პროფესიული განათლება
ეკონომიკის განვითარებისთვის

INDUSTRY-LED SKILLS AND
WORKFORCE DEVELOPMENT

MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA

Preliminary Infrastructure Due Diligence Findings for ISWD PICG Grant Scheme

April 25, 2016

General Information

- 19 applications out of 21 passed the administrative and TEP compliance check, and are subject to Due Diligence Check.
- Documentation review process was accomplished by the end of February.
- DD Site visits to applicants and proposed project sites were launched on March 11, 2016.
- ISWD Civil Engineer visited 50 facilities of 19 applicants as of April 25, 2016.

Main Infra findings from Documentation Review

- The submitted proposals were encompassing projects of different sizes and scopes, and thus need to be treated individually.
- During study of the proposals and the site visitations, the ESP and Infrastructure experts found that more information is required in the following fields such as: Conceptual /technical design, BoQ, Technical specifications and Construction/rehabilitation schedule and Project organization plan,
- The abovementioned documents in the most cases were not submitted properly

Objectives of Infra DD Site Visits

- To obtain information about issues identified from documentation review;
- To check current condition and location of proposed facilities/sites;
- To learn more details about planned activities;
- To provide preliminary/verbal feedback on expected standards applicable PICG proposals;

Issues assessed during DD site visits

- Location of proposed facilities/sites;
- Current condition of proposed facilities including structural/seismic stability, design safety, compliance to design requirements, need for renovation, reconstruction or upgrading;
- Feasibility of proposed infrastructural works;
- Existing safety equipments and check its general functionality;

Summary Infra Information from Site Visits

- We have site visited 50 facilities of 19 applicants , they were in the different conditions;
- Almost all visited applicants plan or need renovation/construction works;
- All applicants were asked to submit design documentation (if missing), even if they plan renovation works at their expense;
- Some applicants were advised to consider replacement of the proposed facilities due to irrelevant conditions;

Site Visit Findings - Main Infra Related Issues

Common Infra Issues

- Great majority of visited facilities do not have safe design and implementation, e.g. doorsteps are elevated, not all stairs have railings, slippery tiles are used, electric wiring is installed unsafely and have no grounding, illumination is not sufficient;
- Usually facilities are not adapted to PWD, some of the buildings have no elevator nor ramps, nor restrooms for PWD, whenever present, adaptation measures are not sufficient, or of appropriate design and require upgrading;
- Existing ordinary restrooms are in a poor sanitary conditions;
- Condition of main part of visited facilities could be classified as Satisfactory or Fair, and they require medium or large scale renovation and upgrading works;
- Some of the visited facilities are in poor condition and requires complete rehabilitation. Structural safety is questionable for 3 buildings in this category.

Recommendations

- To design rehabilitation works and upgrade of facilities up to MCA design criteria and ECIDA standards (including adaptation to PWD)
- To submit design documentation including conceptual/working design, BoQ, technical specifications, etc. together with the rebalanced application package.

Site Visit Findings - Main Infra Related Issues

Case 1: The Applicant proposed a large building, which is not in a good condition and requires full-scale rehabilitation.

The applicant have submitted package of design documentation, though:

- The design is not implemented up to the required standards
- Structural/seismic stability of the building is questionable and sufficiency of designed reinforcement measures is also questionable.
- Due to the raised requirements for seismic resistance (class 8 in lieu of class 7), the structural design of the building has to be proofed for feasibility as well.
- Applicant claimed that implemented structural stability survey, though the survey report is not submitted, authority and reliability of the mentioned implementer is questionable.

Site Visit Findings - Main Infra Related Issues

Case 1 Recommendation (continued):

- The applicant has been asked to provide Structural Stability Survey Report implemented by authorized institution by 12th May 12 prior to the final evaluation steps;
- The Applicant should provide Design Compliance Assessment by authorized institution for the project implementation phase to ensure that proposed reinforcement measures can sufficiently manage structural stability issues;

Site Visit Findings - Major Infra Related Issues

Case 2: The situation similar to the previous case since also a large building has been proposed for rehabilitation, thus similar recommendations were proposed.

However, **different** from the previous case:

- The applicant does not have any design documentation and BoQ;
- Elaboration of design documentation and rehabilitation works themselves require considerable time, requiring proof by means of a concise time management approach (project schedule, work plan);
- Funding is an issue since the applicant did not provide a detail cost assessment;
- It has to be clarified who will bear additional costs that are exceeding the budget;

Site Visit Findings - Main Infra Related Issues

Case 3 (continued): In this case, an old wine cellar has been proposed for rehabilitation and upgrade by means of air conditioning systems:

- The applicant has been asked to provide Structural Stability Survey Report implemented by authorized institution before 12th May, when TEP's decision making session is planned;
- The Applicant should provide Design Compliance Assessment by authorized institution for the project implementation phase to ensure that proposed reinforcement measures can sufficiently manage structural stability issues;

Site Visit Findings – Main ESP Issues

Case 4 (continued): In some cases in the technical parts of the proposals do not provide sufficient information on the proposed simulators, as well the their installation and operation. It also remains unclear, which licenses can be obtained and for what types of training the simulators are going to be used.

Recommendation: The applicant should provide clarifications on the above-mentioned issues.

Case 5 (continued): The applicant has submitted BoQ for rehabilitation activities. However, it may happen that the BoQ does not include costs for all planned activities, For example, in one proposal the installation of a septic tank, WCs and showers are included in the description, but are not reflected in the BoQ. It is also unclear how the water supply system will be arranged.

Recommendation: Applicant should provide additional information. The BoQ should be revised and the missing items should be added. Respective changes should be reflected in the Project Budget.

Site Visit Findings - Main Infra Related Issues

Case 5 (continued):
The applicant's Proposal mentions that ‘Water will be supplied from the reservoir (to be constructed in 2016). It is not clear who is going to construct the reservoir and for what purpose it will be constructed. Where is the guarantee that the reservoir will be constructed? What is the reservoir’s capacity and will the capacity be sufficient to allocate water for the TVET? Is there any alternative water source in case if the reservoir is not built, or in case the applicant will not be given the right for water intake? Did the applicant have preliminary negotiations with the water supplier on the water intake? Will the applicant require piping to supply water? If yes, why water supply cost is not in the BoQ?

Recommendation:
The applicant should provide clarifications on the above given questions.

Site Visit Findings – Main Infra Issues

General Infra Issues

- The technical part of the proposal is very limited on the construction portion. Since there is no backup available by means of drawings or photographs, no further evaluation is possible;
- During the site visit, the applicant promised to supply additional drawings in order to support their documentation;
- Some applicants project budget does not explicitly include costs of adaptation of TVET facilities to the PWDs' needs;
- Some applicants project budget does not include Fire Protection Systems (fire alarms, fire extinguishers, sprinkler system). A budget for this has not been assigned in the proposal;
- Some applicants project does not include installation of ventilation /condition Systems of training rooms and laboratories;
- Some applicants project does not include installation of grounding;
- Some applicants project does not include installation of fencing and walking paths around buildings.

Site Visit Findings – Main Infra Issues

General Recommendations:

- All designs of projects should be according to ESIDA standards and MCA design criteria's;
- The BoQ should be revised. Respective changes should be also made in the Project Budget;
- It is highly recommended to do a check for viability of the Emergency measures /Fire Protection system, etc.;
- Applicants where study space were arranged unsafely were recommended to consider proper design of classrooms and labs;
- Applicants having/with potential to have air quality issues at their labs/workshops were recommended to design and implement draft conditioning/ventilation system up to required standard.

Applicable infrastructure standards (reminder)

The design documents shall be prepared in accordance with the latest requirements of the Design Criteria (Version of January 5, 2015 commented by ESIDA, MES, MCA-GEORGIA) as well as applicable Georgian national and local requirements.

Design Criteria can be found:

A) Georgian version

https://drive.google.com/file/d/0B8mGbVsKFHLjZGhWaEtPa1BOSnM/view?usp=sharing

B) English version:

https://drive.google.com/file/d/0B8mGbVsKFHLjcDBkNTVxcWt1WjA/view?usp=sharing

Site Visit Findings – Main ESP Issues

Application Package(for infrastructure works) consists of the following documents:
Bill of Quantities and Supporting Documents

Bill of Quantities :

Infrastructural improvements/refurbishment must be accompanied by the number of separate worksheets as follow (see application form Annes 9-1 in excel format)

- Bill of Quantities (Sheet 1)
- Priced list of building materials (Sheet 2)
- Priced labour Specifications (Sheet 3)
- Priced Specifications of Machinery to be rented for the execution of refurbishment (Sheet 4)
- Specification of the refurbishment activities for subcontractor (Sheet 5)

Site Visit Findings – Main ESP Issues

Supporting Documents:

- Conceptual, technical or work design(object location diagram, Architectural Plan(s)/if applicable, Diagrams, detail drawings and specifications, details and cross sections, topographic photos of the construction site and adjacent area/if needed)
- Project Organization of construction (POC) (including management plan, management of supervision, HSE management ,etc.)
- List of studies required for any proposes infrastructure investments (geological/ hydrogeological if needed)
- Calendar schedule of work implementation
- Pictures of the building(s)
- Bill of Quantities (BOQ), VAT including
- Construction material/ technical equipment's specifications
- Any permits if needed

The project design shall include sufficient details to facilitate implementation of the proposed

Site Visit Findings – Main ESP Issues

Recommended actions:

-To submit full design documentation package together with the **rebalanced** application so that to demonstrate that the planned construction/refurbishment works will be done up to required standards

-To verify that the planned refurbishment considers: full adaptation of the facility to the PWD needs; proper illumination; and fire safety installations.

-To ensure that the recommendations given on the Documentation Review stage are considered, the planned refurbishments are respectively redesigned (if needed) and necessary clarifications are provided

Thank You!