1990 amended 1999), a temporary budget according to Article 22 of the Financial Law, or in the absence of the above – indicative budget ceilings issued by the MOF to enable the financial operations of the government.

The MOF informs spending units (SUs) of the budget appropriation established. The budget appropriation authorizes the MOF to issue budget allotments. It is a best practice that appropriations allocated for expenditure have earmarked sources of funds for the government to receive to its accounts in CBY to enable payments according to the government priorities.

Allotment

An authorized officer at MOF and its representatives in local governorates issue allotments to each spending unit (SU), having budget appropriation based on a financial plan prepared by the SU and approved by the MOF.

Preparing a financial plan

Upon receipt of the approved budget or instructions of the MOF to prepare a financial plan, the SU should complete the template of the financial plan (Annex 1). The MOF establishes the deadline for SUs to submit the financial plans.

The SU formulates the financial plan based on the budget approved or the MOF's financial ceilings that outline the available operational funding for the SU during the stated period.

The financial plan contains the distribution of budget items by category of economic classification and by the months of the year. SUs collecting revenues should also present the distribution of the revenue plan by months of the year. For annual budgets, the financial sources (for revenues) and uses of the financial resources (expenditures) are distributed by the months of the year in the financial plan, according to the estimated payment requirements. Any deviations from the normal spending pattern (1/12th of the annual expenditure each month) should be explained in the notes attached to the financial plan.

The financial plan should adhere to the procurement plan for commitments depending on the specific procurement methods used, and differentiate between continuing commitments and specific commitments. Annex 2 provides the guidelines for the identification of continuing commitments and specific commitments.

The MOF reviews the financial plan submitted by the SU, focusing on the requirements for smooth provision of the government services, the plan's alignment with financial regulations, and guidance for effective use of the government funds. The MOF then compares the financial plans against the resources listed in the cash flow forecasts reviewed by the Joint Committee for the Management of the Treasury (JCMT).

The MOF provides comments and guidance for amendments to non-compliant SU financial plans and approves the compliant financial plans to use for issuing allotments.

Revising Issued Allotment.

The SU may revise certain allocations in special circumstances to reflect changes in the SU or the budget execution process. For instance, the SU may require changes to the allotments issued to enable normal operations reflecting changing economic conditions or demand for the respective services. The changes to the issued allotments may be justified by the measures to improve the efficiency of the service delivery process.

During the year, the MOF and CBY review budget implementation and fiscal performance. In that time, the MOF may suspend the approved financial plans and request SUs to update the financial plans if the conditions for the budget management have changed, and austerity measures are introduced to enable the timely processing of priority payments.

The MOF verifies that the changes to the allotments issued permit to meet the commitments already made. The SU should prove that the commitments issued have been reversed and could be excluded from the records, if agreements have been reached with the suppliers to cancel the issued orders of goods and services or any similar action to reduce the commitment.

Cash management policies state that allotments for expenditures in chapters 1, 2, and 3 are issued monthly or quarterly according to the requirements established in the approved financial plans. Allotments for the expenditures in chapters 4 and 5, financial ceilings are issued on a case-by-case basis upon separate decisions by the Minister of Finance. The MOF Appropriations Control Unit maintains the record of the allotments issued for each SU.

Pre-Commitment/Commitment

The pre-commitment is a review process by the MOF to authorize a spending unit to enter commitments. This phase of the expenditure process is critical to ensuring that the commitments are fully aligned with the budget resources and that the payment is processed on time. The type of commitments – continuous or specific determines the order of the commitment management and review process.

Pre-Commitment

At the beginning of each quarter, the MOF and the SU review all continuing commitments. These include:

- Wages

- Allowances
- Scholarships
- Other entitlements
- Utility payments
- Government transfer payments
- Petty cash payments processed without producing a purchase order
- *Other types of commitments, if it is not possible to process these through issuing a Purchase Order*

Most of these commitments have already been made through the political and administrative processes of the government, and their full reversal is not possible within the monthly or quarterly financial management cycle.

Petty cash operations of SUs should be assessed as part of the quarterly review process to add the estimated disbursements of petty cash and exclude these amounts from specific commitment review and authorization processes. The government policies establish the procedures and accountability for petty cash operations.

The commitment review process should resolve the requirements for settling any payment arrears or accounts payable[1] which have been incurred earlier in the budget year. Any payment arrears of accounts payable are derived from the Budget Allotment Commitment Expenditure Control ledger (Annex4) as reported in the Budget and Commitment Execution Reports (Annex 5). These should be addressed before new commitments are authorized.

The MOF and SUs should conduct consultation activities on a bi-weekly basis to coordinate the allotment and commitment activities for each quarter. The consultation includes the following specific steps:

- review any outstanding payment arrears or accounts payable for the current budget year carried forward from the previous quarter.
- review all continuing commitments,
- discuss the ongoing procurement activities and the specific commitment requirements,
- review all specific commitments prepared by the start of the quarter;
- prepare for the authorization of the commitments subject of the MOF approval; and
- update the pattern of payment requirements during the quarter.

The SU should complete separate forms– Miscellaneous Commitment Document (Annex3) for the following groups of commitments:

- payment arrears incurred during the budget year and related accounts payable carried forward from the previous quarter.
- continuing commitments.
- specific commitments where conditions for issuing these have been completed.

The SU submits the commitments to designated MOF officer for review. The MOF officer during the quarterly commitment review establishes the following:

[1] The amount of payment arrears and accounts payable is established in the accounting process and described in the section of Accounting and Reporting of this manual.

- there is sufficient budget allotment to ensure complete payment of arrears and accounts payable carried forward from the previous quarter.
- there is sufficient budget allotment to pay for the continuing commitments.
- sufficient balance of budget allotment allows for the payment for specific commitments where conditions for issuing these have been completed.
- the remaining commitments in the budget for the SU can be normally accommodated within the budget allotment as these are prepared and would be presented to the MOF for approval.
- the payment pattern to settle the commitments promptly meets the guidelines of the cash management.

In addition to the aforementioned biweekly consultations, the SU should request a-prior authorization from MoF regarding any anticipated commitment for that quarter when existing commitments exceed 70 percent of the budget allotment for the quarter.

The MOF notifies the SU and CBY upon the SU entering the status of mandatory pre-commitment review. CBY accepts the payment instruments from the SU with matching commitment authorization codes issued by the MOF in the mandatory pre-commitment review phase.

During the pre-commitment phase, the SU subject of pre-commitment review should prepare commitment requests for the continuing commitments and submit them to the MOF for review and approval. The SU will submit a miscellaneous commitment report form to the MOF (Annex 3), with a complete list of all continuing commitments requested for approval at the beginning of the accounting period as per the MOF's guidelines.

The SU subject of pre-commitment review also prepares commitment requests for specific commitments (related to expenditures that require a specific contract or purchase order) and requests authorization from the MOF before placing an order for goods and services or incurring a commitment in any other form. A separate miscellaneous commitment report form is used for this request (Annex 3).

The MOF reviews commitment requests to ensure that the monetary value of requested commitments does not exceed the uncommitted balance of monthly budget ceilings for the spending unit. The MOF may also review if the commitment request is consistent with government expenditure prioritization policies.

Once the availability of funds has been verified, the commitment request is formally approved and recorded by the MOF commitment controls officer, who issues a specific commitment authorization number. The MOF rejects the commitment request if it does not meet the control requirements and returns the request to the SU with the rationale for the rejection.

No such contract or purchase order for a SU subject of pre-commitment review --would be legally valid until so approved and the authorization number assigned. The MOF registers both the expenditure ceilings/cash commitment profile and the approved commitment requests.

The commitment phase of the expenditure cycle.

During the commitment phase, the SU issues purchase orders and confirms the commitment to the suppliers according to the government regulations. The SU subject of pre-commitment review references the MOF's authorization number on the purchase order or other commitment document when issuing it.

SU officers are responsible for verifying that all legal and regulatory requirements have been met before the commitment is issued. This includes the clauses for the reversal of the commitment if the SU cannot process the payment and settle the commitment.

Payment Authorization/Verification, accounting, and reporting phases follow the commitment phase.

Verification and Payment Authorization Phases

Verification.

The SU acquires the goods and services ordered and verifies that they are procured according to the contract terms and invoices. The SU Accounting officer then completes a goods-received note for the accounting records to register the received supplies. These actions incur a liability (accounts payable) for the SU. The procedures will be different for continuing commitments where other methods are used to measure the liability created.

The verification methods for continuing commitment differ as to the following:

- Salaries and wages allowances and benefit payments are made for the government employees or workers upon their appointment to the government positions according to the official establishment, and a properly completed attendance record – payrolls are prepared based on the review of the above to prepare a payroll payment voucher.
- The SU receives utility services (electrical power, water, communication services) based on agreement with the terms of the supplier. The internal controls in the SU control the consumption and the periodic charge for the utility services.
- The eligibility of suppliers of goods and services for government subsidies is established based on the verification of the conditions established in the government regulations and procedures managed by respective government ministries and agencies and verified by the MOF.
- Social benefits to individuals other than government employees or scholarships are calculated based on the eligibility and entitlement, established in laws and other due acts of the government. Respective SUs have the responsibility for verifying the eligibility to record the payable.
- Other verification methods may be established for other government commitments by the decision of the Cabinet of Ministers.

Payment

The SU is responsible for paying its liabilities and other debts on time to avoid penalties, fines, or the reputation damage associated with the government's failure to settle its bills on time.

Moreover, the SU has a liability (accounts payable) to settle by payment upon receipt of the goods-received note for regular supplies purchased and will produce a payment instrument to settle with the supplier of goods and services according to the MOF's regulations. The accounting officer must make the following determinations before preparing a payment voucher:

- The commitment for processing the payment is valid

- The supplier has met the requirements for processing the payment, including the supply of a valid invoice
- The funds released to the SUs account in CBY are sufficient to process the payment
- The payment will not reduce the allotment balance to an amount less than required for making payments for all outstanding commitments for the payment category under Chapter and Part. This requirement applies specifically to processing payments for continuing commitments.

The SU processes payment to settle the liability according to established procedures and regulations through issuing a payment instrument – bank check or a transfer order for direct deposit to the account of the recipient (this may be a bank account or other account with a financial institution compliant with the laws and regulations of Yemen)

The SU and the beneficiary must reach an agreement regarding payment of the accounts payable on occasions if timely payment cannot be executed for reasons outside the beneficiary's control. The agreement should specify the maximum time of the payment delay and the steps the SU takes to resolve the obstacles for timely payment.

Coordination with CBY

The MOF should coordinate with CBY to regularly verify and update resource availability to affirm commitments and process payments efficiently using the cash flow forecasts prepared by the Joint Committee for the Management of the Treasury (JCMT). The technical team of the JCMT meets biweekly and the senior management of the JCMT meets at least once monthly to review the government cash flows and pending commitment authorizations.

The MOF and the CBY should take the necessary cash management actions to ensure that government payment obligations are paid promptly, and SUs proceed with commitments and subsequently with payment authorization actions adhering to the spending ceilings established in the budget. The MOF should supply CBY with the schedule of commitment requests approved for each SU for reconciliation purposes. CBY subsequently will verify the authorization number during the payment processing phase.

Accounting & Reporting

The director of finance and the SU accounting officer are responsible for maintaining the accounting records, producing vouchers, and reporting on the financial operations according to the guidance of the MOF.

The accounting officer uses the budget allotment and commitment expenditure ledger (Annex 4) to record all steps of the expenditure cycle. A separate page of the budget allotment and commitment control ledger is used for each chapter and part of the expenditure.

The accounting officer of the SU ensures the following items are recorded on the ledger:

- The budget allotment received
- All continuing allotments for the specified period the allotment was issued, including the continuing commitments MOF authorized for pre-commitment review
- All specific commitments, completed according to the government regulations, including the specific commitments authorized by the MOF for pre-commitment review

- The receipt of goods and services and other payment obligations, based on the verification procedure
- Payments processed to settle liabilities

The accounting officer calculates additional derived indicators in the Budget allotment and commitment expenditure ledger as the following:

- Accounts payable – the liability to pay has been recorded, and payment has not been processed before the end of the report's accounting period

- Payment arrears – payment obligations past due the date for legal and contractually required settlement

The Accounting officer prepares the budget and commitment execution report and submits it to the MOF within five days after the end of each month. The report entries correspond to the summary for each Chapter and Part for which there are records in the Budget Allotment and Commitment Expenditure Ledger. Finally, the accounting officer and the head of the SU sign the completed report.

Based on the financial reports received, the MOF verifies if the government officials have performed their responsibilities properly and takes corrective measures to address any deviations from the standard budget execution process.

The expenditure management and commitment control procedures should be accommodated into computerized accounting systems of the Government of Yemen as such Financial Management Information Systems (FMIS) are acquired.

Financial plan template

Financial plan

Spending unit *name*

For the month of ________ Year ________

	Budget allocated	January	February	March	April	May	June	July	August	September	October	November	December
		1	2	3	4	5	6	7	8	9	10	11	12
Salaries and wages													
Continuous commitments													
Specific commitments													
Social contributions													
Continuous commitments													
Specific commitments													
Goods and services													
Continuous commitments													
Specific commitments													
Maintenance													
Specific commitments													
Subsidies, grants, and social benefits													
Continuous commitments													
Other transfers													
Continuous commitments													
Acquisition of non-financial assets													
Continuous commitments													
Specific commitments													
Total													

Head of the SU

________ Signature

Finance Director

________ Signature

Guidelines for allocating expenditures to continuing and specific commitments

Type of expenditure	Allocation criteria to continuing and specific commitments
Salaries, wages, allowances, and rewards to employees	Most of these expenditures are allocated to continuing commitments, except compensation and benefits to temporary workers on short-term fixed-term contracts. Overtime pay and performance bonuses are classified as specific commitments and may be paid only if there are significant savings in the Chapter I expenditures compared to the approved budget and specific approval of the MOF to make such expenditure commitment.
Subsistence and travel payments	Specific commitments – these are created at the time when approval for travel is signed.
Utility services	Continuing commitments – the SU signs up for a service – electricity, water, sewerage, communications, garbage removal. The internal control system should facilitate efficient use of these services to avoid increased bills or misuse of government services for private benefit.
Petty purchases.	Specific commitments - limited by the amount of funds released to the spending unit for such petty purchases. It is not practicable to apply centralized commitment controls for this type of expenditure. The expenditure is limited by the petty cash advance to the SU, the rules for permitted payments, and the accountability of officers performing such tasks.
Maintenance and repairs.	Specific commitments - despite the regular character of such operations to ensure that the government assets are adequately maintained and perform their functions adequately. These are subject to specific commitment controls.
Other goods and services.	Specific commitments – the requirements would be assessed through employees completing a requisition order, and items out of stock would be procured and ordered through a purchase order or other appropriate commitment instrument.
Grants and transfers.	Continuing commitments – these are established through policy decisions by a law or an act of the Cabinet of Ministers to compensate public and private producers for economic losses, making transfers to local governments, or paying social benefits or other transfers to households.

Acquisitions of non-financial assets, including capital projects.	Typically, these are specific commitments, while the long-term nature of some of these projects may require classifying such projects are continuing commitments. Payments should be processed according to contract terms to avoid fines and penalties.
Acquisition of financial assets and amortization of liabilities.	These would not be applicable in the financial management of the SUs. Such transactions should happen only by decision of the MOF, in most cases related to the execution of the terms of government borrowing or requiring specific decision by the Cabinet of Ministers,

Annex 3

Miscellaneous Commitment Document

Republic of Yemen Ministry of Finance		الجمهورية اليمنية وزارة المالية

Form - Miscellaneous Commitment Document

Section A: (This Section to be filled out by Accounting Office)

1. Miscellaneous Commitment No.	2. Ministry/ Spending unit	3. Issue Date	

4. Coding Block (Allotment)

Organization	Project	Fund	Chapter	Part	

5. Detailed code				6. Description	7. Amount	8. Authorization code, if applicable
Chap ter	Part	Type	Item			
				9. Total		

Section B: Review and Authorization

10. Accounting Officer (Sign & Date)	11. Authorizing Authority (Sign & Date)

Section C: (This Section shall be filled by Financial Controller)

12. Commitment Controls Officer (Sign & Date)	13. Remarks

Budget allotment and commitment expenditure ledger

	Budget allotment and commitment expenditure ledger								
	Spending unit	*name*							
Economic classification	Code	*21*							
	Description	*Goods and services*							
	For the month of	Apr-21							
Item	Budget allotment	Reserved	Commitment	Unencumbered budget	Accounts payable	Accounts receivable	Arrears	Payments (expenditure)	Balance of allotment for payment
Balance	-	-	-		-	-	-	-	

Budget and commitment execution report

Budget and commitment execution report

Spending unit *name*

For the month of Apr-21

	Budget allotment	Reserved	Commitment	Unencumbered budget	Accounts payable	Accounts receivable	Arrears	Payments (expenditure)	Balance of allotment for payment
Salaries and wages									
Social contributions									
Goods and services									
Maintenance									
Subsidies, grants, and social benefits									
Other transfers									
Acquisition of non-financial assets									
Total									

Head of the SU ____________ Signature

Finance Director ____________ Signature

ANNEX xx - ERLP PARTNER FIRM INCREMENTAL SALES

Partnership Agreement	Baseline Q1 Sales 2020 (US$)	Baseline Q2 Sales 2020 (US$)	Baseline Q3 Sales 2020 (US$)	Baseline Q4 Sales 2020 (US$)	Total Annual Baseline	2021 Q1 Sales (After ERLP (US$)	2021 Q2 Sales (After ERLP (US$)	2021 Q3 Sales (After ERLP (US$)	2021 Q4 Sales (After ERLP (US$)	Total Annual (After ERLP TA)	Incremental sale
Abu Sufyan Trading Corp	$ 11,893,813	$ 12,241,806	$ 11,608,760	$ 12,027,345	$ 36,162,964	$ 12,084,154	$ 14,280,431	$ 17,010,850	$ 19,771,710	$ 63,147,145	75%
Al - Salam Specialized Clinic	$ 372,892	$ 370,054	$ 405,221	$ 401,873	$ 1,550,040	$ 516,050	$ 778,318	$ 811,133	$ 853,074	$ 2,958,575	91%
Al- Madar Specialized Clinic	$ 153,263	$ 218,946	$ 214,142	$ 169,153	$ 755,504	$ 174,301	$ 232,201	$ 274,531	$ 309,167	$ 990,200	31%
AL Salehi Medical Corporation	$ 80,000	$ 82,000	$ 93,000	$ 95,000	$ 350,000	$ 108,300	$ 123,000	$ 160,000	$ 178,560	$ 569,860	63%
Al-Haramain Medical Center	$ 80,628	$ 85,714	$ 87,940	$ 102,010	$ 356,292	$ 117,115	$ 137,669	$ 159,570	$ 172,359	$ 586,713	65%
BBSoft	$ 10,350	$ 12,420	$ 14,450	$ 13,200	$ 50,420	$ 23,300	$ 16,950	$ 17,900	$ 20,650	$ 78,800	56%
Pure Aden for Water	$ 34,462	$ 33,874	35 079	$ 30,788	$ 99,124	$ 35,347	$ 42,000	$ 57,062	$ 66,917	$ 201,326	103%
You4IT	$ -	$ -	$ -	$ -	$ -	$ 10,000	$ 17,000	$ 24,000	$ 19,400	$ 70,400	N/A
Al-Wahda Factory	$ 87,656	$ 55,887	$ 77,032	$ 88,805	$ 309,380	$ 101,956	$ 110,198	$ 126,728	$ 151,197	$ 490,079	58%
Doctors Tower	$ 47,818	$ 32,143	$ 31,658	$ 40,101	$ 151,720	$ 90,567	$ 85,853	$ 103,402	$ 125,146	$ 404,968	167%
Gulf Hospital	$ 242,500	$ 255,560	$ 255,560	$ 265,200	$ 1,018,820	$ 345,000	$ 351,400	$ 431,250	$ 495,930	$ 1,623,580	59%
E-commerce	N/A	1500	N/A	N/A	N/A	N/A	2050	N/A	3100	N/A	N/A
Al Rawda (number of patients)	N/A	$ 8,997	$ 9,374	$ 11,612	$ 29,983	N/A	$ 10,255	$ 11,971	$ 13,865	$ 36,091	20%
Zelal Factory for Mineral Water	N/A	N/A	N/A	$ 227,766	N/A	$ 255,033	$ 390,167	$ 501,295	$ 821,639	N/A	N/A
Al Ruwda for Mineral Water	N/A	$ 67,567	$ 71,468	$ 67,002	$ 206,037	$ 65,217	$ 72,635	$ 78,452	$ 114,300	$ 265,387	29%
Al Mawada	N/A	$ 122,000	$ 126,000	$ 135,270	$ 383,270	N/A	$ 327,673	$ 484,720	$ 521,032	$ 1,333,425	248%
Al Najah Private School	N/A	N/A	N/A	$ 32,907	$ 32,907	N/A	N/A	N/A	$ 53,907	$ 53,907	64%
Al Banoon Private School	N/A	N/A	N/A	$ 13,866	$ 13,866	N/A	N/A	N/A	$ 35,676	$ 35,676	157%

ERLP - Short Impact Pieces – July 2021

Support for small/medium size businesses

- USAID/ERLP supports small/medium businesses to improve their competitiveness and create employment. Recently, ERLP helped Al Rawdhah Hospital in Taiz to scale up its quality and capacity to meet growing demand for medical services, generating 36 new full-time jobs. Working with companies in high-growth sectors, ERLP expects to spur more than 3,000 new jobs in 3 years.

- With a focus on quality improvements to meet international and best practice standards, USAID/ERLP helps Yemeni companies to become more competitive. Al Mawada is a food production company in Hadramout that has adopted enhanced testing and an improved manufacturing cycle with our technical assistance to better compete against imported products. Sales have risen 20 percent, and the company has created 15 new full-time jobs.

Improving livelihoods for farmers

Background data: Nearly 2/3 of Yemenis depend on agriculture for their livelihood, 62% if them on small farms (<2 hectares).

- Solid sales contracts help small-scale farmers shift from highly volatile income generation to higher, more consistent returns. By improving production quality/quantity and focusing on new sales/marketing approaches, USAID/ERLP has generated nearly $4 million worth of new sales agreements in 10 months, benefiting an estimated 3,600 small-scale farmers and their families.

- Yemeni coffee is highly prized around the globe, and USAID/ERLP is helping producers/traders to penetrate the lucrative Korean market. In July, ERLP helped negotiate sales agreements between the Yemeni trader, Mokha Story, and buyer Mountain Korea guaranteeing a set price of $130,000 for 125 bags of green coffee.

- Yemeni honey is a valuable export product, and since September 2020, USAID/ERLP has fostered more than 120 honey market transactions between honey farmers and buyers, worth $ 2 million. ERLP puts the focus on fair and sustainable relationships between beekeepers and buyers, so that the gains from the program outlast it in scope and duration.

- Yemen's rich stock of fish/seafood is a critical source of exports, and USAID/ERLP is rebuilding the fisheries sector to restore its potential for rebuilding livelihoods and the economy. The project's market linkage experts recently supported a deal for frozen sardine shipments between a Yemeni producer in Hadramout and an Omani buyer worth $370,000. To date the project has negotiated $2 million worth of fisheries export agreements in just 10 months.

Macroeconomic reforms: Strengthening Yemen's Central Bank

- With support from USAID/ERLP, the Central Bank of Yemen has replaced cumbersome cash/check transfers with near-real-time electronic ones. Money can circulate more quickly and easily to bring aid, stimulate economic activity, and fuel business growth. "This will help to maintain trust in the Central Bank, facilitate the transfer of humanitarian assistance and public salaries across the country through the Central Bank, and encourage people to use the banking system," says Mervat Bashir, Head of Payment Systems Department at the Central Bank of Yemen.

- "USAID/ERLP's technical support to the Central Bank of Yemen is translating into the upgrade of core banking functions, a modern [electronic] national payment system, and a new regulatory framework to monitor payment system providers —all of which are considered a quantum leap in the field of modern banking." Mervat Bashir, Head of Payment Systems Department at the Central Bank of Yemen.

Trade Facilitation

- As designated Authorized Economic Operator (AEO) "trusted traders," companies can reduce the time it takes to clear customs with their imported products from five days to less than one –giving them a competitive edge. As part of its work to address trade bottlenecks and increase the flow of goods and humanitarian aid in Yemen, ERLP supported adoption of AEO in Yemen. "We are proud to stand out, in this highly ravaged country, as a corporation that adheres to the highest standards of transparency and compliance with Customs regulations," says Luay Khuda Bakhsh, of Hayel Saeed Anam (HSA) Group, which was one of the first companies to obtain "trusted trader" status.

- More companies are looking to qualify as Authorized Economic Operator (AEO) "trusted traders" in Yemen, supported by USAID/ERLP to accelerate customs clearance procedures for their imports. They are joining four companies and the World Food Programme, which have qualified already. "My motivation to be accredited as an AEO trusted trader by the Yemen Customs Authority, is to be acknowledged as an exemplary and well-established company" says Khaled Noman, CEO, of major importer Noman & Sons.

ERLP Short Impact Pieces – August 2021

Talia Salim Ali Hussein owns a small delivery business, which she launched from "less than zero" to support her family. Recently, Ms. Ali Hussein along with 70 women entrepreneurs attended a USAID Economic Recovery and Livelihoods Program workshop on Women's Economic Empowerment and Entrepreneurship in Aden, Yemen. Yemeni women often face difficulty in the business world due to social mores and constraints.

Organized with the Ministry of Industry and Trade, USAID introduced women entrepreneurs to the advantages of formal businesses registration and a set of technical support services specifically intended for them, including business skills, marketing support, help with market linkages, and access to finance. "The key information I took from this workshop was how to preserve my rights, my trade name, and my life's work," says Ms. Ali Hussein. [photo: ERLP]

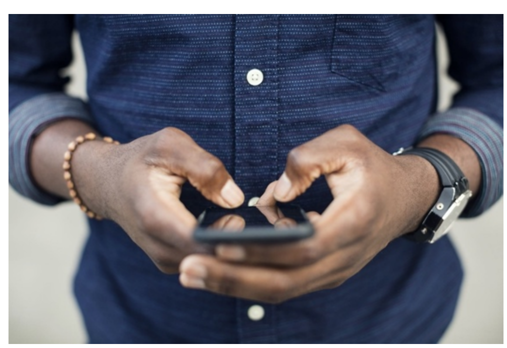
Tackling a real-life brainteaser, ERLP Trade Facilitation specialists conducted focus vessel exercises to identify ways to reduce the number of moves required to handle shipping containers in the Port of Aden – including the coordination of myriad processes from berthing through cargo exchange and departure. Their recommendations, submitted recently to the Aden Container Terminal Chairman and other senior leaders, include modifications to the layout of the container yard, changes to empty container handling, and new tariffs for the storage of full ones. The aim is to reduce transfer time/costs and maximize port productivity to facilitate the flow of goods in and out of Yemen. [photo: Port of Aden, www.portofaden.net]

A two-day bazaar in Aden's Ninety Mall presented female microentrepreneurs from coastal areas of Yemen – raising their visibility and exercising the new business and branding skills they have acquired through USAID/ERLP. Local media featured the bazaar and their wares. The women expect to establish a far wider, global audience starting in September, when USAID/ERLP will help launch an e-shopping website showcasing Yemeni jewelry, handicrafts, honey, and coffee. [image: BelqeesTV]

مصرف اليمن البحرين الشامل (بنك إسلامي)
Shamil Bank of Yemen & Bahrain
خدمات مصرفية إسلامية شاملة

With strong support from USAID/ERLP, August saw the successful launch of a new unit dedicated to small/medium enterprises at Shamil Bank of Yemen and Bahrain. This is a game changer for small companies that usually are cut off from formal financial services and loans. The bank has allocated specially trained staff to the unit and its branch offices. These actions are expected to help increase access to credit in areas served by Shamil Bank to help small businesses grow, succeed, and create new jobs.

Matching eager job seekers with prospective employers, despite the challenging circumstances of Yemen, USAID/ERLP recently held two invitation-only job fairs in Aden (August 11) Mukalla City (August 25). Candidates were selected from over 1,500 job seekers to be matched with job opportunities from more than 45 companies. The USAID/ERLP team had previously worked with the companies to solicit their interest and post job openings on the *yemenjobs* platform. They also organized workshops with applicants to hone their job-search skills. There were 638 interviews conducted during the course of the two job fairs, with at least 180 job offers on the spot, and 220 more selected for second round interviews. Through its demand-driven approach to job placements, USAID/ERLP is working to match job seekers with the skills employers say they need – aiming to deliver valuable employment to 750 young Yemeni job seekers in 12 months. From the perspective of prospective employees, it is a highly rewarding enterprise. “I have never participated in a job fair with such an amazing level of organization and coordination. I’ve conducted 40 job interviews, and I’m certain I’ll choose some new hires. I hope this becomes an annual event,” said Omar Abadi, Manager, Alkuraimi Bank in Hadramout.
[Photo: Aden Job Fair, photo by ERLP team]



USAID/ERLP is helping to bring Yemeni banks into the digital age – and expand their services to more customers. In August, the project’s Access to Finance Team helped initiate the testing phase of the first on-line lending product with Al Amal Bank. Together they assessed the system’s client data entries via its mobile application. The product’s user-friendly interface and platform are expected to significantly increase the bank’s outreach to small and medium-sized enterprises – offering them access to formal financial services that can help them expand and generate new employment opportunities.

ERLP Short Impact Pieces – September 2021

New Curricula to Meet Today's Job Demands

Young Yemenis are desperate for steady employment, but too often lack the skill sets employers say they need. USAID/ERLP is addressing this mismatch with new training curricula targeting three high-growth job sectors, including renewable energies, software programming, and health management. The reformed course designs were officially launched on September 6 at Seyoun Community College in Hadramout in a ceremony that included the region's Deputy Governor. The curricula are designed to insert greater quality and market-relevance to the programs, including the introduction of critical soft skills along with enhanced technical ones. USAID/ERLP also developed best practice teacher development and trainings materials. It conducted targeted Training of Trainers to bring pedagogical practices in line with modern demands and build institutional capacity for responding to current and future labor market requirements.

Fostering Female Entrepreneurs in Coastal Yemen

Home-based businesses are a promising option for women in Yemen's coastal communities, who are looking to generate an income without countering social mores. USAID/ERLP recently provided skills training and assistance to 50 female entrepreneurs from rural Hadramout Governorate to boost their business capacity and success. The training was tailored to meet the high local demand for home-made foods and women's clothing, with sessions focused on small business management, marketing, tailoring, and culinary arts. The project also offered participants small grants to expand their enterprises, aided them in legally registering their businesses, and helped them to establish market linkages to enhance their sales, incomes, and long-term viability.

USAID/ERLP is partnering with the Hadramout Foundation to identify and train the participants in this and similar activities, which represent the first vocational training opportunities ever offered to economically empower coastal women. So far, the project has trained nearly 400 women, including female internally displaced persons, young women, widows, and other female heads of households struggling to support their families. With the Hadramout Foundation, it is building an extensive regional network to scale-up female entrepreneurship and help women gain the economic foothold they need to rebuild their lives, improve their livelihoods, and foster a more stable future.

Increasing Government Revenues Through Improved Foreign Exchange Management

Most of Yemen's government revenues – used to pay for essential public services and salaries – come from the export sales of oil and gas. However, the value of the money coming in from export sales is not what it could be, due to wide differences between official and informal exchange rates. Because of the high demand for foreign currency in Yemen, unofficial exchange agents offer a rate of about 800-1000 Rials for one US dollar, compared to the official rate of just 450 Rials to the dollar. To raise more Yemeni Rials from its export sales, the Central Bank of Yemen, with support from USAID/ERLP, is creating a more flexible and competitive official exchange rate management system. It is launching foreign exchange auctions, where bidders (formal banks and exchange bureaus) help determine the official rate. The auctions are expected to generate more revenue for government coffers and bring the formal and informal exchange rates more closely in line. Their launch received strong backing from International Monetary Fund experts in September, during which time the Central Bank and USAID/ERLP conducted simulation exercises with five commercial banks to test out the auction implementation. They plan to hold the first official auction in the coming months. In September, they also met with experts from the International Monetary Fund, who expressed strong support for the use of foreign exchange auctions to create a more flexible and efficient exchange rate management regime.

Central Bank staff and ERLP advisors discuss near-same-day settlement processes. Photo: ERLP Team

DIGITIZING MONEY TRANSFERS IN YEMEN IS, ELECTRIFYING!

"We now have the capacity to perform same day, near-real-time financial transfers using SWIFT. This new mechanism will greatly accelerate financial processes. It is a first since the Central Bank of Yemen moved to Aden." Mervat Bashir, Head, Payment Systems Department, Central Bank of Yemen

Like many emerging market countries, Yemen has been functioning as a cash-based economy dependent on bulky exchanges of colorful Rial bills for everything from simple daily purchases to government salaries and complex financial transfers. Moving money from one bank or account to another has been a slow and cumbersome process, involving a sluggish system of cash or check clearances. The result has restricted the flow of money for everything from humanitarian aid to the loans, investments, and business transactions that could help fuel economic recovery.

Now, however, Yemen's financial sector is joining the digital age, shifting the speed at which money can move from days or weeks to a matter of minutes. With support from USAID/ERLP, the Central Bank of Yemen has upgraded its payment systems, and as of July 2021, all banks have started using the Society of Worldwide Interbank Financial Telecommunication (SWIFT) network to move money back and forth. Financial transfers are quicker and more secure, and the details regarding transaction amounts, routes, or charges are fully transparent. The effects are meant to keep money circulating more easily to help stimulate economic activity and business growth.

The USAID/ERLP team has been working with the Central Bank of Yemen for many months to strengthen and modernize its financial systems and put in place the needed upgrades to meet SWIFT institutional and security requirements. In addition, they have offered training and technical assistance to build a best-practice compliant Payment Systems Department, strengthening staff capacity and automating payment activities.

The ERLP team also helped guide the complex process of consolidating bank data within the Central Bank headquarters in Aden and among the branches under its control. That work involved the development of new core banking system features to update and manage the consolidated accounts according to internationally accepted standards, along with the development of a decentralized check-clearing system that now feeds into a central clearinghouse in Aden. The new system directs a greater level of control to the Central Bank while also creating a quick, efficient, and streamlined clearance process. Moreover, it allows analysts to get a comprehensive view of the status of the country's banking sector according to key indicators, such as levels of risk, amounts of available cash and reserves, and quality of assets.

With payment transfers happening in near-real time, banks, businesses, and households are better positioned to control their cash flows and make investments that can improve their companies or livelihoods. The advances also are set to boost confidence in the Central Bank and broader banking sector.

“Now large numbers of transactions can be cleared daily,” says Mervat Bashir, who heads the Payment Systems Department at the Central Bank of Yemen. “This will help to maintain trust in the Central Bank and allow it to perform its settlement function [for accepting transactions] effectively. It will facilitate the transfer of humanitarian assistance and public salaries across the country through the Central Bank and encourage people to use the banking system.”

The transition to electronic transfers is a major step for the Central Bank of Yemen, and opens the way for introducing other cashless options to bank customers. USAID/ERLP is providing further technical assistance and expertise to establish the regulatory and operational framework for Mobile Financial Service activities in Yemen, which could greatly expand access to financial services for everday Yemenis and increase opportunities for foreign exchange and investment. The team also is helping to evaluate potential Payment System Providers that could connect merchants to electronic payment systems for accepting credit/debit card payments and online transfers.

Private sector growth and economic reforms cannot thrive without a solid Central Bank foundation to ensure a safe and secure flow of money. By modernizing the Central Bank's payment system and strengthening its core capacities, USAID/ERLP is helping to foster the economic stability and inclusion that are essential for a more self-reliant future in Yemen. Moreover, in spite of the Covid-19 context and its global disruptions, the momentum for change within the Central Bank is keeping pace.

“The USAID/ERLP team has ensured an accelerated implementation and follow up on work plans that we have developed with their support,” says Ms. Basheer from the Payment Systems Department. “Their technical support is translating into the upgrade of core banking functions, a modern national payment system, and a new regulatory framework for the Central Bank to evaluate, license, and establish an oversight tracking system to monitor Payment System Providers —all of which are considered a quantum leap in the field of modern banking.”

USAID
FROM THE AMERICAN PEOPLE

Abdo Al Aziz Al Yafaai, CEO, Afaq Gate Import Pharmaceutical and Medical Supplies

RESTORING SAFETY AND TRUST IN YEMEN'S BANKING SYSTEM

"Before working with USAID/ERLP, I did not consider bank loans as an option for me, nor working with the formal banking system." – Abd Al Aziz Al Yafaai, CEO, Afaq Gate Import Pharmaceutical and Medical Supplies

Until recently, when Abdo Al Aziz Al Yafaai wanted to secure a loan to expand his growing medicine and medical supplies company, he did not even consider the possibility of going to a formal commercial bank for a loan. "We worked with informal money transfers and exchange companies, because we had lost our trust in the banks," explains Mr. Al Yafaai

Abdo Al Aziz Al Yafaai began his career as a cybersecurity expert, but with the disruptions of war he had to find a new way of making a living. Tapping into his network of former colleagues and contacts, Mr. Al Yafaai discovered that Yemen had a large unmet demand for medicine and medical supplies. In 2018, he secured a contract to be the Yemeni distributor for a large pharmaceutical company based in Dubai and launched his fledging enterprise, called Afaq Gate Import Pharmaceutical and Medical Supplies. The company started in Aden, and within a year had opened two new branches in Taiz and Hadramout. However, he struggled to find the financing he needed to expand further.

Mr. Al Yafaai's faith in the banking system had been shaken by negative experiences following the outbreak of war in Yemen, when it was difficult to withdraw or borrow funds from banks due to a lack of liquidity. As a result, he relied on informal companies to deposit, transfer, or borrow money – recognizing that the services were "unprofessional" as he describes them, and risky. "They had no guarantees from the Central Bank, but I felt it was my only option," says Mr. Al Yafaai.

With support from USAID/ERLP's Access to Finance specialists, Mr. Al Yafaai has reconnected with Yemen's formal banking system. He has built a relationship with a Yemeni bank that is delivering access to larger, more secure loans to drive business expansion. It also is bringing his company increased credibility, which is leading to new franchise agreements. The company has been able to diversify its supplier base, increase sales by 26 percent within just three months, and create eight new jobs.

Along with working with commercial banks to reach down market and engage with small and medium-sized enterprises, ERLP also is working with the Central Bank of Yemen to strengthen its role and rebuild public confidence in the formal banking sector. New policies and practices are tightening bank reporting and financial performance requirements/accountability across the financial sector. This in turn can offer more secure and attractive services for investors, businesses, and individuals.

With support from ERLP, the Central Bank is reforming its bank supervision and risk management regulations and operations. It has expanded and restructured its Banking Supervision Department and established a new surveillance team that conducts intensive on-site inspections of commercial financial institutions. Reviews cover such concerns as non-performing loan calculations, reserves ratios, and other measures of institutional stability. The teams offer on-the-job training, as needed, to raise commercial bank internal supervision capacity. The ERLP/Central Bank collaboration also has focused on improving IT risk management in the banking/finance sphere.

Working with ERLP technical experts, the Central Bank has created a Financial Intelligence Unit directed at tightening down on money laundering risk and containment. The aim is to combat infiltration of money obtained through illegal activities (e.g., drug trafficking, terrorism), and enhance the banking sector's ability to abide by strict international anti-money laundering standards. ERLP has helped facilitate a recently signed Memorandum of Understanding between the Financial Intelligence Unit and its counterparts in the MENA region, designed to strengthen their intelligence-sharing and collaboration. It also has helped the Central Bank to adopt best practice compliant regulatory amendments that dramatically strengthen anti-money laundering controls.

Financial institutions are the backbone of the economy in any country. By focusing on the restoration of safety and trust in Yemen's banking system, ERLP is helping the Central Bank to provide the structure for attracting more domestic and international financial transactions that can encourage entrepreneurship, channel savings into investments, facilitate commerce, and stimulate job growth. By encouraging customers to rejoin the formal financial system, ERLP, with its Central Bank partners, is striving to give Yemenis a vested interest in their country's future, and in the development of a stronger, more stable society.

USAID's Economic Recovery and Livelihoods program (ERLP) addresses critical economic stabilization challenges in Yemen. At the macroeconomic level, it works with public and private institutions to restore economic stability, enhance fiscal management, and increase international trade flows. At the microeconomic level, ERLP strengthens private sector performance and competitiveness—creating jobs, raising incomes, and improving livelihoods.