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MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

YEAR 1 WORK PLAN WORKSHOP

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002

3 AUGUST 2011

This document was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech for the Municipal Infrastructure and IDP Housing Rehabilitation Project, Task Order number AID-114-TO-11-00002 under the USAID Architectural and Engineering (A&E IQC).



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The following document was prepared by Tetra Tech EM, Inc. (<http://www.tetrattech.com>).

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August 10, 2011

Mr. Bradley Carr
Water Irrigation and Infrastructure Advisor
Office of Economic Growth
US Agency for International Development
11 George Balanchine Street
Tbilisi, 0131
Georgia

Re: Year 1 Work Plan Workshop for the Municipal Infrastructure and IDP Housing Rehabilitation Project.

Dear Mr. Carr:

This report is being submitted to you in accordance with the requirements of task order no. AID-114-TO-11-00002 of contract AID-EDH-I-00-08-00027-00. It provides Tetra Tech's report on the Year 1 Work Plan Workshop held at Radisson Blu Iveria, Tbilisi on August 3, 2011 for the Municipal Infrastructure and IDP Housing Rehabilitation Project.

If you require a bound/color printed copy, please let me know.

We look forward to your review and welcome your comments and suggestions.

Very truly yours,

A handwritten signature in black ink that reads 'Jeffrey W. Fredericks'.

Jeffrey W. Fredericks, P.E., PhD
Chief of Party
Tetra Tech, Inc.
USAID/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP)
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Email: Jeff.Fredericks@tetrattech.com

CC: USAID (George Kokochashvili); MDF (Kartlos Gviniashvili); Tetra Tech (Firouz Rooyani, Dean White, Tom Chicca, Illia Eloshvili)

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Acronyms

CCN	Cooperating Country National
CFR	Code of Federal Regulations
CO	USAID Contracts Office
COP	Chief Of Party
DCOP	Deputy Chief Of Party
DRC	Danish Refugee Council
EA	Environmental Assessment
EC	European Commission
EIA	Environmental Impact Assessment
EPI	Economic Prosperity Initiative USAID Project
ESS	Environmental Scoping Statement
GEL	Georgian Lari
Geo	Geo Ltd
GMIP	Municipal Infrastructure And IDP Housing Rehabilitation Project (the project)
GoG	Government of Georgia
HO	Home Office
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Persons
IL	Implementing Letters
Kav	Kavgiprotrans-Mg Ltd
KfW	Kreditanstalt für Wiederaufbau (German International Development Banking Agency)
LTTA	Long Term Technical Assistance
MDF	Municipal Development Fund
MLHSA	Ministry of Labor Health and Social Affairs
MRA	Ministry of Refugee Affairs
MRDI	Ministry of Regional Development and Infrastructure
NEO	New Economic Opportunities (USAID Project)
NGO	Non-Government Organization
NTP	Notification to Proceed
PE	Licensed Professional Engineer
PEA	Programmatic Environmental Assessment
PMC	Project Management Committee
PMP	Performance Monitoring Plan
SDC	Swiss Agency for Development and Cooperation
SIDA	Swedish International Development Corporation Agency
SOW	Scope of Work
STTA	Short Term Technical Assistance
TBD	To Be Determined
TOCOTR	USAID Task Order Cognizant Technical Officer
Tt	Tetra Tech EM Inc
UNHCR	United Nations High Commissioner for Refugees
UNTC	United Nations Treaty Commission
USAID	United States Agency For International Development
USG	U.S. Government
WB	World Bank

USAID/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project
(GMIP)
Work Plan Workshop
Radisson Blu Iveria, Tbilisi
August 3, 2011

Background

Under the United States Agency for International Development (USAID)/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-114-TO-I 1-00002, Tetra Tech EM Inc. (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

The major purpose of this project is to improve the infrastructure in five selected municipalities - Dusheti, Mtskheta, Gori, Kareli, and Oni, affected during Russian Georgian conflict in 2008 and improve living standards for nearly 4,000 houses constructed by the GoG without running water or sewer systems for IDPs from the August 2008 conflict, to provide each house with a shower, sink, toilet, water taps and other renovation as necessary. The funds will also be used to upgrade existing IDP shelters and redevelop buildings for use as durable housing for IDPs from previous conflicts. Funding will also support various other activities focused on ensuring overall sustainability of IDP housing.

Activities performed under this task order will complement and reinforce the activities, project management, and engineering expertise of USAID/Georgia and its implementing partners. From 2010 to 2013, USAID/Georgia will undertake works in the infrastructure sector in collaboration with the GoG's Municipal Development Fund (MDF) to upgrade municipal infrastructure in targeted municipalities, to install and extend irrigation channels, and to upgrade IDP housing. Municipal infrastructure and irrigation rehabilitation will be implemented through an agreement with the MDF, and the IDP housing will be implemented through a separate agreement with this same agency. Tt will be expected to form a close working relationship with the MDF in the implementation of both projects, accompanying the MDF in all phases of the project and providing monitoring and oversight services to the MDF and USAID. The purpose of this award is to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. Efforts will not duplicate work that MDF does or might perform under its agreement with USAID. The monitoring and oversight role will encompass all areas of project intervention, from procurement planning to final acceptance. It will help to ensure that infrastructure deliverables are effective, efficient, and sustainable and that implementation is carried out within allowable budgets, time restraints, and within accepted quality standards.

The project includes three major components and two subcomponents:

1. Component 1: Municipal Infrastructure
2. Component 2: Rehabilitation Of Irrigation Infrastructure
3. Component 3: IDP Durable Housing

- a. Subcomponent 1: Provide Water And Sanitation Upgrades For IDP Cottage Housing For IDPS From The August 2008 Conflict
- b. Subcomponent 2: Provide Durable Housing Solutions For IDP From 1990s Conflict

Workshop Outcomes

The goals of the workshop were to i) develop project year one work plan, ii) discuss project procurement options, iii) introduce QA/QC plan, and iv) develop sub-project selection criteria

The Workshop provided an opportunity to focus on procurement/operations, design build/design bid build, a project management plan, and priorities for project selection criteria. An updated implementation schedule was prepared and dates for delivering key items were set.

Workshop Participants

A total of 22 individuals participated in the GMIP Work Plan Workshop. This included participants from USAID (3), Municipal Development Fund (7), and Tetra Tech (12).

A list of Participants is included as Attachment.

Workshop Agenda

The work shop was divided into two sessions. (See Attachment for the Workshop agenda.)

Workshop Sessions

A list of sessions & brief statement on what was discussed is presented below. Compiled notes are presented as Attachment.

The PowerPoint presentations for each session are presented in Attachment.

Session I

Year 1 Work Plan: This was presented by J. Fredericks (Tt). George Kokochashvili (USAID) presented the implementation plan. The project implementation plan and time requirements for design procurement (40 -120 days), design phase (40 -80 days), construction procurement (40 days), and the earliest start dates for construction (July 2012) were discussed. The need of getting environmental clearances before starting project procurement was emphasized by USAID.

Project Procurement Options: A presentation on various procurement options including Design-Bid-Build (DBB) and Design-Build (DB) was presented by Jesse Gutierrez (USAID). It was agreed that it was important to find a way to initiate the construction process as soon as possible. Design Build was discussed as an option that might shorten the procurement process. MDF has had some experience with Design Build but it is not a standard procurement process under World Bank procurement procedures. It was mentioned in the US that DB is not usually done for residential buildings.

Session 2

QA/QC Plan: Ilia Elovshvili (Tt) gave a detailed presentation project management and monitoring. He emphasized that QA/QC is only a part of project management and that a total plan must be prepared that considers: contracts administration, technical supervision/support, site progress monitoring, and inspection/acceptance. There should be office teams formed according to functions and field teams formed according to specialization. It was recommended that a minimum of one field team be formed per contract. The number of construction lots was discussed. The roles of Tt and MDF and the possibility of outsourcing construction management were also discussed.

Project Selection Criteria: This presentation was given by J. Fredericks (Tt). Each of the project components & sub-components was discussed: Municipal, Irrigation, Cottage communities, and IDP Housing buildings. It was agreed the next step was to prepare a selection criteria matrix for each component.

Wrap-up Summary of Day's Activities: The following work schedule for further discussion and agreement was prepared:

1. Selection Criteria - August 12, 2011
2. Project Management Plan - August 31, 2011
3. Types of Procurement - August 12, 2011
4. Staffing Issues – August 12, 2011

Attachments:

Notes Compiled by Sessions

Session 1 – Procurement/Operations

Design Procurement:

Min 40 working days – max 120 working days

Design Preparation:

Min 40 working days – max 80 working days

Construction Procurement

Total – 40 working days

Operations Starting and Delivery Dates:

Building Construction:

- Construction - July 1, 2012
- Cottages – July 1, 2012
- Irrigation – June 1, 2012
- Municipal – June 1, 2012

Handing over

- Construction – Sep. 1, 2013
- Cottages – July 1, 2013
- Irrigation – Sep. 1, 2013
- Municipal – Sep. 1, 2013

Contracts according Design and Construction:

Component	Contracts	
	Design	Construction
Irrigation	1	1
IDP Housing	1	3
Cottages	1	1
Infrastructure	1	3
Total		12

Other:

No Procurement unless Environmental phase is finished!!! (USAID)

Session 2 – Design Build/Design Bid Build

Procurement:

- Conceptual Design with Cost
- Designed Cost Estimate

Rehab:

Start Construction Faster

Advantage:

1. Eliminating Procurement Package
2. Must be on Time

Disadvantage:

DB will do Cheaper

CMC: Need Stranger Firm

Contractor takes all risks

Threshold: 10 m (USA)

Experience:

- May eliminate one procurement but procurement may be more complicated

Use only for

1. Small Contracts
2. Define Results
3. Fast Track

Costs: How divided. Include in Proposal

- Price Set in beginning

Contingencies:

How is this included?

Uncertainty:

Agree for Unit Rates

DB Usually not done for Residential

Buildings:

- OK for Unoccupied Buildings
- Problem with Delays, against Contractor (40%)
- Out of Contractors Hand
- Condition for MRA
- Very Difficult

DBB

More time to Schedule

Design Correct;

Can cut Real Costs.

Procurement: Easy with BQQ

Session 3 – Management and Relocation Plan

Construction Management

1. One Organization
2. Outsource (MDF's Preference)
3. Hybrid of previous two

Project Management Plan

- Design
 - Construction
1. Tt Project Management Plan
Safety Plan
 2. Procurement

Relocation Plan

Complex

- Simple Designs

Other:

How to Save Time???

Session 4 – Selection Criteria (Matrix)

Irrigation:

- Diversification
- Which channels provide maximum benefit
- Replication
- Synergy
- Complete package

Cottages:

- Water supply existence should be documented

Infrastructure:

- Cost for beneficiary
- Threat to human life
- Ease of Implementation
- Design Complexity/time
- Environmental
- Partial funding
- Flexibility for modification and adjustment
- Impacts on residents

Buildings:

- Selection of next schemes
- Economic zone/empty buildings

Final Schedule for Work to be implemented:

- | | |
|------------------------------|-----------------|
| 1. Selection Criteria - | August 12, 2011 |
| 2. Project Management Plan - | August 31, 2011 |
| 3. Types of Procurement - | August 12, 2011 |
| 4. Staffing Issues - | August 12, 2011 |



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**MUNICIPAL INFRASTRUCTURE AND
IDP HOUSING REHABILITATION
PROJECT**



**WORK PLAN
WORKSHOP**

Tbilisi

August 3, 2011



TETRA TECH

Table of Content

1. Agenda
2. List of Participants
3. Work Plan
4. Procurement
5. QA/QC
6. Decision Criteria
7. Implementation Plan
8. Project Implementation Map

**USAID/Georgia Municipal Infrastructure and IDP Housing Rehabilitation
Project**

WORK PLAN WORKSHOP

Radisson Blu Iveri, Tbilisi
August 3, 2011

Work Shop Goals

- 1. Develop Project Year One Work Plan**
- 2. Discussion on Project Procurement Options**
- 3. Introduce QA/QC Plan**
- 4. Develop Sub-Project Selection Criteria**

**USAID/Georgia Municipal Infrastructure and IDP Housing Rehabilitation
Project**

**Work Plan Workshop
Radisson Blu Iveri, Tbilisi
August 3, 2011**

Proposed Agenda

Wednesday 3 August

- 1:00 PM Session 1**
- Convene in Conference Room**
- Opening Remarks**
USAID
MDF
- Overview of the Workshop**
Workshop Facilitator – J. Fredericks/Ilia Eloshvili
- Year 1 Work Plan**
Tetra Tech
- Project Procurement Options**
Tetra Tech/USAID
- 3:30 PM Coffee break**
- 3:45 PM Session 2**
- QA/QC Plan**
Tetra Tech
- Project Selection Criteria**
Tetra Tech
- 5:30 PM Wrap-up Summary of Day's Activities**
Facilitator – J. Fredericks/Ilia Eloshvili
- 6:00 PM Adjourn: Coffee/Buffer Refreshments for Participants**

List of Participants for Workshop held on Wednesday, Aug 3, 2011

Name/Organization	Title
USAID	
Bradley Carr	Water, Irrigation and Infrastructure Advisor
Jesse Gutierrez	Engineering Officer
George Kokochashvili	Engineering Specialist
MDF	
Kartlos Gviniashvili	Program Manager
Zurab Baratashvili	Procurement Manager
Tengiz Lakerbaia	Engineering Consultant
Paata Iakobashvili	Deputy Head of Division for Relations with Int Organizations
Paata Charakashvili	Head of Division for Relations with Int Organizations
Gizo Ghlonti	Head of Procurement Division
Malkhaz Khurtsilava	Deputy Head of Procurement Division
Tetra tech	
Jeffrey Fredericks	COP
Ilia Eloshvili	Deputy COP
Teimuraz Levanishvili	Housing Rehabilitation Manager
Mamuka Shaorshadze	Environmental Engineer
Mamuka Gvilava	Environmental Consultant
David Girgvliani	Environmental Consultant
Jim Gallup	Environmental Consultant
Otar Maghalashvili	Irrigation Engineer
Guram Soselia	Irrigation Engineer
Archil Lezhava	Program Specialist/Public Outreach
George Nizharadze	Office Administrator
Maia Dvali	Translator Interpreter
Total	22 Persons



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AID-EDH-I-00-08-00027-00, TASK ORDER: AID-I14-TO-I1-00002

Municipal Infrastructure and IDP Housing Rehabilitation Project

Work Plan Workshop

Year 1 Work Plan

**Radisson Blu Iveri, Tbilisi
August 3, 2011**

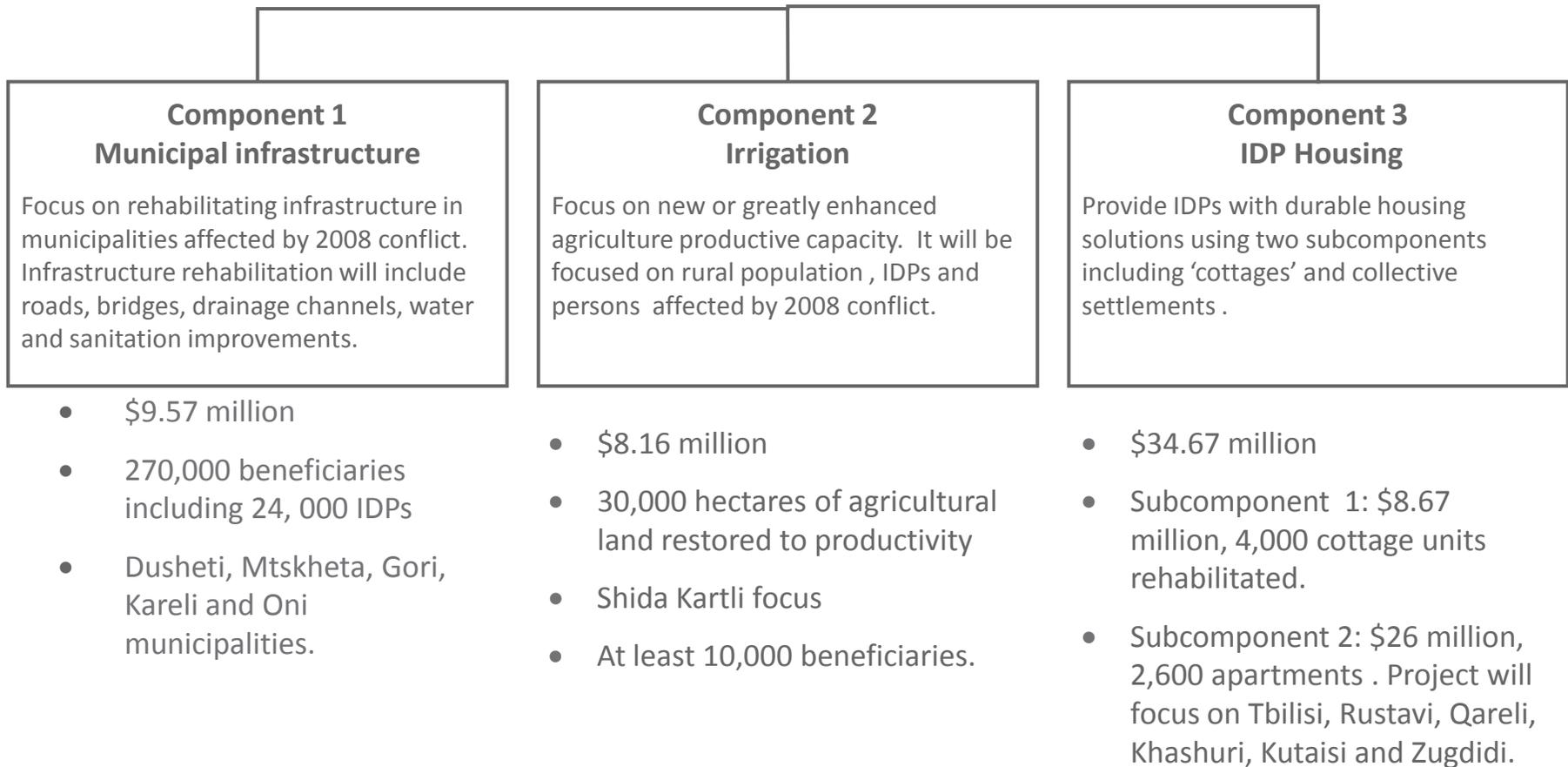


Program Objective

USAID/Georgia will undertake works in the infrastructure sector in collaboration with the GoG's Municipal Development Fund (MDF) to upgrade municipal infrastructure in targeted municipalities, to install and extend irrigation channels, and to upgrade IDP housing.



Project Components





Tetra Tech SOW

1. Environmental Scoping Statements
2. Programmatic Environmental Assessment
3. Environmental Impact Assessment (for Components 1 and 2 – if required)
4. Planning Activities
5. Design Review Activities
6. **Technical Support and Oversight**



Technical Support and Oversight

1. Review of **feasibility and cost/benefit analysis** for accept/reject decisions based on technical and economic criteria.
2. Provision of **technical oversight to implementation staff**, keeping USAID and MDF informed of work progress and implementation issues
3. Ensure that all interventions are in accordance and **compliance** with appropriate USAID/Georgian **codes and regulations**
4. Support and monitor MDF to insure **compliance with the procurement policies** and procedures specified by agreement between USAID/Georgia and MDF.
5. Preparation and/or review of reports and work plans, providing recommendations regarding the **viability and cost effectiveness of interventions** & identify alternatives as needed.



Technical Support and Oversight (cont)

6. Monitoring the adequacy, quality and acceptability of delivered goods and services through **construction inspection and surveillance services**, review of contractor reports, and meetings with implementation partners.
7. Assistance in the development of **solutions for architecture and engineering** issues that cannot be resolved by the implementers.
8. Reviewing of and responding to proposed **changes in design and construction contracts**, the validity of claims and contract time extensions.
9. **Administrative responsibilities** including but not limited to activities such as estimating expenditures, reviewing payment vouchers, responding to audits, assessing claims, and performing other related activities.
10. **Quality control/quality assurance services**, including materials measurement and services analysis, environmental monitoring, and testing to ensure delivered products are in accordance with design specifications and drawings.



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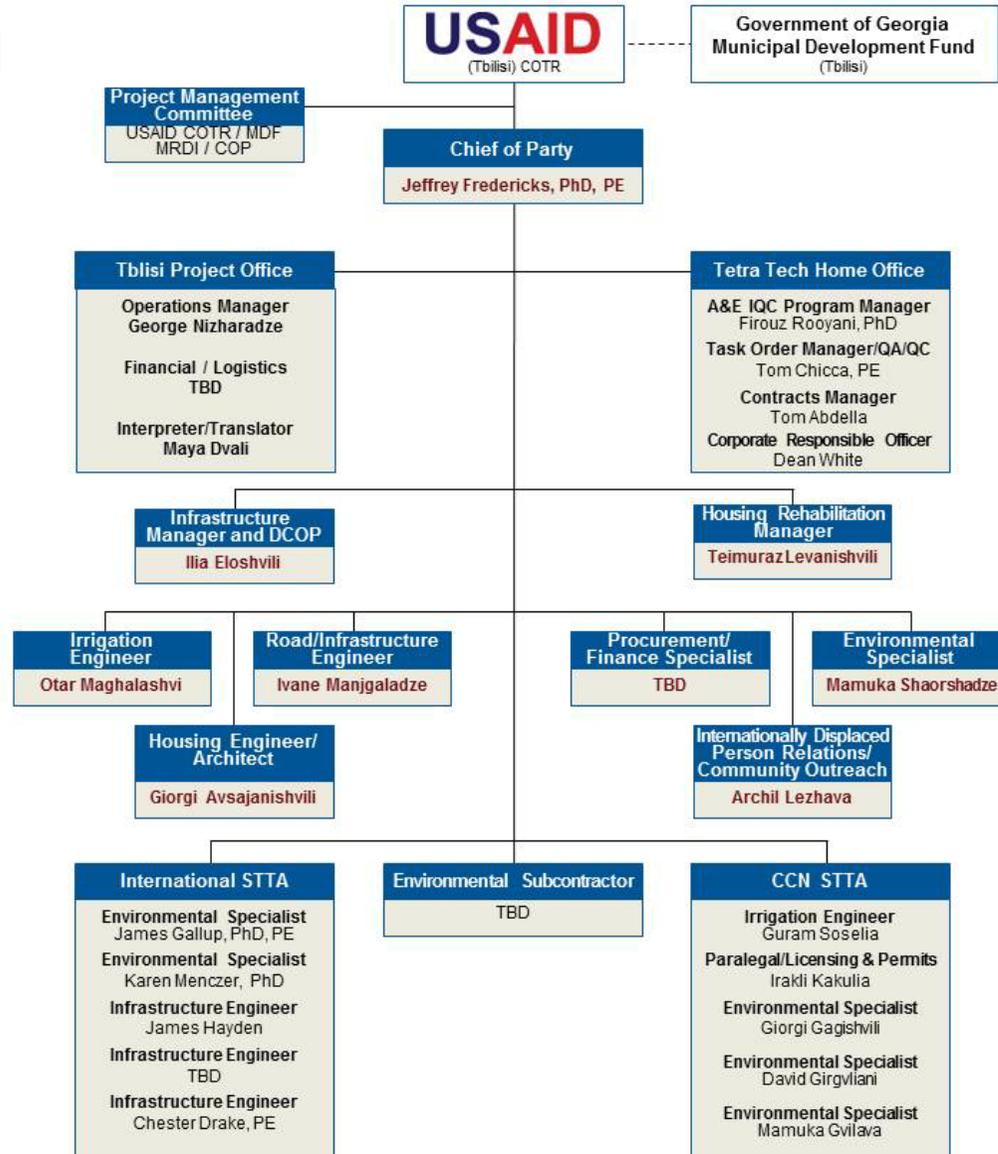
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Work Plan Components

1. Detailed Staffing Plan
2. Planning Oversight Plan
3. Engineering Oversight Plan
4. Administrative Oversight Plan
5. Monitoring & Evaluation Plan
6. Management Structure
7. Work Flow & Overall Program Approach
8. Capacity Building Activities (Strengthen Capacity of MDF & Prof. Recipients)
9. Risk Assessment Matrix & Mitigation Plan
10. Quality Management Plan
11. Organization Structure & Responsibility Matrix
12. Procurement Plan
13. Other Technical Services
14. Project Selection Criteria



Staffing Plan





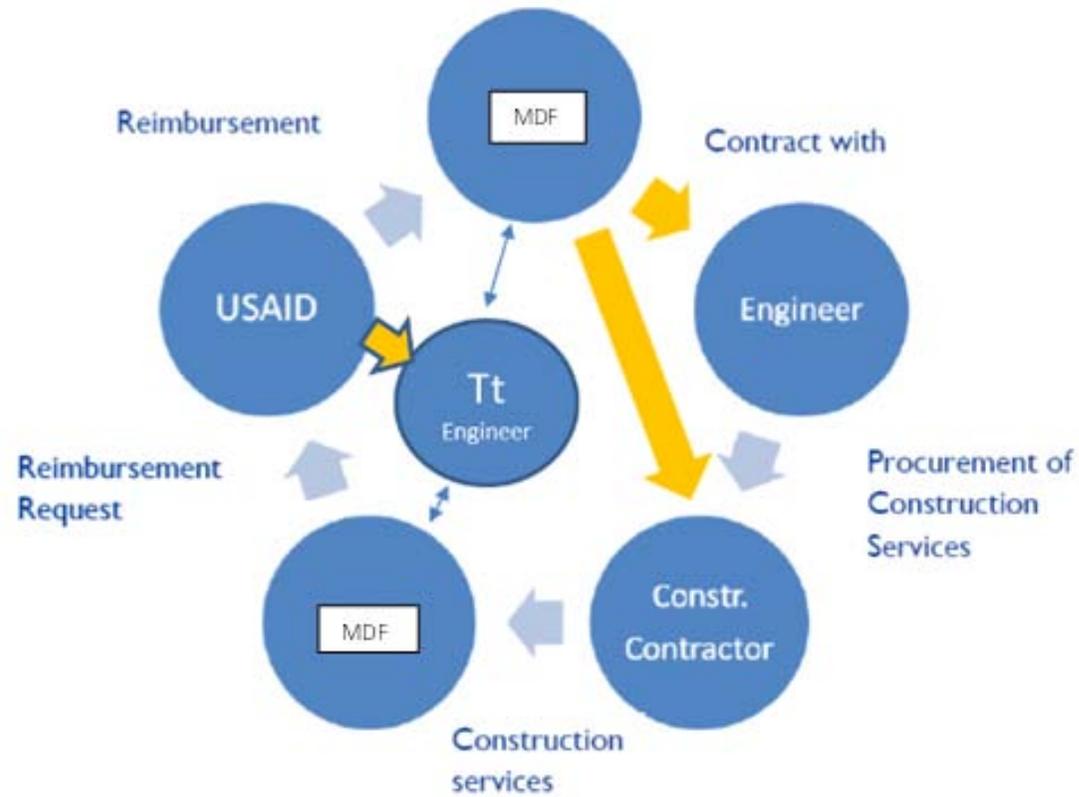
Staffing Plan

No		Procurement Management	Roads (Eng)	Drainage (Eng)	Improving Condos (Eng)	Water & Sanitation (Eng)	Irrigation (Eng)	Environmental Science	Construction Management	Monitoring Inspection	Technical Training	Public Awareness	Codes & Regulation	Finance		
1	Jeffrey Fredericks, Chief of Party, LTTA	x	x													
2	Ilia Elovshvili, Infrastructure Manager & DCOP, LTTA	x		x												
	Engineering Technical Team															
3	Teimuraz Levanishvili, Housing Rehabilitation Manager, LTTA		x	x	x	x										
4	Ivane Manjgaladze, Road/Infrastructure Engineer, STTA			x	x	x										
5	Otar Maghalashvi, Irrigation Engineer, STTA					x	x									
6	Guram Soselia, Water/Waste Water Engineer, STTA					x	x									
7	Giorgi Avsajanisvili, Housing Engineer/Architect, STTA				x											
8	CAD Specialist (TBD)															
9	Materials & Testing Tech (TBD)															
10	Chester Drake, Senior Infrastructure Engineer, Expat STTA	x	x	x	x	x	x									
11	Mid Infrastructure Engineer, Expat STTA (TBD)			x	x		x									
12	James Hayden, Infrastructure Engineer, Expat STTA					x										
	Environmental Team															
13	Mamuka Shaorshadze, Environmental Specialist, LTTA															
14	James Gallup, Environmental Specialist, Expat STTA		x				x									
15	Karen Menczer, Environmental Specialist, Expat STTA															
16	David Girgvliani, Environmental Specialist, STTA															
17	Mamuka Gvilava, Environmental Specialist, STTA															
18	Giorgi Gagishvili, Environmental Specialist, STTA															
	Other Technical Support															
19	Archil Lezhava, Displaced Person Relations/Outreach/DCC, LTTA															
20	Irakli Kakulia, Paralegal/Licensing & Permits, STTA															
	Admin/Procurement															
21	George Nizharadze, Office Operations Manager, LTTA	x	x													
23	Maia Dvali, Translator/Interpreter															
24	Sergo Gviniashvili, Procurement/Finance Specialist, STTA	x														
	Home Office Support															
25	David Sharashenidze, Home Office Coordinator, STTA/HO	x	x													
26	Jhay Omega Bufi, Contracts Specialist, HO	x														
27	Firouz Rooyani, A&E IQC Program Manager, HO	x	x													
28	Thomas Chicca, Task Order Manager & QA/QC, HO	x	x	x	x											
29	Thomas Abdella, Contract Specialist, HO	x														
30	Project Analyst, (TBD) HO	x														
31	Brian Bemis, Sr. Administrative Assistant, HO	x														
32	Shelly Rice, Subcontract Specialist, HO	x														
33	Renee Valentino, Contract Manager, HO	x														
	Total	14	8	6	7	5	8	2	8	9	24	12	25	8	4	6



Management Plan

FARA





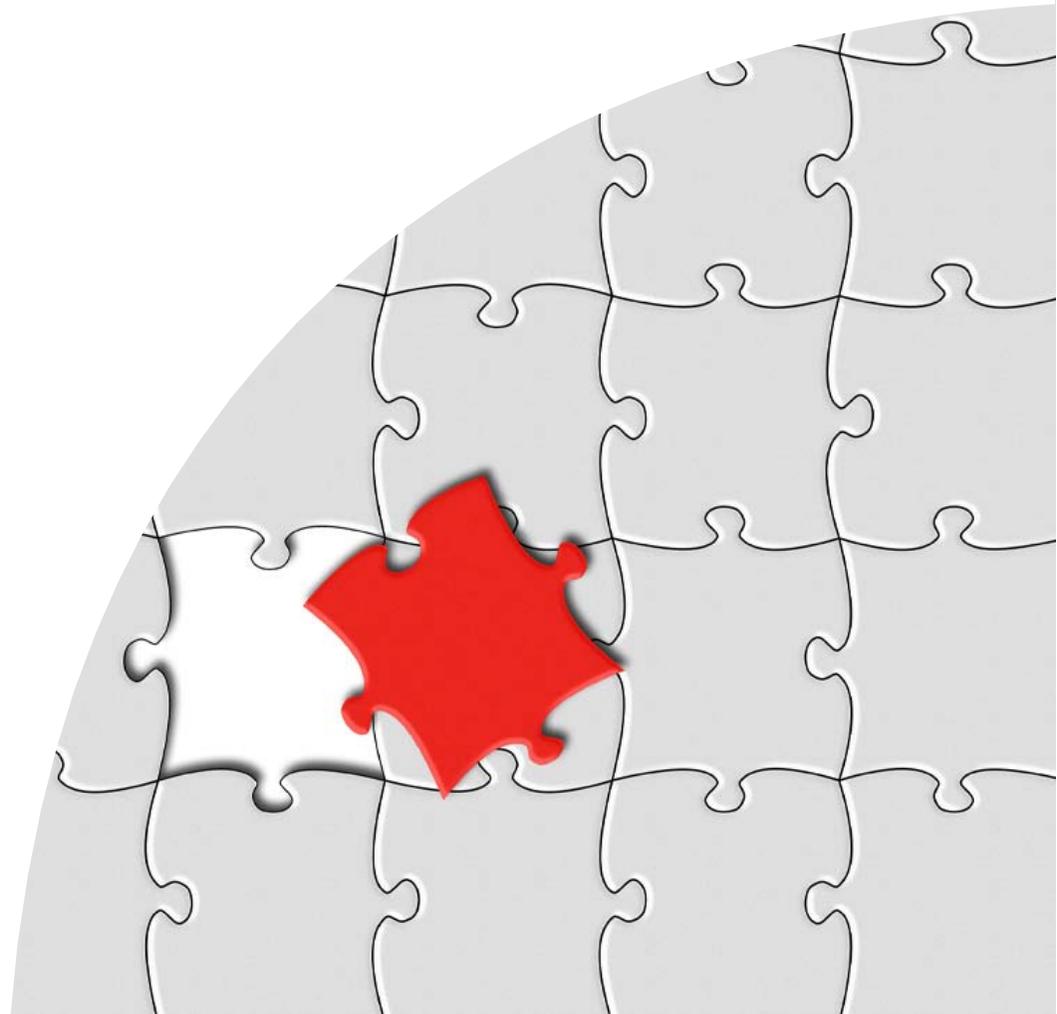
Project Implementation Plan

No	Task Name	Duration	Start	Finish
1	Project Design Study	204 days	3/1/11	12/6/11
2	ENV Scoping + FS TOR Preparation	11 days	3/1/11	3/16/11
3	ENV Scoping + FS Procurement	29 days	3/17/11	4/25/11
4	ENV Scoping + FS Implementation	60 days	5/19/11	8/9/11
5	Contract	30 days	5/19/11	6/29/11
6	Extending the contract	22 days	7/1/11	7/29/11
7	Stakeholder meeting	0 days	6/23/11	6/23/11
8	Stakeholder meeting	0 days	6/29/11	6/29/11
9	Reviewing by TT	7 days	8/1/11	8/9/11
10	Site visit by TT	21 days	8/1/11	8/30/11
11	PEA by Tetra Tech	60 days	8/15/11	11/4/11
12	Presentation of the projects by GEO and KAV	0 days	8/25/11	8/25/11
13	Project selection	6 days	11/28/11	12/6/11
14	Design & QA/QC	459 days	12/6/11	9/3/13
15	Procurement	60 days	12/6/11	2/27/12
16	Design	80 days	2/27/12	6/18/12
17	QA/QC	293 days	7/23/12	9/3/13
18	Construction	339 days	6/18/12	10/1/13
19	Procurement	45 days	6/18/12	8/17/12
20	Construction	294 days	8/17/12	10/1/13



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Thank You!





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Municipal Infrastructure and IDP Housing Rehabilitation Project

Work Plan Workshop

Project Procurement Options

Radisson Blu Iveri, Tbilisi
August 3, 2011



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Procurement Issues

1. Design Procurement:

- a) Number of Packages
- b) Time:

2. Construction Procurement:

- a) Number of Packages
- b) Time:

3. Design-Bid-Build vs Design Build



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Contracts for Design and Construction

Two Major Construction Models:
Design-Bid-Build
Design-Build



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Two Construction Implementation Mechanisms

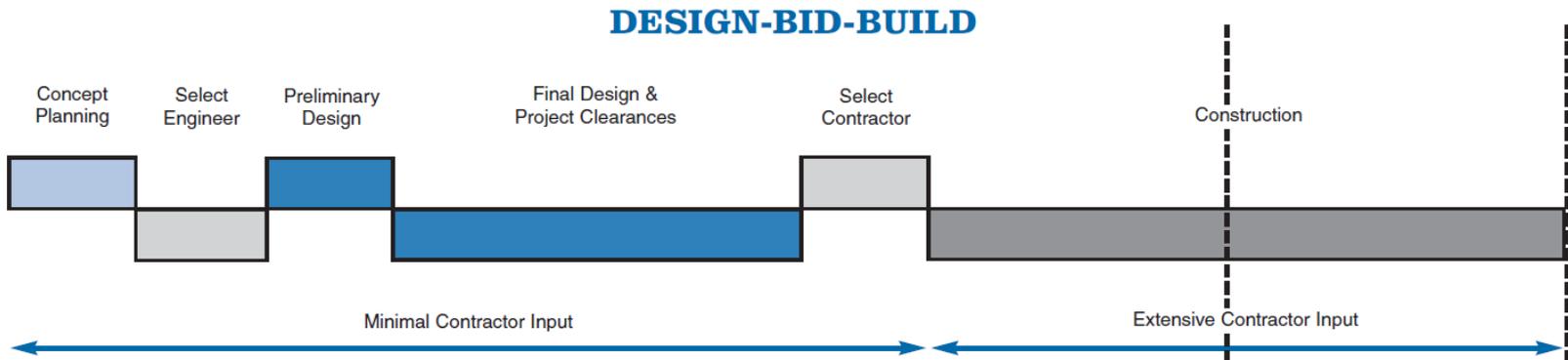
- Traditional Design-Bid-Build
- Design-Build



Design-Bid-Build

The Owner enters into 2 prime contracts; one with the architect or engineer for the design and planning of the project, the other with a single construction contractor to build the project.

The Design Engineer represents the project team in assuring that construction is completed in accordance with the plans and specifications prepared during the design phase.



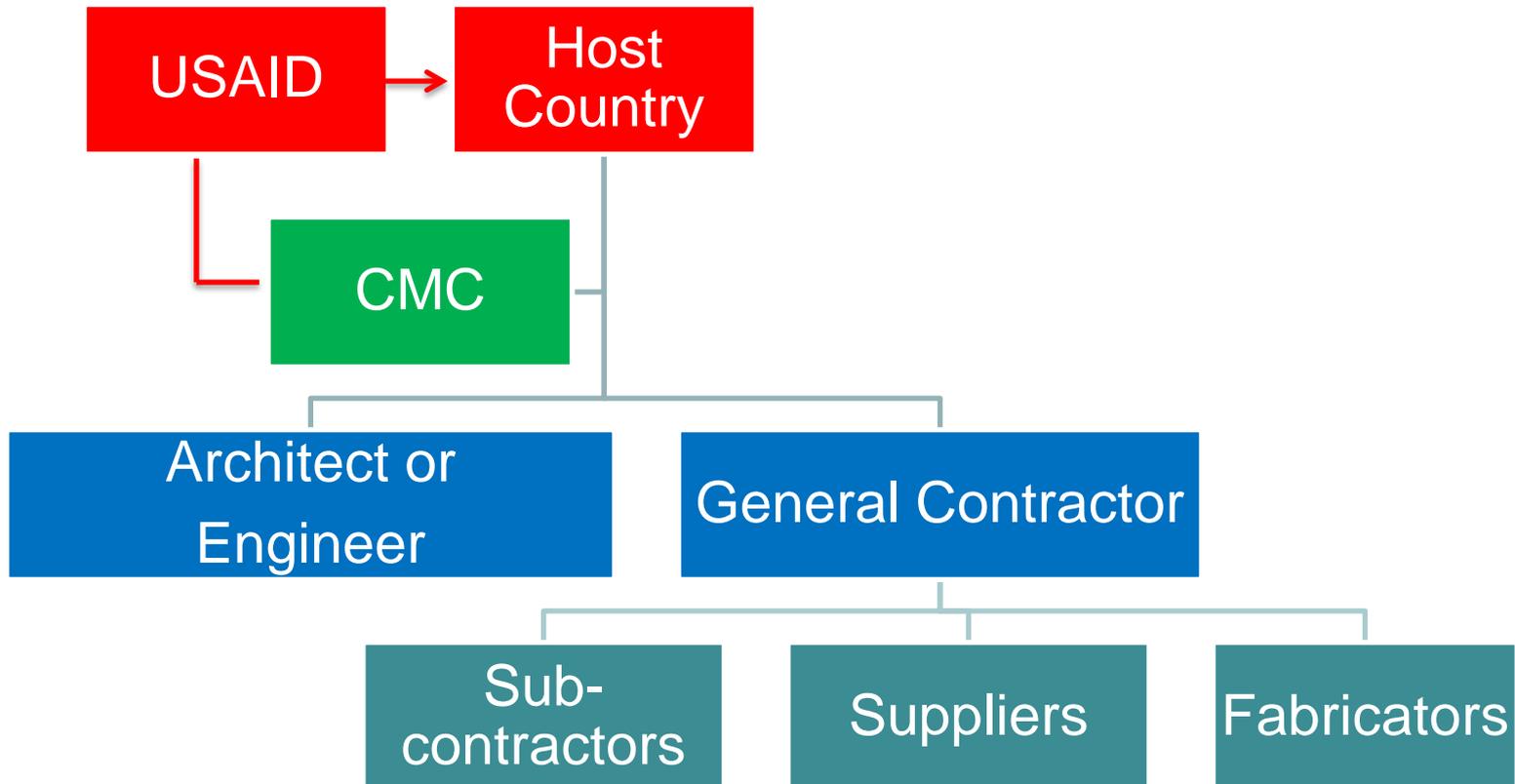


Design-Bid-Build

- Engineer does the planning and 100% of engineering design
- Owner with assistance from the Engineer competitively procures a construction contractor
- Construction company builds with the Engineer supervising performance
- Owner accepts the facility upon completion
- Warranty period and O&M Support



Traditional Design-Bid-Build Contract Relationship





Design-Bid-Build



Potential Advantages

Owner and their Engineer have maximum control over final product

May result in lower life cycle of operating costs

Firms are More Familiar with this and consider it less risky

Potential Disadvantages

Takes longer than other approaches

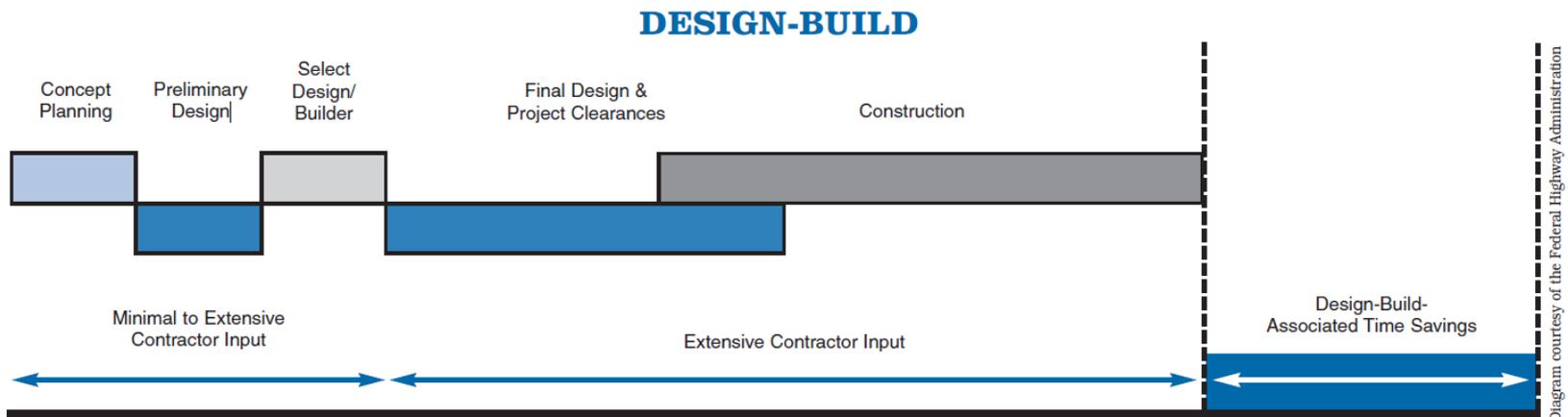
Design costs are typically greater compared with D/B – The engineer must provide greater detail (100% vs. 30%)



Design-Build

Design-Build is a method of Construction where the design and construction tasks are contracted with a single entity known as the design-builder.

Design-Build is more streamlined than the traditional method Design-Bid-Build where design and construction is clearly separated.



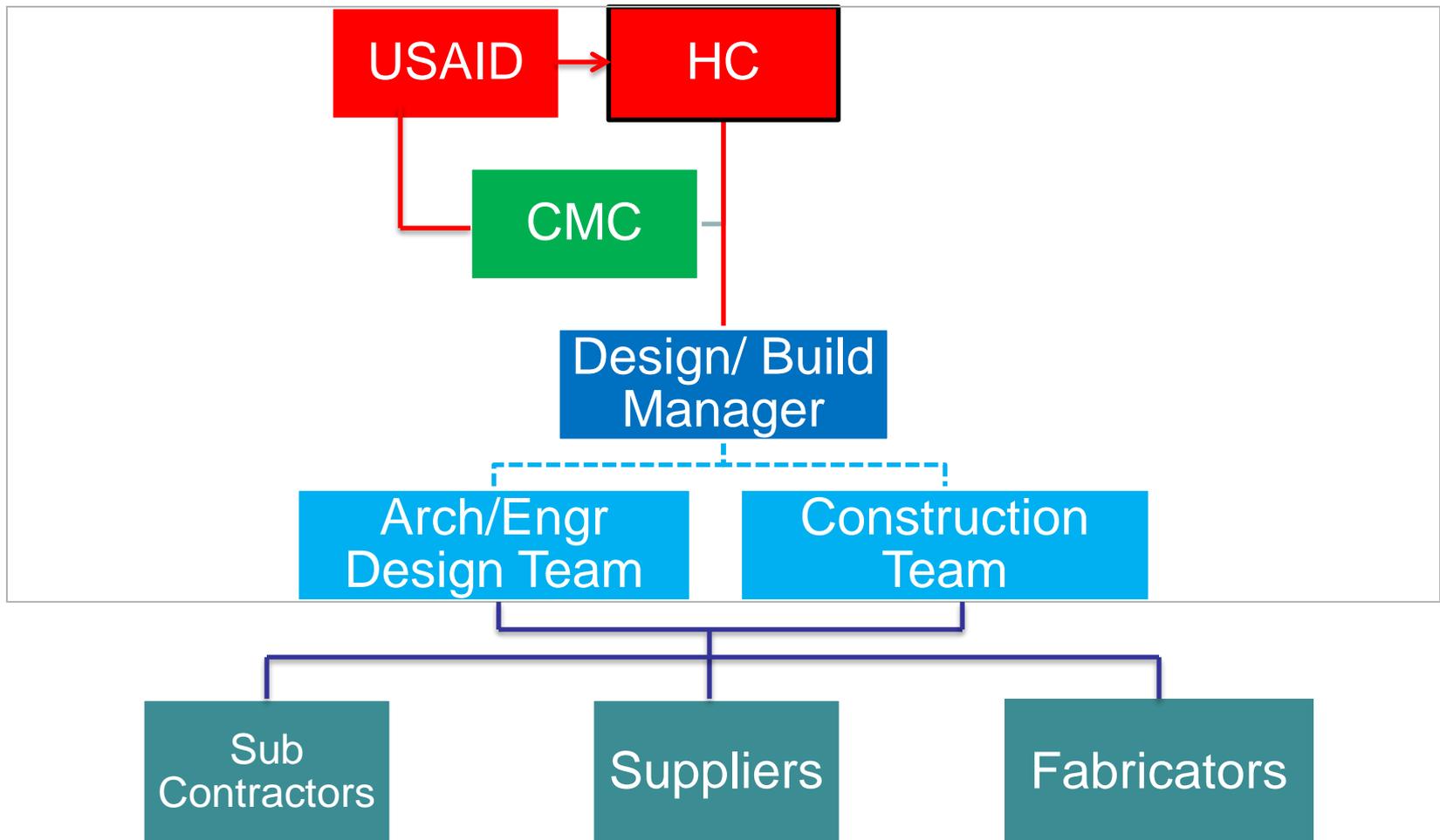


Design-Build

1. The Construction Manager Consultant (CMC) provides a preliminary design, specifications and evaluation criteria for the RFP which is often performance based.
2. Construction firm provides a technical proposal as well as a firm fixed price bid
3. Construction firm and their designers are responsible for design integrity
4. During construction the CMC oversees the work for contract compliance including quality assurance and advises the Owner.



Design-Build Construction Contract Relationship





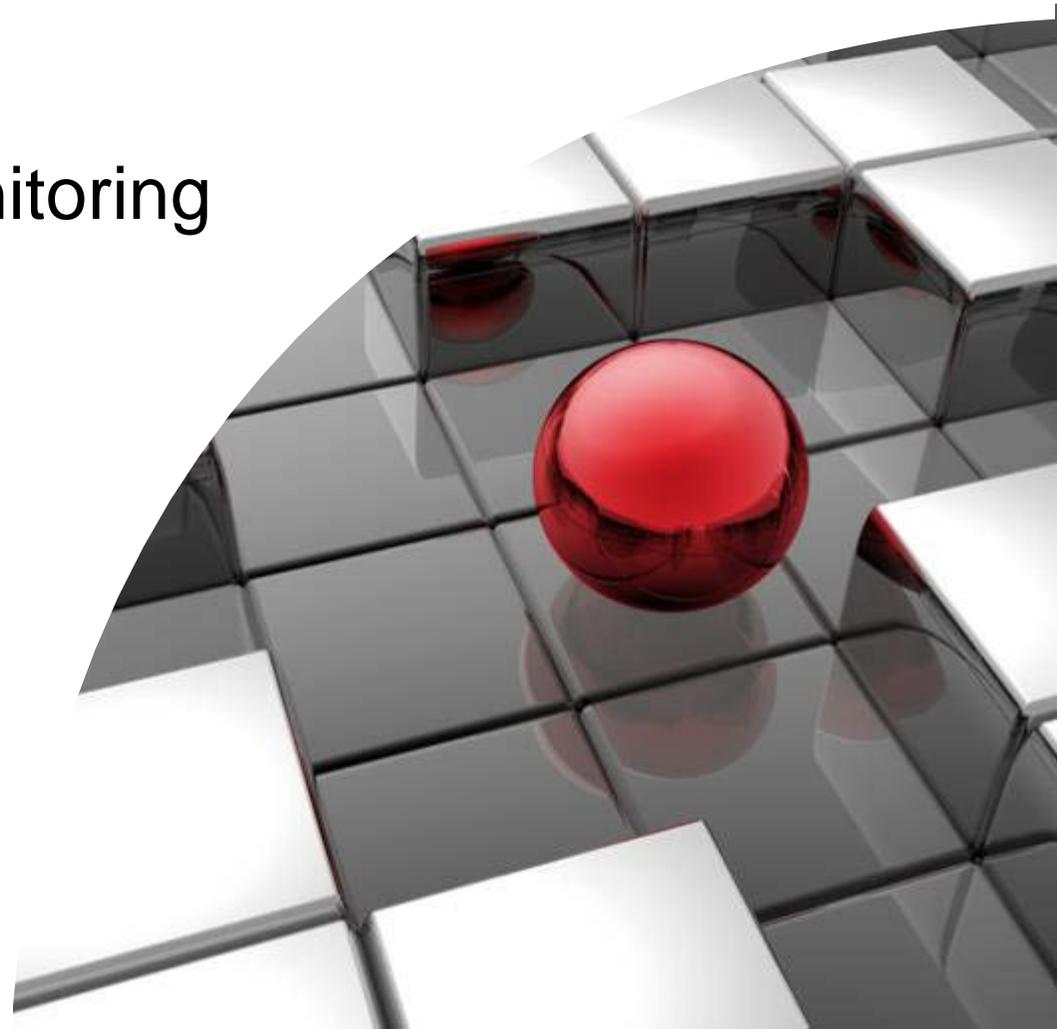
Design-Build



Potential Advantages	Potential Disadvantages
Constructability is enhanced because construction firm controls the detailed design	Owner and their CMC have less control over the final product
Construction may cost less	Design might be cheaper rather than more efficient – life cycle costs may be higher
Significant savings in project delivery time	Potentially results in more claims due to conflicts between the CMC and the D/B Contractor
Greater innovation and efficiencies between the designer and the builder.	



Project management , monitoring





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- Construction management and monitoring – QA/QC**
- 1. Contracts administration**
- 2. Technical supervision/support**
- 3. Site progress monitoring**
- 4. Inspection/Acceptance**



- Project office teams are formed according to functions**
 - 1. Contracts administration management**
 - 2. Design review/adjustment**
 - 3. Technical support**
 - 4. Office support DCC**

- Field teams are formed according to specializations**
 - 1. Resident engineer**
 - 2. Site monitor-QA/QC**
 - 3. Environmental H&S specialist (optional)**



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- Project matters are managed by Office and Field teams jointly;**
- Office: contractual communication, design review and technical support;**
- Field Teams: daily activities site monitoring, progress reports, ensuring conformity with design and specifications and employers requirements;**



Field Team Selection Criteria

- Minimum one field team per contract**
- Number of teams vary depending on the size of the contract: additional teams per contract vs. one team cover several contracts**
- Maximum team number: 6 assuming 4 construction lots: municipal infrastructure, irrigation rehabilitation, cottage settlement rehabilitation, collective centers/buildings rehabilitation**



Field Team Numbers Per Lot

Lots	Field Team Numbers
Lot 1: Municipal Infrastructure	1
Lot 2: Irrigation Rehabilitation	1
Lot 3: Cottage Settlement Rehabilitation	1
Lot 4: Collective Centers/buildings Rehabilitation	2



- Additional contractual requirements:**
- to ensure effective communication and effective information flow during the construction, it is recommended to establish Document Control Centers and request it from the contractors during the bidding period.**

- to receive precise and timely information from field, it is recommended to provide special forms in the contracts as contractual requirements during the bidding period.**



Microsoft Office
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Supervision options

- Design-Bidding documents preparation
- Construction

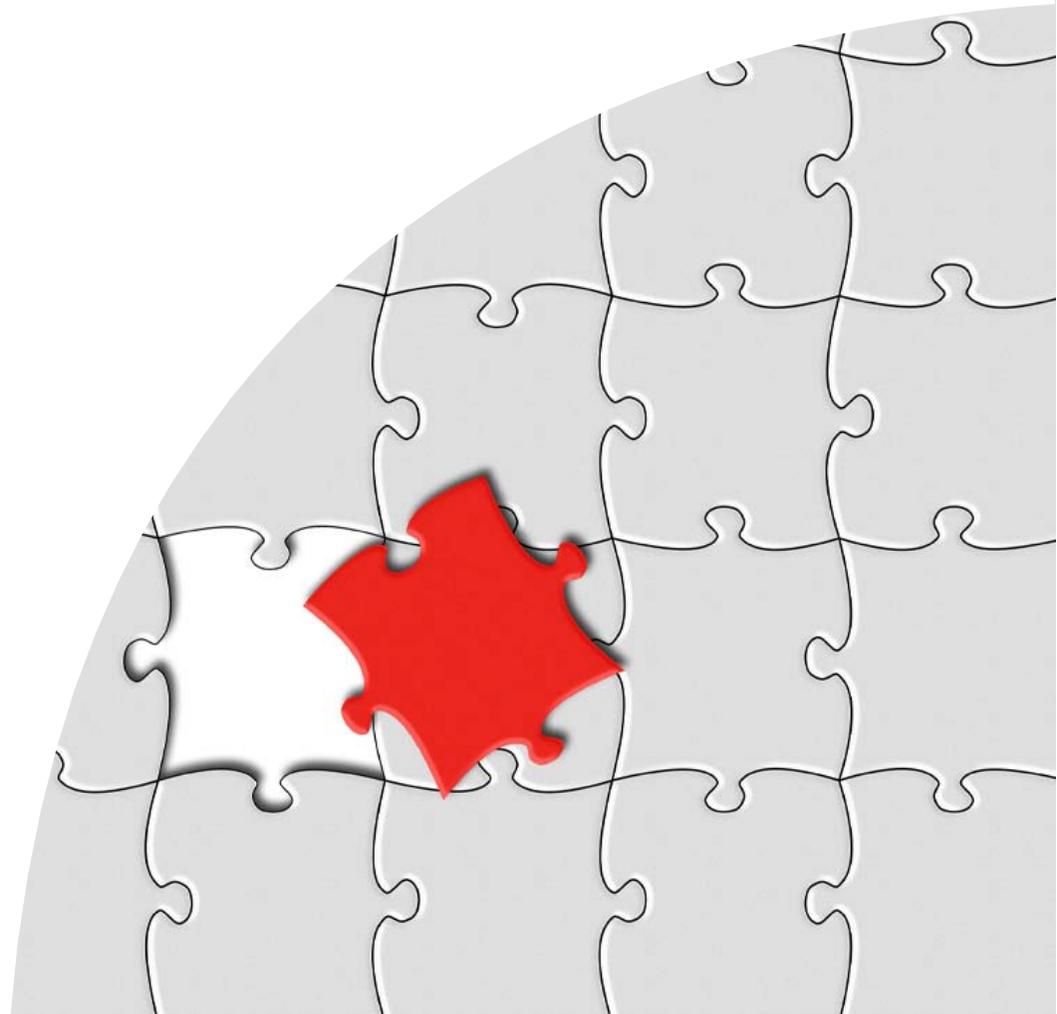
Construction supervision may be done:

1. Independent supervision company
2. Design company
3. Tetra Tech/MDF
4. MDF
5. Tetra Tech



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AID-EDH-I-00-08-00027-00, TASK ORDER: AID-I14-TO-I1-00002

Municipal Infrastructure and IDP Housing Rehabilitation Project

Work Plan Workshop

Sub-Project Selection Criteria

Radisson Blu Iveri, Tbilisi
August 3, 2011



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Components

- Component 1: Municipal Infrastructure
- Component 2: Rehabilitation Of Irrigation Infrastructure
- Component 3: IDP Durable Housing
 - Subcomponent 1: Provide Water And Sanitation Upgrades For IDP Cottage Housing For IDPS From The August 2008 Conflict
 - Subcomponent 2: Provide Durable Housing Solutions For IDP From 1990s Conflict



Component 1 Municipal Infrastructure

- Municipalities affected by 2008
- Conflict. Roads, bridges, drainage channels, water and sanitation improvements.
- \$9.57 million
- 270,000 beneficiaries including 24, 000 IDPs
- Dusheti, Mtskheta, Gori, Kareli and Oni municipalities



Component 1 Project List

#	Municipality	Project Title	Project Brief Description	Main Social Outcomes, Number of Beneficiaries
1	Oni	Installation of asphalt paving in Town Khoni internal roads	Asphalt paving will be installed on the 7-8 km urban street section	End-users 3400 population, doubles during high season
2	Dusheti	Installation of River Dushetiskhevi bank protection and restoration-rehabilitation of bridges over the river	Cleaning the bank of inert materials, installation/restoration of cast-in-situ reinforced concrete walls, installation of bank protecting gabions, reinstallation of bridges, restoration of the footbridge over the gorge	7000 population (Villages Kobiantkari, Sulikiantkari, Shalikiantkari and Mtvareliankari Settlements)
3	Dusheti	Rehabilitation of Town Dusheti streets and storm drains	Rehabilitation of the streets damaged as result of mudslide in Dusheti, restoration-rehabilitation and reinstallation of storm drains (asphalt 2,620 km, stone pavement 1,040 km)	5600 population in Dusheti
4	Mtskheta	Rehabilitation of roads for development of infrastructure in Mtskheta Municipality	Construction and rehabilitation of Mtskheta internal roads, installation of the respective service lines (18-20 km)	Will serve 10 000 population, approximately 100,000 tourists annually. Will foster infrastructure development,
5	Gori	Rehabilitation of internal water supply and wastewater networks and installation of water meters in apartment buildings in Gori	Due to malfunction of the internal systems there is water loss in the apartment buildings, in case if the project is implemented the population will receive water on the 4-5 floors	Improvement of sanitary-hygienic conditions for 17000 inhabitants of 290 buildings: upgrade of potable water supply and installation of water meters
6	Gori	Rehabilitation of potable water and wastewater networks in Railway Settlement	Complete rehabilitation of the wastewater system - GEL 1,500,000; potable water network II stage completing works GEL 500,000	Improvement of sanitary-hygienic conditions for 5000 population.
7	Gori	Complete rehabilitation of pavements and sidewalks of the streets in May 26th, and Moscow streets and Railway Settlement in Gori	Project implementation will result in rehabilitation of 30 streets (18-20 km)	1) May 26th is the city central market adjacent street. It is used by the whole city and village population; 2) Moscow street is used by local and collective center IDP population; 3) 5000 inhabitants will have improved travel conditions in the railway settlement
8	Kareli	Rehabilitation of Sogholasheni-Dvani motor road	Project implementation will result in rehabilitation of 12 km motor road section	Project implementation will result in improved conveyance conditions for 5 villages (6500 population)



Component 1 Municipal Infrastructure

Selection Criteria

- Evidence of civic participation in selection and monitoring of projects through transparent and inclusive practices;
- Reasonable expectation that rehabilitated infrastructure will impact a significant portion (directly and indirectly) of the municipal population;
- Reasonable expectation that rehabilitated infrastructure will contribute to economic growth or greater efficiencies;
- Commitment by appropriate government institutions (national and municipal) to maintain rehabilitated infrastructure, including budget allocations and existence of qualified personnel and required equipment;
- Potential to leverage or be leveraged by other USAID/Georgia funded activities, or those of other donors.



Component 1 Municipal Infrastructure

Feasibility Criteria:

- Engineering, architectural, and other technical needs;
- Potential environmental impact(s) and mitigation(s);
- Anticipated social and economic impact to municipal populations;
- Expected contribution to regional economic development; and
- Reasonableness of estimated cost.



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Component 2 Irrigation

- New or greatly enhanced agriculture productive capacity.
- Rural population , IDPs and persons affected by 2008 conflict. \$8.16 million
- 30,000 hectares of agricultural land restored to productivity
- Shida Kartli focus
- At least 10,000 beneficiaries



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Component 2 Irrigation

Selection Criteria

- 30,000 hectares of land
- 10,000 small holders
- Contribute to improved livelihoods improved agriculture productive capacity
- Focus on rural populations, IDPs or persons affected by the 2008 conflict
- O&M Commitment by GOG
- Potential to leverage other USAID or donor projects



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Component 2 Irrigation

Feasibility Criteria:

- Engineering, architectural, and other technical needs;
- Potential environmental impact(s) and mitigation(s);
- Anticipated social and economic impact to municipal populations;
- Expected contribution to regional economic development; and
- Reasonableness of estimated cost.



Component 3-1: Cottages

- Provide IDPs with durable housing solutions (\$8.67 Million)
- 4,000 houses constructed by the GoG for IDPs from the August 2008 conflict
- Install potable water systems and improve liquid and solid waste disposal in these settlements. Specific actions:
 - a. water supply improvements
 - b. installation of indoor plumbing
 - c. installation of treatment systems



Component 3-1 Project List

#	Name of settlement	# of cottages	# of house holds	# of individuals
1	Tsilkani	400	399	1,093
2	Frezeti	300	263	721
3	Tserovani	2,001	1,927	5,533
4	Metekhi	35	35	128
5	Teliani	54	54	164
6	Khurvaleti	139	139	460
7	Shavshvebi	177	177	586
8	Berbuki	134	134	460
9	Gori (Verkvebi) (by GTZ)	300	275	889
10	Gori (Karaleti)	480	480	1,644
11	Sakhasheti (TIKA)	100	83	220
12	Skra	86	86	312
13	Mokhishi	58	58	220
14	Akhalsopeli	100	100	350
Total		4,364	4,210	12,780



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Component 3-1 Cottages

Selection Criteria

- Prioritize IDP settlements with sufficient access to clean water supplies to allowing for the installation of indoor water taps.
- Settlements without sufficient clean water could be selected for rehabilitation. Additional/alternative water sources may be explored, such as wells.



Component 3-1 Cottage Review List

1. # Cottages
2. # Settlers
3. Sewerage
4. Individual toilets
5. Drinking water
6. Electricity
7. Gas
8. Road
9. Irrigation water
10. Ground waters
11. Utility construction
12. Communal bathroom
13. Individual Bath room
14. Community Centre
15. Household waste
16. Fencing
17. Mini stadium



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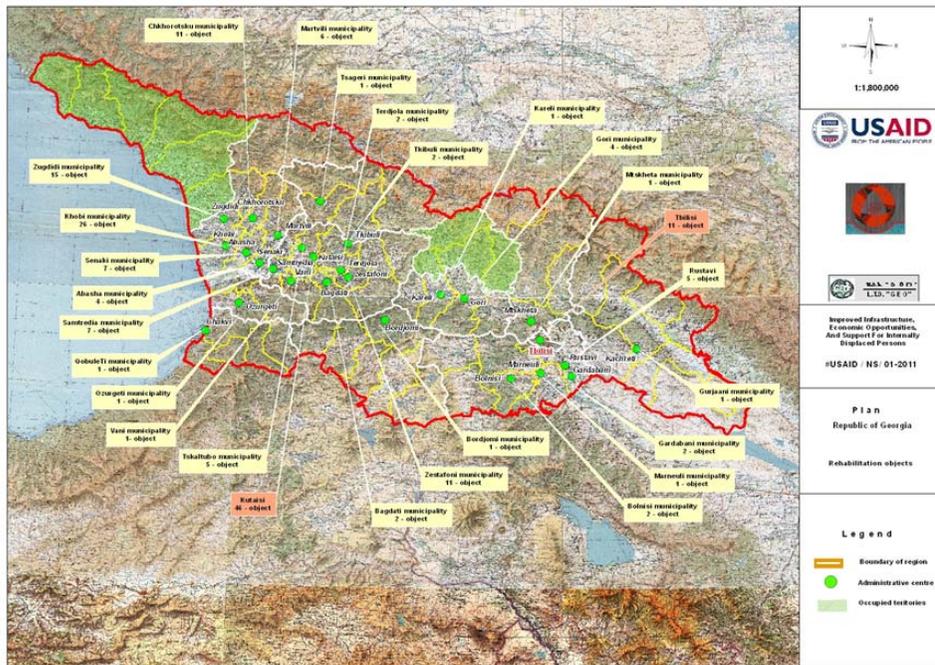
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Component 3-2: Buildings

- Upgrades to existing IDP shelters and redevelop buildings for use as durable housing for IDPs from Georgia's 1990s conflicts.
- Satisfy Ministry of Refugee Affairs (MRA)'s interest in improving the overall living conditions of IDPs
- Budget of \$26 million
- Rehabilitate approximately 3,000 family dwelling units
- Cost/family dwelling unit \$8,000 and \$10,000
- Location: Tbilisi, Rustavi, Qareli, Khashuri, Kutasi, Khobi, and Zugdidi.
- Rehabilitate collective centers and other buildings for IDPs; New housing for a portion of this population.
- State and privately owned buildings; privately owned buildings will be purchased by the GoG.
- Possible alternative housing vouchers, direct cash payments, or other alternatives that provide the IDPs with a choice in the selection of a housing solution.



Component 3-2 Project List



Item	Region	Total area of the Bldgs (m2)	Number of flats	Cost/USD	Cost per flat/USD
1	Tbilisi	6,391	86	851,993	9,907
2	Rustavi	2,752	38	356,558	9,383
3	Kvemo Kartli	1,231	27	249,480	9,240
4	Shida Kartli	2,165	54	448,579	8,307
5	Imereti	72,551	1160	10,387,308	9,180
6	Racha-Lechkhumi	2,360	34	312,907	9,203
7	Samegrelo-Zemo svaneTi	10,247	171	1,593,581	9,319
	Total/avg	97,697	1570	14,200,406	9,220



Component 3-2 Buildings

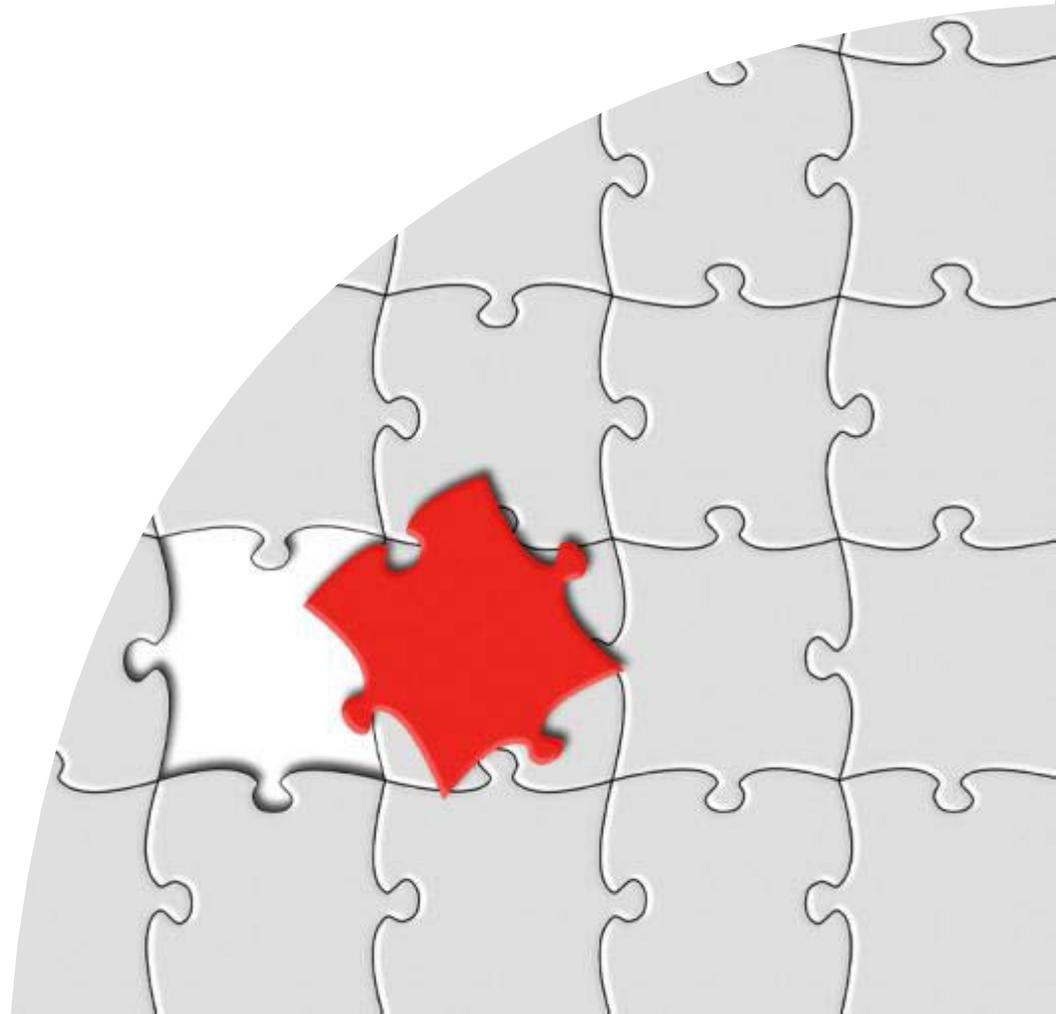
Selection Criteria

- Overall integrity of the building
- Size of apartments
- Rehabilitation cost per occupant
- Condition of building infrastructure (Water, sewage, electricity)



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REHABILITATION OF MIP AND IDP INFRASTRUCTURE BY MDF/USAID

ID	Task Name	Duration	Start	Finish	2011												2012												2013														
					D				J				F				M				J				J				A				S				O				N		
0	MIP Project	755 days	2/17/11	12/30/13																																							
1	Rehabilitation of MIP and IDP DH Infrastructure	755 days	2/17/11	12/30/13																																							
2	MDF	69 days	2/17/11	5/23/11																																							
5	Tetra Tech	7 days	5/24/11	6/1/11																																							
8	1. IDP Housing	747 days	3/1/11	12/30/13																																							
9	Project design study	204 days	3/1/11	12/6/11																																							
10	ENV Scoping + FS TOR Preparation	11 days	3/1/11	3/16/11																																							
11	ENV Scoping + FS Procurement	29 days	3/17/11	4/25/11																																							
12	ENV Scoping + FS Implementation by LTD "GEO"	60 days	5/19/11	8/9/11																																							
13	Contract	30 days	5/19/11	6/29/11																																							
14	Extending the contract	22 days	7/1/11	7/29/11																																							
15	Stakeholder meeting in Teliani settlement	0 days	6/23/11	6/23/11																																							
16	Stakeholder meeting in Kutaisi	0 days	6/29/11	6/29/11																																							
17	Reviewing by TT	7 days	8/1/11	8/9/11																																							
18	Site visit by TT	21 days	8/1/11	8/30/11																																							
19	PEA by Tetra Tech	60 days	8/15/11	11/4/11																																							
20	Presentaion of the projects by GEO and KAV	0 days	8/25/11	8/25/11																																							
21	Project selection	6 days	11/28/11	12/6/11																																							
22	IDP Housing Apartment Building Design & QA/QC	459 days	12/6/11	9/3/13																																							
23	Procurement	60 days	12/6/11	2/27/12																																							
24	Design	80 days	2/27/12	6/18/12																																							
25	QA/QC	293 days	7/23/12	9/3/13																																							
26	IDP Housing Apartment Construction	339 days	6/18/12	10/1/13																																							
27	Procurement	45 days	6/18/12	8/17/12																																							
28	Construction	294 days	8/17/12	10/1/13																																							
29	IDP Cottage Settlements Design & QA/QC	524 days	12/6/11	12/3/13																																							
30	Procurement	60 days	12/6/11	2/27/12																																							
31	Design	80 days	2/27/12	6/18/12																																							
32	QA/QC	358 days	7/23/12	12/3/13																																							

