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Initial Baseline Assessment

Indonesia Trade Assistance Project

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Initial Baseline Assessment

Indonesia Trade Assistance Project (ITAP)

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Executive Summary

Purpose

The Baseline Assessment is the first Task in the Scope of Work (SOW) for the Indonesia Trade Assistance Project (ITAP). It is intended to be a comprehensive review of the Ministry of Trade's (MOT) institutional capacity in the specific areas designated as the focus of ITAP's institutional development and reform efforts. These areas are:

- Business Process Redesign
- Establishment of a Legal Advisor's Office
- A Strengthened Research and Data Capability (TREDA)
- Human Resources Development and Training
- Strengthened Inter-Agency Trade Framework
- Information Technology
- The Public-Private Sector Dialogue on Trade

The expected outcome of the Baseline Assessment will be a reconciliation of the deliverables specified in the SOW Tasks to the actual situation prevailing in the MOT. Where issues, circumstances or priorities appear to be different from those that were used to develop the original Scope of Work, the Baseline Study will provide information about the prevailing conditions to support proposed modifications and refinements to the SOW. Once the Baseline Analysis has been agreed upon, it will provide the foundation for development of the Joint Work Plan which will serve as the blue print for the project's activities at the MOT.

Activities

The three ITAP long-term advisors commenced work in Indonesia on 3 January 2006. Since then, there have been over seventy formal meetings held with people inside the MOT, with stakeholders such as KADIN, and potential capacity building partners such as the University of Indonesia. Short-term experts in international law, trade economics, information technology, and organizational development have supplemented and helped focus our efforts on understanding the issues facing the MOT and how best the ITAP "capacity building" objective can be achieved. We believe that we now have a reasonably good understanding of the key issues as well as a better awareness of those areas where the prospect of substantive change is limited. Most of the areas where limited change is likely are due to the fact that the MOT is subject to civil service rules and regulations that are beyond their authority to change.

In working in the Legal Bureau, we have been impressed with the desire shown by many of the lawyers to expand their knowledge and skills. We have already been involved in several legal cases that have provided meaningful opportunities for mentoring as well as for providing substantive legal counsel. The opportunities for ITAP to help the Legal Bureau in training, developing improved and more efficient internal processes, and improving internal operations and organization appear to be substantial and well within our capacity without worrying about the formal organizational status of the Bureau. However, we propose some internal organizational changes at the sub-unit level in order to develop expertise and greater client focus. We also recommend designating an existing lawyer from each DG secretariat as a legal coordinator for the lawyers in that DG and for linking with the Legal Bureau.

TREDA presents an interesting challenge in that it already does many things well. The biggest need is something that is clearly recognized by all within the Ministry: how to attract and retain the brightest researchers to fill gaps in expertise, and knowledge in the shortest possible time given the organizational limitations imposed by a rigid civil service bureaucracy. We believe that by identifying experts who can provide the best training, working with outside institutions such as the University of Indonesia to tailor specific programs for the MOT, and providing ongoing personal support and

mentoring, we will be able to contribute substantially to helping strengthen TREDa and building a cadre of people with the level of skill and expertise the MOT requires.

Improving the Ministry's Information Technology (IT) operation presents many opportunities and challenges. Clearly, a more centrally managed IT function, additional expert staffing, extensive user training, and the provision of IT hardware will yield substantial benefits to the MOT. However, because of the way the IT system has evolved at the Ministry with various DGs and Agencies developing, operating and maintaining their own IT function, obtaining consensus about how to proceed may not be straight forward. Budgeting for the ongoing operation and sequencing activities to accommodate the relocation to new facilities in one to two years will also require careful planning. It should also be noted that all IT procurements are required to adhere to US government rules. Because so much IT equipment is manufactured outside of the USA, this has the potential to become a complex and time-consuming activity.

In addition to technical training for the Legal Bureau, TREDa, and IT, it is expected that ITAP will also support an expanded calendar of English training activities with limited support provided to Agencies such as NAFED and CoFTRA. Other training activities will be substantially focused on two primary groups: the significant number of lawyers working outside of the Legal Bureau but in other MOT DGs or Agencies, and personnel whose work involves or requires a better understanding of issues related to the WTO. These training programs will fall under the general theme of international trade law and international trade policy and negotiations.

Developing an improved communications and public outreach program is something that most agree is important, and an area where we can provide ideas, organizational support and activity sponsorship. However, aside from tracking activities and measuring inputs, identifying tangible and sustainable results will be a challenge.

Issues

The value of taking the time necessary to fully review and examine the Scope of Work in light of prevailing conditions in the MOT is evident in our findings. While most of the Project Tasks and Deliverables can be provided as originally specified, a number of issues have been identified would make it desirable to consider changing or omitting certain activities or tasks in a revised ITAP SOW. These are summarized below and are explained in greater detail in Section 1.

- Analyze and propose an enhanced organizational structure that is consistent with the needs and demands of the Ministry, streamlining when and as appropriate.

Comment: All organizational design issues are strictly controlled by the Menteri Negara Pendayagunaan Aparatur Negara (MenPAN) (State Ministry for Administrative Reform). Similarly, salary levels, promotional steps and other benefit and remuneration issues are strictly regulated and standardized at the national level and are therefore substantially beyond the control of the MOT as well as the ITAP advisors.

While ITAP can make observations, suggestions and comparative analyses with other organizations, the process of change is slow, bureaucratic and controlled by a government agency outside of the MOT. It is recommended that all organizational design and restructuring activities be deferred until the second or third year when a better understanding of what is desired and what is possible is known with the recognition that tangible achievements in this area may be very few.

- Assist in developing and implementing a plan to establish a new Legal Advisor's Office (General Counsel), with the status and rank equivalent to a Directorate General.

Comment: The MOT has indicated that ITAP's activities should be limited to capacity building including, mentoring, training and improving internal operations. The MOT will determine if or when it wishes to recommend any other formal organizational changes to the Legal Bureau which

would in any case require approval from MenPAN. It is recommended that the specific reference to upgrading the “status and rank” be deleted from the SOW.

- Assist in the Establishment of a functioning Executive Secretariat.

Comment: The MOT has indicated that ITAP should limit its support to efforts to strengthen internal and external communications but should have no other formal role relating to an Executive Secretariat. We recommend that all references to work relating to an Executive Secretariat be deleted from the SOW.

- The SOW states that “The New Trade Team believes that it must rebuild the MOT from the ground up” and indicates that the “MOT must review and revise all personnel policies such as those related to recruitment, retention and dismissal.”

Comment: The deliverables under this task consists of both organizational development activities and training. For reasons elaborated above, we recommend that the focus be on training and that activities related to organizational or policy change that are the exclusive domain of MenPAN or agencies outside of MOT be excluded from the SOW.

- It is planned that ITAP will fully fund all operational aspects of both the IT and web systems during the first year.

Comment: This should be deleted. The Ministry has a substantial ongoing IT operation and this is neither practical nor required.

- Satellite based (V-SAT Link) with node access for all users identified.

Comment: This should be deleted. This is not needed or practical.

Conclusion

The introduction to the ITAP SOW states that the primary purpose of the project is to build and strengthen the capacity related to the analysis, negotiation, and implementation of bilateral and multilateral agreements. In discussions with MOT personnel, including the Minister, it is apparent that what is desired is very much a practical program of training courses, mentoring and coaching to refine skills, develop new expertise, and improve the overall capacity of the MOT.

The SOW presents an eclectic mix of activities intended to accomplish this. Some can have a significant and measurable impact while others may be harder to assess or to implement. We have identified those tasks in the SOW that due to factors beyond the control of the MOT or ITAP would be nearly impossible to achieve as major GOI reforms would be needed. Therefore, we recommend that these be deleted from a revised SOW. However, there are a number of these issues, many of which are very sensitive, that virtually everyone recognizes must be addressed if the MOT – and indeed the Government of Indonesia – is to ever develop the motivated, efficient and accountable civil service that is needed to keep up with other emerging economies such as Vietnam, China and India. The issues of staff discipline, performance management, promotion and advancement, and everything from transparency to composition of benefit and remuneration are but a few of the areas that need fundamental reform.

We would also like to note that this is not intended to be a balanced report. Our focus has been on identifying whether the MOT has problems or other issues that warrant the attention of ITAP. It is therefore by its very nature a report that highlights more negative issues than positive ones. We would like to iterate that we have observed many very hard working and dedicated individuals at the MOT. Entrepreneurship, innovation, commitment and self-sacrifice have been observed in many of the MOT’s employees. However, because our focus is on what is needed rather than what is already being done well, this report may appear to be overly negative. It is not our intention or desire, but the consequence of what the report is intended to address.

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Acronyms

BAPPENAS	Ministry of Planning (National Development Plan Agency)
BKN	Civil Service Agency (National Personnel Agency)
BPKP	Agency for Finance and Development Supervisory
COFTRA	Commodity Futures Trading Agency
CSIS	Center for Strategic and International Studies
DG	Directorate General
DGDT	Directorate General of Domestic Trade
DGFT	Directorate General of Foreign Trade
DGITC	Directorate General of International Trade Cooperation
DIP	Approved project document for development projects funded from the budget
DIPA	Approved Budget Allocations
DP3	Daftar Penilaian Pelaksanaan Pekerjaan; GOI Employee Evaluation
GOI	Government of Indonesia
HRD	Human Resource Development
HRM	Human Resource Management
IG	Inspectorate General
IT	Information Technology
ITAP	Indonesia Trade Assistance Project
ITPC	International Trade Promotion Center
KADIN	Kamar Perdagangan dan Industri (Indonesian Chamber of Commerce and Industry).
LAN	National Institute of Administration
MenPAN	Ministry of Administrative Reform
MOF	Ministry of Finance
MOI	Ministry of Industry
MOIT	Ministry of Industry and Trade
MOT	Ministry of Trade
NAFED	National Agency for Export Development
R&D	Research and Development
RKAKL	Ministry and Institutional Budget Work Plan*
SG	Secretary General
SME	Small and Medium Enterprises
SNI	Indonesian National Standards
TREDA	Trade Research and Development Agency
UI	University of Indonesia

Organizational Terms and Explanations

Badan Kepegawaian Negara	BKN (National Civil Service Board). Not a ministerial level agency, but an echelon one agency that reports directly to the president. Handles government-wide recruitment. Administers civil service exam.
Badan Pemeriksaan Keuangan dan Pembangunan	BPKP (Comptroller of Finance and Development) Audits development projects government-wide. An independent agency that reports directly to the president, though still under MOF.
Bureau	Bureaus are sub-units within directorates. Five bureaus (level 2) report to the secretary general.
Center	Centers are organizational support units within directorates. Three centers (level 2) report to the secretary general.
Centre for Strategic and International Studies	CSIS. An independent non-profit organization focusing on policy-oriented studies and dialogue on domestic and international issues involving economics, political economy and international relations.
Daftar Isian Proyek	DIP. Approved project document for development projects funded from the budget. The DIP describes the activities, the schedule and the financial allocations of the project.
Daftar Penilaian Pelaksanaan Pekerjaan	DP3. Format used for the performance evaluation of civil servants.
Daftar Urut Kepangkatan Pegawai Negeri Sipil	DUK (PNS). List of civil servants of an institution according to rank and seniority. Should be used for promotion decisions.
Daftar Usulan Kegiatan	DUK. Proposal for funding from the routine budget.
Daftar Usulan Proyek	DUP. Proposal for a development project that should be funded from the annual budget. Once approved, the DUP becomes a DIP.
Development Projects	Special projects funded by the government and are carried out by government agencies, to support agencies in achieving their goals. Development projects are critical drivers of MOT activities and employee performance, as participation in development projects provides financial incentives. In 2006, the MOT has four main development projects and twelve support projects. Each may have hundreds of line items.
DIPA	Approved Budget Allocations showing the main line items for MOT's development projects and routine expenses (unified budget).
Diklat	Abbreviation for pendidikan dan pelatihan (training and education).
Diklat structural	Structural training, i.e. training and education for holders of structural management positions (jabatan struktural) in the Indonesian civil service. D.S. is a career development training, attendance of which is a precondition for promotion to a higher eselon. There are three levels of d.s.: SPAMA, SPAMEN, SPATI.

Diklat teknis	Literal for "technical training". Training that is geared to the specific tasks and functions of a civil service position, irrespective whether it is jabatan struktural or a jabatan fungsional.
Diklat fungsional	Functional training, i.e. training and education for holders of functional positions (jabatan fungsional) in the Indonesian civil service. The main purpose of d.f. is the improvement of the professional skills and knowledge.
Director	Title for heads of directorates (Level 2).
Director General	Title for (level 1) person in charge a directorate general.
Directorate General:	Ditjen Direktorat Jenderal (in Bahasa). Line agencies reporting directly to the minister. (Level 1). The MOT has five Directorate Generals.
Directorates	Also, Divisions. Directorate Generals are divided into directorates (level 2). Directorates are divided into sub-directorates (level 3). Sub-directorates are divided into sections. (level 4). MOT Directorate Generals typically have four divisions and one secretariat.
Echelon	Or Eselon and sometimes referred to as 'level'. Ranking of positions in the structural hierarchy. There are four management echelons, with echelon one, the highest, reporting directly to the minister.
Golongan	Grouping, ranking of personnel status for purposes of pay and qualification for posting to structural positions
Head of Bureau	Title for (level 2) MOT person in charge of a bureau.
Head of Center	Title for (level 2) person in charge of a center.
Honorarium	Financial incentive provided to employees for work carried out on development projects. The amount varies per project and per individual contribution.
Inspector General	Title for (level 1) head of Inspectorate General who reports to the Minister.
Inspector	Title for (level 2) head of Inspectorate in the Inspectorate General.
Jabatan Fungsional	Functional position in the civil service. j.f. are civil service career paths for certain professions like medical doctors, computer operators, researchers, etc. Precondition for the appointment in a j.f. is the corresponding professional education and working experience. In its effort the make the civil service more professional, the government is increasing the number of j.f. as compared to the number of jabatan struktural.
Jabatan Struktural	Structural position in the civil service. j.s. are line management positions in the civil service with a supervisory function for a work unit. Approximately 157,000 positions in the civil service are j.s.

Lembaga Administrasi Negara	LAN. (National Institute of Administration). An independent, echelon one government agency that reports directly to the president. Trains GOI echelon two employees, and provides undergraduate education for select government agencies.
LEMHANAS	National security institution that trains all GOI echelon one government employees, including top military personnel.
Level	See Eselon.
MenPAN	Menteri Negara Pendayagunaan Aparatur Negara (State Ministry for Administrative Reform). Dictates the structure of GOI agencies, and authorizes structural changes. Decides number of employees and new employees for GOI agencies.
MOIT	Ministry of Industry and Trade. MOT, a separate ministry, was combined with the MOI in 1995, becoming MOIT. MOIT split in October 2004 to once again become two ministries, MOT and MOI.
MOT	Ministry of Trade.
PNS	Pegawai negeri sipil. Civil servant.
PNS tidak tetap	Civil servant whose appointment is for a limited time only.
RKAKL	Budget showing the detailed line items of a unit's routine expenses and development projects (unified budget). RKAKL is a more detailed breakdown of the DIPA.
Secretariat	Each DG has a secretariat (level 2), which is the administrative backbone of the directorate. Secretariats are divided into divisions (level 3) and subdivisions (level 4).
Secretary	Title for (level 2) heads of secretariats under DGs.
Secretary General	Sekjen Sekretaris Jenderal. Title for (level 1) head of Secretariat General.
Sistem Administrasi Negara	National system of administration, refers to the whole body of regulation and practice on public administration and civil service administration, as compiled from time to time in a publication from LAN.
Staff	Sometimes, though not exclusively, used to describe lower level (non management) MOT employees.
Sub-Division	Bureaus (level 3) are broken down into divisions (level 4). Typically, each division has three sub-divisions, with each sub-division having at least three employees.
Unit	Generic term used to signify DG, bureau, center, division, or any individual organizational entity in the MOT hierarchy.

Section 1 - Introduction

1.1 Background

Over one year has elapsed since the ITAP Scope of Work was prepared. In that time, Indonesia’s financial recovery has continued to progress, public sector accountability has been reinforced through a series of court cases, and the public and the press continue to demand greater accountability and more transparency in government.

The Ministry of Trade (MOT) has also undergone significant change including separation from the Ministry of Industry (MOI) after ten years as a ‘combined’ Ministry of Industry and Trade (MOIT). Although now resolved, budget issues arising from the split from the MOIT caused serious operational problems that adversely impacted MOT operations through the end of last year. Several newly appointed directorate and bureau heads have assumed their positions and a government-wide ‘zero growth’ policy which has been in place for over ten years will soon end and the MOT expects over 300 new recruits to join soon. Construction has also started on a new building that is expected to be completed within eighteen months and which will provide significant improved and expanded facilities.

With all of these changes, the ITAP Scope of Work prudently included as the first task a Baseline Assessment. It is therefore intended that the Baseline Assessment will reconcile the activities specified by the United States Agency for International Development (USAID) in the Scope of Work (SOW) for the Indonesian Trade Assistance Project (ITAP) with changes in organizational conditions and status within the Ministry of Trade (MOT) as observed by the project advisors during the initial two months of the project. By identifying and where necessary adjusting the SOW at an early stage, the objectives of the MOT and USAID will be aligned and the project should be able to avoid any disruptive mid-course corrections.

The Baseline Analysis, once agreed with the MOT and USAID, will also provide the foundation for Task 2, preparation of the Joint Work Plan with detailed action steps, activity sequencing, performance indicators and any recommendations for modifying the original SOW. Table 1.1 summarizes the key ITAP objectives from the SOW.

Table 1.1 Indonesia Trade Assistance Project Objectives

Project Purpose	To strengthen the capacity of the Ministry of Trade in advancing Indonesia’s trade commitments, consistent with the needs of a modern market economy, thereby strengthening a strategic partner of the United States
Task 1	Reconciliation of task order activities against baseline assessment; recommendation of sequencing of activities; final baseline assessment presented for review
Task 2	Coordinated “project team” approach; detailed year 1 work plan; well defined subsidiary work plans for each task
Task 3	<ul style="list-style-type: none"> a Organizational assessment of MOT; propose model(s) for reform b <ul style="list-style-type: none"> i. Legal Advisor’s Office well organized and fully functioning; Office of General Counsel well prepared in full range of domestic and international trade law; staff trained ii. Fully functioning Executive Secretariat; roles and responsibilities clearly defined; long-term operations plan in place c Functioning Executive Secretariat; organizational units and administrative procedures defined; long-term operations plan in place d TREDAs become high-caliber organization producing excellent research and better able to analyze policy; TREDAs organized and staffed for maximum efficiency with

human resources development plan in place; excellent horizontal and vertical communication capability in place, resulting in highly upgraded quality and quantity of outputs

- e Technical capacities of MOT staff improved; functioning Training Center for MOT; public awareness of trade issues enhanced; negotiation skills of MOT staff strengthened; economic modeling and quantitative analysis skills improved; analytical, management, and reporting skills strengthened
- f Interagency Negotiating Team fully functional, operating with well established policies, procedures, and structures to promote interagency cooperation; transparent interagency process; designated point persons in relevant agencies; negotiating positions based on intra-governmental negotiations
- g IT system installed in MOT and Interagency Negotiating Team within budget that increases communication, reduces risk, increases productivity, and maximizes investments; use of IT is increased and improved; counterpart staff trained to maintain system; ongoing end-user training provided; web site functioning with e-government services; MOT IPR compliant

Task 4 KADIN capable of producing valuable analyses of trade policy; private sector players have transparent, reliable method of expressing concerns to MOT; MOT establishes and uses consultative process regarding policy; MOT has system of notifying stakeholders regarding pending actions to allow for comment; legislative drafting incorporates opportunities for private sector to offer comments; MOT implements public awareness strategy to increase public understanding of trade issues

1.2 Approach

Over the last two months, we have held numerous consultations with MOT officials, attended several presentations and have reviewed key MOT documents. Our team has spoken formally and informally with one or more key individuals from each of MOT's DGs and agencies, as well as all of the bureaus and centers reporting to the Secretary General. We have also probed extensively into the noted ITAP priority areas of economic research, legal service, trade policy formulation, and information technology. While the information has been important in developing the perspective and understanding that was needed for the Baseline Analysis and Joint Work Plan, we would like to emphasize that the purpose of our consultations has not been to draw firm conclusions, but to gather data and where possible facts to inform our views and opinions about how best to undertake the objectives outline in the SOW.

In large part, we have confirmed that most of the SOW Tasks and Objectives are still relevant in that they remain important to the MOT and USAID. We have also confirmed, as documented in the following pages, observations that strongly support the need and approach presented in the SOW for most of activities. However, in a few areas, and for reasons that are generally due to changed circumstances or national-level institutional issues, we have identified areas where changes to the SOW are recommended.

Table 1.2 summarizes the expected results from key project tasks and includes our comments. Overall, the SOW is ambitious, wide-ranging but achievable. However, in many of the areas under the general heading of institutional reform, tangible results are going to be highly unlikely since all Indonesian Government Ministries are subject to the civil service guidelines that specify in detail everything from promotion timing to the span of control in each Directorate General. While we understand that requests for exceptions are sometimes approved, they are infrequent and can take over a year to go through the various reviews. From a practical point of view, it is unlikely any substantive changes will be approved. It is our understanding that after several months the MOT had a request to establish a new bureau for ministry-wide IT operations declined as it was determined the Secretary General already had too many agencies or bureaus reporting directly to him. In addition many of the

needed organizational and institutional reforms would necessitate revising personnel practices including hiring procedures, promotion policies, performance planning and evaluation, salary and remuneration policies, disciplinary procedures and other such areas that are largely outside of the Ministry’s direct control and/or deemed to be too sensitive for outside consultants to be involved in.

Table 1.2 Minimum Tangible Results for ITAP

Minimum Tangible results for ITAP include:		Comment
1	The Ministry is implementing an enhanced career development and remuneration system;	Recommend this be deleted as it is beyond the control of the MOT and ITAP
2	There is a functioning secretariat for the Minister of Trade	The MOT has requested this be dropped.
3	The Legal Office is functioning at the Director General Level with requisite skills having been developed.	The MOT has indicated that ITAP should focus on capacity building and any decision to upgrade the Legal Bureau to a DG will be at the discretion of the MOT. This can be dropped as training and capacity building are addressed elsewhere.
4	The Government of Indonesia, through the Ministry of Trade, is effectively participating in bilateral (e.g. TIFA), regional (ASEAN) and /or multilateral (WTO) trade negotiations.	ITAP can provide training, support, and equipment but cannot assure effective participation or a tangible metric for achieving success that will tie directly to the project.
5	TREDA is operating at full capacity and providing analytical and data support to the various units of the Ministry, as assigned, and to other parties as appropriate (e.g. Interagency Negotiating Team).	Aside from the determination of what constitutes “full capacity”, substantial results can be expected in this area.
6	The Ministry has a fully functional and integrated IT system that is IPR compliant.	The term “fully functional” for a ministry with the breadth and scope of activities that MOT has is indefinable, is likely to require resources in excess of what ITAP has available, and will take several years to achieve. The construction of a new building and relocation in one to two years will also impact this.
7	The Ministry has a fully functional web site with dual language capabilities.	Each DG currently has its own IT operation. Although efforts have been initiated to consolidate some functions, there are budgeting and operational issues that may make this more challenging than it should normally be.
8	There is enhanced public to private sector dialogue on both domestic and international trade issues.	ITAP proposes measuring instances (including means and methods) of private sector outreach for core Ministry functions. This will focus primarily on the systemization, frequency and breadth of communication efforts, and on the number of private sector inputs received. We will also measure how private sector inputs, are considered by the ministry in performing its core service, regulatory, and policy making functions.
9	There is a greater understanding by the public and media of MOT.	While certain activities can be undertaken that should address this requirement, establishing a tangible performance metric and how it will be measured with any degree of accuracy is not clear.

For the reasons noted, we therefore recommend the following changes to the SOW:

- Table 1.1, Task 3(a) Delete
- Table 1.1, Task 3(b) All references to establishing the Legal Bureau as a General Counsel's Office or DG should be deleted.
- Table 1.1, Task 3(a) All references to an Executive Secretariat should be deleted.
- Table 1.2, Results 1, Delete
- Table 1.2, Results 2, Delete
- Table 1.2, Results 3, Delete reference to General Counsel's Office or DG
- Table 1.2, Results 4, Rework to be more tangible, specific and measurable
- Table 1.2, Results 5, Rework to define "full capacity" in the context of what can be achieved in the three year duration of the project.
- Table 1.2, Results 6, Delete fully as it is ambiguous and not measurable
- Table 1.2, Results 7, Delete fully as it is ambiguous and not measurable

1.3 Report Structure

We have approached the Baseline Assessment from an operational review perspective where current conditions, practices, policies and procedures were observed and then the possible or likely implications to organizational planning, performance, efficiency, effectiveness and accountability were noted. Our point of reference throughout the exercise has been the ITAP Scope of Work as this document forms the contractual obligation that we have to USAID and the MOT.

We have generally not attempted to prescribe approaches or solutions to the issues noted since that is understood to be the purpose of the Joint Work Plan once the general conclusions in the Baseline Assessment have been agreed and approved. Our underlying objective therefore has been to:

- determine what the SOW task asks in terms of effort as well as results;
- examine whether the prevailing conditions at the MOT will be effectively addressed by the task;
- determine if it is something the MOT still wants to be done; and
- most importantly, and determine whether the task can realistically be achieved and if not, document the reasons why.

The following pages of this report therefore addresses the key focal areas for the ITAP project and presents a narrative, tables, charts and diagrams to presenting organizational facts as well as our observations and perceived implications. It is expected that the findings contained herein will be serve as a basis for discussions, the purpose of which being to reach agreement on how ITAP can best support the ministry in those areas that are within ITAP's scope. From this consensus, a Joint Work Plan will be formulated outlining ITAP's scope and specific support activities. This will include sequencing, project resource requirements, and milestones for verifying that the project is achieving the desired results.

We would once again caution that the observations, implications and commentary herein is based on extensive discussions and reviews of documents and other available information. In almost all cases, corroborating evidence or facts, though it may sometimes be anecdotal, has been taken into consideration in preparing this report.

Finally, we would like to express our sincere appreciation for the warm reception we have received throughout the MOT. The enthusiasm and interest that has been shown indicates that despite the many challenges, there is considerable potential and energy that with effective training, mentoring and coaching can be transformed into improved performance and sustainable growth in capacity at the MOT.

Section 2 Cross Cutting Institutional Issues

2.1 Introductory Comments

This report is organized into five key sections that closely correspond with the main SOW focus areas. These are:

1. Trade Research and Development Agency (TREDA)
2. Inter-Agency Trade Framework: Coordinated by the Directorate General of International Trade Cooperation (DGITC)
3. The Public-Private Sector Dialogue on Trade
4. Legal Bureau
5. Information Technology and Data Processing

In addition to the comprehensive analyses of these functional areas, in this section we look at those issues that transcend organizational structures: management and human capital. During the course of the work to produce this report, it has been clarified by the MOT that issues pertaining to organizational design, remuneration, performance management and related issues should not be the focus of ITAP. However, as the SOW presented specific tasks in each of these areas and understanding such issues is key to understanding how MOT operates. Per our discussions with MOT leadership however, we do not intend to focus on addressing these issues unless requested to do so.

2.2 Management - Observations and Implications

Observation 1 MOT's strategic direction is coming into increased focus. MOT's recently revised vision and mission are clear and provide strategic-level guidance to the MOT's DGs. However, the additional strategic planning documents that were provided to ITAP appear to be less useful as management tools to define, monitor and measure organizational outputs and outcomes. While some DGs have delineated priority organizational outputs, most have not and none appear to have qualitative and quantitative goals that are specific, measurable, achievable, relevant and time-bound ("SMART") against which to objectively monitor performance.

Implication Without goals and objectives that meet the "SMART" test, whether at the organizational or personal level, planning will be ineffective and will likely become a routine, bureaucratic process that does little to stimulate performance.

When things are measured, they are more likely to get done. Many of the MOT's goals are at the macro level and may be difficult to measure accurately or timely. Still, many specific metrics for activities that are critical to achieving the broader measures of success can be identified.

Developing an organizational culture that focuses on results requires both top down and bottom up planning. For strategic planning to be really useful, it must follow a systematic framework that incorporates the basic "SMART" elements.

Observation 2 The institutional environment under which the MOT operates imposes significant hurdles to achieving positive change.

Numerous regulatory or administrative restrictions that apply generally to government organizations make it difficult for the MOT to significantly improve operational efficiency and effectiveness. Strict and relatively inflexible

Implication Overall, the institutional environment imposes a heavy burden on the MOT by limiting the scope for organizational change, resource flexibility, and an incentive driven culture that recognizes and rewards performance and desirable behavior.

With many of these issues beyond the control of the MOT, the capacity of ITAP to encourage and

personnel regulations severely limit the efficacy of traditional performance management and evaluation techniques as a major factor in determining employee remuneration and advancement.

The Ministry's organizational structure, controlled by MenPAN, adheres to the institutionalized concepts span of control without taking into account a basic tenet of strategic management that form follows function. As long as bureaucratic approval to change organizational structure takes a year or more to obtain, inefficient work-arounds will continue to be employed.

Equally as challenging to creating a more responsive MOT is the apparent way in which budgets are approved and controlled by the Ministry of Finance for individual operating units, making it difficult to reallocate funds internally within the MOT without significant effort..

Observation 3 In our meetings with MOT leaders, changes to the MOT's organizational structure do not appear to be a major concern except in a couple of areas: separating the Public Relations function from the Bureau of General Affairs and eventually establishing the Information Technology/Data Processing Center as a separate unit from TREDa. Neither change appears imminent due to the constraints on organizational change noted previously.

During meetings throughout the MOT, it was also noted that there appears to be some overlapping of activities focused on the SME sector. However, we have not yet developed sufficient information to identify all of the areas of overlap or to develop any conclusions.

It is also our understanding the legislation is forthcoming that will split the functions of CoFTRA between the Ministry of Finance (MOF) (or an independent board coordinated by the MOF) and the MOT.

Observation 4 The creation of an Executive Secretariat and raising the status of the Legal Bureau to that of a Directorate General are in any case organizational decisions that are the sole prerogative of the MOT and not ITAP.

These are not objectives that ITAP can be realistically expected to pursue.

support reforms will be limited. However, it is expected that as ITAP becomes more familiar with the rules and how/if other organizations have found ways to deal with these issues, we may be able to identify some achievable opportunities for institutional reforms that will contribute to creating a more efficient, effective, transparent, and performance-based organization.

While GOI regulations prohibit many potentially useful changes, limited flexibility appears to be allowable when budgets are not affected. As precedent exists for making 'unofficial' changes and then seeking formal recognition of the change after showing that they work, this may be the most effective, albeit time consuming, way to bring about desired changes.

Implication Issues relating to organizational structure are complex, sensitive and require a thorough understanding of the institutional and regulatory environment. Therefore, ITAP will not include any significant activities focused primarily on MOT organizational restructuring in the first work plan. The issue may be revisited at a later date following discussions with the MOT and USAID.

The ITAP Scope of Work and Contract will need to be modified accordingly.

Implication ITAP will provide diagnostic and advisory help, training and capacity building, and whatever support is specifically requested by the MOT in the area of organizational design and development but will not pursue these issues.

The ITAP Scope of Work and Contract will need to be modified accordingly.

Observation 5 MOT’s organization culture and management systems appear to emphasize command and control with nominal consideration given to ways in which initiative and empowerment could be encouraged.

The message that we clearly heard from our meetings throughout the MOT was things cannot be changed and that the numerous laws, regulations, and restrictions limit the applicability of modern management concepts. There are no incentives for employees taking measured and informed risks while in fact, such behavior is discouraged and may be penalized.

It was also noted that there is a strong sense of formality within the MOT with some employees indicating they would not feel comfortable communicating with individuals above their level outside their assigned unit.

With few exceptions, there was little sense of the MOT being a service organization.

Implication Customer and service driven organizations rarely succeed without a strong organizational commitment to developing employees who are sufficiently empowered to exercise a defined level of discretion, initiative and creativity in dealing with their job responsibilities.

ITAP will stress the need for creating transparent, customer-centered public outcomes with all of its technical assistance activities. This will reinforce these core public sector values, and MOT’s renewed focus on outputs and outcomes, as much as possible throughout the Ministry.

Observation 6 It was frequently heard that the MOT aspires to become an effective, efficient, transparent, performance-based organization. It appears clear that these principles are being driven from the top of the organization and they are being heard. However, in practice, it does not appear that these principles are consistently applied throughout the organization or that beyond the rhetoric, there is much tangible reinforcement.

Implication To institutionalize values is a long, tedious process that requires consistent reinforcement emanating from the top and extending throughout the organization. Without a deliberate and conscientious effort to mold an organization, it is likely to have no overriding character and will take on the personality of individuals within the organization – individuals that may or may not represent the organizational ideal.

While the MOT’s mission statement states that it is to ‘provide responsive, efficient, accountable service to the public while demonstrating good governance,’ there is no tangible measures or recognition when this is or is not achieved. The mission statement therefore is at risk of becoming a bureaucratic icon without a soul.

Observation 7 MOT focuses on financial accountability over accomplishment.

The Inspector General’s office, a level one unit with responsibility for financial auditing, has one hundred and thirty employees including sixty auditors. The monitoring and evaluation division, a level three unit with responsibility for assessing the accomplishments of development projects, has seven employees who are said to have satisfactory attendance. Monitoring and

Implication Ensuring that financial controls are operative and effective in a large government ministry is of critical importance to ensuring accountability and compliance with mandated financial regulations.

However, significant sums are also spent on projects. It is therefore of equal importance that careful consideration and planning be given to such projects to ensure that project objectives are fully realized. Measurable performance criteria

evaluation units within DG secretariats also appear to be understaffed.

With few measurable project performance indicators, and with a regulation mandating that development projects must submit quarterly reports pending, the Ministry's focus appears to be primarily on financial control and significantly less on determining the effectiveness of projects.

and other elements of the "SMART" model referred to above can help ensure that transparent, performance-based quantitative and qualitative objectives are established and project funds are not wasted.

Observation 8 Although MOT building one is currently undergoing renovations, it will be demolished after the new building is constructed.

While the current lack of space at the MOT affects all personnel, ITAP is appreciative for the effort that has been made to provide office space for our TREDAs and Legal Bureau advisors.

Implication Developing the IT infrastructure and procuring IT hardware is a major component of the ITAP project. However, it may be desirable to program a significant portion of project funds in the third year to provide support or equipping and furnishing a new data center.

However, until a project office can be found within the MOT that will accommodate ITAP short-term experts, administrative personal and the COP, coordination and communications with and within the ITAP project will be problematic.

Observation 9 Decentralization has resulted in the transfer of responsibility for many of the MOT's regional offices to the regional authorities. While some exceptions do exist, NAFED for example, the MOT still has substantial responsibility for providing support and information to these offices.

Implication Electronic communications, better information technology resources, and an effective communications and public relations program will enhance the MOT's ability to provide timely and relevant support to regional offices and other remote locations that are involved in activities under the MOT.

Observation 10 During introductory meetings throughout the MOT, meeting participants were both welcoming and forthcoming in identifying areas where ITAP could possibly be of assistance. Unfortunately, the needs are many, some of the areas may be beyond the scope of the project and some areas may already be receiving support from other donors.

Implication ITAP's primary focus will be on those specific areas noted in the final Joint Work Plan. Requested support in areas where other donors have an active presence or interest will be referred to them for consideration to ensure effective donor coordination and minimal overlap.

While the ITAP Joint Work Plan will establish project activities for 2006-2008, it is expected that there will be sufficient flexibility built in to enable ITAP to respond to important priority needs as they emerge.

2.3 Human Capital

Observation 1 While MOT has many hardworking and dedicated employees, human capital is generally under-utilized and under-qualified.

It has been consistently reported during our

Implication It is unclear whether any really effective remedies are available to the MOT. In any case, this issue is of considerable sensitivity and will continue to undermine successes if it is not addressed.

meetings throughout the MOT that the majority of the work load is handled by a percentage of employees that varies from averages below 50% of the total staff. While these employees often work long hours, others are often underutilized. The Personnel Bureau estimated that up to 40% of employees come to work infrequently. This percentage varies among DGs and bureaus, with some having found ways to encourage higher levels of employee attendance.

It was noted that this situation can adversely affect the morale and efficiency of employees who do have a commitment to the MOT. While a number of explanations have been heard including some financial and others psychological, the inability of the MOT to effectively deal with this issue will continue to have a range of negative effects on the MOT's performance.

The past decade has seen a marked shift in international public sector standards and practices. While public sector employees have often enjoyed a high level of job security and were rarely subjected to strict performance management practices, today, a significant number of countries have adopted private sector practices including demanding performance evaluations, strict disciplinary procedures and layoffs to improve efficiency and greater effectiveness in serving the general public.

While it is recognized that comprehensive solutions to these problems lie outside of the MOT, there should be no hesitancy in acknowledging such problems exist, documenting the extent of the problem, and experimenting with creative solutions in anticipation of the day when Indonesia's declining international competitiveness compels that a solution be found.

Observation 2 Although training is a high priority throughout the MOT, many training needs remain.

Every single DG and bureau with whom we have met identified training as a high priority issue. Specific technical training as well as basic IT skills and English frequently were requested. While various units spoke favorably of the management and administrative courses provided by the Center for Education and Training, it was felt that technical training would need to be sourced from external providers such as universities, the WTO and other experts.

The lack of on-site training facilities makes it difficult to integrate training into the regular work week while key individuals find it difficult to be away from the office to attend extended off-site training activities.

Implication ITAP training programs will focus primarily on courses and programs that will address the needs of TREDAs, the Legal Bureau, and information technology throughout the organization. ITAP will also support English training and other specific programs on an as needed basis as priorities dictate and resources permit.

We understand the need and logic underlying the use of off-site, residential training. However, there is substantial anecdotal evidence that on-site facilities and training for periods of from ½ day to two days serves an important training need. Additional research and supporting rationale will be provided to the MOT at a later date.

Observation 3 The MOT's restrictions on staff recruitment which have been in effect for ten years will end in 2006 with an intake of approximately three hundred university graduates. These employees were 'assigned' to MOT by BKN and the first batch start work in April with a subsequent intake expected in October.

Implication The addition of a significant number of new employees presents the MOT with both opportunities and challenges.

It can be expected that new employees will arrive with a fresh outlook, inquisitive minds, and a desire to establish a sound career. If the orientation and initial training are handled effectively, these employees can become the vanguard for change in the MOT. They will also be better prepared to assume increasingly responsible roles as up to thirty percent of MOT personnel will reach retirement age over the next four years. Equally

important is that all MOT supervisory staff devote significant attention to meeting, coaching, and guiding the new employees.

Should the orientation and on-the-job-training not be implemented well, the new employees could quickly develop negative attitudes, adopt bad habits, and become disillusioned.

Observation 4 Existing DP3 employee evaluations lack technical, job-specific evaluation factors.

All employees are evaluated yearly, by their managers, using BKN's DP3 evaluation form. This standardized form, used for all employees, assesses employee loyalty, performance, responsibility, responsiveness, honesty, cooperation, initiative, and leadership. These factors do little to assess unit- or job-specific technical skills and/or individual training needs. Also, we understand that for cultural reasons, managers almost always give all of their employees high scores. Evaluation results are not tied to increases in pay or rank.

Implication Creating a service driven organization depends on having employees who are well trained and motivated. Aside from the innate motivation that drives some people, most individuals require some type of extrinsic incentives to internalize the behaviors that are generally associated with good employees in a performance driven organization. For incentives to work properly, they must be administered objectively and systematically. Performance based management and evaluation systems are the best way to do this.

However, in the rigid, rule-based system that currently exists throughout the Indonesian civil service, this performance management does not appear to be an option.

Until such time as the information can be identified that shows that alternatives to the BKN system can be used, ITAP will not include anything related to this in its Joint Work Plan.

The ITAP Scope of Work and Contract may need to be modified accordingly.

Observation 5 Performance incentives are limited, non-existent or not-transparent and almost never aligned to objectively assessed achievement of personal performance goals and objectives.

Employees unanimously spoke of the lack of incentives to do their jobs well. The primary benefits, such as job security, health care coverage, and pensions are essentially guaranteed regardless of how well or poorly the employee performs.

While opportunities for training, promotions, or overseas postings do provide some limited incentive, the scope, frequency and applicability of these incentives are insufficient. Those who are recognized to be dedicated and good performers seem to be motivated by the personal pride that comes from a job well done and the prospect of receiving an honorarium.

Implication The issue of performance incentives and honorariums are clearly as important as they are sensitive – and the system is unlikely to change much until there is comprehensive civil service reform.

Therefore, ITAP will not have any involvement in this area without specific requests from the MOT.

The ITAP Scope of Work and Contract may need to be modified accordingly.

Observation 6 Approximately 30% of the MOT's employees will reach retirement age within five years and 55% within ten years. On average, this will mean that approximately 100+ employees will retire annually over the next several years. Less than 10% of MOT's current employees are under 35 years of age.

Retiring employee's experience and skills must be replaced to avoid potentially crippling gaps in experience and knowledge.

If the MOT is prepared to challenge the system, this situation would also seem to provide a clear and substantial justification for seeking modifications to civil service rules that will permit objective performance management systems to be implemented, incentive systems to be modified, and fast tracking promotions.

Implication An inventory of scheduled retirees with detailed profiles about their experience and job responsibilities is needed to help to identify the most urgent training needs.

While formal training will be an important response to this situation, on the job training, planned job rotation, and mentoring/ coaching/ apprenticeship type training will also be important to providing employees with the practical and MOT-specific knowledge to take on additional responsibilities.

Consideration may also be given to increasing the use of "functional staff" to fill experience gaps while "structural staff" are groomed. (see Jabatan Fungsional and Jabatan Struktura in Organizational Terms for an explanation of the difference). In addition to temporarily filling strategic positions vacated by retiring officials using experienced professionals, individuals could be selected who would also help bring about the cultural changes that are needed to improve organizational efficiency and accountability.

Observation 7 Many of the MOT's echelon one and two employees have received post-graduate degrees from overseas universities. They are therefore committed to the belief that such training is a critical element in training the next generation of leaders. Overseas training is believed to provide not only a high standard of academic knowledge, but long-term exposure to different economic systems, cultures, and values—all of which are important to developing the perspective and real world knowledge that analysts as well as policy makers require.

Implication ITAP will need to examine the feasibility of supporting overseas degree training programs as direct support for degree programs is not included in contractual Scope of Work or budget.

As an alternative to sponsoring overseas degree studies, ITAP may be able to reprogram some funds intended for short-term training programs to support a potential MSc degree program in trade policy that has been discussed with the University of Indonesia. Preliminary discussions have been held with the Dean of the Faculty of Economics and Head of the Department of Economics.

Section 3 Trade Research and Development Agency (TREDA)

3.1 Summary of Findings

1. TREDA prepares the analytical foundation for solid policy-making
 - TREDA plays a constructive role in trade policy making by preparing the analytical foundation for sound decision-making.
2. TREDA has a Shortage of Qualified Personnel
 - TREDA does not have a sufficient number of qualified personnel available to prepare the analyses and reports it must submit to its clients within the Ministry.
3. TREDA Staff Members Need Training in Technical Skills and Trade Subjects
 - TREDA staff members need additional training in fundamental macroeconomic, statistics and economic modeling concepts and skills, as well as technical drafting skills.
 - TREDA staff members need additional expertise on specialized market issues, competitiveness and WTO subjects, including newly emerging issues in order to produce quality work.
 - TREDA can play a leadership role in encouraging MOT officials to make sound policies based on accurate understanding of economic data.
 - TREDA needs to improve its capacity to anticipate emerging issues and the flexibility to respond to new issues on shorter notice.
4. MOT Training Center and Other Private Training Resources Could Help
 - TREDA needs to enlist the support of the MOT Training Center and other Indonesian institutions in the development of its staff.
 - The MOT Training Center could more effectively support TREDA if its own professional capacities were improved.
 - Having more staff members with advanced degrees in related subjects would enhance TREDA's work product and efficiency.
5. Expansion of TREDA Strategic Planning for Personnel Development and Utilization Could Help
 - TREDA needs to be more strategic in hiring, training and utilizing staff members and training resources in order to maximize the quantity and quality of its work.
6. Private Institutions Can Provide Stop-Gap Support While Capacities are Developing
 - Support from private sector economists enables TREDA to perform essential duties while developing its staff.

3.2 Introductory Comments

The Government of Indonesia (GOI) has an unusually busy trade agenda at this point in history. While still addressing the challenges of implementing the World Trade Organization (WTO) Agreements arising from the Uruguay Round, the GOI is fully engaged in the complexities of the five-year old Doha Development Agenda Round of WTO negotiations on Agriculture, Non-Agriculture Market Access, Services, Rules and other issues as well, and ongoing bilateral and regional negotiations with China, Japan, the Association of Southeast Asian Nations (ASEAN) and the Asia Pacific Economic Community (APEC). The GOI also is considering bilateral Free Trade Agreements (FTA) with Australia and the United States.

New issues on the international trade policy agenda include development, trade facilitation, investment and deepened intellectual property disciplines, as well as sectoral regulatory agreements on services in the bilateral FTAs.

All of this means that the trade policy responsibilities of the Ministry of Trade (MOT) are more extensive, more complex and more novel than they have been in decades. MOT trade policy makers are looking to the Trade Research and Development Agency (TREDA) to provide accurate data and sophisticated projections needed to make sound policy choices. The MOT will be relying on the Directorate General for International Trade Cooperation (DGITC) to counsel the Minister on appropriate policies and negotiating positions, as well as to coordinate the inter-agency negotiating team. The Indonesian business community (exporters, importers, domestic producers and consumers) is looking to the MOT to represent all their interests.

To further complicate matters, historical hiring peaks and valleys at the Ministry will result in the retirement of most of the Ministry's leadership and a third of its employees within the next four years. For the first time in ten years, the Ministry has begun to hire significant numbers of new employees, most of whom will have not have advanced degrees in trade policy or established expertise in trade issues. This, along with flexible assignment practices, allowing individuals to shift from one DG to another, means that the Ministry needs to provide training opportunities across the board to all its professional employees working in these areas, but also in depth training and education of some of its most qualified employees in specific areas in order to development a sufficient quality and quantity of subject experts needed for the Ministry to fulfill its mandate in these areas.

One of the challenges of this project will be to assist the Ministry to meet its function to conceptualize national policy, executing policy and technical policy in trade, and executing the governance accordingly, supervising its tasks, while helping it prepare for the departure of its most experienced personnel and the sudden influx of a large number of new employees. In addition to training the Ministry will need to upgrade its use of information technology and online data bases and needs significant increases in additional books and other reference materials related to the above tasks.

3.3 Overview

3.3.1 Mission

1. Preparing the formulation and analysis of strategy in the trade sector;
2. Conducting research and development activities in trade according to the regulations;
3. Formulating strategy, standardization, norms, guidelines, criteria, and procedures in the research and development of trade;
4. Providing technical guidelines and evaluation in trade research and development;
5. Providing guidance and development of trade application and data base, data analysis network and services;
6. Conducting Trade Research and Development Agency administration

3.3.2 Organizational Structure

Secretariat

TREDA Secretariat provides technical and administrative support for all other TREDA divisions. The duties of the secretariat encompassed planning, motivating, evaluation and programming of management and cooperation works of the Agency.

Foreign Trade Research and Development Center-FTC

FTC conducts policy research and policy development that mostly related to export and import issues; and programming of bilateral, multilateral, and regional trade cooperation.

Trade Data and Information Center-TIC

Trade Data and Information Center conducts coordination, guidance, and develop TREDA data base and data analysis as well as developing model of data analysis. It also builds up the trade data and information network system and provides data and information services for trade development stakeholders. The Trade Data and Information Center gathers appropriate data and information in several ways, that include:

- Literature search
- Deliberate networking
- Empirical research, including snapshot surveys
- Systematic collection of statistic
- Media searching

Trade Entrepreneurships Climate Research and Development Center-TECC

TECC conducts research and development that mostly relates to the policy development and formulation that is directly tied with trade climate such as: tariff and non-tariff policies, trade regulation and deregulation and policy planning of trade infrastructure.

Domestic Trade Research and Development Center-DTC

DTC conducts policy research and development that is related to policy, regulations, and institutions of domestic trade. This includes the preparation and provision of trade policy substances and recommendations as well as consumer protection. The issues managed by DTC are, among other: trade competition, consumer protection, entrepreneurship and empowerment and domestic strategic commodities distributions.

3.3.3 Personnel

TREDA has over one hundred and forty eight persons. Fifty five (36.5%) of whom have an Indonesian degree with thirteen holding economics degrees, five law degrees, three agricultural degrees, nine information technology degrees and nineteen political sociology degrees, ten international trade degrees, and the rest have degree in administration. An additional eighteen people (12.2%) have a Masters degree (mostly earned in Indonesia). There are two persons with PhD (1.4%) in TREDA, twenty people (13.5%) have diplomas and the rest have either senior high school (31.8%) or junior high school (4.7%) education.

Table 3.1 Total Persons with Level of Education by Unit in TREDA

Unit	PhD	Master	Degree	Diploma	Sr High	Jr High	Total
Secretariat	1	6	19	8	24	4	62
Domestic Trade Research Center	-	3	7	2	9	-	21
Foreign Trade Research Center	-	4	8	2	6	2	22
Foreign Trade Research Center	-	4	8	2	6	2	22
Business Climate Research Center	1	2	8	2	4	1	18
Trade Data Center	-	3	12	6	4	-	25
Total	2	18	54	20	47	7	148
(%)	1.4	12.2	36.6	13.5	31.8	4.7	100

3.3.4 Activities

The following list summarizes TREDA's funded projects over the last two years:

1. Technology Capability Improvement Program:
 - Making/collecting/processing/analyzing data and statistic
 - Study on competitiveness of several Indonesia's export commodity
 - Monitoring trade policies in several business partner countries
 - Information making on priority commodity

2. Export Development Program:
 - Publish magazine/journal
 - Functional training and education
 - RI delegation support to International conference
 - Institutionalization development
 - Recommendations on current issues settlement in trade field
 - Study on competitiveness of Indonesia non-agriculture product in International trade liberalization
 - Study on competitiveness of fishery and maritime products in International trade liberalization
 - Study on possibility of making FTA between Indonesia-Morocco
 - Study on technical obstacles towards Indonesia's export product in Australia
 - Study on facilitation policy for export improvement
 - Research and development of harbor facility in supporting export activity
 - Providing hard tool/data processor and other supporting equipment
 - Providing software/making of application program
 - Networking system development
 - Collecting/providing/processing data
 - Statistical data analysis for trade
 - Data and information service and distribution

3. International Trade and Export Import Cooperative:
 - creating FTA-Bilateral policy concept
4. National Distribution Development:
 - Research on retail development strategy in Indonesia
 - Research on effective and efficient goods distribution system nationally
 - Research on consumer behaviour analysis towards domestic product
 - Research on service trading
 - Potentials to be developed domestically
 - Compilation of technical plans on domestic trade research and development
 - Compilation of priority commodity information, and
 - Compilation of position papers.
5. Trade protection and security, it has research on technical application to monitor goods circulation/operation

In the report (TREDA Secretariat, 2005. *Performance Plan of TREDA Research and Development Agency 2005*. Trade Research and Development Agency Ministry of Trade), the TREDA's secretariat concluded that TREDA's performance plan 2005 was not carried out as was expected due to limited time to accomplish the project as well as limited human resources.

The study (TREDA Secretariat, 2005. Master Plan: TREDA Human Resource Development for 2009, paper presented in Bali, December 2005) recommended that TREDA needs a new recruitment staff during 2006 (19 persons), 2007 (22 persons), 2008 (20 persons) and in 2009 (21 persons). The report recommends that new recruits should have background in economics, agriculture, as well as information technology.

3.4 TREDA - Observations and Implications

Observation 1 TREDA plays a critical and primary role in at the MOT by collecting and evaluating data and presenting analyses that provide the foundation for making sound trade policy and policy decisions. Data analysis must be accurate, timely and complete to support policies and regulations that are based on factual and insightful analysis.

TREDA does not have authority to gather raw data in order to make trade policy analysis in the MOT. TREDA has to rely on external data sources, including the BPS (the GOI central statistical agency), and Customs data. When TREDA's clients come to it, TREDA currently has not ability to collect its own data. When it is forced to depend on BPS or Customs, it may not get the complete data it needs.

The DGs compile certain raw data, which they gather themselves. TREDA has no role in the development of this data.

Also, data collected and reported in the MOT is not cataloged consistently, and there are instances where the same data is reported and numbered at least three different ways. This makes cross-referencing difficult.

Observation 2 TREDA does not have a sufficient number of qualified personnel available fulfill all of its obligations and therefore private sector economists are used to supplement its research capacity. There is little to no functional subject matter specialization by personnel within TREDA.

It is recognized that TREDA must have at least one well-trained employee with expert knowledge and skills in the following key areas:

- Econometric modeling
- Economic analysis (supply and demand)
- Statistical analysis
- Trade defense injury analysis
- Dumping technical analysis
- Subsidy technical analysis
- Safeguard technical analysis
- Import tax analysis
- Export Tax analysis
- Quota technical analysis

Implication Without a strong capacity to collect and analyze data, including the potential impact of various policy options, TREDA will be unable to contribute to effectively to the policy dialogue.

TREDA will continue to rely on outside think tanks and academics for its analyses

The MOT may respond in an incomplete or incorrect manner to trade issues due to the lack of or inadequately researched policy options.

To help the rest of the MOT to recognize the value of TREDA data and analysis, a plan effort to coordinate its activities with those of other government research institutions should be considered.

Implication

- Analyses will not be completed on time
- The quality and completeness of research and analysis provided to policy makers will be insufficient.
- There will be a continuing reliance on non-MOT research organizations (universities, institutes and think tanks) and donor funded experts.
- The MOT may be unable to respond to trade issues effectively and in a timely manner.
- Important economic sectors might be neglected due to the lack of analysts familiar with the relevant issues.
- Staff development would be enhanced through cross training and mentoring provided by subject matter experts.
- On the positive side, the use of non-MOT research organizations provides TREDA with the temporary ability to redirect its internal staff to development activities and training
- TREDA will not be able to supply the

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Welfare analysis (impact of policy; gains and losses) • Basic policy change analysis • Input / Output analysis | <p>necessary technical analysis in dumping, subsidy or safeguard cases.</p> <p>Training programs will need to be identified that are directly relevant to the responsibilities of MOT personnel and take into account existing levels of expertise. Such programs should be presented professional, cost-effectively and with attention to participant selection and commitment achievement to ensure objectives are met and sustainable results achieved.</p> |
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Observation 3 TREDA staff members need intermediate or advanced training in:

- International economics
- Macroeconomics
- Trade policy
- Statistics
- Economic modeling theory and practice
- Technical drafting
- Analytical skills to reconcile conflicting data, translate raw data into projections and make recommendations based on appropriate mix of fact and policy.
- Data-gathering skills such as doing research on the internet and learning where to find data collected by other GOI agencies.
- Use of data from the Global Trade Analysis Project (GTAP), SAS, SPSS, E-View (for trade policy analysis) and the Computable General Equilibrium Model.

Implication

- Research will lack academic rigor
- Research will be cursory and will not reflect the depth necessary to effectively consider all policy options
- Analyses will not effectively evaluate all aspects of issues
- All issues will not be recognized and therefore analyses will be incomplete
- The consequences of policy actions will be inadequately understood and forecasts of impact will be inaccurate
- Policies will be reactive rather than proactive
- Reports will not be written in a succinct, readable form.

Lecturers with substantial expertise will need to be sourced from both domestic and international educational organizations to ensure effective presentation and learning. Consideration and planning has already started on how best to provide high level training needs in these areas, including development of customized academic degree programs.

Observation 4 TREDA does not have adequate expertise on the issues related to international trade. It lacks broad substantive experts in areas such as WTO or ASEAN or sub-areas therein such as services or TRIPs. It also lacks sectoral experts in areas such as agriculture or manufacturing.

TREDA staff members need additional expertise on issues related to international trade including:

- specialized market issues (ASEAN or

Implication TREDA researchers will be unable to:

- produce analyses of specific sectoral issues of importance to Indonesia.
- effectively evaluate Indonesia’s competitive advantages in products or markets; and
- will be unable to produce reports and analyses on WTO subjects with the depth and perspective required by the MOT.

In addition to traditional classroom learning,

- bilateral), competitiveness (by sectors); and
- WTO subjects¹, including newly emerging issues such as competition policy.
- distance learning, CD-ROM based learning programs, and practitioner-led learning will be explored.
-

Observation 5 The quality of written output from TREDAs has been noted both by TREDAs and other MOT units to occasionally be below the standard desired in terms of communicative effectiveness due to a combination of writing skills, time limits, human resources, and presentation formats.

Implication The full value of the work done by TREDAs's researchers may not be realized due to ineffective communications based on inadequacies in writing skills, time, personnel and formats.

In addition to training in the technical skills needed to prepare analyses and projections, programs to develop report-writing skills, language and composition training, editorial mentoring, and the creation of appropriate templates for standard reports may also be helpful to develop the desired skills.

Observation 6 The need to improve verbal and written communication involving TREDAs's technical staff (statisticians and economists) and other non-technical personnel within and outside of TREDAs has been noted. Lower level staff frequently are not involved in the thought processes of research, but are used to support the higher echelon people in TREDAs. They are frequently used more for typing and document gathering than for actual analysis. These people need to be trained – and then involved – in the full research process, so that all of the staff share a common understanding of their role.

Implication Misunderstanding, wasted time and effort, inefficiency and frustration can easily occur from miscommunications resulting from differing assumptions, perceptions, points of reference, etc.

Another aspect of training for TREDAs staff at all levels is to develop communication skills, so that they are able to communicate complex research results to their clients, who are not trained researchers.

Observation 7 TREDAs should play a more proactive leadership role in anticipating emerging issues and developing an enhanced capacity to produce analyses, analytical materials, and forecasts based on an awareness of global

Implication Policy makers will be better prepared, have a broader perspective, and a deeper understanding of issues and events which will enhance their capacity to administer and develop more enlightened trade policies in a

¹ WTO Agreements; Trade in Goods, Agreement on Agriculture, Sanitary and Phyto-Sanitary Measures, Technical Barriers to Trade, Trade-Related Investment Measures, Anti-Dumping, Customs Valuation Methods, Rules of Origin, Import Licensing Procedures, Subsidies and Countervailing Measures, Safeguards, Trade in Services, Intellectual Property Rights, Dispute Settlement, Trade Policy Review Mechanism, Government Procurement.

Source: *United States Government Initiatives To Build Trade Related Capacity in Developing and Transition Countries*, Page 3, Summary Report, Prepared by the United States Agency for International Development (USAID) October 2001

economic events, a comprehensive understanding of economic data and skilled use of available analytical tools. On key issues that are of obvious importance to Indonesia (*e.g.*, rice imports), TREDA has not been proactive in preparing research before an urgent issue arises. As a consequence, TREDA has not always anticipated key demands and thus could not perform certain research tasks on a timely and thorough basis.

timely manner.

While the goal is to develop true subject matter experts, additional consultation will be needed to determine how broadly or narrow subject training should be and how much time individuals can devote to intensive training over an extended period of time and whether greater specialization in day-to-day responsibilities is possible.

Observation 8 It has been indicated during initial discussions that not all users (typically the DGs) of TREDA’s work product fully utilize the information produced due to insufficient knowledge of international economics and statistics. Officials in the DGs do not appear to be sufficiently trained in these disciplines. Often, users are said to be unable to effectively articulate their information requests to TREDA or do not know how to use the information TREDA provides.

It has been noted that the more knowledgeable TREDA clients are, the more effective TREDA will be in satisfying their requirements. Sensitizing clients to the ways in which TREDA could be supporting them will encourage communication between TREDA and the policy and negotiating units while also helping TREDA monitor upcoming issues.

Implication With user requests that are more specific to their actual needs, and with users who have a clearer understanding of the data or analyses they require to address their implementation and/or policy concerns, the communications process with TREDA will be enhanced and work efficiency and effectiveness should be enhanced. The overall quality of forecasts, analyses and other work produced by TREDA is likely to improve thereby contributing to better trade policy.

It may be appropriate to identify personnel from throughout the MOT who use TREDA data or analyses and would benefit from attending courses on statistics, economic modeling and the how trade data should be used policy formation. Other programs may need to focus on improving communications and presentation skills.

An effective feedback system will also be very helpful to determine how effectively TREDA is meeting its clients needs and where targeted training may be beneficial.

Observation 9 TREDA has limited flexibility to respond to emerging issues due to the current practice of setting the research agenda twelve months or more in advance.

It is understood that due to rigid budgeting procedures, it can be administratively difficult to shift resources to subjects of greater current interest even when planned research issues are no longer a priority. The budget for “current issues” limits the amount of effort that can be spent on issues that arise during a budget year.

The selection of research topics would benefit from close collaboration with the MOT’s trade-oriented DGs, and from helping them maintain familiarity with forthcoming issues such as WTO agenda items and other major negotiations.

Implication Without the flexibility to respond in a timely manner to emerging issues, policy makers may:

- lose confidence in TREDA.
- be required to rely on outside support.
- be unable to take appropriate action on an issue.
- may be caught unaware of a critical issue

In addition, valuable research resources may be expended on research that is no longer of importance.

Development of an early warning system where TREDA can be alerted to emerging issues in time to adjust its work plans will serve the needs of both its clients and TREDA.

Observation 10 TREDA does not take full advantage of the training that can be provided by the MOT Training Center and other Indonesian institutions in the development of its staff.

Implication

- Available training opportunities are not being maximized.
- MOT Training Center resources are underutilized.
- Personnel do not receive the amount of training that is needed to develop their skills over the long term.
- Personnel need to be provided with opportunities to apply the knowledge they have gained from training opportunities in their jobs or the knowledge will be lost.

While the Training Center has conducted a training needs analysis, attention to curriculum development, resource management and development of a strategic plan that prioritizes internal MOT training will need to be considered.

Observation 11 TREDA does not have adequate numbers of personnel with advanced degrees. As the research center of the MOT, it is important that TREDA have staff who bring academic rigor, intellectual curiosity, and expert knowledge to the respective positions. To achieve this, it is recognized that more well-qualified staff with advanced degrees in relevant subjects would enhance TREDA's work product and overall effectiveness.

Implication Without sufficient numbers of academically well qualified staff:

- TREDA may be unable to undertake some research activities.
- Research activities may not incorporate the most recent theories, practices or findings.
- Research may lack depth, perspective and overall quality.
- Staff mentoring and cross-training will be impaired.

Observation 12 Electronic accessibility for all MOT trade-related economic data and research to MOT employees has not been realized. DGITC has the most information, but other resources are still lacking.

Implication

- Dissemination of information can be significantly improved.
- Greater access to information resources usually results in more informed users and decisions.
- Work efficiency and productivity can be expected to improve.

Section 4 Inter-Agency Trade Framework: Coordinated by the Directorate General of International Trade Cooperation (DGITC)

4.1 DGITC Overview

4.1.1 Mission

- To formulate policies to encourage international trade cooperation in order to increase market access and to eliminate trade barriers for Indonesian goods and services.
- To develop international trade cooperation through multilateral, regional and bilateral trade negotiations.

4.1.2 Organizational Structure

Multilateral Cooperation

Multilateral Cooperation conducts policy formulation for multilateral trade cooperation, increasing market access of goods and services, intellectual property rights, and new trade issues. It formulates criteria for multilateral trade negotiation and cooperation, technical supervision of negotiations and trade cooperation, and evaluation.

Regional Cooperation

The main tasks for the unit Regional Cooperation is the same as the main tasks for the multilateral cooperation except for the regional trade agreements such ASEAN and APEC.

Bilateral Cooperation

The main tasks for the unit Bilateral Cooperation is similar to the main tasks for the multilateral cooperation unit but for the bilateral issues i.e policy formulation for bilateral trade cooperation, increase market access goods and services, intellectual property right, new trade issues. It formulates criteria for bilateral trade negotiation and cooperation, technical supervision of negotiations and trade cooperation, evaluation. Bilateral Cooperation I consists of East Asia, Southeast Asia, Australia and Pacific, North and South America, meanwhile Bilateral Cooperation II consist of Europe, Africa, West and South Asia region.

Trade Defense

The main tasks of trade defense unit are to defend Indonesia trade interests in anti-dumping, and anti-subsidy and safeguard proceedings. There are over one hundred and twenty such cases, with twenty-five new cases against Indonesia filed in 2005 alone.

Secretariat

The DGITC Secretariat provides technical and administrative support for all other DGITC divisions. The duties of the secretariat encompass administration, human resources development, planning, budgeting, and technical support services.

4.1.3 Personnel

The DG ITC has over two hundred and twenty people. Eighty five (40.45%) DGITC people have both overseas and Indonesian bachelor degrees. An additional 33 people (15%) have a Masters degree, mostly earned in Indonesia. There are two people with PhD (0.91%) in the DGITC, 20 persons (9.09%) have diploma and the rest have either senior high school (25%) or junior high school/elementary school (11.34%).

Table 4.1 Total Persons with Level of Education in DGITC

Education Level	Total	Percentage (%)
PhD	2	9.09
Master's Degree	33	15.00
Bachelor's Degree	85	40.45
Senior High School	55	25.00
Junior High School/Elementary	5	11.34
Total	220	100.00

4.1.4 Activities

The list of negotiating activities that have been done by the Directorate General of International Trade Cooperation and the Inter-Agency Trade Framework are as follows:

1. ASEAN Agreements: EEE regulatory Scheme, MRA Engineering, MoU concerning Cooperation on Standard and Conformance, and ASEAN Single Window
2. ASEAN-China included Tariff Barrier to China, and a Framework Agreement
3. ASEAN-India is a Framework Agreement
4. ASEAN-Japan is a Framework Agreement
5. ASEAN-Korea is a Framework Agreement, Agreement on Dispute Settlement Mechanism, and Agreement on Trade in Goods
6. Indonesia-APEC
7. Indonesia-WTO included MoU of Goods of Origin (RoO), Final Act Uruguay Round, Marrakesh Protocol, Pre Shipping Investigation (PSI), Customs Valuation Agreement, Subsidy and Countervailing Measures Agreement, Technical Trade Barrier Agreement, TRIPs Agreement, License Import Procedures Agreement, Marrakesh Agreement, Agriculture Agreement, Anti Dumping Agreement, Safeguard Agreement, Textile Agreement (ATC), Human, animal and plant protection agreement (SPS) Agreement, Legal action settlement (DSU) Agreement, Trade policy observation mechanism (TPRM) Agreement, RTA Agreement, Trade Related Investment Measures (TRIMS) Agreement, General Agreement on Trade Services (GATS) Agreement and General Agreement on Trade and Tariff (GATT) 1994 Agreement.
8. Bilateral Agreements included Trade-Cross Border optimally between Indonesia-Malaysia, Philippines, Papua New Guinea, Timor Leste, and China-Indonesia.
9. Trade Defense.

4.2 Inter-Agency Trade Framework (IATF)

4.2.1 Overview

1. Significant Structural Changes in the Inter-Agency Trade Process are Not Necessary
 - The Inter-Agency Trade Framework led by DGITC is fundamentally sound.
2. DGITC and other MOT Staff, as well as the Inter-Agency Negotiating Team Need to Further Develop Their Subject Matter and Professional Knowledge and Skills
 - The DGITC and Members of the Inter-Agency Trade Negotiation Team need greater expertise on macroeconomic concepts, international trade law, and WTO subjects.
 - All MOT employees would benefit from a greater degree of knowledge about trade related macroeconomic and legal issues and WTO subjects.
 - The DGITC and Members of the Inter-Agency Trade Negotiation Team need greater expertise on negotiation theory and practice.
3. The Trade Negotiation Team, including its leadership in the DGITC, needs to improve its effectiveness as a unit.
 - The DGITC and the Trade Negotiation Team are still in the process of establishing their roles and relationships, which could be strengthened.
 - The DGITC and members of the Inter-Agency Trade Negotiation Team need to improve their language skills and IT capacities to communicate with their negotiating partners and each other.

4.2.2 Mission

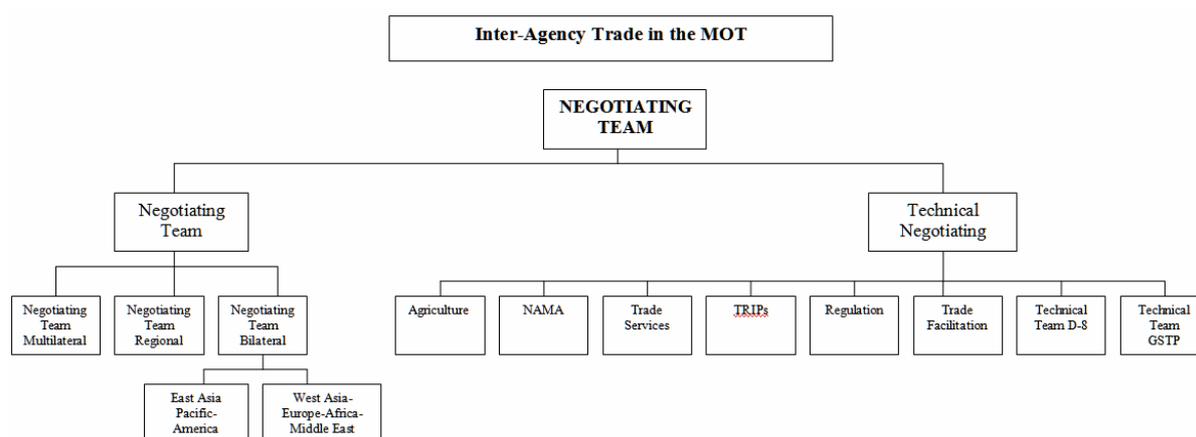
Responsible for formulating trade policy, taking account of various agencies interest leads by the MOT. This Interagency Negotiating Team draws upon the respective ministries according to the trade topic and coordinates with these interested bodies when responding to trade related questions, issues, negotiations, etc., as needed to advance the Indonesia's national interests.

4.2.3 Organizational Structure

The Inter-Agency Trade Framework in the MOT comprises two main teams: (1) negotiators team focused on International cooperation issues divided by multilateral-WTO, UNCTAD, Technical Team for Global System of Trade Preferences (GSTP), Technical Team for D-8 (Development-8 region consisting of eight muslim countries-Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan and Turkey), regional, Bilateral I-East Asia Pacific, Bilateral II-West Asia, Europe, Africa and Middle East; and (2) technical negotiator team focused on issues by sector divided agriculture, NAMA (Non-Agriculture Market Access), Trade services, TRIPs (Trade Related to Intellectual Properties) , Trade Regulation, Technical Team D-8, and GSTP (see Chart 4.1).

On the negotiator team, IATF has sixty persons comprised of senior officers from the Ministry of Trade, Ministry of Agriculture, Ministry of Industry, Ministry of Finance, Ministry of National Human Right, Ministry of Foreign Trade, Ministry of Cooperatives & Small Medium Industry and BAPPENAS. Meanwhile, on the technical negotiator team, one hundred and forty seven persons have been involved in the IATF.

Chart 4.1 Organization Chart for the Inter-Agency Negotiating Team



4.2.4 Personnel

The IATF has over one hundred and forty seven people working with nine different groups, including technical teams. The assignment of personnel is shown in Table 4.2 below.

Table 4.2 Total Persons Involved in the Technical Negotiator Team by the expertise in IATF

Expertise	Total	Percentage (%)
Agriculture	23	15.65
Trade in Services	35	23.81
Non Agricultural Market Access (NAMA)	16	10.88
Environment, Special Differential and Implementation	9	9.12
TRIPs	11	7.48
Trade Regulation	10	6.80
Trade Facilitation	5	3.40
Technical Team D-8	21	14.29
Technical Team – GSTP	17	11.56

4.2.5 Activities

The list of negotiating activities that have been done by the Directorate General of International Trade Cooperation and the Inter-Agency Trade Framework are as follows:

- ASEAN Agreements: EEE regulatory Scheme, MRA Engineering, MoU concerning Cooperation on Standard and Conformance, and ASEAN Single Window.
- ASEAN-China included Tariff Barrier to China, and a Framework Agreement.
- ASEAN-India is a Framework Agreement.
- ASEAN-Japan is a Framework Agreement.
- ASEAN-Korea is a Framework Agreement, Agreement on Dispute Settlement Mechanism, and Agreement on Trade in Goods.
- Indonesia-APEC.
- Indonesia-WTO included MoU of Goods of Origin (RoO), Final Act Uruguay Round, Marrakesh Protocol, Pre Shipping Investigation (PSI), Customs Valuation Agreement,

Subsidy and Countervailing Measures Agreement, Technical Trade Barrier Agreement, TRIPs Agreement, License Import Procedures Agreement, Marrakesh Agreement, Agriculture Agreement, Anti Dumping Agreement, Safeguard Agreement, Textile Agreement (ATC), Human, Animal and Plant Protection Agreement (SPS) Agreement, Dispute Settlement Agreement (DSU), Trade Policy Review Mechanism (TPRM) Agreement, RTA Agreement, Trade Related Investment Measures (TRIMS) Agreement, General Agreement on Trade in Services (GATS) Agreement, and General Agreement on Trade and Tariff (GATT) 1994 Agreement.

- Bilateral Agreement included Trade-Cross Border optimally between Indonesia-Malaysia, Philippines, Papua New Guinea, Timor Leste, and China-Indonesia Sign Joint.
- Trade Defense.

4.3 Inter-Agency Trade Framework – Observations and Implications

Observation 1 The Inter-Agency Trade Framework led by the Directorate General for International Trade Cooperation (DGITC) although new, is fundamentally sound, but may need assistance to develop.

Most countries with successful trading relations feature a centralized unit within the government that is responsible for formulating trade policy, taking into account the interests of all relevant stakeholders. The GOI has recently established an Interagency Negotiating Team to fulfill this purpose with the MOT's Directorate General for International Trade Cooperation as its lead agency.

After discussions with the DGITC, it seems that the essential elements of a sound interagency process have been successfully established. The inter-agency members of the team have been identified, and they appear to be clear about their respective roles reasonably well.

The DGITC has pointed to three aspects of its work that would benefit from technical assistance:

- the subject matter expertise and negotiating skills of the DGITC staff and the other members of the negotiating team;
- the commitment of the inter-agency team members to the smooth functioning of the team as a whole; and
- the communication skills and resources of the negotiating team.

Observation 2 The DGITC and Members of the Inter-Agency Trade Negotiation Team need greater expertise on trade policy, trade related macroeconomic concepts, international trade law and WTO subjects.

While several senior and some mid-level

Implication The process should be monitored to determine whether glitches arise in the inter-agency process and then steps should be taken to address such issues and provide support as they arise.

Implication Consultations should be held with DGITC, DGFT, TREDA, Legal Bureau, NAFED and other parts of the MOT to ascertain which of its existing trade experts might be willing and able to train some of their colleagues or participate in the development of training programs to be

members of the staff have significant experience and expertise in the subjects for which they are responsible (referred to hereinafter as “WTO subjects” for simplicity’s sake), the majority of the staff does not. Nor are more qualified candidates easily found outside the DGITC. For example, two key positions (the Director of the Multilateral Affairs division and the head of the Market Access for Services and IPR unit) are vacant in part because DGITC has had difficulty finding available qualified candidates. This lack of depth stretches DGITC’s experts too thinly and impedes the ability of the Directorate to effectively fulfill its mission. It has also been noted that for a rules-based negotiation, there are very few lawyers on the Team.

In addition the MOT has identified that it lacks sufficient capacity and expertise on trade policy and trade related macroeconomic concepts, and that it lacks capacity in the Legal Bureau for expert advice on WTO subjects.

DGITC would like to develop more experts in international trade negotiation techniques, major WTO subjects, FTA negotiations skills, as well as in market intelligence skills, and competition policy so that Indonesia can more effectively represent its interests in trade policy making and in trade negotiations.

Topics of interest would include trade in agriculture, non-agriculture market access, services, trade facilitation, intellectual property rights, standards, trade remedies, legal issues, dispute resolution, investment, government procurement, economic development and trade capacity building.

conducted by others.

An integrated series of courses should be developed to address the basic macroeconomic concepts and legal issues related to trade and major WTO subjects, as well as more focused programs of special topics of importance to the trade policy and trade negotiating units. WTO topics to be addressed would include agriculture, non-agriculture market access, services, trade facilitation, intellectual property rights, standards, trade remedies, legal issues, dispute resolution, investment, government procurement, economic development and trade capacity building.

A three-tier approach to training should be considered. The first tier of training will be developed in conjunction with the MOT Trade Center. One element of this first tier training will be a two-day general introductory course on trade-related macroeconomic concepts, international trade institutions, and WTO international trade law to be conducted in conjunction with the mandatory training program for all probationary employees. During the first year of ITAP’s operations, it also would be offered on a voluntary basis to all other interested employees (supervisors could require attendance). The second element of this first tier training will be short training courses to be offered to MOT employees rising from one echelon to the next. The “promotion courses” will serve as a refresher on trade subjects of general interest.

The second tier of training will be available to those currently working in international trade matters and will provide them with more extensive background on subjects relevant to their duties. This training would be conducted in Indonesia, preferably outside Jakarta, by the Training Center with support from experts within the Ministry, foreign experts and local academic institutions.

The third tier of training will be available only to those selected by their managers for intensive training, presumably personnel with supervisory responsibilities, experienced personnel who need expert level knowledge and skills and junior personnel who have been selected for rapid advancement. Training Center personnel who will be responsible for teaching these subjects also would be expected to participate in this more intensive training. The Training Center, Ministry leadership and ITAP would work together to coordinate third tier training, some of which would be conducted in Indonesia with local and foreign

experts and some of which would be conducted abroad. Tier three training would involve an integrated series of programs designed to provide the selected participants with the skills and knowledge needed not only to do their own job, but also to serve as resources to their colleagues.

Subjects to be covered by tier one and tier two training would be oriented toward fundamental skills and issues that help employees put their jobs in context and know where to look for additional information. Examples include: courses on trade-related macroeconomic theories (price sensitivities or comparative advantage, for example), courses on basic statistics concepts and modeling theory, courses for international trade law, courses on typical trade agreement frameworks like rules of origin, national treatment, subsidies, dumping, tariff classification, bound rates versus applied rates and the like, courses on the purposes and functions of international trade organizations and interest groups like the WTO, ASEAN and WIPO, and courses on trade subjects like services, standards, intellectual property, agricultural and industrial goods and procurement.

Tier two and three courses would move more deeply into skills development and substantive expertise on these subjects, and their more esoteric components.

MOT trainers need to develop the substantive expertise necessary to teach introductory courses by receiving intensive training on both the subjects and on curriculum development for these subjects, as well as by including trainers in programs being organized for other MOT personnel. Whether MOT trainers should be responsible for conducting the more specialized tier two and three courses will need to be determined at a later date.

Observation 3 All MOT employees would benefit from a greater degree of knowledge about trade policy, trade related macroeconomic concepts, international trade law and WTO subjects.

The DGITC leadership also indicated that, given the fluidity of assignments within the Ministry and the fact that most of the DGs within the Ministry play at least some role in international trade policy making or implementation, it would be beneficial for all employees of the Ministry to

Implication See the discussion above with respect to tier one training.

have at least an introductory exposure to trade policy, trade-related macroeconomic concepts, international trade law and WTO issues. Those who are in more senior positions or directly involved in trade issues need more advanced levels of training and those officials responsibilities for specific subjects in the Multilateral Affairs office of the DGITC and TREDATA need to develop true expertise in their subjects.

Observation 4 The DGITC and Members of the Inter-Agency Trade Negotiation Team need greater expertise on negotiation theory and practice.

As in the case with substantive trade subjects, there is a broad range of experience and expertise within the DGITC and the Inter-Agency Trade Negotiating Team with respect to negotiation experience and expertise. Some members of the negotiating team do not have enough experience as negotiators to anticipate the requirements of preparing for and actually conducting an international negotiation, or the negotiating skills to effectively represent Indonesia's interests. They would benefit from training regarding the international institutions and agreements of which they are members or that they hope to sign, the typical negotiating processes of those institutions and for those agreements, and the practical skills needed to successfully negotiate on behalf of the Government of Indonesia

Implication Consultations should be held with DGITC, DGFT, TREDATA, the Legal Bureau, NAFED and other parts of the MOT to ascertain which of its existing negotiation experts might be willing and able to make the time to train some of their colleagues or participate in the development of training programs to be conducted by others.

Briefings should be arranged on the specific steps and typical schedules for preparing for and conducting specific types of negotiations (*i.e.* FTA negotiations, WTO Ministerial meetings, bilateral negotiations in the WTO context, etc.).

Training should be provided including role-playing, concerning negotiation theories and skills for as many members of the Inter-Agency Negotiating Team as possible.

Specialized training for the leaders of issue teams will help them identify the information and support they will need and the skill to develop realistic timetables and interagency strategies for developing positions and consensus, etc.

Observation 5 The DGITC and the Trade Negotiation Team are still in the process of establishing their roles and relationships, which could be strengthened.

DGITC indicates that it has the same problem most trade negotiation agencies have: divergent priorities within their own government. They would like technical assistance in further developing their interagency processes to ensure that, while each relevant stakeholder participates in the process, it is the national interest that controls the direction of policy and negotiating positions. Improvements could be made in both the process used by the team to develop policies and positions and the interaction of the individual members of the team. Timeliness and trust issues are two examples of the latter.

Technical assistance for the desired team-building

Implication A process-oriented training could help the negotiating team conduct a self-assessment and elicit the input of team members about how the current system could be improved. Consideration can be given to whether this would be most appropriately for only the team leadership to encourage a freer exchange of ideas.

could largely be accomplished by including select non-MOT members of the negotiating team in local and overseas training and consultative activities conducted in order to deepen subject and negotiating expertise. More extensive procedural reforms also may be needed, but planning for such work should be reserved until we can see whether improving professional competencies solves the problem.

Observation 6 The DGITC and members of the Inter-Agency Trade Negotiation Team will benefit from improving their English language skills and IT knowledge. This will enable them to communicate with their negotiating partners more precisely and effectively and will enable them to make full use of available communication technologies.

Communications need fall into two categories:

- Having the language proficiency needed to research and communicate in WTO languages; and
- Having the technical awareness to know how to exchange papers and thoughts securely through electronic means to concerned individuals and agencies.

All WTO members need to be able to do business (research, read and prepare submissions, negotiate, participate in dispute resolution, etc) in at least one of the languages of the WTO. The consensus within the MOT appears to be that English should be WTO language in which Indonesia conducts business.

The need for improved English skills at all levels in basic writing skills, vocabulary, grammar and composition, report writing and presentation skills has been frequently cited as an essential need for MOT staff.

Increasing the number of staff members with basic English skills and increasing the number of staff members with advanced English proficiency and comprehension will be of substantial value. With improved English skills, an individual's confidence and persuasiveness are also likely to improve.

Skills development, team-building and technical communication improvements would appear to be the areas where effort should be concentrated.

Once those needs are met, additional organizational and inter-agency communication improvements can be addressed.

Implication English language skills training including vocabulary, grammar, composition and comprehension should be an important priority. Training is required at basic, intermediate and advanced levels in both written and conversational English. For the advanced English speakers, special informal sessions can be considered at which participants will discuss current trade issues in English.

Special programs on basic and advanced report-writing, technical writing and oral presentation skills are also needed. Advanced level training, including role playing, would help Inter-Agency Negotiation Team members polish their abilities to present their positions in clear, precise and convincing form.

English language reference materials, including WTO treatises and agreements and glossaries of trade to support both the language skills and substantive knowledge of MOT and Inter-Agency Negotiation Team personnel, would make useful training aids.

It is unclear how much of the needed training can be done in-house and how much would be more effectively provided by contracted presenters. Initial impressions are that the Training Center personnel have the organizational skills but that outside experts may be required for many of the specialty or advanced courses. The Training Center's practice of pre-training testing and post-training testing is very positive and more attention should be placed on the results of such testing and subsequent use of instructors.

Section 5 The Public-Private Sector Dialogue on Trade

5.1 Summary of Findings

1. MOT Should Expand and Formalize its Trade Policy Making Consultations with the Indonesian Private Sector
2. The MOT communicates regularly with the Indonesian private sector on an informal basis, but needs to develop more orderly communication and cooperation links with it.
3. The MOT, and Indonesian trade policy, would benefit from more active outreach to the business community, consumers and civil society.
4. The MOT needs operating procedures that will ensure that the private sector's views are not just received, but also actually considered when making trade policy.
5. The MOT should improve the quality and quantity of information it shares internally and that it makes available to Indonesian stakeholders and Indonesia's trading partners.
6. The MOT needs to do more to inform the Indonesian private sector of its trade related plans and accomplishments.
7. The MOT needs to do improve the quality and quantity of information it presents to its trading partners.
8. Improvements in NAFED's research and record keeping could assist both Indonesian exporters and GOI trade policymakers to better understand Indonesia's market access challenges and opportunities.
9. The Indonesian private sector should improve the quality and quantity of its efforts to advise the GOI about its trade related interests.
10. Indonesian businesses and trade associations need to improve their advocacy tools and skills to ensure that the GOI understands and considers their concerns.

5.2 Indonesian Chamber Of Commerce and Industry (KADIN) Overview

5.2.1 Mission

KADIN is an umbrella organization and a vehicle for conveying thoughts, ideas, communication, information, consultation and advocacy for Indonesian business society, between Indonesian business society and government, Indonesian business society and foreign business society, for matters related to trading, industrial, and services, in order to provide and to create a clean, transparent, and professional business climate, and to create a better national economy.

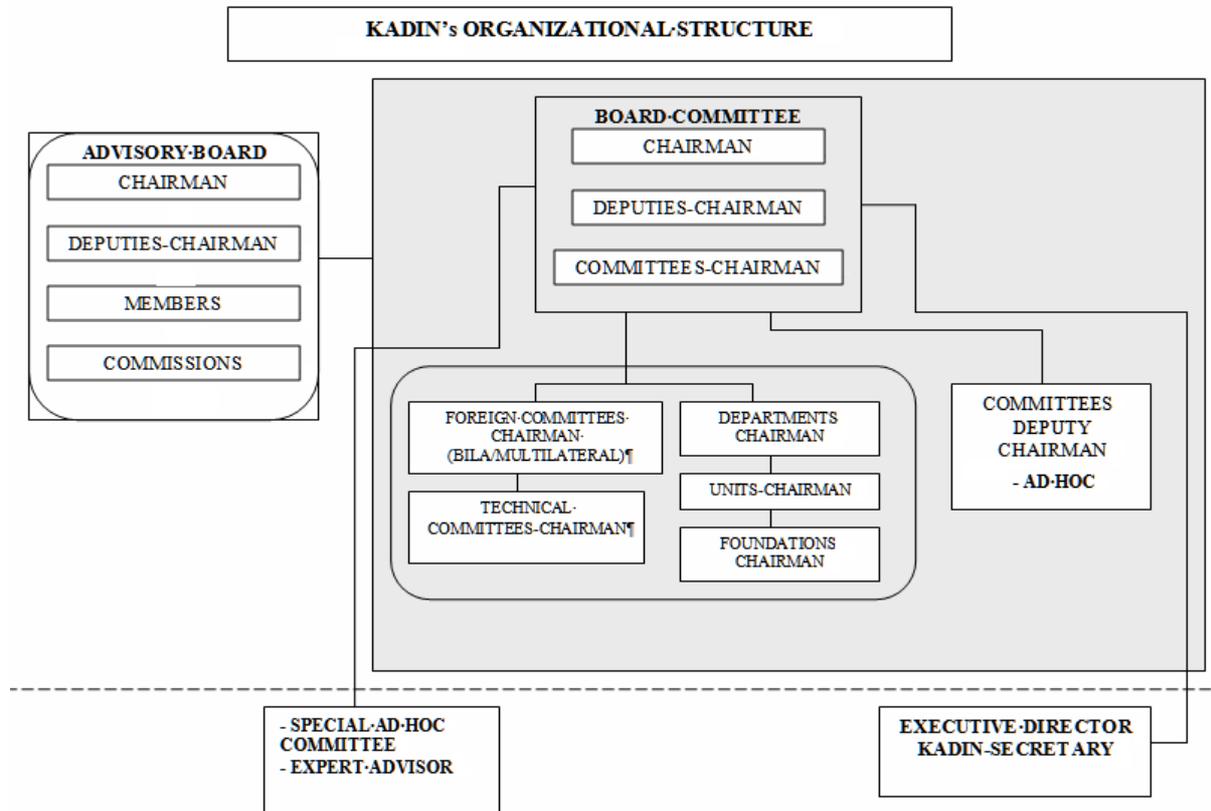
5.2.2 Organizational Structure

KADIN's organizational structure, basically, is divided by 3 categories i.e. (1) Board Committee, (2) Advisory Committee, and (3) Secretariat and ad hoc committee.

Moreover, KADIN Indonesia has 30 KADIN provincial chambers, i.e in the provinces of Aceh, West Sumatra, North Sumatra, Riau, Jambi, Bengkulu, South Sumatra, Lampung, Bangka Belitung, Banten, West Java, DKI Jakarta, Central Java, DI Yogyakarta, East Java, West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, North Sulawesi,

Gorontalo, Central Sulawesi, Southeast Sulawesi, South Sulawesi, Bali, Nusa Tenggara Barat, Nusa Tenggara Timur, Maluku, North Maluku, and Papua.

Chart 5.1 Organization Chart for the Indonesian Chamber Of Commerce and Industry



5.2.3 Personnel

On the board committee, KADIN has over fifteen people and fifty eight people on the advisory committee. The board of the committee consists of one chairman, two deputy-chairmen (Deputy I: organization and membership, Deputy II: investment, informatics, telecommunications and tourism), and eight committee chairmen (organizational development, regional empowerment, membership development, association empowerment, membership advocacy, investment and business promotion, communication, and informatics).

KADIN's Advisory Board has fifty-eight members, one executive director in the secretariat, and two deputies who handle international and regional issues.

5.2.4 Activities

During 2004/2005, KADIN's work plans list the following key activities:

- Planning and supervising
- Planning workshop 2005
- Finishing planning workshop components
- Agreement on activities and indicator with DIHK
- Report activities
- Annual report for the all DIHK activities

5.2.5 Objectives

1. KADIN Organization Law (AD/ART)
 - Socialization KADIN's AD/ART
 - Problem identification for completing KADIN's AD/ART
 - Translation of KADIN's AD/ART in English
2. Restructuring secretariat
 - Organizational structure implementation
 - Election process for executive director
 - Selection and staff restructuring
3. Board committee qualification and secretariat
 - KADIN Workshop Management in Malaysia (Euro Chambers)
 - Workshop Management Information and Information services
 - Qualification improvement and training for executive director
 - Program qualification for staff
 - Implementation for program qualification
 - Training management for secretariat
4. Organizational book manual/KADIN management handbook
 - Team work compiling
 - Planning concept
 - Book compiling
5. Membership Data Base
 - A compatible compiling concept
 - Software production
 - Software installation and staff training
6. Enhancing lobbying efforts and public relations

5.3 National Agency for Export Development (NAFED) Overview

5.3.1 Mission

- To formulate policy and establish guidelines to encourage and support the expansion of non-oil and gas products.
- To provide information services and market coordination
- To implement and organize export promotion
- To expand the range of export products and market

5.3.2 Organizational Structure

Secretariat

NAFED's Secretariat provides technical and administrative support for all other NAFED divisions. The duties of the secretariat encompass planning, motivating, evaluation and programming of management and cooperation works of the Agency.

Center for Export Information Service

Export information services are two kinds aimed at two distinct audiences. The first is information about market possibilities and methods of penetration for Indonesian exporters, the second export information service is information for overseas buyers about the quality and availability of non-oil and gas products offered by Indonesia.

Center for Export Development in America and Europe

Export coordination and development for industrial, handicraft, and agricultural products; penetration strategy and policy formulation; export promotion for America and Europe.

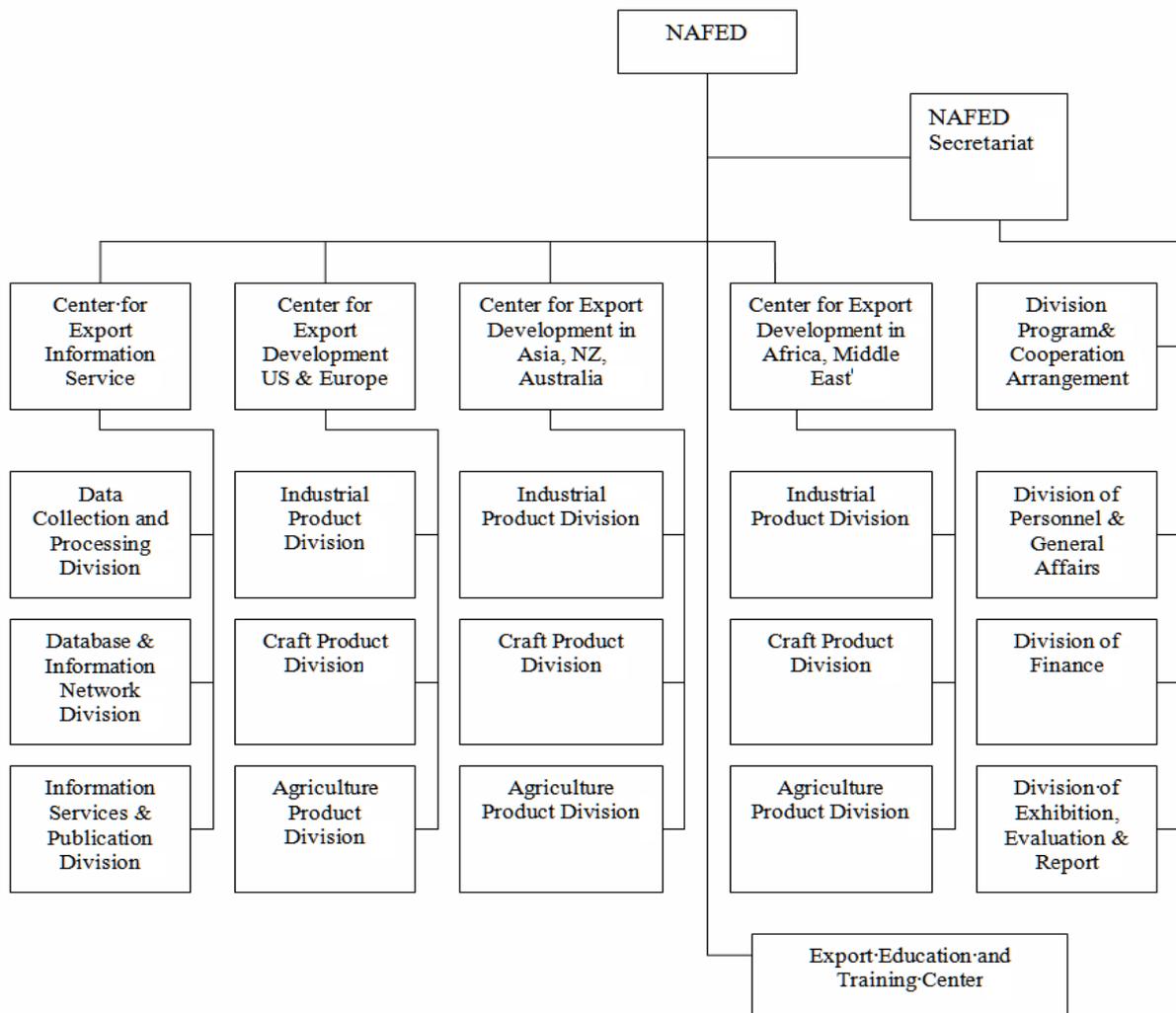
Center for Export Development in Asia, Australia, and New Zealand

Export coordination and development for industrial, handicraft, and agricultural products; penetration strategy and policy formulation; export promotion for Asia and Oceania.

Center for Export Development in Africa and Middle East

Export coordination and development for industrial, handicraft, and agricultural products; penetration strategy and policy formulation; export promotion for Africa and Middle East.

Chart 5.2 Organization Chart for the National Agency for Export Development



5.3.3 Personnel

Out of over three hundred and fifty nine total employees, NAFED has one hundred thirty three (37.05%) who have both an overseas or Indonesian bachelor’s degree. An additional twenty people (5.29%) have a master’s degree, mostly earned in Indonesia and one person has a PhD (0.28%). Forty-four people (12.26%) have a diploma and the rest have either senior high school (39.28%) or junior high school/elementary school (5.85%). Table 5.1 summarizes the educational level of NAFED employees.

Table 5.1 Total Persons with Level of Education in NAFED

Education Level	Total	Percentage (%)
PhD	1	0.28
Master’s Degree	20	5.29
Bachelor’s Degree	133	37.05
Diploma	44	12.26
Senior High School	141	39.28
Junior High School/Elementary	28	5.85
Total	359	100

5.3.4 NAFED’s Activities

NAFED is organized by functional activity:

1. Export Promotion

a. Market Intelligence Analysis

This activity tries to assist exporters in penetrating and expanding into overseas markets. NAFED regularly makes available the results of research into strategic markets.

b. Annual Report Consulting Forum

A three day export forum is held in conjunction with the annual Resource Indonesia Exhibition and provides an opportunity for exporters to obtain information resulting from market surveys and briefs and to engage in consultation and discussions, either in groups or individually.

c. Workshops and Seminars

NAFED coordinates many kinds of seminars and workshop at regional, national and international level to discuss market possibilities and entry strategies as well as to facilitate information exchange between the government and the business world.

d. Business consultation for small and medium enterprises (BCSMEs)

NAFED constantly seeks develop new initiatives, services and consultation opportunities in export promotion, and to distribute them to the business people, especially the small and medium enterprises.

2. Product Adaptation and Development

To help Indonesian exporters to produce and market products that suit market test and demand.

3. Buyer Services

To help overseas buyers to obtain products and to locate the right business partners, among other things, by establishing a Buyer Reception Desk (BRD) service.

4. Export Promotion

- a. Trade Fairs - helping exporters by organizing annual activity programs and coordinating Indonesia exporters' participations in overseas trade fairs.
- b. Annual selling mission to export markets overseas.
- c. Annual Resources Indonesia Exhibition.
- d. Regional export products trade fairs.

5.4 Public-Private Sector Dialogue on Trade – Observations and Implications

Observation 1 The MOT communicates regularly with the Indonesian private sector on an informal basis, but needs to develop more orderly communication and cooperation links.

Although some dialogue already occurs, there is no formal process for taking private views into account when making trade policy. Public and private stakeholders agree that private sector input generally does not play a major role in the government's trade policy decision making. The informality of current arrangements makes it more likely that key stakeholders will be inadvertently skipped over and that input will be considered less carefully than it should be.

There are two primary strategies at the disposal of the Ministry to elicit trade policy input from the private sector and to inform the private sector of the current and potential trade obligations and opportunities: active outreach through meetings, speeches and announcements and passive outreach through print and electronic publication of information. The Ministry is interested in pursuing both.

Implication New mechanisms for soliciting input from the private sector with respect to existing and potential trade policies should be established. Consultations and provision of materials describing options employed by other nations to bring the private sector into this process should be considered.

Observation 2 The MOT and Indonesian trade policy would benefit from more active outreach to and dialogue with the business community, consumers and civil society.

Facilitating a more extensive and regularly scheduled consultative process might help to improve both the reality and the perception of the private sector role in shaping policy since they have both substantial practical experience and a direct interest in the process and policy.

One of the challenges faced by the Ministry is that it needs to be cognizant of the needs of producers for the domestic market, producers for foreign markets, consumers of local goods and services and consumers of imported goods and services, as well as the interests of civil society. Understanding and balancing these disparate

Implication A strategy should be developed for increasing MOT's outreach activities.

Additional consultations will need to be held to determine if the establishment of official permanent trade sector advisory committees, or coordination with existing private sector committees, would be beneficial.

concerns requires concerted effort. Those worried about competition from foreign imports are almost always the most vocal advocates for or against specific policies, so a reasoned assessment of the impact of trade policies frequently requires extra effort to elicit the views of the entire market.

The Ministry has a general sense of the trade organizations and other stakeholders that possess the type of information it needs to develop reasoned trade policy positions, but appears not yet to have established a formal structured systematic way of soliciting that information. Establishment of formal mechanisms for advising all stakeholders of MOT's plans and soliciting stakeholders' views and relevant data on existing conditions and upcoming issues would be useful.

Observation 3 The MOT needs operating procedures that will ensure that the private sector's views are not just received, but also actually considered when making trade policy.

However the consultative process is arranged, one key element of it should be a self-monitoring function through which MOT will check how it responded to private input, and perhaps report to those who provided rejected suggestions, why their suggestions were rejected. Such a process should reduce any tendency on the part of MOT staff to consider consultations a mere formality and demonstrate to the private sector that they are being heard.

Implication Consideration should be given to the MOT developing a self-monitoring function to help the Ministry confirm that, even if not adopted, private sector views have been given due consideration in the policy making process.

Observation 4 The MOT needs to do more to inform the Indonesian private sector of its trade related plans and accomplishments.

In order to inform the public about trade matters, and to add some balance to the public discourse about trade matters (which frequently is dominated by people wary of trade liberalization), the Ministry also could enhance its outreach efforts through the press and the Internet. For example, the various international trade DGs could work with the Public Relations Bureau to prepare talking points and briefing papers for Ministry officials' use in making public statements or to prepare press kits on trade topics for the Indonesian and international press.

Improvements to the cohesiveness, quality and integration of the Ministry's various websites could also be helpful. While some MOT websites are well developed and easily accessed, other

Implication The DGs and the Public Relations Bureau should prepare talking points and briefing papers for Ministry officials' use in making public statements, as well as press kits on trade topics for the Indonesian and international press.

The DGs, NAFED and the Public Relations Bureau will need to actively participate in maintaining sections of a MOT web portal once it is developed. A comprehensive MOT web portal providing transaction support, information, and communications would be an invaluable tool to the MOT public communications program.

MOT websites could improve the quality and quantity of information they post informing the Indonesian public of upcoming issues and recent developments.

With such information, members of the public should better understand the accomplishments of the Ministry and would have advance notice of issues on which they might wish to comment or offer suggestions.

Observation 5 The MOT needs to improve the quality and quantity of information it presents to its trading partners.

One of the functions served by the NAFED and DGITC websites is to inform Indonesia's trading partners and foreign governments about the Indonesian market and Indonesian trade policies. Consequently, some of their websites are in English. Ensuring that those English materials are clearly written and present the information of greatest interest to their intended audience would increase their effectiveness.

Implication Translation and editorial support are key needs within the MOT to enhance the clarity and accuracy of information posted on its websites in English. ITAP will be able to provide both training and support to develop internal capacity to perform such tasks.

Observation 6 Improvements in NAFED's research and record keeping could assist both Indonesian exporters and GOI trade policymakers to better understand Indonesia's market access challenges and opportunities.

Another source of information and a potential participant in this public-private dialogue on trade policy formation is the National Agency for Export Development (NAFED). As the Indonesian Government agency responsible for helping Indonesians export their goods and services, NAFED monitors market opportunities and obstacles around the globe. It also is the MOT agency that currently works most closely with the Indonesian business community, albeit the exporting community, rather than the business community as a whole.

In response to specific inquiries from Indonesian exporters, NAFED gathers and then discards a significant quantity of tariff and market access information in an ad hoc fashion, information that could be helpful to companies beyond the initial requester. It also could be helpful to TREDATA and trade policy makers trying to determine how Indonesia is being affected by the policies of its trading partners and which negotiating issues are of greatest importance to it, and to its trading partners.

Implication NAFED should increase its utilization of electronic record keeping and its ability to post on its website data useful to exporters and the rest of the GOI. The goal of this effort would be to increase the availability of collected data and analysis that currently is inaccessible to companies and decision makers who would benefit from it.

Development of more robust intranet communication systems should facilitate development of a consultative process that will enable NAFED to receive and distribute market intelligence more seamlessly, which can assist in more informed trade policy formation and attention to reducing domestic barriers to trade.

Technical assistance, training, reference materials and consultations will help NAFED and TREDATA improve their ability to conduct market research as part of the larger effort to increase the quality of their work product and, thereby, trade policy.

A system to periodically assess NAFED's institutional success would help focus resources and attention on areas of greatest value and impact. This would include the internal capacity to evaluate foreign markets and market opportunities.

Observation 7 Indonesian businesses and trade associations can improve their advocacy tools and skills to ensure that the GOI understands and considers their concerns.

The private sector also has underdeveloped outreach capacities. Strengthening the ability of private associations like the Indonesian Chamber of Commerce and Industry (KADIN) to understand and handle trade issues could be helpful to the MOT, as would similar strengthening of relevant national consumer groups.

Implication Representatives of the private sector could be included in certain trade training activities when appropriate or in separate programs developed specifically for them.

KADIN and other industry and interest groups should improve their strategies, tools and skills for making their trade policy needs known the GOI. Some of this work could be done through training in advocacy, economic analysis skills and WTO issues, and some through improved strategic planning and outreach techniques.

Section 6 Legal Bureau

6.1 Overview

6.1.1 Vision

There is an existing Legal Bureau, which will be upgraded. It will be a full service Legal Advisor/General Counsel Office, offering strong support to the MOT in legal drafting, advice and negotiation on international trade agreements, foreign trade law matters and trade cases, domestic law, litigation and international dispute settlement, and legislative and regulatory initiatives. Working together with lawyers in the DGs and Agencies, the Legal Bureau will handle or coordinate all legal work for the MOT, will be respected for its work and experience, will be relied upon for its expert advice and service, and will contribute as a vital part of the functioning of the Ministry.

6.2 General Introductory Observations on Government Ministry Legal Functions

6.2.1 Typical Ministry Legal Functions In Developing Countries

The MOT system of having legal work prepared in decentralized bureaus and using the central legal bureau only as a final clearance stop is not uncommon in developing countries. In Eastern European, Middle Eastern and Sub-Saharan countries, as well as most Asian countries, lawyers have not typically played the substantive role that lawyers play in the U.S. and Western Europe. The role of lawyers in those countries may have been slow to develop as a result of the generally lower concern for the rule of law, or the accepted view that lawyers will play limited roles outside the courtroom, or simply the shortages of trained lawyers. Whatever the reason, lawyers generally are a part of the clearance process for documents and decisions, rather than a part of the creative process.

Generally, the clearance process includes a requirement that proposed laws and regulations (and, in more advanced bureaucracies, for policies) be submitted to the legal department immediately before they go to the decision maker (the Minister or Legislature, for example). In some countries, there may be an informal consultative process prior to the time a document goes to the legal department. Government agencies struggling for limited resources and power may find it difficult to reveal too much to other agencies with competing interests and priorities.

In governments with this system, the legal department's review generally is limited to whether the proposed step can be taken under the local government's domestic laws, and whether the proper process for doing so has been followed. The legal department may, or may not, look at the country's international commitments before approving or disapproving the proposed action. Legal department lawyers have not been expected to give advice on how to improve a legally acceptable submission or on how to accomplish an objective in an alternative manner. Typically, the legal department will only indicate to the submitting department that the proposed action is acceptable or requires adjustment in certain ways to conform to local law.

It has been relatively rare for legal departments to view the departments requesting clearance as clients they are serving to accomplish a common goal. Neither have the non-legal departments viewed the lawyers as a source of help. The lawyers in the legal bureau are legitimately perceived as an obstacle to get past, rather than as a support service.

6.2.2 Development of Legal Functions in Legal Departments versus non-legal Departments

When non-legal department managers have recognized that legal analysis would be useful, they have turned to people with law degrees (or others with good analytical skills) who happened to already be on their staff in non-legal jobs, or they have hired lawyers to work within their departments. By having “in-house” lawyers, department managers have been able to secure legal guidance from individuals committed to the achievement of the manager’s goals, something department managers have not received and generally do not expect from the central legal department lawyers. The other advantage of in-house lawyers is that they develop greater familiarity with the substance and intricacies of the issues that department addresses, rather than being generalists like the lawyers typically found in legal departments serving an entire ministry. In-house lawyers generally do play the creative and constructive role that central legal department lawyers are expected to play in developed countries. In addition, they can assure that the department’s documents and positions are legally defensible before papers go forward to the legal department, where negative responses can be difficult to reverse.

While non-legal department managers may be happy to improve the skills of the lawyers they manage, they may be reluctant to improve the skills of lawyers who traditionally have been more hindrance than help. Thus, lawyers in a legal bureau in such a setting often are perceived as an obstacle to get past, rather than as a support service for the non-legal department.

6.2.3 Frequent Organizational Models for Ministry Lawyers

The lawyers in a non-legal department may not be organized into a group. Rather, they may work independently of each other to contribute to the needs of the various units and individuals within the department. Although this has the advantage of building lawyers with strong subject matter expertise and will inevitably encourage a strong client-service ethic, it also has disadvantages. The lawyers will not receive the benefit of professional development or oversight by a more experienced lawyer, they may become so specialized that they overlook related issues that should be taken into account, they may create overlapping (and sometimes contradicting) rules or policies, and they may lose objectivity as they become too close to their clients.

One variation of this model is for a senior lawyer within the department, perhaps in the department’s secretariat, to serve as a monitor of quality and to help other lawyers develop their professional skills. In a fully decentralized model, this senior lawyer would not have supervisory responsibility over other lawyers, but his or her approval of legal work would be required before it could be finalized. This variation may improve quality control, but does little to address other concerns.

Another variation of the model would give the senior attorney supervisory control over all lawyers within the department. Intermediate supervisors might also be used. For example, lawyers might be assigned to the red, blue and green units, with each unit having a supervisory lawyer of its own and all three supervisory lawyers could report to the senior lawyer.

Alternatively, all lawyers within a non-legal department may be organized into a single unit either in or independent of the department’s secretariat that provides service to the entire department. This may increase the quality and objectivity of the legal advice the department receives. If there are enough lawyers available and the legal unit’s management fosters subject expertise through training and assignment distribution, this centralization should not result in any diminution of expertise offered to the department’s various units. It may benefit the division by ensuring that the interests of the division as a whole are considered by the lawyers.

The next higher model of centralization, having a centralized legal bureau for an entire Ministry, is the model employed by most developed countries. Typically, such central legal

bureaus have an organizational structure that mirrors the organizational structure of the Ministry as a whole with some overarching units that handle general litigation, administrative, personnel and other issues that regularly arise in all divisions of the Ministry. Such a structure enables the legal subdivisions to be intensely involved and expert in their client division's work, while giving lawyers the independence needed to ensure that legal work is well done and consistently reflects the interests of the Ministry as a whole, not just the concerns of one of its constituent parts.

Another advantage of both of the last two examples is that it provides a career path for lawyers, enabling them to advance as their skills become more developed and to share their experience and expertise with more junior lawyers, enhancing their professional development beyond what would be possible if they were not part of a common legal unit.

6.2.4 Transitions in Development of Legal Offices

As noted above, there can be an evolution in legal offices within government ministries. Frequently in the early stages of a ministry, lawyers are hired on an *ad hoc* basis, and may not be organized in a single well-managed and organized office. As a ministry grows and it faces legal demands of an increasingly complex nature, the need arises to improve and adapt the legal function in the Ministry.

6.2.5 MOT Legal Functions in Transition

The above-described growth situation is the case now for the MOT.

There is a consensus that Indonesia is being partially out-manuevered in international trade negotiations. Other countries, utilizing more capacity in the form of trained negotiators with expert legal and economic support, are achieving negotiating gains in multilateral and regional or bilateral agreements. To capture similar gains, Indonesia must develop a strong cadre of international trade lawyers. To date, in WTO matters, the role of lawyers on behalf of Indonesia has been marginalized. However, for Indonesia to keep pace with other countries with which it negotiates, this cannot continue. In most of the trade ministries with which the MOT interfaces as developed countries, lawyers are a part of a strong and relatively prestigious Legal Advisor/General Counsel office, providing specialist legal support to particular specialist areas, and overall senior level counsel to the Minister.

The principal functions needed in a Legal Advisor Office are:

- Administrative, Regulatory, and Legislative: Advice, Drafting and Counseling;
- Negotiation;
- Litigation - Domestic and International (*e.g.*, WTO); and
- Research

This task under ITAP will be to upgrade the existing role and functions of the Legal Bureau, so that it can offer strong support to the MOT in each of the above areas, both at the staff level within the DGs as well as at the senior level of the Ministry.

6.3 Legal Bureau - Observations and Implications

6.3.1 Introductory Comments

The Legal Bureau is doing an impressive job, considering that it has inadequate resources to perform its job properly. Legal services overall in the MOT are not coordinated, and the lawyers are not trained in all required areas, or given clear legal career opportunities. The current role of lawyers in the policy formulation process is minimal, and must be substantially strengthened. The skills of the lawyers and staff need to be improved. The Legal Bureau needs to be able to deliver expert advice to all relevant DGs and the MOT as a whole, and to become client service oriented, with an overall duty to the Ministry as a whole.

As a result of the ITAP, the Legal Bureau will be well organized and fully functioning. The Legal Bureau will be well prepared in a full range of domestic and international trade law. The Legal Bureau will have capabilities to participate in all aspects of legal assistance related to rules, regulations, decrees and other governmental responsibilities incumbent upon the Ministry.

Over the term of ITAP, legal and support staff within the Legal Bureau will be sufficiently trained to carry out assigned duties after ITAP. Lawyers currently performing legal work outside of the Legal Bureau will be coordinated by the Legal Bureau, either by becoming part of the Legal Bureau or by oversight and dotted-line reporting and coordination. Skill levels of lawyers in the Legal Bureau will be improved. The Legal Bureau will become service-oriented to its client offices, while retaining its overall duty to serve the best interests of the Ministry.

We expect to start the process of establishing an upgraded Legal Bureau immediately following submission of our Joint Work Plan. Training and capacity building will continue throughout the life of the project. Trade Lawyer James Lockett will have primary responsibility during the first eighteen months, and then will transfer primary responsibility to one of the local ITAP trade lawyers for the balance of the project. The plan will include a training program to upgrade staff skills, particularly with regard to international trade agreements and legal drafting. The plan will include an initial organization chart, comprehensive job descriptions, and operating procedures. It will also suggest a detailed plan for rationalizing the disparate legal functions scattered across the Ministry, which will need to be harmonized in stages and will need to account for civil service rules if certain steps are agreed in respect to transfer of some lawyers from the DGs into the Legal Bureau.

The following discussion will present the key overall implications from our observations above. It then will also present detailed implications in certain key areas of the Legal Bureau and MOT.

6.3.2 Legal Bureau - Observations and Implications

6.3.2.1 Present Organization of Lawyers in the MOT

Observations

Observation 1 The MOT has over one hundred and thirty persons with a law degree, working throughout the organization.² One hundred twenty eight (128) MOT persons have an Indonesian law degree (SH). An additional nine are known to have a Masters degree in law earned in Indonesia or abroad (LL.M.).³ Thus, at last report there are one hundred and thirty seven (137) persons with legal training in the MOT, of which fewer than thirty of those persons work in the MOT Legal Bureau or the CoFTRA Legal Bureau. The distribution of MOT personnel with a law degree (either legal undergraduate SH, or legal postgraduate such as overseas LL.M.) is shown in table 6.1.

Implications

Implication There are one hundred and thirty seven (137) persons with law degrees in the MOT, but only eighteen (18) are organized in the main MOT Legal Bureau and only eight are in the Legal Bureau of CoFTRA. This means that the vast majority of lawyers in the MOT are not currently working in an organized general counsel office or receiving relevant training as lawyers. It also means that legal services throughout the MOT are not coordinated, and that there is no clear career path for a lawyer in the MOT.

Table 6.1 Total Persons With Law Degree In MOT

Office	SH Degree	LL.M. or Other Legal Postgrad Degree	Total
Legal Bureau	14	4	18
Personnel Bureau	7	1	8
Finance Bureau	2	-	2
General Aff & PR Bureau	4	-	4
SME Centre	1	-	1
Inspector General	9	-	9
Domestic Trade DG	18	-	18
Foreign Trade DG	18	1	19
Int'l Trade Cooperation DG	15	-	15
NAFED	12	-	12
CoFTRA	13	1	14
TREDA	5	1	6
Others	10	1	11
Total	128	9	137

Observation 2 There are mixed opinions about the quality of lawyers in the MOT. There is a consensus that the Legal Bureau⁴ lawyers are the best available legal drafters in the Ministry, but that that fact alone is not enough, and there are perceived weaknesses in certain substantive areas

Implication With most MOT lawyers not working in the Legal Bureau and yet performing an estimated eighty percent (80%) of the MOT's legal work, if those lawyers cannot be either transferred to, or coordinated/integrated in some fashion by the Legal Bureau, and trained together

² The last available data is from July 2003. Our reports were issued on 9 February 2006, but were based upon the earlier survey. Each bureau was due to report on the updated status by December 31, 2005, but that data is still being compiled.

³ The last available data is from July 2003. Our reports were issued on 9 February 2006, but were based upon the earlier survey. Each bureau was due to report on the updated status by December 31, 2005, but that data is still being compiled. We are aware of two lawyers in the Legal Bureau with domestic Masters degrees in law, who are not reported but are included in our summary here.

⁴ "Biro Hukum" in Bahasa Indonesia.

in the Legal Bureau. Lawyers in other locations tend to be specialists in their substantive areas, which is also a key skill. There is also a consensus in the Legal Bureau that most of the other persons in the Ministry with a law degree (SH) are not as qualified - at least in legal drafting - to join the Legal Bureau, as compared to present Legal Bureau lawyers. A substantial number of the persons with SH degrees outside the Legal Bureau are near retirement. Others may have an SH degree, but it was received from a lower tier law school⁵ and their legal training was not necessarily of an adequate standard for the complex advanced needs of the Ministry, and has typically not been further enhanced since joining the Ministry.

with Legal Bureau lawyers, making uniform overall improvements in the legal work done for the MOT will be very difficult. The actual number of quality trained lawyers appears to be small by comparison to the total number of persons who have studied law. Merely studying law at a law school does not make someone a qualified lawyer. Focused training, mentoring and experience after graduation are keys to developing the practical skills to effectively serve one's client.

Observation 3 A Legal Bureau has existed in the MOT for at least ten to fifteen years. Before being merged with the Ministry of Industry in 1995, the MOT's Legal Bureau had a different name - Legal Affairs Bureau, which originally also included a PR/Spokesperson function. These two functions were separated before the merger. All members of that initial, pre-merger MOT Legal Bureau have since retired or have transferred to other jobs⁶. In the MOIT, a combined Legal Affairs Bureau existed covering all issues of trade and industry.⁷

Implication The Legal Bureau is under-developed, considering that some sort of Legal Bureau has existed for at least ten to fifteen years.

Observation 4 The existing MOT organizational chart contains a Legal Bureau, reporting to the Secretary General. It began in March 2005, when the present deputy and one first year lawyer were transferred to the MOT from the MOIT. According to the lawyers involved in the process of splitting into two legal offices, the transfer was difficult and traumatic -- from a well equipped set of offices in the MOIT, to a construction site in the MOT. The initial Bureau was five persons, but was expanded when the current head of the Legal Bureau was transferred from the DG for International Trade Cooperation. Very little of the joint library

Implication Resources that ordinarily would be present in an existing Legal Bureau were lost in the separation from the MOIT, and the Legal Bureau is lacking certain resources still as a result.

⁵ While all Indonesian law schools prepare lawyers for more typical legal functions, the unusual demands of the Ministry make it difficult to keep up at a national level of performance without the background of the more rigorous training provided by the more competitive schools or by postgraduate training.

⁶ The current head of the Legal Bureau worked in that Legal Affairs Bureau for one year.

⁷ Three lawyers in the present MOT Legal Bureau have experience in the MOIT Legal Affairs Bureau. The current head of the Legal Bureau worked in that MOIT unit for seven years (mostly in IPR). His current deputy worked there for a year in 2004, and one of her present junior lawyers worked there for a few months. No other present MOT lawyer worked in that office.

materials or other resources for the earlier MOIT Legal Bureau were allowed to leave the MOIT, meaning that the MOT Legal Bureau has needed to be organized afresh in virtually all respects.

Observation 5 The Legal Bureau presently has thirty-three employees, of which approximately twenty-five are active.⁸ It is divided into four Divisions, each headed by a Division Head: Foreign Trade, Domestic Trade, Litigation, and Documentation (research). See Chart 6.1 below for the organization chart. The head of the Legal Bureau and the four division heads are lawyers with experience in the MOT or earlier MOIT, but none have been lawyers for their entire professional career – none has more than eight (8) years of experience practicing law as a lawyer, and the heads of division have two (2) to four (4) years of legal experience. The other lawyers have less than two years of experience. Details on the four Divisions follow:

- Currently there is a Foreign Trade Law Division within the Legal Bureau, with four lawyers. It is responsible for handling all international/foreign trade law issues. The client offices for this division are the DG of Foreign Trade and the DG of International Trade Cooperation, and NAFED could also be a client office to a smaller extent. The Head of the Foreign Trade Law Division has an international LL.M., and the equivalent of three years of experience as a lawyer plus over fifteen years of experience as an MOT official. The other three lawyers are essentially entry-level lawyers in their first or second year. It has three sub-Divisions: Study, Drafting, and Agreements.
- Within the Domestic Trade Law Division of the Legal Bureau, there are five active lawyers, the Head of the Domestic Affairs Division having a domestic Masters Degree, two years of experience as a lawyer and earlier years of experience in the MOT or MOIT as an official in the DG for Domestic Trade. The other four lawyers are entry-level. The client office for this Division is the Domestic Trade DG. It has three sub-Divisions: Study, Drafting, and Agreements.

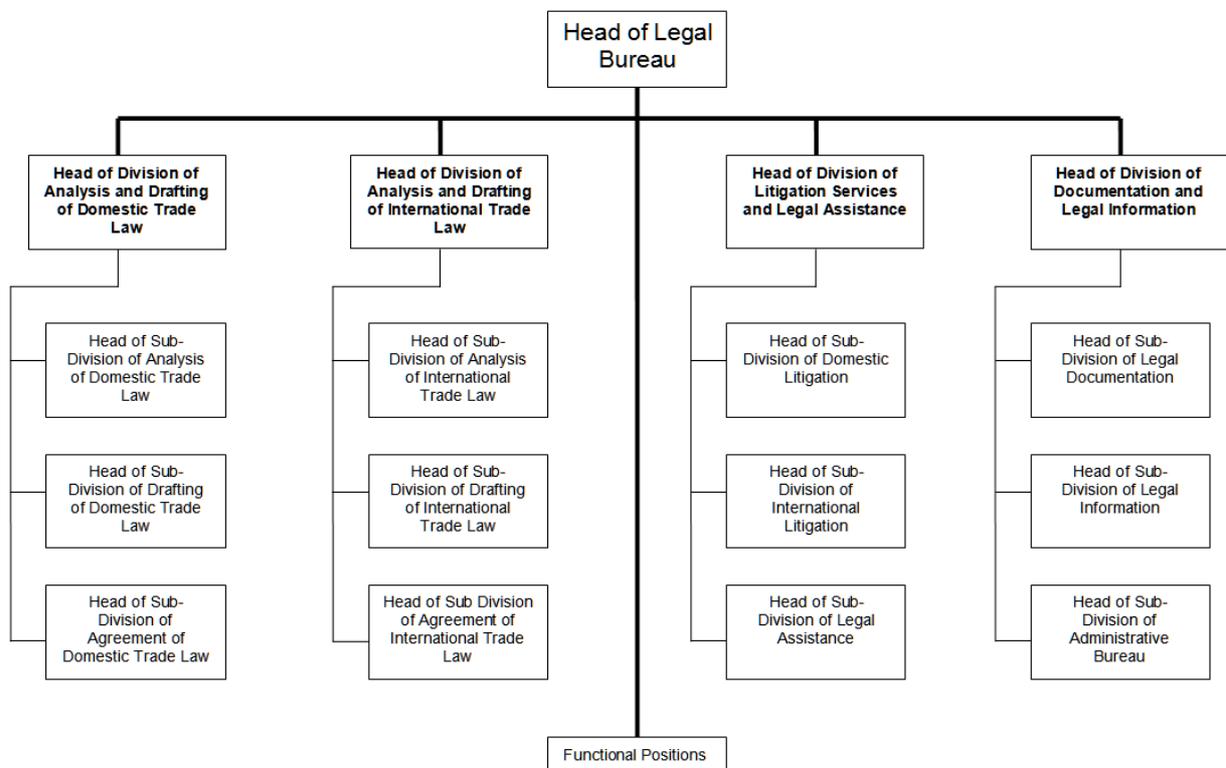
Implication The leadership in the Legal Bureau does not have the length of experience that one would anticipate in a Legal Bureau that has existed for perhaps fifteen years in various forms. This indicates that there has been a high degree of turnover or attrition among the lawyers. The other notable factor in the current organization structure is that, particularly in the two substantive divisions - Foreign Trade Law and Domestic Trade Law - they are organized in sub-divisions along the lines of review of draft regulations (study, then drafting, then agreements). Nothing in the structure of these sub-divisions indicates a lawyer role other than in the drafting process. This reinforces the thought that the Legal Bureau has been seen, internally as well as externally, primarily as a place to review drafting, rather than as a broader resource.

⁸ As is noted in other parts of this assessment, daily work attendance is not always assured in some offices.

- Concerning the domestic and international litigation needs of the MOT, there is a Litigation Division in the Legal Bureau. It is staffed currently by three lawyers and is assisted, when needed, by other lawyers in the Legal Bureau. The entire MOT is the client of this Division. It has three sub-Divisions: Domestic Litigation, Foreign Litigation, and Legal Assistance.
- Concerning the legal research needs of the MOT, there is a Documentation Division in the Legal Bureau, handled by a lawyer. The clients of this Division are the Legal Bureau, others in the MOT, other government agencies, and private law firms, all of which use the resources of this Division. It has three sub-Divisions: Legal Documents, Legal Information, and the Legal Bureau Administrative Support Staff.

The Legal Bureau organization structure is presented in Chart 6.1 below.

Chart 6.1 Current Organizational Structure of the Legal Bureau



Observation 6 The Legal Bureau is responsible for both domestic Indonesian law matters relating to trade/commerce, and international matters relating to trade/commerce. According to lawyers in the Legal Bureau, the work in which they are involved is approximately seventy percent (70%) domestic and thirty percent (30%) international.

Implication In some ways, it is not surprising that domestic trade matters constitute a majority of the Bureau's work. However, given that the DG for International Trade Cooperation has not used the Legal Bureau for much work, it is likely that the current percentage does not reflect the actual amount of legal work to be done.

Observation 7 The head of the Legal Bureau estimates that a high amount – roughly eighty percent (80%) – of the MOT's present legal work is performed by legally trained personnel working outside of the Legal Bureau. A typical split of work between the Legal Bureau and other lawyers in the Ministry is that the others tend to be substantive experts, and the Legal Bureau has tended to be drafting experts. In addition to the Legal Bureau, of the one hundred and thirty seven (137) lawyers in the Ministry, the other main parts of the Ministry containing lawyers who perform legal functions as part of their responsibilities are:

- First, there is a Legal Bureau as part of the Commodity Futures Trading Regulatory Agency (CoFTRA), which is a separate part of the MOT. The Legal Bureau there is of equivalent rank to the main MOT Legal Bureau, headed by a level two Head of Bureau. This Legal Bureau has eighteen staff, of whom eight⁹ are lawyers, three are economists and the others are support staff. It handles legislative and administrative law functions for CoFTRA, including investigations and taking decisions as to possible violations. It does not handle litigation. For criminal prosecutions, cases are referred to the Attorney General, and for civil cases the Litigation Division of the main MOT Legal Bureau handles all litigation.
- Second, there are over one hundred persons with law degrees working in various Directorate General offices, Agencies, or elsewhere in the Secretary General or Inspector General offices. Roughly half of these lawyers involved with legal issues work on legal drafting, while the other half do administrative or regulatory work (e.g., issuance of licenses, investigatory work, etc). Thus, lawyers in the latter category do not practice law as part of their job description,

Implication Because the Legal Bureau is part of the Secretary General office, the DGs perceive it to be part of the approval process at the SG level, and not a general resource for the MOT. In order to make the Legal Bureau more of a general resource, and to work within the current structure of lawyers in multiple offices, a formal concurrence process should be considered that requires earlier consultations between the DGs and the Legal Bureau in a drafting process (as well as in policy development and cases that arise), and approvals by the Legal Bureau earlier in the approval process. In the longer term, once the Legal Bureau has been strengthened, consideration should be given to a freeze on hiring of lawyers directly by the DGs, so that recourse to the Legal Bureau becomes the norm. Unless and until lawyers in the DGs who are doing legal work can be transferred to the Legal Bureau, they should be part of some coordination mechanism for the MOT supervised by the legal Bureau, and they should be required to attend all trainings done for and by the Legal Bureau in their relevant area of work.

⁹ There are also six other lawyers working in CoFTRA who are not in its Legal Bureau.

but they do undertake legal tasks occasionally on an *ad hoc* basis, and generally would be performing functions to enforce a law or regulation. Some of these personnel, however, are not involved with legal issues as a part of their overall work.

6.3.2.2 Status of Legal Bureau

Observation 1 The Legal Bureau does not appear to have been a priority for the MOT, as reflected in the fact that, of the five bureaus under the Secretary General, the Legal Bureau has the second lowest budget. It has few of the resources needed for a strong Legal Department. It currently has been given no role in coordinating, hiring, training, or evaluating the majority of the lawyers working in the MOT.

Implication If steps were taken to increase the perceived status of the Legal Bureau, it would be easier to continue to attract more highly qualified applicants and to enhance its influence over decision-making. For example, the Legal Bureau could participate more in the inter-Agency process, when lawyers of other government ministries are involved, and likewise in bilateral and multilateral negotiations and meetings. The seriously inadequate office space, library, budget and number of trained legal personnel affect the perceived status. The Legal Bureau needs a series of changes, in particular in terms of structure and in terms of personnel.

Implication In the mid to long term, in order for this Legal Bureau to have the prestige necessary to attract and develop top level legal talent, it should have status equivalent to a Directorate General, and in order to achieve that status, it would be advisable to raise it to equivalent rank to a Directorate General (DG). However, the MOT is not interested in such a process currently. According to the USAID contract award, the minimum tangible results for ITAP include:

- *The Legal Office is functioning at the Director General level with requisite skills having been developed.*

Accordingly, the USAID contract should be amended to remove the requirement of attaining DG level during this contract.

Observation 2 The MOT Legal Bureau has eighteen lawyers with an Indonesian Law SH degree, of whom two have overseas Masters and two have domestic Masters. One lawyer who assisted in drafting Indonesia's new Competition Law several years ago is on loan to the Competition Board (KPPU). This number is currently stretched to handle present workload, which is focused mostly on domestic drafting. Staffing is not adequate for the fuller remit foreseen for the Legal Bureau.

Implication This is a foundation for growth, considering that the current Legal Bureau began after separation from the MOIT and started with only two lawyers being transferred from MOIT's Legal Bureau.

Implication To meet the MOT's legal needs, the Legal Bureau needs more personnel. As explained below, the active number of lawyers needed to handle the broad range of domestic, international and litigation needs of the Ministry is at least forty-two, far beyond the present

eighteen lawyers. A limited number of persons with law degrees, currently working elsewhere in the Ministry, should be considered for transfer to the Legal Bureau, with the proviso that they pass an interview with the Legal Bureau and agree to participate fully in all training. It may also be worthwhile hiring several “functionals” as mid-level professionals or to head a new sub-division.

Also, aggressive new hiring is needed. In addition to the six lawyers already designated to join the Legal Bureau in 2006, the ideal would be for the MOT to designate an additional ten (10) new lawyer hires for the Legal Bureau again in October 2006. Hiring a minimum of ten (10) lawyers per year should be continued for at least three to five years. Certain of these lawyers also could be sent for overseas LL.M. programs in order to build substantive expertise and foreign language skills, as well as to build the prestige or image of the lawyers and the Bureau as a whole. Lawyers also should be placed in overseas internships. Such a strong hiring push and the training needed might not be possible without ITAP and its resources dedicated to training, but an unusual push of this nature should be considered. Strong and continuous internal organic growth over the next several years will be the best way to build long term legal capacity.

Observation 3 Most Legal Bureau lawyers are young, generally in their first or second year after law school and thus have little experience practicing law. The most experienced lawyer has eight years of legal experience, while the four division heads have two to four years.

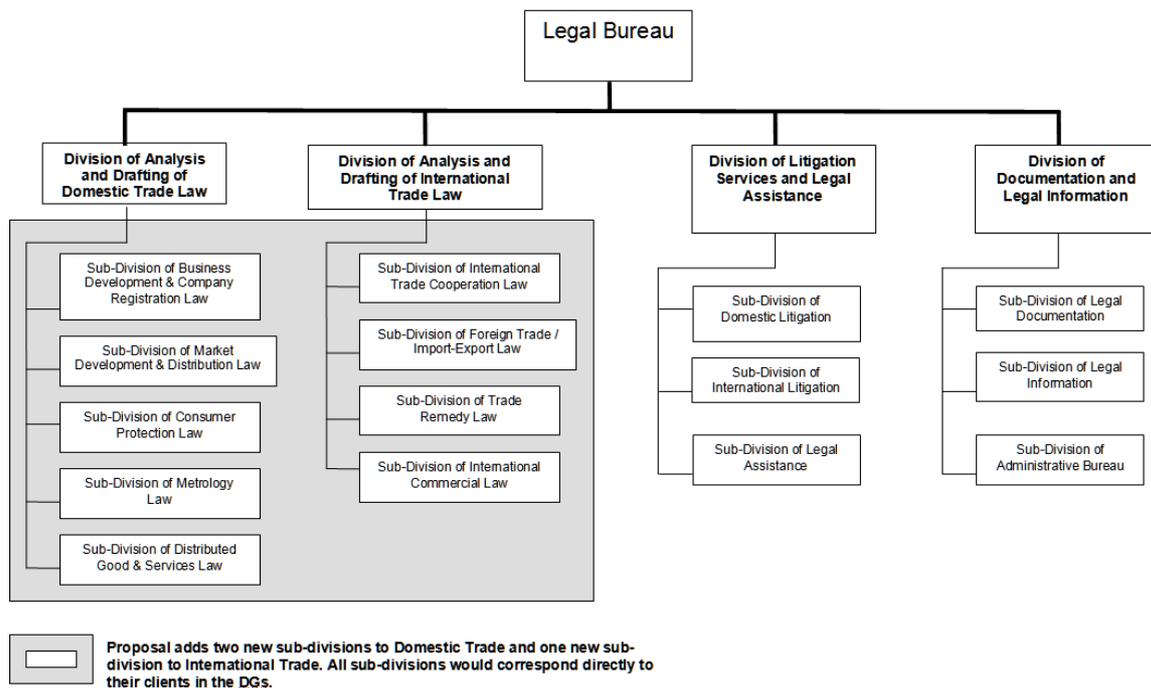
Implication There are significant training needs, but they will need also to be focused on various levels, from entry level to medium and higher experience levels.

Observation 4 The lawyers overall are not adequately trained, and have insufficient experience in international economic and trade law. All lawyers would benefit from developing a specialization in certain areas of law and having better knowledge of the substantive issues.

Implication Attorneys in the Legal Bureau should get the necessary training and experience in the international areas identified. Specialization beyond simply being grouped in a Division, whether Foreign Trade Law or Domestic Trade Law, should be considered, and this is best accomplished by forming structured teams in relation to client needs. Observation 8 below provides additional details on this.

Essentially, the Domestic Trade Law Division would establish two new subdivisions while the Foreign Trade Law Division would have one subdivision. As their focus would correspond with the functional tasks in the DGs, deeper expertise would be developed while the relationships that would result would foster better understanding of the issues. Chart 6.2 shows this structure.

Chart 6.2 Proposed New Organizational Structure of the Legal Bureau



Observation 5 Legal Bureau lawyers need training to be more capable at drafting and vetting new legislation, regulations, case handling, research, litigation and matters and procedures, decrees and policy.

Implication Focused training in the drafting and review process would be helpful.

Observation 6 Legal Bureau lawyers handling international issues need greater training focus on international trade agreements. Attorneys in the MOT have expertise in predominantly domestic legal matters, and do not have firm understanding or facility with international trade agreements. Historically, trade negotiators have relied upon legal staff of the Ministry of Foreign Affairs for counsel in the formal, final stages of negotiations, or have either not involved MOT lawyers in negotiations or have involved persons with a law degree but who were not working as lawyers. Even when Indonesia had a WTO dispute with South Korea relating to an anti-dumping case there involving Indonesian products, the Legal Bureau was neither consulted nor involved, but instead the free WTO legal service was used. External legal counsel also are used.

Implication Focused training in the drafting and review process, case handling, research, litigation, and international trade agreements would be helpful. Without this legal capacity, the MOT will not be self-sustaining in these disciplines and functions and cannot ensure compliance with international obligations.

Observation 7 Legal Bureau lawyers handling domestic issues need greater training focus on foreign laws covering the same type of domestic issues.

Implication Focused training on comparative foreign laws would be helpful, as well as developing research capacity and foreign law research abilities.

Observation 8 There are insufficient qualified lawyers for the work required. New lawyers need to be recruited to the Legal Bureau. Six are scheduled to be hired in 2006, but this is inadequate to meet current needs. Moreover, in the two key substantive areas in the Legal Bureau, the organization does not respond to client needs.

Implication As explained in Observation 4 above, and shown in Chart 6.2, a minor change at the sub-division level of the Legal Bureau would align it with the structure of its clients and could be expected to render improvements in client focus and legal specialization.

To cover all client needs, client expertise will need to be coupled with adequate numbers of trained lawyers to promptly address client requirements. There are significant hiring needs, if the Ministry wishes the Legal Bureau now to develop as a resource to the MOT, rather than a final verifier of legal drafting.

Implication for the Foreign Law Division

To meet the full legal needs of the MOT on international issues, the Foreign Trade Division needs at least twelve (12) lawyers. In addition to a senior lawyer to head this division, there is a need for at least four mid-senior lawyers to oversee several teams of lawyers on specialty areas within international trade law. The current office structure has three sub-Divisions, namely (1) study; (2) drafting, and (3) agreements. These are lateral work areas, and do not correspond with client needs directly. Four specialist teams in sub-Divisions are recommended, corresponding to the needs of (1) DG for Foreign Trade, (2) DG for International Trade Cooperation, (3) Directorate of Trade Defense, and (4) NAFED. One team of three should focus on the work of the DG of International Trade Cooperation, including bilateral and regional trade agreements, such as ASEAN or various FTAs, as well as WTO issues, both for ongoing legal support during the Doha Development Agenda as well as various issues arising under these various agreements. A second unit of three lawyers likewise should be dedicated to working on issues for the DG of Foreign Trade, which involves approvals and licensing of imports and exports, as well as legal issues involving export controls. A third unit is needed to handle the complex area of Trade Defense. In most trade ministries, trade defense cases (anti-dumping, subsidy, safeguard, etc.) take up 25-50% of the Legal Counsel Office time, because they are frequent, complex and contentious. The Indonesian anti-dumping, countervailing duty and

safeguard authorities have substantial caseloads involving foreign countries and firms. Moreover, the Directorate of Trade Defense is helping to defend Indonesian trade interests in over one hundred foreign dumping, subsidy and safeguard cases. A team of at least three lawyers is needed to handle this work, with a mid-level lawyer and two junior lawyers, overseen by the head of division. Finally, a fourth unit of at least two international commercial law specialists should be developed. This unit could provide practical advice on foreign business law to NAFED, as part of export promotion. It also could research and provide examples of foreign laws covering domestic legal issues as needed for the Domestic Trade Law Division. All lawyers in this Foreign Trade Law Division must be fluent in English, which is the main language used in ASEAN, one of three official WTO languages, and the language used most often to communicate with other countries. The final number of lawyers here also depends considerably on how it interfaces with lawyers in the DGs for Foreign Trade, and for International Trade Cooperation. It is also important to note that the number of lawyers suggested for each team needs to be flexible. These are recommended areas of specialization, but lawyers from other teams can and should be expected to work on other matters when the need requires. For example, lawyers in a trade defense team should assist if there is an important and large project under foreign trade law, and *vice versa*.

Table 6.2 Proposed Sub-Division Team Structure and Estimated Legal Staffing for Foreign Trade Law Division

Foreign Trade Law Division	Current Active Lawyers	Total Lawyers Needed
International Trade Cooperation	1	3
Foreign Trade/ Import-Export	2	3
Trade Remedies	0	3
International Commercial Law	0	2
Head of Division	1	1
Total	4	12

Implication for the Domestic Law Division.

To meet the full legal needs of the Domestic Trade DG in terms of the services that the Legal Bureau should perform, this legal division needs at least twenty-one (21) lawyers. The current office structure has three sub-Divisions, namely (1) study; (2) drafting, and (3) agreements. These are lateral work areas, and do not correspond with client needs directly. Five substantive units in sub-Divisions are recommended to be developed

as counterparts to the five main directorates within the DG for Domestic Trade. In addition to a senior lawyer to head this division, there is a need for at least five mid-senior lawyers to oversee several teams of lawyers on specialty areas within domestic trade law. It is best to have legal teams that correspond to the five directorates under the DG for Domestic Trade. A team of at least six lawyers is needed to handle the work of the Directorate of Distributed Goods and Services, with a mid-level lawyer and five junior lawyers, overseen by the head of division. This team will need to consider many legal regulations, and also the impact of competition law and policy on the structure of any regulations. A second team of four lawyers should perform work for the Directorate of Market Development and Distribution. A major issue being addressed by this Directorate, for example, is the issue of regulation of hypermarkets. A third team of five lawyers is needed for the complex area of Consumer Protection. A fourth team of one lawyer should be specialized in Metrology (there are apparently seven persons with SH degrees working in that Directorate already). Finally, a fifth unit of at least four lawyers is needed for Business Development and Company Registration issues. The final numbers here also depend considerably on how it interfaces with lawyers in the DG for Domestic Trade. The Domestic Trade Law Division also should use the proposed International Commercial Law unit in the Foreign Trade Law Division as a resource to find and study good examples of laws and regulations in other countries that are application to the legal issues arising from the work of the DG for Domestic Trade.

Table 6.3 Proposed Sub-Division Team Structure and Estimated Legal Staffing for Domestic Trade Law Division

Domestic Trade Law Division	Current Active Lawyers	Total Lawyers Needed
Business Development and Company Registration	1	4
Market Development and Distribution	1	4
Consumer Protection	1	5
Metrology	0	1
Distributed Goods and Service Supervision	1	6
Head of Division	1	1
Total	5	21

Implication for the Litigation Division. The Litigation Division in the Legal Bureau is staffed currently by three lawyers and is assisted, when needed, by other lawyers in the Legal Bureau. It handles only domestic litigation. That should remain its focus, but it should be a resource for all types of litigation. For example, there are major litigation possibilities under WTO and ASEAN rules, as well as other multilateral and bilateral agreements. When cases of this nature arise, the Litigation Division should be able to provide advice on the dispute settlement process, and help with drafting of briefs and submissions, as part of a team handling major international cases. One additional lawyer should be added to the domestic litigation team, and one lawyer should be added and focused on international dispute settlement and litigation.

Table 6.4 Proposed Sub-Division Team Structure and Estimated Legal Staffing for Litigation Division

Litigation Division	Current Active Lawyers	Total Lawyers Needed
Domestic Litigation	2	3
International Litigation	0	1
Head of Division	1	1
Total	3	5

Implication for Documentation Division
Concerning the legal research needs of the MOT, there is a Documentation Division in the Legal Bureau, handled by a lawyer. The resources devoted to domestic trade issues are inadequate. The resources devoted to international law issues are essentially non-existent. The research capabilities need to be expanded. Legal Bureau lawyers handle the research themselves. However, this unit should have a law librarian.

Table 6.5 Proposed Sub-Division Team Structure and Estimated Legal Staffing for Documentation Division

Documentation / Research Division	Current Active Lawyers	Total Lawyers Needed
Legal Researchers	1	1
Law Librarian	0	1
Head of Division	1	1
Total	2	3

Implication To summarize the legal personnel needs of the Legal Bureau, assuming that no other current lawyers from DGs are transferred to it in the short term, the following chart shows the four current divisions within the Legal Bureau, and the present active lawyers working in each one, plus a projection of the actual need:

Table 6.6 Legal Bureau: Summary of Overall Legal Personnel Needs

Legal Bureau Division	Current Active Lawyers	Total Lawyers Needed
Foreign Trade Law	4	12
Domestic Trade Law	5	21
Litigation	3	5
Documentation/Research	2	3
Head of Legal Bureau	1	1
Total	15	42

Observation 9 The Legal Bureau currently is not involved in lawyers hired elsewhere in the MOT. Thus, the Legal Bureau has no input into the type or quality of lawyers being hired by the various DGs and Agencies. Those hiring decisions are usually made by non-lawyers.

Implication While good general job interviews can be conducted by non-lawyers, they cannot determine the legal skills of a candidate for legal work. This will mean that, on average, a non-lawyer will tend to hire more lawyers with inadequate legal skills.

Observation 10 Lawyers in the Legal Bureau indicate that officials in the DGs do not involve the Legal Bureau early for various reasons, including: the Legal Bureau is perceived to be part of a later approval process; DGs hire their own lawyers for drafting; and there is a lack of experience or competency or capacity in the Legal Bureau to handle all the necessary issues.

Implication Communication needs to be improved, both concerning the perceptions, as well as to new staff in the Legal Bureau now available to do work that it was not earlier capable to do or perceived to be capable.

Observation 11 From the client’s perception, administrators in certain DGs indicate that they do not use the Legal Bureau often for variety of reasons including no real need; the perception that Legal Bureau senior lawyers are too busy or lack expertise (especially on the international side); or that the DGs prefer to hire their own “internal” lawyers to do drafting or analysis.

Implication Improved capacity, as well as improved perception of capacity via communication, will be needed to change this dynamic.

Observation 12 Staff lawyers need to have better awareness of how other countries use their legal counsel offices, and have a need to see how other General Counsel Offices operate.

Implication Internships should be considered in other countries’ legal counsel offices, as well as seminars from lawyers who have worked in such offices, with a preference for developing country examples which have been modernized.

Observation 13 The Legal Bureau suffers from inadequate library and research facilities. There are only a handful of foreign law reference books, and those are out of date or only marginally relevant to the Legal Bureau’s work. No research materials exist for ASEAN, or APEC or UNCITRAL, and virtually none exist for the WTO. While there is a WTO library elsewhere in the building, it is important for lawyers to have ready access to all relevant laws at their office, and a unified legal library is important. Checking out books from another library is inefficient.

Implication Consideration should be given to creating a single thorough law library for the MOT, under the Legal Bureau, where all lawyers and administrators could go as a sure source for legal materials and research, in all legal disciplines relevant to the MOT.

Observation 14 The Legal Bureau needs to upgrade its library, and recruit a qualified law librarian. Skills in legal research and training in online research would also be helpful. There are roughly 3700 volumes in the library, basically old copies of Indonesian legal codes and regulations. When the earlier MOIT library was split in 2005, it appears that the MOI retained most of the more up-to-date materials. Thus, the MOT law library is vastly under-resourced. There are no modern research tools such as CDROM or Internet law database subscriptions in use, or materials on international trade law (with the exception of an Indonesian translation of the Uruguay Round Agreements which is apparently inaccurate). The library also needs equipment such as shelving, file cabinets, and reading tables.

Implication A significant investment should be made to upgrade the library materials, get subscriptions, hire a law librarian, and train library support staff.

Observation 15 The Legal Bureau does not have a training plan for other support staff in the Legal Bureau, including librarians.

Implication A full training plan for support staff should be developed, covering topics such as law office administration, computer skills, organizational skills, file management and other subjects.

Observation 16 For a staff of thirty-three persons, there are only nine computers, none of which are networked. Software is limited and is not standardized. Few of the senior lawyers have their own computer and often junior lawyers must wait to share a computer.

Implication Priority should be given to purchasing twenty new computers for the Legal Bureau, so that all staff lawyers and other key support personnel have direct access to all computer services, and then are trained.

Observation 17 There is no internet connection in the Legal Bureau. There is no way currently to do online research or to download documents from international or domestic sources to make sure that Indonesia's trade laws incorporate best international practices.

Implication: Office efficiency is adversely affected by the lack of internet.

Observation 18 The Legal Bureau does not have a legal case management system or office management system. It has also been observed that certain DGs also do not have such systems (*e.g.*, Trade Defense) so that a common case management system, including document retention, would fix certain problems with case management.

Implication: A case management and document management system is likely to improve efficiency in the Legal Bureau and in other parts of the MOT, and should be considered.

Observation 19 There is only one outside phone line for the entire Legal Bureau, which also serves as a fax line.

Implication At a minimum, separate phone and fax lines should be arranged, and the need for additional phone lines should also be determined.

Observation 20 The Legal Bureau has minimal office equipment and supplies. For example, it has a single photocopier, but even that copier has no feeder, so pages have to be fed one by one manually. Basic office supplies are lacking.

Implication Budgets should be examined in order to get basic office equipment in place.

Observation 21 The Legal Bureau's objectives support the five year plan of the MOT, and it then works annually in relation to the MOT annual plan, doing its part to achieve these goals. For example, a recent goal was the development of a new Investment Law. However, there is no list of specific activities for the Legal Bureau to perform.

Implication There is a need for strategic action planning.

Observation 22 Legal Bureau employee performance evaluations are done according to Indonesian civil service regulation, using a DP3.¹⁰ Rather than give negative evaluations, the Legal Bureau managers use positive rewards, utilizing an honorarium/bonus budget, and also travel, to reward those who do well. The prospect of post-graduate studies abroad is also an incentive, though rarely available.

Implication Within the limitations of the civil service system and Indonesian culture, the evaluation system seems to work well. As part of further management training, the use of direct and indirect incentives and employee morale schemes could be reviewed further.

6.3.3 Status of Other Legal Functions in the Ministry

Observation 1 Legal drafting in various DGs is done often by persons in those DGs who have an Indonesian law degree (SH). These employees are usually focused on the substantive topic of their Directorate, and are often used in the legislative drafting process. Training in legal drafting is provided twice a year, but drafting skills in the DGs are still below the level needed for the MOT.

Implication These lawyers from outside the Legal Bureau need to have training, and there should be coordination between all of the various legal functions in the MOT. As explained further below, consideration should be given to having regular coordination meetings and to the appointment of a Legal Coordinator in each DG to interface with the lawyers in that DG and the Legal Bureau.

Observation 2 Officials in the client DGs appear to not regard the Legal Bureau as "their" lawyers. If they need a lawyer, they hire one directly (either as an employee in the own DG, or as outside counsel). The Legal Bureau essentially is seen as an approval point within the Secretary General's office, rather than as a business partner.

Implication Arrange for the Secretary General or another senior representative of the Minister to meet on an annual basis with the Director of the Legal Bureau and the heads of each Directorate General and Agency to consider whether their legal needs are being met, what their upcoming requirements will be and, if appropriate, whether additional hiring or re-assignments of legal staff would facilitate the accomplishment of the Ministry's objectives.

¹⁰ DP3 is the standard Indonesian government form for doing appraisals.

Observation 3 Officials in the DGs rarely involve the Legal Bureau until it is formally required. Even when using the Legal Bureau would be normally expected in order to ensure quality drafting starts from the beginning of a project, officials in the DGs handling international issues have used Ministry of Foreign Affairs lawyers, the free WTO legal service (Advisory Centre on WTO Law - ACWL) for international disputes (*e.g.*, the WTO case against South Korea), or outside counsel.

Implication Need to change the dynamics of the MOT in terms of its thinking on use of the Legal Bureau as a client service organization. The Ministry should consider communicating as to the new and broader purposes for the Legal Bureau, and the Legal Bureau should be ready to assist when called upon.

Observation 4 The Legal Bureau staff is not sufficiently engaged in the decree-making process, whether for domestic or international issues. The DGs often involve the Legal Bureau only late in drafting process. Often, the legal staff reviews decrees for legality once others with non-legal backgrounds have drafted them. In other cases, draft decrees may have been prepared by persons working in the various DGs who received a law degree but who are not receiving regular legal training or who are not overseen by experienced lawyers.

Implication This type of decree making inevitably leads to legal confusion and overlapping regulations. The Legal Bureau's expertise is therefore not properly utilized at the early stages of drafting or is brought in late. Hence, the need exists for developing institutional capacity in trade-related law, rule-making, and policy development.

Observation 5 The DGs (particularly in ITC) regard the current Legal Bureau lawyers as unable to assist in trade negotiations. The DGs regard their own lawyers in their DG, if any, as the substantive experts.

Implication There will need to be focused training, and the development of negotiation experience, in the Foreign Trade Law Division of the Legal Bureau. If those lawyers are mentored by the ITAP Trade Lawyer who has this type of experience, the DG should find their needs met.

Observation 6 The present arrangements for hiring of lawyers in various DGs lead to inadequate use of the legal talent and experience currently in the MOT. For a lawyer (someone with a law degree) to apply for a job at the MOT, current rules require such a person to apply for law jobs, which are being offered both in the Legal Bureau and in the various DGs. In most cases, lawyers being hired in the DGs are not interviewed by a lawyer. The Legal Bureau currently has no involvement in, or input into, this hiring process. The lawyer recruitment process can be improved by having candidate interviews conducted by lawyers, who can more effectively assess the skills and competencies expected from MOT lawyers. While good general job interviews can be conducted by non-lawyers, they cannot determine the legal skills of a candidate for legal work.

Implication New lawyers being hired elsewhere in the MOT should also be interviewed by the Legal Bureau (even prior to any possible reorganization). Currently non-lawyers are conducting most of these interviews. This weakness in the present system in terms of determining the legal skills of a candidate needs to be addressed.

6.3.2.4 Needs to Address in Legal Bureau

Observation 1 Retention of senior lawyers. Lawyers who worked earlier in the Legal Bureau at the MOT or MOIT have been reassigned to other jobs, and thus experience as a lawyer and legal drafter was lost to the Legal Bureau. There needs to be a more defined career path for lawyer in the MOT. Today, no clear legal career path exists. Lawyers from the Legal Bureau often are asked to take non-legal jobs elsewhere, which hinders their growth and experience as lawyers.

Implication Develop a plan for better retention of senior lawyers. There needs to be a career path for a lawyer to join the MOT and to be a lawyer as one's career. Today, no clear career path exists. Lawyering is different from other specialties in that legal experience is an integral part of efficient action as a lawyer; thus, breaks from the development process are generally not helpful. Accordingly, lawyers should be segregated from the general tendency in the MOT to move personnel into various types of jobs over their career. There need to be promotion opportunities within the Legal Bureau in order to attract and retain quality experienced lawyers in lawyer roles.

Observation 2 Better training of junior lawyers. Junior lawyers currently depend too much on being trained by their supervisor. Though that training is essential, it needs to be rounded out by other types of training.

Implication Consider developing a plan for better training of junior lawyers in all facets of their legal practice.

Observation 3 Fill five (5) empty positions on the current staff. To develop a client orientation, the Legal Bureau needs to be adequately staffed. In some cases, positions are being held open for a year or more, in the hope that younger lawyers will develop into those positions with the passage of the required time under civil service rules (*e.g.*, 4 years). However, there are few mid-level lawyers in the Bureau. Either way, there is legal work needing to be done and the current staff cannot complete all of the work that could be done by a better-staffed Legal Bureau.

Implication Develop a plan for filling the five (5) empty positions on the current staff. If experience is lacking in the present staff, consideration could be given to hiring functionals, rather than regular government career officials.

Observation 4 Hire new lawyers, and a law librarian. As explained in detail below, there is work that exists in the Ministry now, and there are not enough trained lawyers to do the work. Capacity must be developed now for present and future needs.

Implication Develop a plan for hiring new lawyers, and a law librarian, taking advantage of the ITAP training program to bring in higher numbers of new lawyers and train them.

Observation 5 Train new lawyers. Knowledge of legal issues is important to the proper functioning of the Ministry.

Implication Develop a plan for training new lawyers (see below). The training needs of new lawyers are different than those of both junior lawyers and more experienced lawyers, and programs need to account for this difference in their needs.

Observation 6 Train existing lawyers.

Implication Develop a plan for training existing lawyers (see below).

Observation 7 Opportunities for post-graduate studies abroad should be made available to deserving lawyers, particularly initially for those working in the Foreign Trade Law Division. Especially if the studies are done in English, it serves the dual purpose of improving English language skills, while developing substantive legal knowledge.

Implication Develop a plan for post-graduate studies abroad for deserving lawyers, especially initially for those working in the Foreign Trade Law Division. Consider making the availability of such overseas opportunities known, so that it could be administered as a reward tool for deserving lawyers in the Legal Bureau and as an incentive for other lawyers to join the Legal Bureau.

Observation 8 Overseas internship opportunities will provide practical training in legal drafting and advice.

Implication Develop a plan for overseas internship opportunities. Consider making the availability of such overseas opportunities known, so that it could be administered as a reward tool for deserving lawyers in the Legal Bureau and as an incentive for other lawyers to join the Legal Bureau.

Observation 9 Better library and research capability, including a WTO library, and foreign law materials, will improve the Legal Bureau's quality of work.

Implication Develop a plan for better library and research capability. Need to purchase a WTO library. Need to purchase foreign law materials for domestic research and for reference by exporters.

Observation 10 Loading all relevant treaties, laws, regulations, decrees, cases and other information into a central and secure database will provide greatly enhanced access to critical information.

Implication Develop a plan for loading all relevant treaties, laws, regulations, decrees, cases and other information into a central and secure database, managed by the Legal Bureau.

Observation 11 Language studies in WTO languages, especially English, are a need due to use of English in international negotiations and in research materials.

Implication Develop a plan for language studies of WTO languages (English, French and Spanish). English studies are a priority due to use of English in international negotiations and in research materials. Consider making the availability of such language study opportunities known, so that it could be administered as a reward tool for deserving lawyers in the Legal Bureau and as an incentive for other lawyers to join the Legal Bureau.

Observation 12 Greater specialization and development of focus areas, to develop deeper expertise.

Implication Develop a plan for greater specialization and/or focus areas, in order to develop substantive expertise. Training in these areas, building teams with specialists in client offices, and considering a re-organization of the Foreign Trade Law Division and Domestic Trade Law Division, all should be considering as means to achieve greater expertise.

Observation 13 Training, and then experience in international negotiations will enable the Legal Bureau lawyers to fulfill the expressed wish of the Ministry for it to have seasoned lawyers during important negotiations. That experience does not instantly materialize, and must be developed over time.

Implication Develop a plan for experience in international negotiations. A plan should make use of the expertise of the ITAP team, and involve joint assistance.

Implication Develop a plan for a representative of the Legal Bureau to be seconded as a lawyer to the Indonesian WTO Mission in Geneva on a permanent two to three year rotation. Later, once capacity and numbers of lawyers in the Legal Bureau have been developed, similar postings in key international posts should be considered, such as Washington, Brussels, Canberra and Tokyo.

Observation 14 Experience in international dispute settlement. WTO, ASEAN and other multilateral and bilateral agreements have dispute settlement provisions, and if cases arise, the Legal Bureau lawyers will need to handle them.

Implication Develop a plan for gaining experience in international dispute settlement. Consider identifying a WTO dispute settlement case between two other countries on a topic of interest to Indonesia (*e.g.*, an agricultural dispute), and participate as a third party participant in the WTO process. Likewise with ASEAN and other multilateral or bilateral processes for handling disputes.

Observation 15 There is currently no process of consultation between the Legal Bureau and its client offices as to their needs. There is also no consultation as to how to staff any particular case, matter or issue in relation to which lawyers should be involved, either from the Legal Bureau or DG or both.

Implication Develop a plan so that the head of the Legal Bureau and his division chiefs meet regularly (monthly or at least quarterly) with each of their clients (DGs and other Agency and Bureau chiefs) to ascertain whether the client's needs are being met, what the client's upcoming needs will be, and which lawyers from the Legal Bureau and the client's office (as applicable) will meet the need, etc.

Observation 16 There is currently no Ministry-wide assessment of legal needs and requirements.

Implication Arrange for the Secretary General or another senior representative of the Minister to meet on an annual basis with the Director of the Legal Bureau and the heads of each Directorate General and Agency to consider whether their legal needs are being met, what their upcoming requirements will be and, if appropriate, whether additional hiring or re-assignments of legal staff would facilitate the accomplishment of the Ministry's objectives.

6.3.2.5 Needs to Address in MOT DGs

Observation 1 Team-building should be encouraged. When any particular project or case is commenced, the normal process of work in the MOT should be to develop teams from the DGs, Legal Bureau, and TREDAs, in order to ensure that substantive, legal, and analytical/policy aspects all are covered.

Implication Develop a plan for encouraging team-building, where the normal process of work in the MOT is to develop teams from the DGs, Legal Bureau, and TREDAs from the outset of a particular project or case.

Observation 2 There is no coordination of lawyers within individual DG or agencies, and there is no overall coordination of the lawyers within the DG in relation to the lawyer counterparts in the Legal Bureau. In addition to that, there is no Ministry-wide coordination involving all of the lawyers in the Ministry.

Implication Develop a plan for each DG and Agency to have, within its Secretariat, a coordinating office for all legal affairs within that DG or Agency. Each Secretariat already has one or more lawyers on its staff, so the suggestion would be to designate one of them to conduct this coordinating role, and not to add new staff. This person could have a title or role such as Legal Coordinator for __ (e.g., Domestic Trade). The responsibility of this person would be two-fold: first, to supervise and coordinate all legal work within that particular DG or Agency; and second, to coordinate with the appropriate counterpart in the Legal Bureau, most likely with the Division head responsible for that DG or Agency. In addition, a plan should be developed for each of these Legal Coordinators to meet as a group with the Director of the Legal Bureau and the heads of the various Legal Bureau Divisions to coordinate work, training, communications, and management of the legal needs of the Ministry. Such meetings should be held at least quarterly.

Observation 3 The Legal Bureau has not been involved early in work such as trade investigations (e.g., anti-dumping) or consumer affairs, so cases are well underway before the Legal Bureau is asked to assist in them.

Implications Develop a plan for each official to inform the Legal Coordinators and the Legal Bureau about any new investigations or cases. A flow chart should be developed for use in the case or investigation handling process. The flow chart should include coordinating meetings and require sending copies of filings and correspondence so that the Legal Bureau lawyers are well informed about case developments.

Observation 4 There is no clear concurrence process for development of laws, regulations, and decrees which will ensure the review of drafts in a timely and thorough manner.

Implication Develop a plan for a concurrence process for development of laws, regulations, and decrees. A flow chart should be developed for use in the approval process, once drafting has begun. The process should ensure that the Legal Bureau has input and an opportunity for its staff and senior lawyers to participate fully in the process of drafting all laws, regulations and decrees. For example, a process to consider could be a system where officials in a given DG Directorate are

required to consult with the Legal Bureau (and TREDAs for policy/analytical input) prior to any drafts being submitted for approval to a Director within a DG, and for a staff lawyer in the Legal Bureau to confirm agreement with any draft prior to the Director giving approval. Once a Director has approved, a draft could be circulated so that the Head of either the Foreign Trade Law Division or Domestic Trade Law Division agrees with the draft before it is submitted to a Director General for approval. A TREDAs approval at more senior counterpart level could be included also. Finally, after the Director General approves, and before the Secretary General approves, the Head of the Legal Bureau would give his written concurrence. Once the Head of the Legal Bureau (plus a senior TREDAs official) and the Secretary General agree, it would be ready for the Minister.

Observation 5 The Legal Bureau should participate in the trade agreement negotiating process, including attendance at all important negotiations.

Implication Develop a plan for involving the Legal Bureau in the trade agreement negotiating process. As part of that plan, there should be consideration of a plan, starting in April 2006, for the MOT to send a member of the Legal Bureau and an ITAP lawyer to all negotiations involving the WTO, ASEAN or multilateral and bilateral agreements. If priority needs to be given, the WTO negotiations should be prioritized in this effort.

Observation 6 There are no lawyers present in certain key international embassy postings, such as the Indonesian WTO Mission in Geneva, as well as key international posts such as Washington, Brussels, Canberra and Tokyo. Many WTO Missions have a lawyer from their Trade Ministry Legal Department.

Implication Develop a plan to post a Legal Bureau officer in certain key international embassy postings, such as the Indonesian WTO Mission in Geneva, as well as key international posts such as Washington, Brussels, Canberra and Tokyo. This person can be posted as a legal officer or trade attaché. It would increase the attractiveness of the Legal Bureau to have such an option as part of the rotation of jobs in a legal career in the MOT, and such posting would develop considerable experience from which the DGs could draw.

Observation 7 Overseas Embassies need to be instructed how to handle the interface with foreign trade remedy cases. Currently, deadlines are missed and opportunities for legal defense are lost because Embassy officials do not forward notifications in a timely manner or process such information in such a way as to preserve Indonesia's rights in certain cases.

Implication Develop a plan to set up instruction to all Indonesian Embassies. The plan will have to account for differences in embassy structures, and particularly where some embassies have both a commercial counselor and economic counselor, and other embassies have only an economic counselor who frequently is not familiar with the handling of trade cases and may not consider it as a part of their job. Additionally, a system is needed for the Trade Defense Directorate to ascertain that the instructions are being carried out by embassy officials.

<p>Observation 8 There is considerable time loss in some cases, where overseas embassies sent time sensitive information only via normal diplomatic channels which meant communications went first to the Ministry of Foreign Affairs before being forwarded to the Ministry of Trade. In some cases a deadline had already passed before the document had reached the Ministry of Trade. This can make proper defense of a trade case impossible.</p>	<p>Implication Develop a plan for expedited courtesy copies to be sent directly by fax or email to the Ministry of Trade.</p>
<p>Observation 9 Senior MOT officials currently do not include senior Legal Bureau lawyers in all meetings and negotiations.</p>	<p>Implication Develop a plan for enabling senior officials to include senior lawyers in all meetings and negotiations. The example of senior officials is needed in order for less senior officials to change their traditional means of operating without legal guidance.</p>
<p>Observation 10 The Legal Bureau is not included in international negotiations, and it has no travel budget to include lawyers in trade negotiations.</p>	<p>Implication Develop a plan for a Legal Bureau travel budget to include lawyers in trade negotiations.</p>
<p>Observation 11 Train MOT officials on relevant legal issues, such as WTO law.</p>	<p>Implication Develop a plan for training MOT administrators on relevant legal issues, such as WTO law.</p>
<p>Observation 12 Train other RI agencies, and RI business and society parties, such as those involved in WTO negotiations.</p>	<p>Implication Develop a plan for training RI business and society parties, such as those involved in WTO negotiations.</p>

6.3.2.6 Specific Training Needs For Legal Bureau

<p>Observation 1 The following list provides a representative sample of professional development and skill training courses to fully develop the skills and competencies of the Legal Bureau personnel:</p> <ul style="list-style-type: none">• Introduction to all WTO Agreements on• Introduction to all ASEAN Agreements, and other multilateral and bilateral agreements.• Trade Dispute and Dispute Resolution Course (covering both WTO and ASEAN Agreements).• Legal drafting seminar on drafting of regulations.• Legal drafting seminar on drafting of agreements.• Preparation of legal opinions• Persuasive writing in Bahasa Indonesia• Litigation seminar.• Legal research.	<p>Implication Without training in the areas noted, the Legal Bureau will have gaps in skills and knowledge that will adversely impact their capacity to provide the full range of legal services to the MOT.</p>
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- Implementation of trade agreements.
- Competition Law and Policy.
- Internship opportunities at the WTO, relevant ministry counterparts abroad (e.g., USTR, DOC) and perhaps private law firms.
- Managing a legal office.
- Training for the head of the Legal Bureau on organizational change.
- Training on WTO languages (English, French and Spanish, with emphasis on English).
- Training for Legal Bureau office support staff on secretarial, law library and paralegal support issues.

6.3.2.7 Specific Training Needs For MOT DGs

Observation 1 Need courses on the following topics

- Introduction to all WTO Agreements.
- Introduction to all ASEAN Agreements, and other multilateral and bilateral agreements.
- Trade Dispute and Dispute Resolution Course (covering both WTO and ASEAN Agreements).
- Foreign Trade Regulation.
- Trade Remedies.
- Procedures for monitoring and responding to foreign unfair trade law cases (anti-dumping, anti-subsidy, safeguards).
- Basic Trade negotiations, and general negotiation skills.
- Legal drafting seminar on drafting of regulations.
- Legal drafting seminar on drafting of agreements.
- Preparation of legal opinions
- Persuasive writing in Bahasa Indonesia
- Legal research.
- Developing national negotiating positions.
- Competition Law and Policy.
- Mediation and dispute settlement systems (for the Consumer Affairs Directorate).
- Training on WTO languages (English, French and Spanish, with emphasis on English).

Implication Without training in the areas noted, the legal personnel assigned to the various DGs will have gaps in skills and knowledge that will adversely impact their capacity to provide the full range of expert advice and support to the MOT.

6.3.2.8 Specific IT Needs for the Legal Bureau

Observation 1 Need to install a high quality IT system, ideally in the first half of 2006, and no later than the end of year one. It should include, at the least, a document management system¹¹ and a law office management system.¹²

Implication Develop a plan for installing a high quality IT system, ideally in the first half of 2006, and no later than the end of year one. It should include, at the least, a document management system and a law office management system.

Observation 2 Each lawyer in the Legal Bureau needs to have a computer with Internet access and email, and to be trained in its proper use. Other key support staff also should have computer access. To account for the six new lawyers being hired in 2006, at least twenty (20) computers need to be purchased for 2006.

Implication Develop a plan for ensuring that each lawyer in the Legal Bureau has a computer with Internet access and email, and becomes trained in its proper use. Other key support staff also should have computer access. To account for the six new lawyers being hired in 2006, at least twenty (20) computers need to be purchased for 2006.

Observation 3 Need a section in the MOT website for the Legal Bureau, which will explain its functions, address job opportunities (details of which are handled by the Personnel Office), and also be a resource site for all laws, regulations and decrees relevant to the work of the MOT.

Implication Develop a plan for a website for the Legal Bureau, which will explain its functions, address recruiting, and also be a resource site for all laws, regulations and decrees relevant to the work of the MOT.

Observation 4 Need a law library data base center in the Legal Bureau, which will be accessible to all lawyers and staff within the Legal Bureau.

Implication Develop a plan to law library data base center and a network connection to all the computers of the lawyers and staff within the Legal Bureau. If the Legal Bureau law library eventually becomes the law library for the entire MOT, then access for all MOT officials should be considered.

¹¹ A legal office needs a document management system, in order to keep complete files of all documents in the various cases or files in which it is working. In complex litigation or complex negotiations, such as system is imperative for proper management of the matter. It is also necessary to be able to trace various drafts of document.

¹² A law office management system is similar to generic office management systems which cover personnel, budget, procurement and related management issues. For law offices, it also should include litigation and other complex case or file management systems, including tracking of deadlines within certain known statutory or court frameworks.

6.4 Conclusion

Our assessment reveals a situation involving the legal functions of the MOT that is far more complex and challenging than had been envisioned. The Ministry has made clear that it is principally interested in legal capacity building, and for the term of this project it may not be interested or ready to face the question of upgrading the Legal Bureau to Directorate General status. The capacity building could be optimized by a small degree of re-organization to be considered in the Legal Bureau, which would change the sub-division structure of the two substantive legal divisions from an emphasis on review of drafting, to a client focus. New methods of coordination and communication between the Legal Bureau and the DGs and with lawyers in the various DGs and agencies will also improve service. Another key factor is the reliance of the DGs on the hiring of their own internal lawyers, and the entrenched perception that the Legal Bureau is not a resource for them, but merely a functional part of obtaining approval for legislation, regulations and decrees within the Secretary General's office. A lack of adequate resources also presently inhibits the Legal Bureau from functioning to its potential, in terms of trained personnel, budget, systems, and research facilities. As outlined above, an aggressive and multi-faceted training program will assist in improving the legal skills of the Legal Bureau and other parts of the MOT. Equally, certain changes in practices will be needed, such as developing a culture of team-building and inclusion of lawyers in all phases of the MOT's mission. The Work Plan will need to address these needs in detail, as well as a plan to ensure that training and consultative processes continue after ITAP is finished.

Section 7 Information Technology and Data Processing

7.1 Background

The Indonesia Trade Assistance Project (ITAP), USAID Task Order No. AFP-I-04-04-00002-00, managed by Chemonics International Inc, is to support the Government of Indonesia to build and strengthen capacity related to the analysis, negotiation, and implementation of bilateral and multilateral trade agreements. A major component of the project is the provision of information technology (IT) equipment, software and services (installation, customization and maintenance) to enable MOT personnel to effectively identify, analyze and communicate issues and data relevant to their work developing and implementing policy.

However, in order to develop the acquisition and migration or conversion plan, it is essential to understand the MOT's current IT systems as well as their perceived needs for a new IT system. Additional key requirements include the assessment of local vendors regarding availability, quality and cost, and a brief examination of likely training needs specifically focusing on post implementation systems, equipment and network administration, service and support to the user base.

7.2 Scope

The scope of this activity is to perform a baseline assessment of the information technology architecture, computer equipment and infrastructure, office automation, equipment and systems maintenance, e-government, licensing, information flow, policies regarding security and use, networks, internet access, intranet, and web sites.

7.3 Initial Findings

From an overall guideline standpoint, per the memorandum 08/M/I/2005 from the Minister of Trade, dated January 6, 2005, the Trade Data Center (TDC) currently under TREDATA is to be responsible for:

- Local area network development
- All connections to the internet
- All web site development, intranet applications, and the MOT's email system
- Software licenses and compliance
- Development of software applications
- All application development

The memo stipulates the transition of these services during 2005 directly to the trade data center, with the trade data center taking full responsibility for these services from 2006 forward. Currently, it is taking a bit longer for some of these services to transition to the trade data center because of funding, available resources and facilities.

The trade data center team has developed a Five Year Plan that has outlined many core initiatives that directly support the directive from the Minister of Trade in that all IT functions are the responsibility of the TDC and outline the major programs for an enhanced and integrated information technology strategy. The trade data center is actively working on several of the programs listed below.

Table 7.1 Trade Data Center Team Five Year IT Development Plan

Programs	Year				
	2005	2006	2007	2008	2009
Software legalization	■	■	■	■	■
MOT web site development	■	■	■	■	■
Headquarter Network integration	■	■			
Database integrations and data warehouse development in headquarter		■	■		
Branches network connection developments (WAN)		■	■	■	■
Branches infrastructure survey		■	■		
Pilot project connections to office branch in east java		■			
Connection to 5 others branches based on survey			■		
Others branches				■	■
Development online applications for branches		■	■	■	■
Implementation of online applications with 6 branches		■	■	■	■
Others branches				■	■
Purchasing and maintenance for hardware	■	■	■	■	■
Library developments	■	■	■	■	■

These programs range from procurement activities, application development, to infrastructure enhancements. The biggest challenge that the TDC faces is the acceptance and integration of all the echelon 1 networks into a centralized model, with TDC having overall responsibility. TDC anticipates still supporting IT personnel in each DG but envisions relocating all technical systems into one dedicated, stable, and protected server room.

Currently, there are 5 distinct and separate local area networks within the MOT. TDC has been working hard to cable all floors and both buildings in an effort to allow for a smooth transition of each unit's network into one MOT network. Each Directorate General network has their own internet connection, their own firewall, servers, websites, applications, workstations, and their own cabling systems between building 1 and building 2. The new centralized model will be a dramatic shift for some DGs in terms of levels of information technology responsibilities and the ongoing maintenance and management to these systems.

In building out a core network for the MOT, TDC will have the unique ability to start from scratch. Most workstations are connected as a peer-to-peer network with little management or oversight in terms of file storage and security. Enterprise wide solutions are needed to properly manage all technology as one asset for the MOT. Today, there are many missing pieces to the technical architecture, everything from a network domain for user authentication, an active directory structure for file security, to virus protection and patch management. Many of the IT staff throughout the MOT will need technical training as they will be asked to support systems that they have not been exposed to in the past. 2006 is targeted as the time to lay down the architecture that will support the business needs of the users and provide technical services to enable the employees to become even more efficient and effective in their daily work.

The MOT is also very interested in moving away from the vestiges of the split from the Ministry of Industry. At that time, many system and processes were transitioned over in an "as is" state. MOT is now ready to establish itself with its own form of branding and service. In support of this direction, the redesign and development of a new and consolidated website is of high importance. There is currently a website and server being supported by each of the networked DG. The vision is to consolidate these sites during the redesign yet still maintain the responsibility of the content within each DG. TDC will provide the architecture, network services and support, and the DGs will provide the content.

With all of these plans, it is important to know where things stand today. The following sections establish the technical baseline of the current IT capabilities within the Ministry.

7.4 Baseline Inventory

The initial inventory was collected by visiting the on-site echelon 1 units and their various sub units, and reviewing the information technology surveys from 2005, as well as follow-up meetings.

Table 7.2 IT Hardware / User Inventory

	ITC	Foreign Trade	NAFED	Inspector General	Domestic Trade	COFTRA	Secretariat General	TREDA	Totals
People in Unit	222	489	299	125	398	103	563	145	2,344
IT Staff	2	1	6	0	5	2	7	15	38
Networked	Yes	Yes	Yes	Yes	Yes	Yes	Partial	Yes	
PCs	122	90	144	24	126	66	92	72	736
Laptops/Notebooks	12	0	15	1	16		0	20	64
Computers on the network	72	40	108	20	57	60	90	64	511
% Connected to network	54%	44%	68%	80%	40%	91%	98%	70%	64%
Internet users	100	50	175	30	112	60		60	587
% Internet users	45%	10%	59%	24%	28%	58%	0%	41%	25%
Email users	100	50	100	6	126			30	412
% Email users	45%	10%	33%	5%	32%	0%	0%	21%	18%
Planned new computers	18	18	46	16	21				119

Table 7.3 Inventory by Processor and Memory

	ITC	Foreign Trade	NAFED	Inspector General	Domestic Trade	COFTRA	Secretariat General	TREDA	Totals
CPU									
Pentium1	1		9						10
Pentium2	25		20						45
Pentium3	18	11	15		5	24			73
Pentium4	78	21	118		62	64			343
Memory									
16MB			3						3
32MB	1		11						12
64MB	12		14			4			30
128MB	37	19	34		21	37			148
192MB						1			1
256MB	69	11	66		42	41			229
512MB	3		28			2			33
1GB		2	6						8

* Not all information was available from the echelon 1 units.

Table 7.4 IT Software Inventory

	ITC	Foreign Trade	NAFED	Inspector General	Domestic Trade	COFTRA	Secretariat General	TREDA
# File & Print Server	0	0	0	0	0	0	0	0
Domain	N	N	N	N	N	Y	N	N
Website	ditjenkpi.go.id	djdaglu.go.id	nafed.go.id	None	djpdn.go.id	bappebti.go.id	N	depdag.go.id
Website Location	Unit	Unit	Co-Location		Unit	Unit		Unit
Leased Line	Y	Y	Y	N	Y	Y	N	Y
Speed	512kbps	128kbps	128kbps		128kbps			1mbps
Firewall	Y	Y	Y	N	Y	Y	N	Y
Firewall Solution	CheckPoint Firewall 1	Kerio Winroute Firewall	Cisco PIX		Cisco PIX, Black Ice	ISA		Watch Guard
Antivirus on servers	Y	Y	Y	N	Y	Y	N	N
AV Software on Server	Trend Micro	NAV Corp Edition	ClamAV		Trend Micro NetSuite	Symantec		
Antivirus on Clients	Y	Y	Y	Y	Y	Y	Y	Y
AV Software on clients	Trend Micro Officescan Corp Edition	NAV 2002, McAfee Virus Scan	AVG, Norton, McAfee, Trend Micro		Trend Micro NetSuite	Symantec		AVG
Web Servers	2	1	5	0	3	2	0	1
Type of Web Server	IIS	IIS	Apache		IIS, Apache	IIS, Apache		IIS
Database Servers	2	1	5	0	3	2	0	1
Database	Microsoft Access, SQL Server 2000, MySQL	Microsoft Access, SQL Server 7.0	Microsoft Access, MySQL		Oracle, MySQL	SQL Server		Oracle 10g
Back-up data	Y	Y	Y	Y	Y	Y	Y	N
Backup Media	Tape	Hard Drive	Hard Drive	Hard Drive	Hard Drive	Tape	Hard Drive	
Server OS	Windows 2000 Server, Linux	Windows 2000 Server	Linux Fedora Core		Windows 2000 Server, Linux	Windows NT, 2000/2003 Linux		Windows 2000, 2003, Novel
Workstation OS	Windows 95, 98, XP	Windows 98, ME, 2000, XP	Windows 98, ME, 2000, XP	Windows 98, 2000, XP	Windows 2000, XP	Windows XP, 98	Windows 98, 2000, XP	Windows 98, 2000, XP
Admin Servers	4	0	1	0	4	2	0	5
Total Servers	8	2	6	0	7	7	0	5

7.5 IT Issues and Applications – Observations and Implications

Based on the initial findings here are observations and potential implications from the inventory assessment. Many of these observations are already known topics or issues to the MOT and some of these observations are projects or tasks that the trade data center has already begun to address.

7.5.1 Organizational Structure and Responsibility

Observation 1 The trade data center should be relocated under the Secretariat General.

Currently the trade data center is under TRED A. While this has served the short term needs of the MOT, it does not support the long term information technology requirements.

Implication The trade data center would be positioned to transparently support the entire MOT.

The current situation of having the trade data center under TRED A gives the perception that it might give preferential treatment and support to TRED A issue over issues or work tasks for other units.

Other units would be more inclined to use the data center if they are positioned as the in-house IT experts supporting all of the DGs. They could also develop a centralized help desk to support end-user questions or problems.

7.5.2 Information Technology Architecture

One of the information technology goals of the MOT is to tie all units together on the same network. This need has already been defined and articulated by the Minister in a memorandum to all units. It stipulates that the trade data center is responsible for the development, implementation, maintenance and management of the network architecture.

The network architecture can be referred to as the cabling plant for the MOT. This would encompass all the cabling from the workstations to the servers, all risers in the wiring closets, all switches, routers and hubs on any floor in any building within the MOT. Also included would be all external connections to the other buildings, other ministries, third party entities, and the internet.

Within this architecture management has the need for security. There are many security devices and equipment that the trade data center will be responsible for. This will include all firewalls, antivirus management, patch management on all servers and workstations for the operating systems and applications,

Supporting the current decentralized structure of the MOT, there are application servers database servers, web servers and various utility servers scattered around the MOT in different units. It is recommended that the servers from all units be consolidated into one specifically designed network operations center. Each unit would still maintain the ability to control the content or applications on each server and the trade data center staff would be responsible for ensuring that the systems are online and available. All servers should be converted to rack mounted systems when appropriate.

Observation 1 The server room for the trade data center is not designed to handle a centralized server model.

- The current trade data center on the 7th floor will need to be updated to handle the increase server load and capacity.
- Servers are sitting directly on the floor.
- Most of the servers are tower units and not rackable.
- Air conditioning capacity will need to be increased.
- Power capacity will need to be increased.

Implication The ability to consolidate servers into a centralized facility will have to wait.

The server room needs to be built out so that the other units will feel comfortable in moving their equipment into the server room. This should be done in moderation since this is a temporary solution until the new building is completed.

The server room needs to be a secure and stable environment that will support all the server needs.

Without appropriate upgrades and procedural changes, it will be difficult to bring other unit's

- UPS battery backup will need to be increased.
 - Fire suppression system uses the building sprinklers.
-

Observation 2 There are many underutilized dedicated fiber optic links between building 1 and building 2.

There are currently five dedicated fiber optic connections between building one and building two. Several units have their own link to connect their departments together between the two buildings, ITC has 2, and Foreign Trade, Domestic Trade, and the data center each have their own.

Since each fiber connector operates at 1GB of bandwidth, and at the most, one connection supports just over 500 users, there is excess capacity. Unfortunately this excess capacity does not mean redundancy since there would be no backup circuit if one of the lines were accidentally cut due to construction activities.

Based on the number of users and the types of applications they are accessing, a single primary fiber circuit with a backup fiber circuit is all that is recommended to tie the two buildings together.

TDC is currently working on a solution and has been laying out the core backbone or fiber optic cable to connect all the floors and the two buildings together. They anticipate migrating all units onto the MOT backbone by the end of 2006.

servers into a centralized model.

Implication There is excess bandwidth capacity and management has concerns for this many connections. There will also be routing implications if all circuits are collapsed into the backbone.

The management of this many disparate fiber optic connections requires duplicate cables and switches, all of which are expensive. Even though this is a sunk cost at this point, the real issue comes when these connections are connected to the main backbone.

This has the potential of causing data packet routing problems between the buildings and between the floors. A data packet will have more than one way to get to its destination which will cause problems on the network.

Observation 3 The network switches can only support 10/100 speeds to the desktop.

As more and more workstations are joined to the network, contention and bottlenecks will become an issue. The current switches are only running at the most, 100MB. As the workstations are also communicating at 100M and the switches become fully populated with connections, the ability for data to get through the network will be severely constrained.

Internally, the industry standard for connectivity between devices on the network is 1GB. This increase to gigabit speeds will greatly enhance the users' ability to connect to database applications, file shares for file storage and retrieval, and internet access.

Implication The network switches can not handle faster port speeds.

Users will see slower and slower speeds and network performance as more users are connected to the backbone. This will definitely be the case for anyone using a database application doing select calls and queries.

7.5.3 Network and Network Management

Observation 1 Implementation of an enterprise domain with an active directory structure would increase the functionality and security of the network.

Currently, the only domain structure is a small domain being run by TDC. By moving to an enterprise domain model, users can be given the appropriate security rights and granted file access

Implication User authentication is not possible as all accounts are generic.

Users on their workstations all login with the same user account. This provides for anonymity for the user and a lack of accountability. There is also no way to utilize security rights or groups when everyone is using the same user account.

With an active directory, you will have the ability to manage all user accounts from one console. You can set groups, establish and enforce network policies, and have access to the appropriate devices on the network.

Observation 2 It is currently not possible to resolve an IP address to a hostname.

There is no internal DNS. Applications have to be given hard coded IP addresses to have access to a network resource.

Implication Browsing of the network and resolving hostnames is not possible.

Many applications and network management tools require the use of DNS to be able to browse their name space. These applications allow you to see and access other network devices or you can impose security and block or restrict access to these same devices.

These devices are PCs, laptops, printers, mail servers, files servers, database servers and application servers.

Observation 3 All machines connected to the network have static IP address and are not using DHCP.

All machines on the network have a hard coded IP address. This means that someone has to physically touch each and every machine to allow it to connect to the network.

DHCP or dynamic host control protocol, allows workstations to automatically request and receive an IP address from the network.

Implication A machine has to have an IP address physically entered for it to access the network.

As the number of workstations increases throughout the MOT, it will be easier and less time consuming for the IT support staff to manage workstations. It will also give them greater flexibility in managing the workstations based on the dynamic IP settings and schema.

Observation 4 Workstations are connecting to the network at either 10mbps or 100mbps.

Most workstations on the network have 10/100 network cards in them. As the network continues to mature, they could take advantage of the greater speed and performance by upgrading their network interface card.

Implication This is a slow connection speed and will affect users' access to applications and systems.

The main implication here is that the users will connect slowly to other devices around the network. This will affect their efficiency and the amount of work that could be accomplished.

Observation 5 A MOT-wide help desk model could help all users and track trouble tickets.

Currently, all help is done through the specific IT resources with a DG or unit. Most if not all IT resources are not tracking problems when they occur or documenting a solution when a resolution is found.

Implication A help desk would allow better resolution and tracking of problems on the network.

By implementing a help desk, users would have a central place to turn for support regardless of who the support person is. This would also allow for the creation of a knowledge base that could be referred to by both users and IT staff as well.

With the proper use of a ticketing system, you could start tracking trends and hotspots of problems and then determine a solution to correct or mitigate the problem.

Observation 6 Most machines are not on the current security patch level.

There are security patches and fixes that are available but are not installed. Microsoft comes out with new patches on a monthly basis. Many software vendors also release periodic patches or fixes to their applications.

Implication The machine can be disabled and working files lost or compromised.

Currently, most working files are stored on the local drive. If something were to happen to the machine, all the data could be lost or compromised.

Operating systems and applications are constantly being fixed or security patches are being released from the vendor in an effort to protect the system from external and internal threats.

Observation 7 The network would be easier, more efficient, and more secure with one enterprise level antivirus system.

The inventory showed that as the procurement process happened over the years, various flavors of antivirus has been used. There are products from Trend Micro, Norton, McAfee, AVG, and even a Linux counterpart. This is the case for both workstations and servers.

Implication Without standardizing on one tools set, management and maintenance becomes a major manual effort.

By standardizing on one antivirus toolset, the entire MOT can then be covered by a single console and can keep all clients up-to-date automatically. Exception reporting can then be used to manage the clients and servers.

Observation 8 There are approximately 290 standalone workstations.

These workstations are spread throughout the MOT. They are typically connected with a local printer for office automation tasks like word processing or spreadsheets. All data is stored locally and files are manually being copied on and off the machine.

The TDC is actively working to connect these machines to the network.

Implication These workstations cannot be managed centrally and will always be out of compliance with patches and virus protection.

Work is being done on these machines and the need to maintain their compliance is incredibly important as files are copied on and off these machines with flash drive or other means. These machines are at risk of a virus being transferred to it and then back off of it without detection or cleaning. Also, there are limited backups for most machines.

Observation 9 Most servers are towers and not rack mountable units.

In reviewing the various servers throughout the MOT, most servers are tower units that sit on shelves or on the floor. Shelves are better than the floor in terms of static electricity, cleanliness, and manageability.

Implication Tower units take up more physical space and are less efficient than rack mountable units.

As the data center looks to consolidate all the servers, the space plan is very different when dealing with a large quantity of tower servers. Shelving units will need to be installed in the data center that will take up more physical floor space. Depending upon the cooling capabilities in the room, shelves can restrict the flow of cool air through the space. With a rack system, it is much easier to control the cooling requirements and develop hot isles and cold isles which the AC system can directly address.

Observation 10 There is a mix of server operating systems.

Based on the inventory, there is a mix of server operating systems. There is Windows 2000 server, Windows server 2003, and various distributions of Linux.

Implication Harder to manage a larger set of server operating systems.

It is harder to manage multiple operating systems from several fronts. First, you have to have the personnel that are proficient and completely understand each operating system and its network capabilities.

Second, you have to have the management tools for each operating system. This would include backup systems, antivirus systems, patch management systems, network monitoring systems, etc. Most products are built around one operating system and don't support both Windows and Linux from the same console, which means that two applications are needed for each function. Some vendors do provide a mixed solution but at an additional cost. This is an additional expense that might be mitigated by standardizing on one OS.

Observation 11 Proactive management of the network could be enhanced with network management software.

There is no way to proactively manage the physical infrastructure. The only way that the staff knows when a server fails is either the users notify them or they physically try to access the server and they can't.

Implication A server would go down and there would be loss of productivity, loss of the application, and possibly loss of data.

When the server goes down, either through a hardware failure, disk space fills up, or a server stops, it all means that the system or application is unavailable and someone will need to fix the problem. Depending upon the problem type, the resolution time will vary.

With network management software, you are able to setup thresholds and notifications via email or SMS that could notify someone of the issue before it negatively impacts the user community.

Observation 12 The network switches are being managed one at a time.

There are several types of network switches in the MOT and each one is managed individually.

This is an inefficient and very difficult to manage should the need be to disable a port because a machine is infected with a virus or spamming.

Implication It will take a long time to manage, update, or maintain all of the network switches throughout the MOT.

Should a change need to be made at the core level of the network or anywhere along the backbone, it will be very laborious to affect all the switches.

Centralized software exists that allows technicians to manage multiple switches from one console and make instant change should the need arise.

Observation 13 All software is installed manually.

Any time that software is distributed to the workstations, it is installed manually and required someone to visit each PC. This is inefficient and time consuming, especially when there are a lot of users.

Software does exist that allows for remote or electronic distribution of software. It will install the application and configure the software based on the MOT's or user's preferences.

Implication It take a lot of time to deploy a new software application or update as each workstation must be visited manually.

This is an inefficient process that can take a lot of time and depending on the settings of the application, can be installed inconsistently.

Observation 14 An implementation of an enterprise class backup solution would greatly enhance the reliability and integrity of the network.

Backups are not currently happening on servers or on almost all workstations. The current solution is to copy files from one server to another.

A centralized backup solution under the control of the trade data center could support all the servers in the server room, and potentially any that hasn't been brought into the server room but is connected to the network.

Currently, the risk of losing data or information is high.

With any backup solution, guidelines for Recovery Time Objective – how long it will take to recover data, and Recovery Point Objective – how far back in time should data be recovered, need to be defined and then a solution developed and implemented.

Implication Should loss of data occur, there would be a mechanism for recovery.

This is a Risk Management and a Disaster Recovery issue. Can the MOT afford to lose any of its data and for how long?

Utilizing a centralized model and having one solution act as the recovery/restoration agent would mitigate this risk to a manageable level.

Data lose occurs in most organizations, either through a hardware failure, accidentally by a user or sometimes even deliberately. The ability to recover from an event will greatly enhance the MOT's position on this issue.

7.5.4 Computer Equipment

Observation 1 The workstations are varied by manufacturer as well as technical specifications.

With approximately 780 workstations within the MOT, there are numerous PC/laptop vendors. Also, the technical specifications range from old Pentium 1 processors to state-of-the-art Pentium 4 processors. Workstation memory ranges from 64MB to 512MB. Hard disk size also varies from 10GB to over 200GB on the new systems.

See the inventory above in section 4.

Implication This makes management of the hardware more difficult in terms of service and support.

When there is a hardware failure, finding a matched or swappable part can be increasingly challenging. Software configuration is also another issue in that there can be hardware conflicts with the software which might prevent an application from working on a particular client.

Observation 2 There is a wide range of Operating Systems on the clients.

The client operating systems cover the full spectrum of Windows operating systems; 95/98/ME/2000 and XP. This can make it difficult to manage and possibly cause software problems.

Implication Support for the various versions is no longer available.

Without support from Microsoft, these operating systems do not receive security patches or fixes. This makes these machines susceptible to exploitation by virus, worms, and hackers.

This will also put the MOT's data at risk.

Table 7.5 Microsoft Product Support Lifecycle

Product	Mainstream Support Ends	Extended Support Ends
Windows 95	12/2000	12/2001
Windows 98 SE	6/2002	6/2003
Windows ME	12/2003	6/2006
Windows NT	6/2002	6/2004
Windows 2000	6/2005	6/2010
Windows XP	Supported	Supported

Table 7.6 Mainstream Support versus Extended Support

Support provided	Mainstream support phase	Extended support phase
Paid support (per-incident, per hour, and others)	X	X
Security update support	X	X
Non-security hotfix support	X	Requires extended hot fix agreement, purchased within 90 days of mainstream support ending.
No-charge incident support	X	
Warranty claims	X	
Design changes and feature requests	X	
Product-specific information that is available by using the online Microsoft Knowledge Base	X	X
Product-specific information that is available by using the Support site at Microsoft Help and Support to find answers to technical questions	X	X

Observation 1 Not enough RAM to handle daily computing needs.

Most machines have less than 256KB of memory. Today's baseline on new machines is 512KB. For anyone doing work with databases or application development, the recommendation is 1GB.

Implication The user will see very slow processing times.

This will limit the productivity and capability of the user. More memory is required to open more applications at the same time and to work effectively on database applications.

Observation 2 Users have local administrator access to their machines.

Users are allowed to download and install any software even if it has not been approved. Any user can see any file on the machine, even if it belongs to someone else. Several machines were exhibiting signs of Spyware.

Implication Users have the ability to have directly access to the Windows operating system, thus allowing them to make core changes that could disable the machine.

The need is to make sure that the client machine is stable, secure, and accessible. Any of these can be put at risk by allowing malware on a system.

Spyware, Trojans, and other malware can be installed on the system. Any of these can disable a system or cause a loss of data.

7.5.5 Office Automation

Observation 1 The selection of a single office application suite would provide for a more seamless user environment.

While Microsoft Office was on most machines, there were several flavors and versions of Office depending on the unit or location of the workstation or user.

Implication File compatibility will be greatly enhanced and license management will be easier.

With one version of MS Office, all files can be accessed by all users. Using different versions or other application suites could cause compatibility problems. Standardizing on one solution will allow the MOT to gain greater efficiencies when purchasing product.

7.5.6 Equipment and Systems Maintenance

Observation 1 Purchasing maintenance for key networking devices would provide for a more stable network.

There are currently no maintenance contracts on servers, air conditioning units or printers.

Implication There is a greater risk of downtime and the potential for a longer repair or resolution time as well.

Workstations, PCs and laptops come with a manufacturers warranty for a long enough period to cover most repairs.

Coverage of key networking devices is important to ensure that the network stays up and remains available. These maintenance agreements should be structured with preventative maintenance cycles to properly care for and cover any equipment that might impact productivity.

7.5.7 E-government

Observation 1 An e-government solution is not in place.

This type of a solution is already being considered and is being addressed by the TDC. There are many aspects to a MOT-wide solution so a requirements effort will need to happen before a system can be developed and put in place.

Implication The MOT will be able to present its services directly to the public.

An e-government solution will bring the MOTs services directly to the public and allow them to update their own changes.

7.5.8 Licensing

Observation 1 Almost 80% of all software is unlicensed.

This is based on information from the TDC and is a known issue within the MOT. Steps are being taken to correct the current exposure and to bring the MOT into compliance. The MOT is intent on acting as a leader for software licensing, intellectual property rights and compliance.

This is found to be the case on both workstations and servers throughout the MOT.

Implication Unlicensed software is a legal risk for the MOT.

The risk here is that a software vendor would sue the MOT over intellectual property rights and there can be very large financial penalties.

Also, as a government agency, the MOT can be an example of proper software licensing.

Observation 2 There are no published standards for approved workstation software.

There are no published standards that outline a list of MOT-approved software. This software is the only software that is allowed to be installed on workstations by the appropriate people.

Implication This allows anyone to download or install any application that they choose. The application might break something on the workstation or affect the user's ability to get their work done.

The risk here is that people will feel that they can load any software onto any workstation at any time.

The main issue here is the control and consistency of the workstation and the workspace. Applications sometimes conflict with each other and can render a workstation useless or even destroy data. Applications have certain sets of .DLL files that sometimes are replaced by new applications which can disable the application.

7.5.9 Information Flow

Observation 1 There needs to be one mail system for the MOT.

TDC has implemented the beginnings of a framework for an organization-wide email system. They are using a linux based email system called Squirrel Mail and have created the root domain with addresses of

Implication The MOT does not represent itself with a consistent form of communication.

When people need to email someone at the MOT, the email addresses of the employees vary widely. Some use official email addresses based on the unit, while others use third party mail accounts like Yahoo or Hotmail.

user@depdag.go.id. Currently, TDC, TREDA and a few other groups are using this email addresses with the rest of the MOT to be converted and added by the end of 2006.

There are a couple of mail servers within the MOT and different users are under different domains. The mail systems do not talk with each other. Most units are using Squirrel Mail with a web interface.

SquirrelMail is a excellent open-source email system and is the email system of choice for most departments. While this is a good tool for email, it doesn't provide calendaring, forms, public folders, or work flow.

Observation 2 Data and working files are stored on local hard drives.

Most units are storing their information in one of two locations, either their local hard drives or on the Intranet in the file sharing area. There are pros and cons of each solution.

When using local hard drives, any file that is stored there is available to anyone that uses that workstation since they all login with administrator credentials. These files are also not backed up unless the user copies them to a flash drive or some other form of media.

The Intranet is used as a fileserver for any file that is important or often used. Files can be shared with appropriate individuals or with groups. Once the file is on the Intranet, TDC makes a copy of all files to another hard drive. This will preserve the file should something happen to it.

The trade data center has taken this a step further and developed a Novel fileserver for use within the TDC. This allows users to map a drive letter to a shared or secure area for their working files.

Implication Data can be lost, corrupted, or infected.

With any type of files or data in the MOT, there are three areas of concern:

Confidentiality – the ability to allow only the appropriate people assess to the files.

Integrity – the ability to keep the data accurate and not allow the files to be compromised in any way.

Accessibility – the ability to retrieve the files.

The best way to handle this is to keep all the files on a file server and use access credentials and security rights to manage the file system.

7.5.10 Security Policies

Observation 1 There are no published security policies or guidelines.

Table 7.7 provides a suggested list of security policies and guidelines that should be considered for implementation.

Implication Without policies or guidelines, enforcement of security measures or infractions is incredibly difficult.

Should something ever happen with an employee, property of the MOT, or data or files from the MOT, it will be very difficult for the MOT to take legal action should it be needed.

This should be a part of a Risk Management plan for the MOT.

Table 7.7 Sample List of IT Policies

- **Acceptable Encryption Policy** – Defines requirements for encryption algorithms used within the organization.
- **Acceptable Use Policy** – Defines acceptable use of equipment and computing services, and the appropriate employee security measures to protect the organization’s resources and proprietary information.
- **Analog/ISDN Line Policy** – Defines standards for use of analog/ISDN lines for Fax sending and receiving, and for connection to computers.
- **Anti-Virus Policy** – Defines guidelines for effectively reducing the threat of computer viruses on the organization’s network.
- **Application Service Provider Policy** – Defines minimum security criteria that an ASP must execute in order to be considered for use on a project by the organization.
- **Acquisition Assessment Policy** – Defines responsibilities regarding government acquisitions, and defines the minimum requirements of an acquisition assessment to be completed by the information security group.
- **Audit Vulnerability Scanning Policy** – Defines the requirements and provides the authority for the information security team to conduct audits and risk assessments to ensure integrity of information/resources, to investigate incidents, to ensure conformance to security policies, or to monitor user/system activity where appropriate.
- **Automatically Forwarded Email Policy** – Documents the requirement that no email will be automatically forwarded to an external destination without prior approval from the appropriate manager or director.
- **Database Credentials Coding Policy** – Defines requirements for securely storing and retrieving database usernames and passwords.
- **Dial-in Access Policy** – Defines appropriate dial-in access and its use by authorized personnel.
- **DMZ Lab Security Policy** – Defines standards for all networks and equipment deployed in labs located in the “Demilitarized Zone” or external network segments.
- **E-mail Policy** – Defines standards to prevent tarnishing the public image of the organization.
- **E-mail Retention** – The Email Retention Policy is intended to help employees determine what information sent or received by email should be retained and for how long.
- **Ethics Policy** – Defines the means to establish a culture of openness, trust and integrity in business practices.
- **Extranet Policy** – Defines the requirement that third party organizations requiring access to the organization’s networks must sign a third-party connection agreement.
- **Information Sensitivity Policy** – Defines the requirements for classifying and securing the organization’s information in a manner appropriate to its sensitivity level.
- **Internal Lab Security Policy** – Defines requirements for internal labs to ensure that confidential information and technologies are not compromised, and that production services and interests of the organization are protected from lab activities.
- **Internet DMZ Equipment Policy** – Defines the standards to be met by all equipment owned and/or operated by the organization that is located outside the organization’s Internet firewalls (the demilitarized zone or DMZ)).
- **Lab Anti-Virus Policy** – Defines requirements which must be met by all computers connected to the organization’s lab networks to ensure effective virus detection and prevention.
- **Password Protection Policy** – Defines standards for creating, protecting, and changing strong passwords.
- **Remote Access Policy** – Defines standards for connecting to the organization’s network from any host or network external to the organization.
- **Risk Assessment Policy** – Defines the requirements and provides the authority for the information security team to identify, assess, and remediate risks to the organization’s information infrastructure associated with conducting business.

- **Router Security Policy** – Defines standards for minimal security configuration for routers and switches inside a production network, or used in a production capacity.
- **Server Security Policy** – Defines standards for minimal security configuration for servers inside the organization’s production network, or used in a production capacity.
- **The Third Party Network Connection Agreement** – Defines the standards and requirements, including legal requirements, needed in order to interconnect a third party or organization’s network to the production network. This agreement must be signed by both parties.
- **VPN Security Policy** – Defines the requirements for Remote Access IPsec or L2TP Virtual Private Network (VPN) connections to the organization’s network.
- **Wireless Communication Policy** – Defines standards for wireless systems used to connect to the organization’s networks.

Observation 2 There is no intrusion detection system.

There is currently no mechanism to monitor intrusions from the outside. Most of this type of activity comes from the internet with users trying to break into a network. Other than the firewall logs, there is no way to determine if you are under attack, and if you are to then have the ability to shut down the potential threat.

Implication Security of the network can be compromised.

If the worst case happens and an intruder from the outside tries to access the network from any of the many external connections, they could damage the system, cause a denial of service, change or take any data, review any files, or use the MOT as a spamming site.

While this is a worst case scenario, networks are being attacked on a daily basis for no more reason than to see if they can get in.

7.5.11 Internet Access

Observation 1 There are too many internet circuits.

In reviewing the network architecture for the various units, there are five separate internet circuits in use with various line capacity ranging from 128kbps to 1mbps. These were developed to support the web sites and internet browsing by the different units.

Implication There is duplicity in the internet connections and security issues surrounding each leased line.

From a cost standpoint, the MOT is paying for multiple lines with separate monthly recurring costs for each line. The usage patterns for each line vary as well and there is no internal ability to manage or report on the bandwidth utilization of each circuit.

For each circuit, there are security concerns the internal and external usage. A firewall is in place for all circuits but they are not actively managed to monitor exceptions or irregularities. The trade data center has setup automatic notification for events like internal spamming which can completely saturate a network and cause a denial of service attach. This is only one small example that needs to be managed for all 5 firewalls and circuits.

Without a dedicated security manager, it is unlikely that the MOT can maintain an effective security model and keep the wrong people out and the right people in.

7.5.12 Intranet

The internal Intranet performs many functions for the people of the MOT. It has a solid foundation and support from the TDC. Here is a list of the applications that are supported on the intranet:

Observation 1 The intranet needs to be enhanced and updated.

The TDC is actively working on this application with staff and developers. The next steps are to get it out to the entire MOT.

Implication The intranet can turn stale and the use of it will diminish as a productive tool.

This application can play a vital role throughout the organization. It needs to stay current and fresh with new and updated content to keep the users coming back to it and possibly maintaining a portion of it themselves.

Observation 2 Enhance the timesheet system for the entire MOT.

The timesheet system is currently in place and providing valuable time tracking information. It could be enhanced with even better authentication and validation to ensure the accuracy of the collected information.

Implication Easier access to the time sheet system will help with acceptance and accuracy.

By making this application easier to access and use, it will be that much less of a burden on the users to maintain their usage.

7.5.13 Web Sites

Observation 1 Most of the MOT web sites are hosted internally.

Most of the web sites for the MOT are developed and maintained in-house. The outside users are routed first to the main site <http://depdag.go.id>. From there, they can link to any of the other MOT web sites.

When they link, they are routed back out of the MOT to the internet and then back into the MOT on a different and slower circuit. Once someone knows the address for a units' website, they can go directly there the next time.

Also, with the web sites being located in the building and with the purpose of providing information to the outside, the web servers are not setup for high availability or for fault tolerance meaning that during the loss of service, the recovery time for an incident can be lengthy.

In addition, the same internet connections are being used for both internal internet browsing and for external web site access. Both users groups vying for the same bandwidth.

Implication There is no fault tolerance or high availability of the websites.

All of the web sites are located each on a single web server. Should something happen to that machine, the website would become unavailable to the internet. There is no fault tolerance or backup server setup to bring the website back online. When an incident occurs, this loss of service or availability can only be rectified by someone providing direct hands on support.

Observation 2 The websites for the MOT should be upgraded and rewritten to provide a consistent look and feel to all aspects of the site.

There are many web sites that are being hosted within the MOT. They were all developed by different companies and at different time. They only have a rudimentary link to each other with little to no data being shared.

There is no consistency on the sites in terms of look and feel or navigation.

Implication Anyone accessing the website will have a standardized navigation throughout the site with a consistent look and feel regardless of what DG or information they access.

Observation 3 There are many root web servers.

There are currently five different root web addresses and web servers that house information about the MOT. They all have a different look and feel yet they each are directly accessible and searchable on the web.

The architecture of the web service, operating system, web development tools and technology, and database servers are all different. This should be standardized for a more compatible and homogeneous web presence.

Implication Web architecture is not implemented in a consistent fashion and the external look of the MOT is dramatically different.

This will impact the external web face and presence of the MOT. By reworking the web sites into one contiguous site, it will be easier to manage, update, and maintain as there will now be a consistent look and feel, and the maintenance tools can be standardized within the MOT.

7.5.14 Training

Observation 1 To better take advantages of the changes in the technology, additional IT training will be needed.

End-user level training – you have a full range of people that have no typing skills and have never used a PC and mouse before to people that are comfortable with MS Office but want to learn advanced features.

IT training – here again you have a broad range of people supporting PCs. Some know little more than how to turn on the PC and how to start Windows and Office, and are not able to effectively troubleshoot a workstation problem when it can't connect to the network or an application has failed.

There is a definite need to increase the knowledge in the trade data center staff in terms of Microsoft networking since this will become the core technical structure for the MOT. Security will also play a big role here in that the MOT doesn't have anyone actively monitoring the network to intrusions, possible hacking, or virus defenses.

As the network is expanded out to remote locations and branch offices, the ability to provide connectivity and security to these locations will increase in importance.

Implication Staff lack the needed skills to complete their jobs and to effectively manage the technology needs of the MOT.

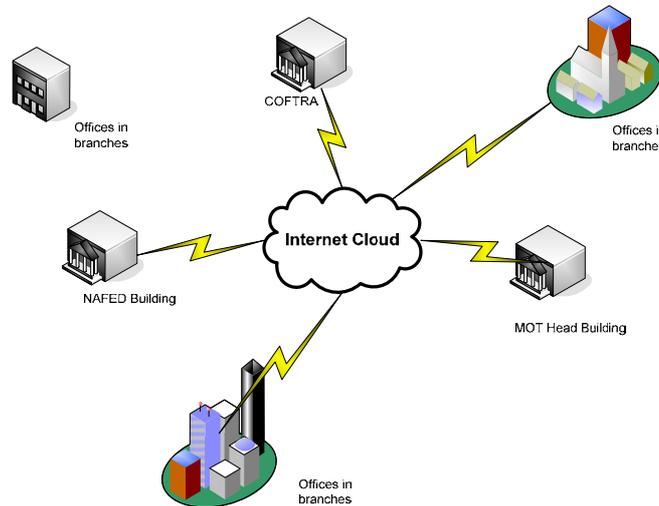
By providing more technical training, end-users will become more efficient and effective in their daily work tasks.

The technical staff will be better positioned to handle the core networking challenges of a structured and secure MOT.

7.6 Current Architecture

The current internet structure is based on a decentralized model that has allowed for unstructured growth of the network. This model is in part a hold over from the split from the Ministry of Industry. This configuration has numerous internet connections and has multiple IT structures within each building.

Diagram 7.1 Current Internet Structure



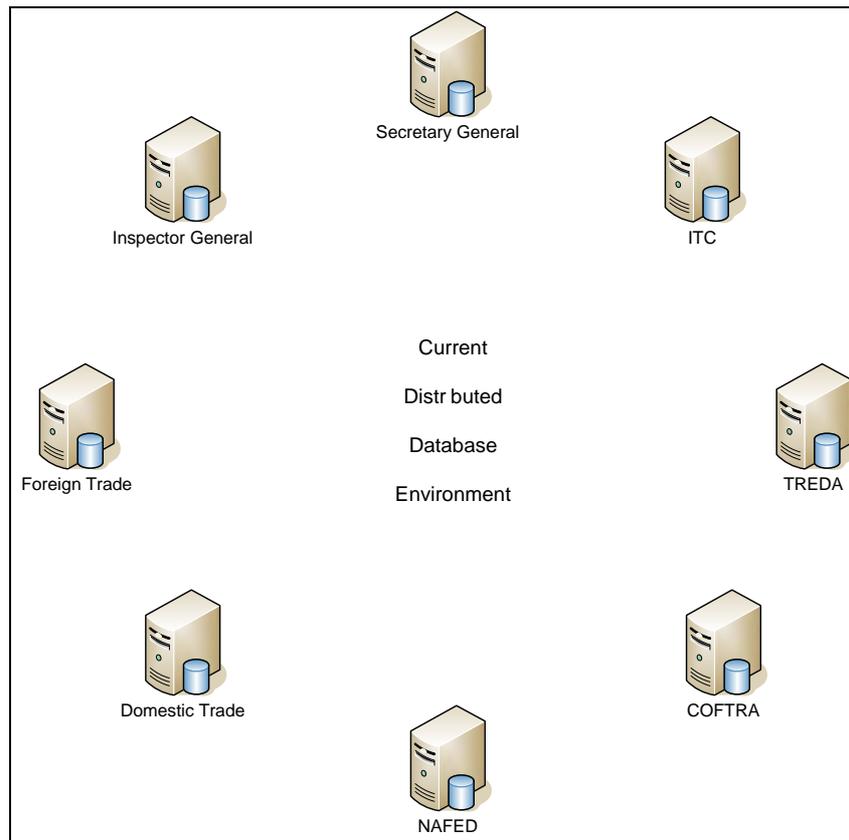
TDC is aware of the need to restructure this configuration to better support the data needs within the MOT.

The local area network at headquarters is also representative of the split from the Ministry of Industry with many of the unique and separate networks still in existence. As pictured later in this section, several of the echelon 1 units have their own local area network that is not connected to the MOT backbone.

Some of these units still have dedicated leased lines back to other third parties or other ministries. These relationships and external links will require special consideration and architecting when tying back or collapsing into the MOT backbone. There are also numerous internet connections that need to be consolidated into a primary and backup connection that has enough bandwidth to support all of the MOT's needs.

There are various database systems throughout the Ministry using a variety of different vendors, Microsoft Access, Microsoft SQL Server, and MySQL open source. The current database architecture represents a decentralized model with duplication of data within multiple databases.

Diagram 7.2 Databases in Use



It is generally recognized by several, but not all units, that this architecture is inefficient and is prone to duplication of data. To alleviate these and other challenges, a new architecture is being discussed that will provide for a common set of tables which would then be the record of source for various pieces of data that all units would then access and use to perform their daily reporting and processing.

This structure would utilize a data warehouse to store the information for retrieval by all systems and units. The data warehouse model would be an excellent use of this technology within the MOT. While data warehouse projects can sometimes develop into unwieldy mega-projects, properly managed, this architecture could support the MOT's web sites, data analysis and internal reporting.

Diagram 7.3 Domestic Trade Network Configuration
NETWORK CONFIGURATION DIAGRAM FOR DOMESTIC TRADE

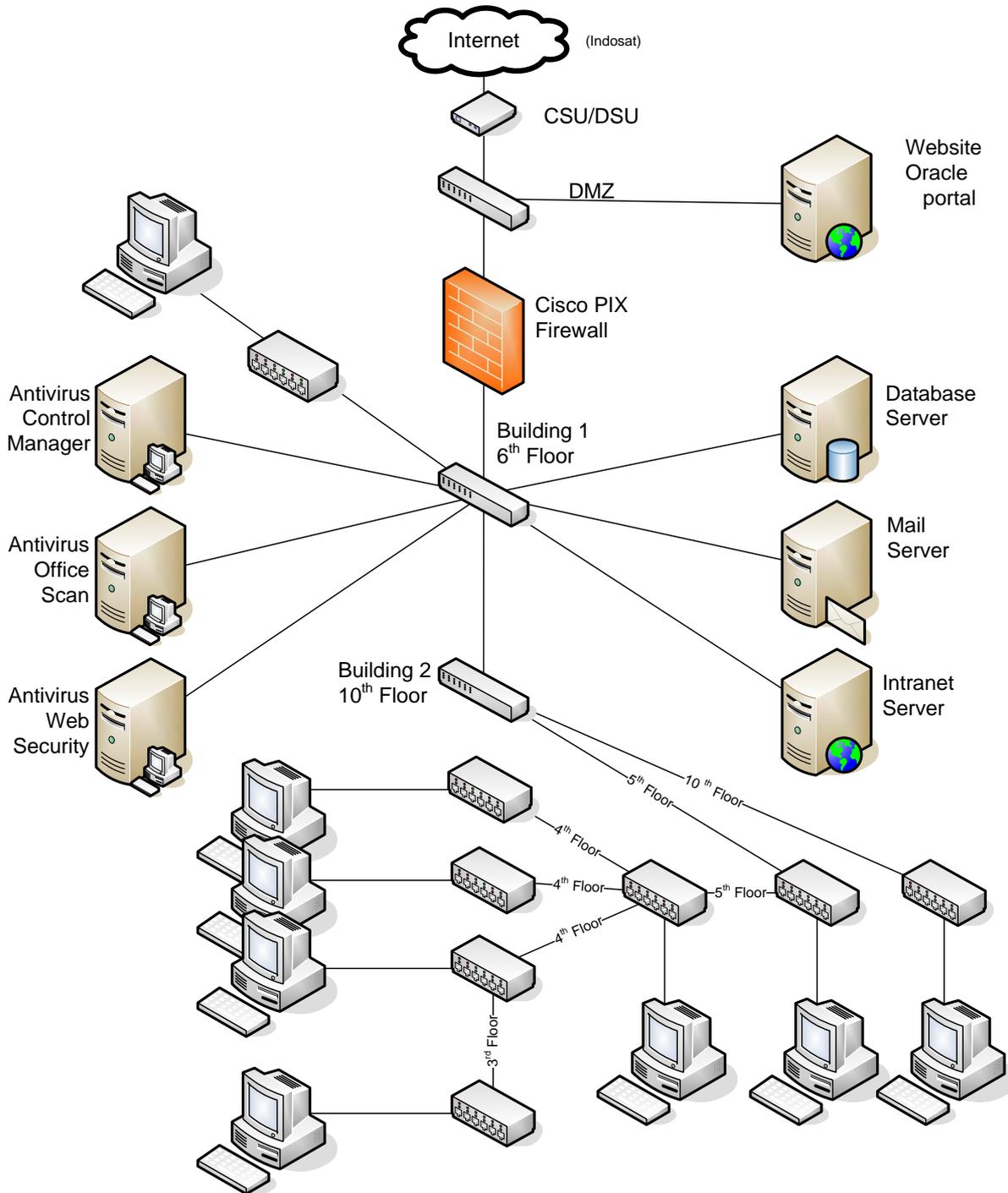


Diagram 7.4 Foreign Trade Network Configuration

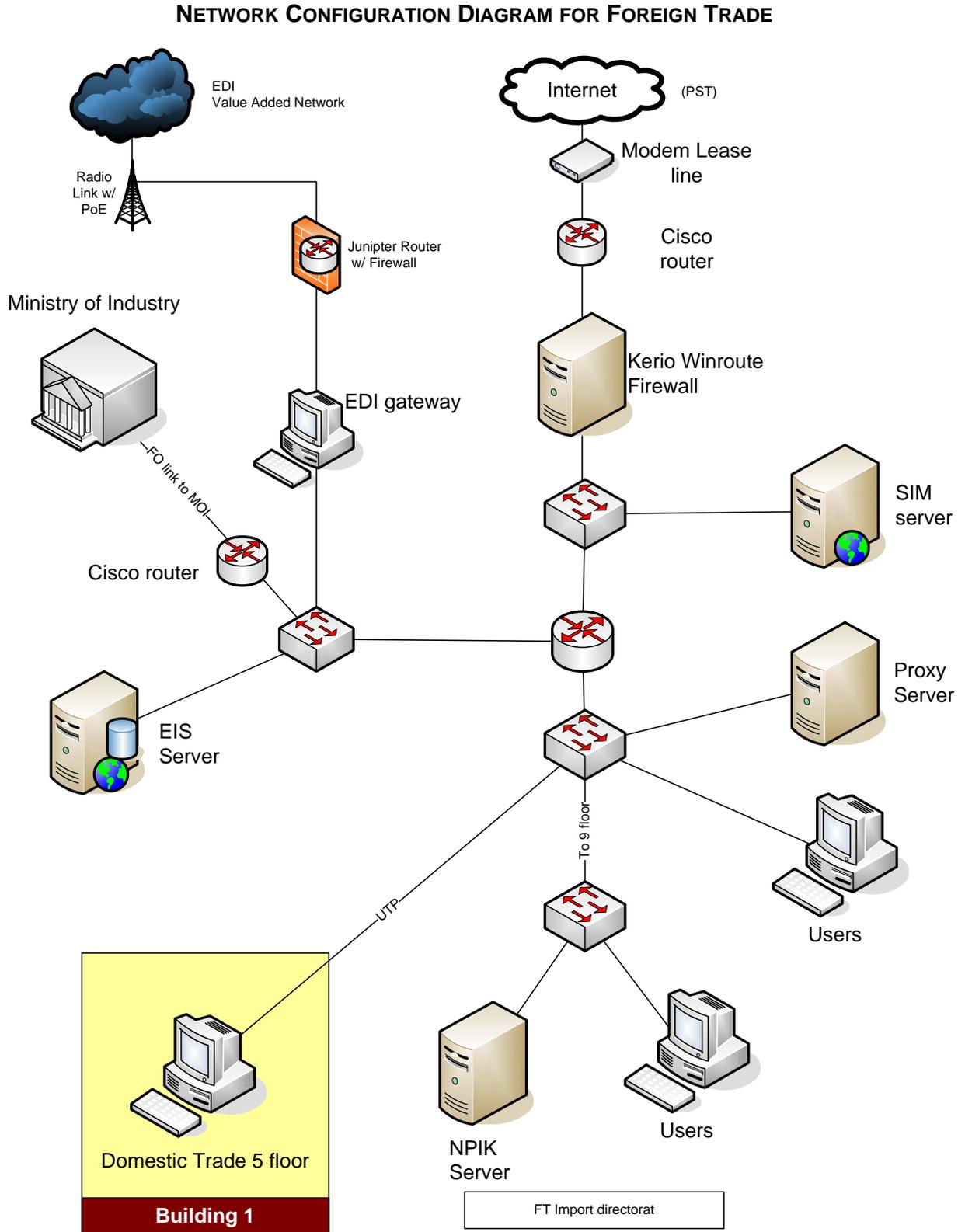


Diagram 7.5 Inspectorate General Network Configuration

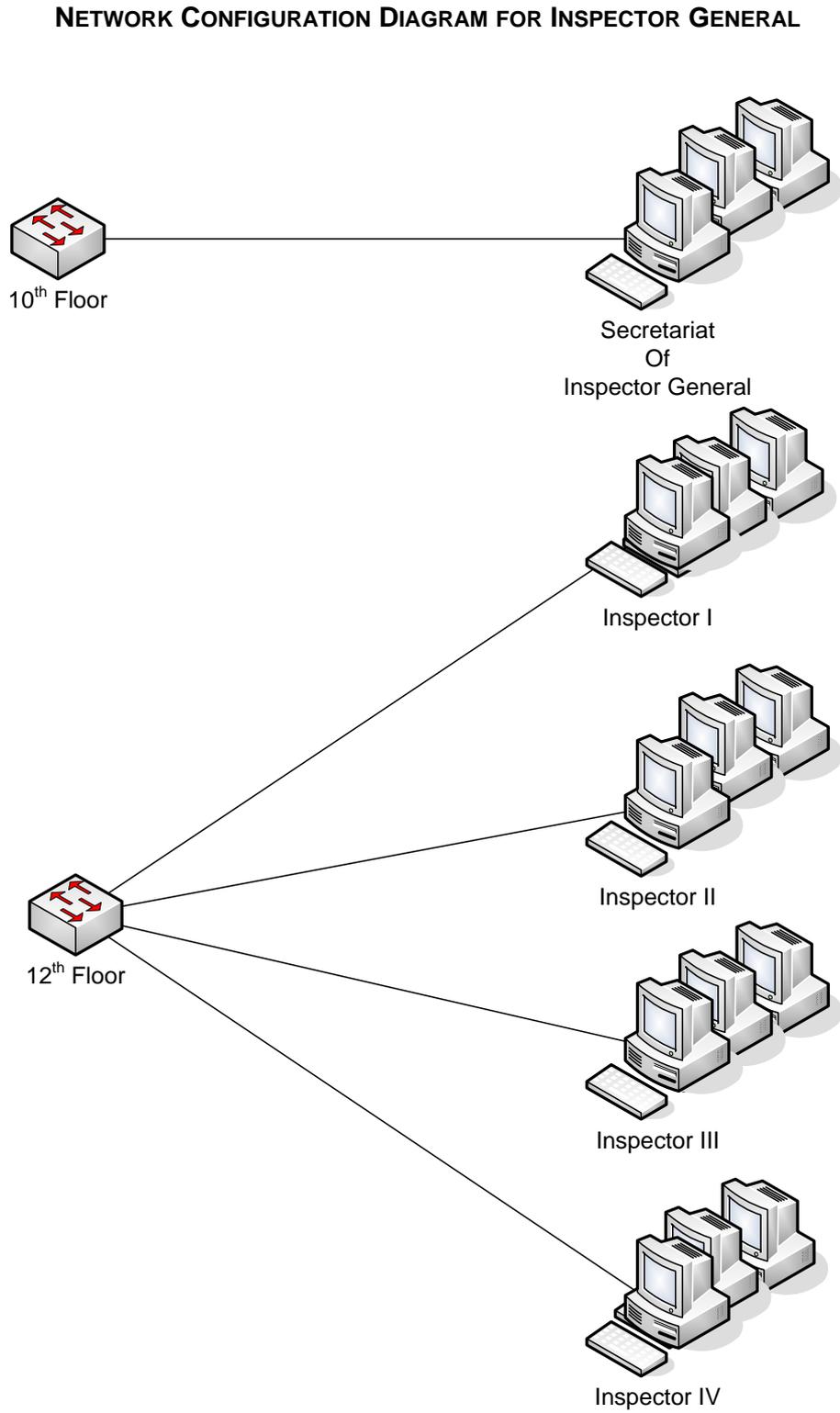


Diagram 7.6 International Trade Cooperation Network Configuration

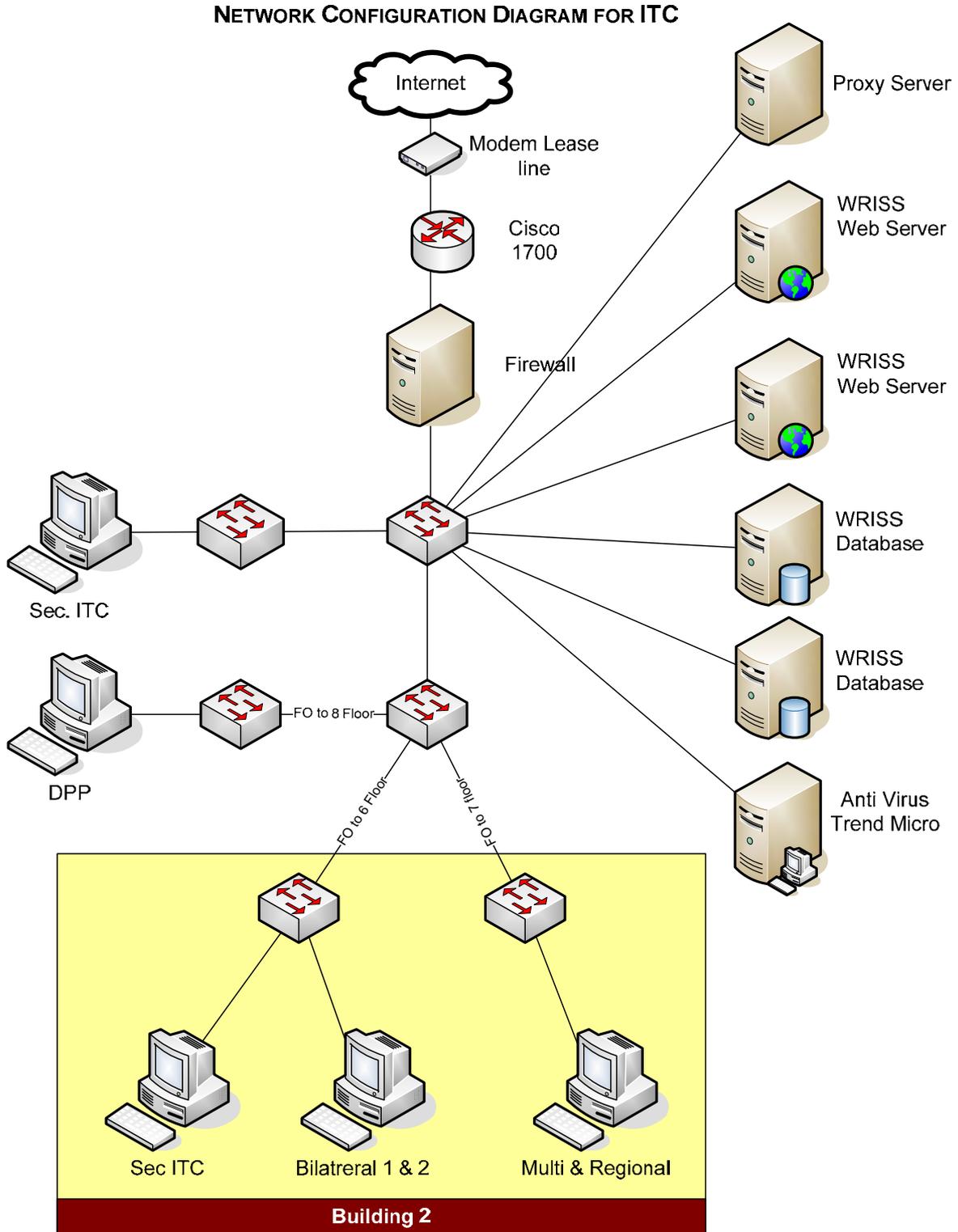


Diagram 7.7 National Agency for Export Development (NAFED) Network Configuration

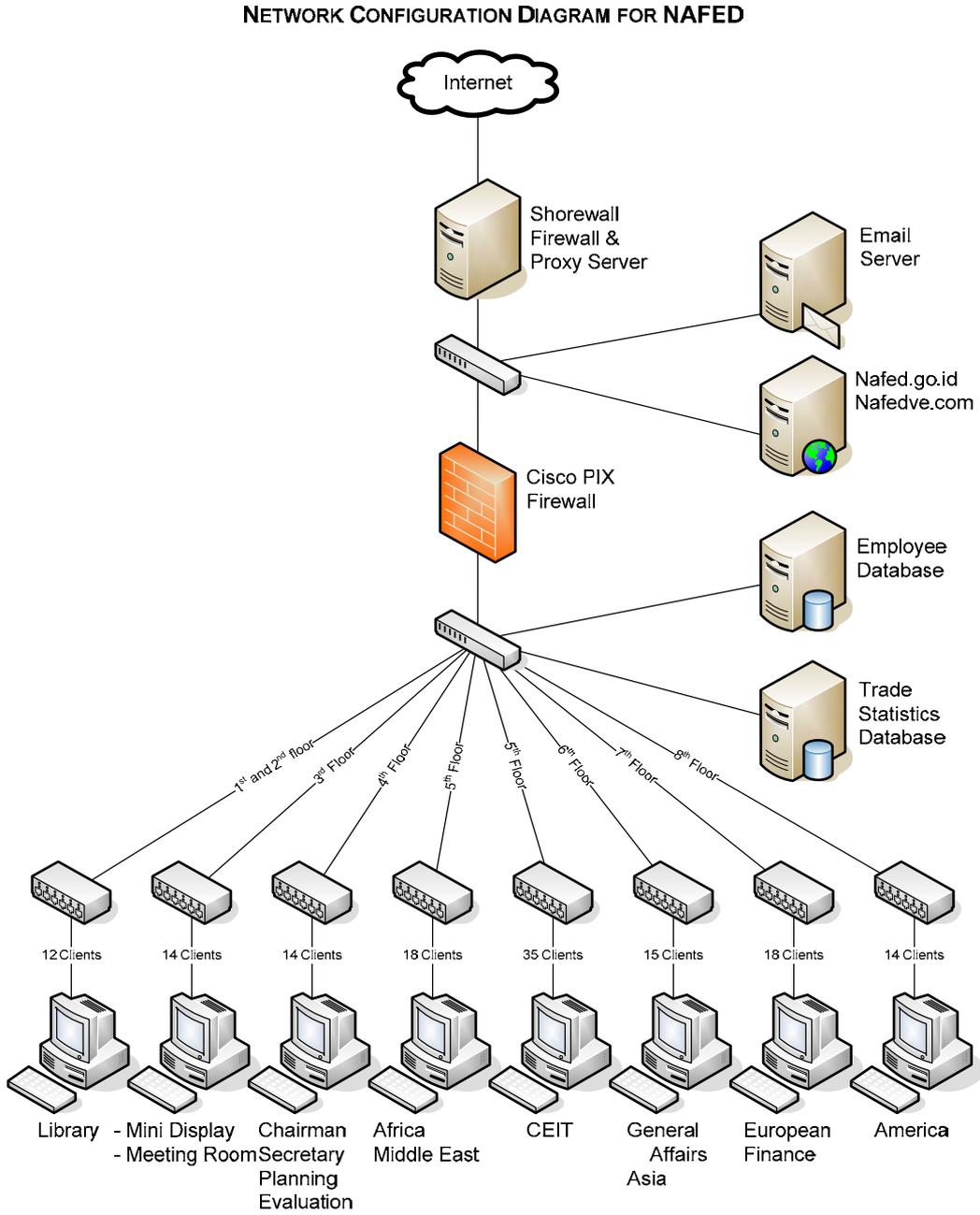


Diagram 7.8 Secretariat General Network Configuration

NETWORK CONFIGURATION DIAGRAM FOR SECRETARIAT GENERAL

