### **Task Force on Electronic Tendering**

### **Discussion Paper No. 3/2000**

#### Framework for Electronic Submission of Tenders

### 1. Purpose

1.1. The paper presents the methodology and programme for formulating the framework for electronic submission of tenders.

#### 2. Definitions

2.1. In this document, unless the context otherwise requires-

"Assignment" means the process of formulating the ESF;

"Electronic Submission Framework" (or ESF) means a framework on the technical, administrative and legal provisions for electronic submission of Tender Returns

"Electronic Submission" means submission of ESP through private or public network connections (such as the Internet);

"Electronic Submission Package" (or ESP) means the collection of Submission Files for a Tender:

"Physical Submission" means submission of ESP by deposition of removable media hosting the package;

"Submission File" means an electronic file containing the whole or part of the contents of a Tender;

"Stakeholder" means an entity involved in preparing and processing Tender Return. Stakeholder includes-

- (i) consultants and contractors from various work disciplines;
- (ii) government departments and bureaux involved in tendering of works contracts; and
- (iii) trade organizations and professional institutions;

"Tenderer" means a person or firm who submits a tender for a works contract;

"Tender" means a tender submitted by a Tenderer in response to a tender invitation:

## 3. Background

- 3.1. During the Plenary Meeting on 6 September 1999, the Task Force on Electronic Tendering (the "task force") endorsed the proposal in Discussion Paper 2/99 to implement electronic tendering in two stages, viz.-
  - (a) Electronic dissemination of tender documents

This stage includes the dissemination of electronic version of tender documents to tenderers; and

(b) Electronic submission of tenders

This stage includes the submission of tenders in electronic format.

- 3.2. The implementation of electronic dissemination is covered in Discussion Paper 2/2000.
- 3.3. Regarding electronic submission, the Sub-groups conducted brainstorming sessions on topic during the latest series of meetings at the end of March 2000. The brainstorming sessions yield useful ideas formulating ESF.
- 3.4. Our next step is to formulate ESF through a structured methodology that will involve examining the existing workflows, identifying the existing problems and issues, ascertaining the requirements of Stakeholders and formulating a framework on the basis of these findings.

# 4. Methodology for Formulating ESF

4.1. The proposed methodology is included in Annex 1.

# 5. Programme

- 5.1. The Assignment is scheduled for completion in February 2001. The programme for delivering the deliverables are included in paragraph 2 of Annex 1.
- 5.2. It should be noted that the Assignment covers only the formulation of the framework for electronic submission. The detailed arrangements for implementing electronic submission, including the

implementation programme, will be considered when the framework is available.

# 6. Division of Responsibilities

- 6.1. WB will be responsible for providing the input for the Assignment.
- 6.2. The deliverables of the Assignment will be submitted to the task force for consideration. WB will finalize the deliverables taking into account members' comments.

# 7. Advice Sought

7.1. Members are requested to express their views on the contents of this paper.

## Annex 1

## **Methodology for Formulating ESF**

## 1. Purpose

1.1. This annex presents the proposed methodology for formulating ESF.

#### 2. Deliverables

2.1. We will produce the following deliverables for the Assignment-

Stage	Deliverable	Contents	Target Delivery Date
1	Working Paper No. ES1 – Base Lining of Tender Submission	Paragraph 4	October 2000
2	Working Paper No. ES2 – User Requirements for Electronic Submission	Paragraph 5	October 2000
3	Working Paper No. ES3 – Options for Electronic Submission	Paragraph 6	December 2000
4	Working Paper No. ES4 – Framework for Electronic Submission	Paragraph 7	February 2001

# 3. Overview of Methodology

- 3.1. The proposed methodology for formulating ESF consists of the following stages-
  - (a) Stage 1 Base lining
  - (b) Stage 2 User requirements analysis;
  - (c) Stage 3 Options identification and evaluation; and
  - (d) Stage 4 Framework development.
- 3.2. The methodology and deliverables for the various stages are described in the following paragraph.

3.3. To expedite the completion of the Assignment, Stages 1 and 2 will be conducted largely in parallel. The deliverables for these stages will be completed at the same time in October 2000.

## 4. Stage 1 – Base lining

- 4.1. In this stage, we will gather information on the existing business processes related to submission of Tenders.
- 4.2. The investigation for this stage will include-
  - (a) identifying the business processes in following stages of the tendering cycle-
    - (i) Preparation of Tenders;
    - (ii) Submission of Tenders:
    - (iii) Opening of Tenders;
    - (iv) Assessment of Tenders;
    - (v) Tender recommendations; and
    - (vi) Preparation of contract documents.
  - (b) For each business process, we will identify-
    - (i) the flows of information between the entities involved;
    - (ii) the existing problems and issues arising from the flows of information: and
    - (iii) the effects of the problems and issues on the business of the entities involved.
- 4.3. The information in paragraph 4.2 will be gathered mainly through workshops and interviews with the Stakeholders.

## 5. Stage 2 – User Requirements

- 5.1. On the basis of the findings in Stage 1, we will ascertain the user requirements of the Stakeholders for electronic submission.
- 5.2. The deliverable for this stage will take the form of a user requirements catalogue with the following contents-
  - (a) precise and concise description of the requirements for the;

- (b) initiators of the requirements;
- (c) rationale behind the requirements; and
- (d) whether the requirements will be included in the ESF; and
- (e) justification for the recommendation in (d) above.

## 6. Stage 3 – Options for Electronic Submission

- 6.1. On the basis of the findings in Stage 2, we will formulate possible options for implementing electronic submission and evaluate these options.
- 6.2. The investigation in this stage will include-
  - (a) identifying possible options;
  - (b) developing high level framework for implementing the options;
  - (c) evaluating the possible options. The criteria for evaluation will include -
    - (i) feasibility of the options;
    - (ii) time frame for implementing the options; and
    - (iii) cost effectiveness of the options;
  - (d) identifying the option that should be carried forward for further consideration.
- 6.3. In developing the options, we will pay particular attention to the following issues that have been actively discussed in the deliberation of the task force-
  - (a) arrangements for submitting bills of quantities and schedule of rates:
  - (b) whether the submission of hard copies of Tender Returns should be continued:
  - (c) the pros and cons for Physical Submission and Electronic Submissions;
  - (d) security of ESP's;
  - (e) prevention of unauthorized alterations to ESP's; and

(f) use of ESP's in preparing the contract documents.

# 7. Stage 4 – Framework for Electronic Submission

- 7.1. On the basis of the option recommended in Stage 3, we will formulate the ESF on the basis of the findings in Stage 3.
- 7.2. The investigation in this stage will cover-
  - (a) technical, administrative and legal provisions for ESF;
  - (b) capital and recurrent cost of implementing ESF;
  - (c) staff resources implications of ESF;
  - (d) benefits of electronic submission;
  - (e) cost/benefit analysis for electronic submission;
  - (f) issues in implementing ESF; and
  - (g) implementation programme.