

# **Electronic Tendering of Works Contracts Procedures for Electronic Dissemination of Tender Documents**

## **1. Introduction**

### **1.1. Definitions**

1.1.1 In this appendix, unless the context otherwise requires-

- (a) "Architect/Engineer/Maintenance Surveyor/Supervising Officer Designate" means the person who will perform the duty of the Architect, Engineer, Maintenance Surveyor or the Supervising officer for a Works Contract being tendered.
- (b) "Authorized Service Provider" means a non-government organization which has signed a service agreement with ETWB on the provision of electronic dissemination services for EDP.
- (c) "CD-ROM" means CD-ROM media complying with ISO 9660 standard and/or DVD-ROM media in DVD+R or DVD-R format.
- (d) "Digital Signature" means a digital signature as defined in section 2 of the Electronic Transactions Ordinance (Cap. 553) satisfying the requirements stipulated in Section 6 of that Ordinance. "Digitally Signed" should be interpreted accordingly.
- (e) "Editable File" means an electronic file which is stored in file formats that are editable using mainstream computer applications for office automation and computer-aided drafting.
- (f) "Electronic Dissemination Package" (or "EDP") means the collection of electronic files comprising:-
  - (i) files containing the contents of a set of Tender Documents;
  - (ii) the licence conditions on using the files in Clause 1.1.1(f)(i) above; and
  - (iii) supporting files containing information on using the files in Clause 1.1.1(f)(i) above.
- (g) "Eligible Tenderer" means a tenderer who is eligible to submit tender for a works contract.
- (h) "ETWB" means the Environment, Transport and Works Bureau
- (i) "ETW Department" means Architectural Services Department, Civil Engineering

and Development Department, Drainage Services Department, Electrical and Mechanical Services Department, Environmental Protection Department, Highways Department, Transport Department or Water Supplies Department.

- (j) "Image File" means an electronic file which is stored in file formats that capture the printed image of the document.
- (k) "Map Data" means any map and land boundary data in which Lands Department has copyright. Map Data do NOT include any data from other sources including any land surveys commissioned by an ETW Department.
- (l) "Organizational e-Cert" means a digital certificate issued under the name of an organization by a recognized certification authority as defined under Section 2 of the Electronic Transactions Ordinance (Cap. 553).
- (m) "Signed Editable File" means the Digitally Signed version of the Editable File.
- (n) "Signed File" means Signed Editable File and Signed Image File.
- (o) "Signed Image File" means the Digitally Signed version of the Image File.
- (p) "Tender Addendum" means a set of documents and its attachments in the form of hard copy or electronic files issued before the Tender Closing Date to amend the tender documents.
- (q) "Tender Closing Date" means the date and time set for the return of tender for a Works Contract.
- (r) "Tender Documents" means the documents in the form of hard copy or electronic files issued for the tendering of Works Contracts, including-
  - (i) the invitation to submit tenders and other documents issued together with it; and
  - (ii) Tender Addenda.
- (s) "Works Contract" means a contract managed by an ETW Department for design, construction, operation or maintenance of infrastructures or buildings and includes maintenance term contracts and design and build contracts. A Works Contract does not include-
  - (i) contracts awarded through the Government Supplies Department;
  - (ii) consultancy agreements awarded in accordance with the consultant selection procedures in the Stores and Procurement Regulations; and
  - (iii) procurements made in accordance with Chapter II of the Stores and

## Procurement Regulations.

### **1.2. Scope**

- 1.2.1 This document stipulates the procedures for the dissemination of Tender Documents for Works Contracts managed by an ETW Department.
- 1.2.2 Tender Documents for Works Contracts should be disseminated through each of the following channels-
- (a) Direct Dissemination – Tender Documents in the form of hard copy and EDP should be issued to tenderers eligible to submit tenders for Works Contracts; and
  - (b) Dissemination through Authorized Service Providers – Tender Documents in the form of EDP only should be disseminated through Authorized Service Providers.
- 1.2.3 This Circular should apply to all Works Contracts delivered using in-house resources of ETW Departments or through consultants.

### **1.3. Structure of document**

- 1.3.1 This document is structured as follows-
- (a) Section 1 – Introduction;
  - (b) Section 2 – Electronic Dissemination Procedures, which describes the procedures to be followed by an ETW Department in disseminating electronic tender documents;
  - (c) Section 3 – Electronic Dissemination Packages, which describes the procedures for packaging the electronic tender documents for dissemination;

## **2. Electronic Dissemination Procedures**

### **2.1. Purpose**

- 2.1.1 This section describes the procedures to be followed by an ETW Department in disseminating electronic tender documents.

## **2.2. Preparation of EDP**

2.2.1 The electronic version of Tender Documents for Works Contracts should be disseminated in the form of EDP's prepared in accordance with the manner and format contained in Section 3.

2.2.2 EDP's containing the following documents should be issued -

- (a) the original version of tender documents; and
- (b) any Tender Addenda issued in accordance with the Conditions of Tender.

## **2.3. Direct Dissemination**

2.3.1 An ETWB Department that manages a Works Contract should issue the EDP as well as the hard copy of Tender Documents for the contract to Eligible Tenderers. The EDP and the hard copy should be issued free of charge. Requests for additional electronic copies of tender drawings should be charged in accordance with the provisions of the prevailing ETWB technical circular on charges of electronic drawings. Request for additional electronic copies of other types of Tender Documents should be charged at the rates prescribed from time to time by the relevant authorities. Request for additional hard copies should be charged at the rates prescribed from time to time by the relevant authorities.

## **2.4. Dissemination through Authorized Service Provider**

2.4.1 ETWB may from time to time enter into service agreements with non-government organizations (including, without limitations, construction industry trade associations and commercial entities) for-

- (a) distribution of EDP's through their web sites (Internet dissemination services);
- (b) distribution of duplicates of EDP's (replication services); and
- (c) providing value-added services through their web sites using the contents of the EDP's (value-added services).

2.4.2 Hard copies of Tender Documents should not be issued to Authorized Service Providers.

2.4.3 Service agreements will be made using the standard agreement in Appendix 3 of ETWB TC(W) No. 11/2005. The list of Authorized Service Providers is posted on ETWB's web site at [www.etwb.gov.hk/gov/asp.htm](http://www.etwb.gov.hk/gov/asp.htm).

## **2.5. Issue of EDP's**

2.5.1 When EDP's are issued to Eligible Tenderers, the ETWB Department should issue at the same time the same EDP's to Authorized Service Providers using the Issue Notice

stipulated in Schedule 2 to Appendix 3 of ETWB TC(W) No. 11/2005. An EDP should be issued with the attachment of a set of licence conditions in Appendix 2A or Appendix 2B of ETWB TC(W) No. 11/2005 where appropriate, duly completed by the ETW Department in accordance with the footnotes therein.

- 2.5.2 In accordance with the service agreement, Authorized Service Providers should submit, within 7 working days of the Tender Closing Date, a Return Notice as stipulated in Schedule 3 to Appendix 3 of ETWB TC(W) No. 11/2005 to the ETW Department. The ETW Department should retain the Return Notice for record purposes.

### **3. Electronic Dissemination Packages**

#### **3.1. General Guidelines**

3.1.1 Notwithstanding the procedures for preparing EDP's as described in this Section, the following guidelines are applicable to electronic copies of all tender documents except CAD drawings:

- (a) The EDP files should be considered as an e-book of the corresponding hard copy of tender documents. Number of files constituting each Part (Clause 3.7.6 of this Appendix) of the tender documents should be minimized.
- (b) The followings serve as reference when compiling EDP files on textual information, Bill of Quantities and images:
  - (i) Sections of each Part of the tender documents other than Bill of Quantities, etc., that are standardized and not subject to changes to suit particular contract, should be combined into one single file. If, e.g., Section xxx of Part yyy will be different for different contracts, it is recommended to combine all Sections before Section xxx into one file, Section xxx in a separate file and the remaining Sections in another file. Only three files will cover the whole part in this example.
  - (ii) It is recommended to have one Excel workbook for the Bills of Quantities / Schedule of Rates/Plant and Labour Schedule / Equipment Schedule.
  - (iii) Image files should be reviewed to see if they could be combined meaningfully into a multi-page image file with a view to reducing the number of files in an EDP.
  - (iv) Due to operational constraints such as time available in checking the merged file of different documents produced by different professional disciplines, each

Part of the tender document may be split according to the disciplines. Yet, the principle of minimizing the number of EDP files should be adhered to.

## **3.2. Contents**

3.2.1 The original set of Tender Documents in electronic format should contain the electronic version of-

- (a) a set of tender documents;
- (b) the license conditions for EDP; and
- (c) the supporting information described in section 3.8 below for using the EDP.

3.2.2 The Tender Addendum in electronic format should contain electronic version of-

- (a) the covering letter for the Tender Addendum;
- (b) the amendment sheets issued with the Tender Addendum;
- (c) the license conditions for EDP; and
- (d) the supporting information described in section 3.8 below for using the EDP.

## **3.3. Media**

3.3.1 EDP's should be distributed on write once type CD-ROM's. Re-writable media shall not be used. The CD-ROM shall be logically closed such that no subsequent change can be made to the EDP.

3.3.2 The label for the CD-ROM's should contain the following information:

- (a) the EDP reference number as specified in section 3.6 below
- (b) the Contract number and the Contract title
- (c) CD-ROM sequence number in the form of "Disk x of y" where x is the sequence number of the CD-ROM and y is the total number of CD-ROM's in the EDP. This will be useful in identifying individual CD-ROM when an EDP contains more than one CD-ROM.

3.3.3 For EDP that will be used for direct dissemination, i.e. EDP issued directly to Eligible Tenderers, the distribution media should be contained in envelopes or other similar enclosures and sealed with labels containing the following notice –

"Please read the attached "Licence Conditions for Electronic Dissemination Packages" (the Licence Conditions) before opening this package. If you open this package, you will be deemed to have read the Licence Conditions and to have accepted them. If you do not agree with the Licence Conditions, please do not

open the package and do return the package to [name of department and address]."

### 3.4. Data formats

3.4.1 The data formats<sup>1</sup> and associated versions of documents / files to be adopted in EDP's should adhere to the latest OGCIO Interoperability Framework which can be downloaded from the OGCIO website:

[https://www.ogcio.gov.hk/en/our\\_work/infrastructure/e\\_government/if/interoperability\\_framework.html](https://www.ogcio.gov.hk/en/our_work/infrastructure/e_government/if/interoperability_framework.html)

The current data formats for the various types of documents in EDP's are stipulated as follows-

Type of File	Editable File Format	Image File Format
Bills of Quantities, Schedule of Rates and any other schedules	Microsoft Excel format (.xls) ISO/IEC 29500:2008 format (.xlsx)	Not Applicable
Other text documents	Microsoft Rich Text Format (RTF) Microsoft Word format (.doc) ISO/IEC 29500:2008 format (.docx)	Adobe Portable Document Format (PDF) v1.5, 1.6 or 1.7 (ISO 32000-1)
Scanned text documents	Not applicable	Adobe Portable Document Format (PDF) v1.5, 1.6 or 1.7 (ISO 32000-1)
Drawings	Microstation DGN format AutoCAD format Autodesk Drawing Exchange Format (DXF) Initial Graphic Exchange Specification (IGES)	Adobe Portable Document Format (PDF) v1.5, 1.6 or 1.7 (ISO 32000-1)
Building Information Modelling (BIM)	<i>(Procuring Department to define and insert)</i>	Not Applicable <sup>2</sup>

<sup>1</sup> *Internal Note for procuring departments* : The data formats and associated versions of documents / files to be adopted in EDP's should be updated to the latest OGCIO Interoperability Framework as appropriate

<sup>2</sup> For files generated by BIM, please refer to the file format required for the respective types of documents.

<b>Type of File</b>	<b>Editable File Format</b>	<b>Image File Format</b>
Scanned drawings	Not applicable	Adobe Portable Document Format (PDF) v1.5, 1.6 or 1.7 (ISO 32000-1)
Animation <sup>2</sup>	Adobe Flash (.swf) Adobe Shockwave (.swf) Apple Quicktime	Not Applicable
Video, movie <sup>3</sup>	MPEG-1 (ISO 11172) MPEG-4 (ISO 14496)	Not Applicable
Slide presentation	Microsoft PowerPoint format (.ppt) ISO/IEC 29500:2008 format (.pptx)	Adobe Portable Document Format (PDF) v1.5, 1.6 or 1.7 (ISO 32000-1)

- 3.4.2 To facilitate electronic tender preparation by tenderers and subsequent processing of electronic tender return, the files for "Bills of Quantities, Schedule of Rates and any other schedules" should be prepared in Excel format, unless prior agreement is made with DEVB. Cells which are not intended for data entry by tenderers should be locked and protected from being updated. The file should be structured and formatted to enable the use of verification tools that the works departments may adopt to facilitate checking of unauthorized changes to locked cells.
- 3.4.3 If more than one file format are specified, files need to be provided in one of the specified formats only. In so far as possible, the preferred formats should be used.
- 3.4.4 The contents of each document in an EDP, where applicable, shall be hosted in two file formats as shown in section 3.4.1-
- (a) Editable File format– which is in file formats that are editable by mainstream computer applications for office automation and computer-aided drafting; and
  - (b) Image File format – which in file formats that capture the printed image of the documents.

<sup>3</sup> Please ensure that appropriate viewers / codecs are openly accessible to the tenderers (e.g. as freeware downloadable from the Internet), and should provide a pointer to the viewer / codecs as necessary.



3.4.5 As the conversion of drawing files to PDF may slightly distort the scale of the drawing elements, line scales in both horizontal and vertical directions should be included in drawings files to enable the tenderers to ascertain the correction factors to compensate for the distortion.

3.4.6 File compression programs should NOT be used to compress files in EDP's.

### **3.5. Digital Signature**

3.5.1 For the purpose of authentication, all files in an EDP should be Digitally Signed.

3.5.2 For in-house contracts, the Digital Signatures for Signed Files should be applied by officers authorized by the Architect/Engineer/Maintenance Surveyor/Supervising Officer Designate. For contracts managed by consultants, the signatures should be applied by employees of the consultants at professional or more senior ranks.

3.5.3 Organizational e-Cert shall be used for the purpose of applying Digital Signatures.

### **3.6. Reference Number**

3.6.1 Each EDP should be identified by a unique reference number consisting of the following fields-

- (a) Standard prefix consisting of the letters "EDP";
- (b) Contract number, that is the contract number for the Works Contract;
- (c) Serial number to be assigned as follows-
  - (i) EDP for original set of Tender Documents – 0; and
  - (ii) EDP for Tender Addendum – reference assigned to the addendum.

3.6.2 The following examples illustrate the rules in section 3.6.1 above-

<b>Tender Documents</b>	<b>EDP Reference</b>
EDP issued with original set of tender documents for DC/98/12	EDP-DC/98/12-0
EDP issued with Tender Addendum No. 2 for DC/98/12	EDP-DC/98/12-2

### 3.7. File Naming Convention

#### General provisions

- 3.7.1 EDP files but excluding model drawing files should be named in accordance with the conventions in the following sections. However, ETW Departments may adapt or extend these conventions to suit their requirements.
- 3.7.2 File names of the model drawing files should comply with the CAD Standard for Works Projects.
- 3.7.3 File names should consist of fields separated by the dash character (“-”).
- 3.7.4 Characters that are not allowed in file names should be replaced with the underscore character (“\_”).
- 3.7.5 The type identifier of an Editable File is "E" and the type identifier of an Image File is "I".
- 3.7.6 The following are the suggested identifiers for identifying files belonging to the various parts of the EDP-

<b>Part</b>	<b>Part Identifier</b>
General specification	GS
Standard method of measurement	SMM
Articles of agreement	AA
General conditions of contract	GCC
General conditions of tender	GCT
Special conditions of tender	SCT
Form of tender	FTR
Special conditions of contract	SCC
Particular specifications	PS
Bills of Quantities	BQ

Schedule of Rates	SR
Drawings	DRG
Tender Addenda	TDA
Licence Conditions for EDP	LC

3.7.7 File names should include version numbers that may consist of alphabets, numerals or a combination of both.

#### **Drawing files**

3.7.8 The file name should consist of the following fields-

- (a) type identifier;
- (b) drawing number conforming with the CAD Standard for Works Projects;
- (c) part identifier; and
- (d) version number

#### **Tender Addenda**

3.7.9 The file names for Tender Addenda should consist of the following fields-

- (a) type identifier;
- (b) contract number;
- (c) part identifier for Tender Addenda;
- (d) Tender Addendum number – the reference number assigned to the Tender Addendum; and
- (e) component number – a field for distinguishing the different files containing the contents of a Tender Addendum.

#### **Other types of files**

3.7.10 The file name for the other types of files should consist of the following fields-

- (a) type identifier;
- (b) contract number;
- (c) part identifier;

- (d) component number – a field for distinguishing the different files containing the contents of Tender Documents; and
- (e) version number.

### **3.8. Supporting Information**

3.8.1 Each EDP should include a "Readme" file, named "README.RTF", that should be prepared in Rich Text Format, Digitally Signed and stored in the root directory of every CD-ROM. This file should contain at least the following information (or reference to other files on the CD-ROM on the following information):

- (a) general guidance on the use of EDP's (e.g. the file naming convention, directory structure of the EDP, software name and version for viewing the file);
- (b) a list of all documents in the EDP with the following information-
  - (i) brief description of the content of the document; and
  - (ii) disk no. (if the EDP contain more than one CD-ROM) and filename with full path information for the Signed Image File and Signed Editable File;
- (c) Revision history – summary of the revisions made to the files including the Tender Addenda making the revisions;
- (d) information on the proper setting for viewing, editing, and printing the EDP files, including, without limitations-
  - (i) the type of printer to be used for printing the files;
  - (ii) the paper sizes;
  - (iii) requirements for special fonts; and
  - (iv) any special printing instructions (e.g. the adjustment settings such as “Shrink oversized pages to paper size”, “Expand small pages to paper size”, etc. when printing PDF files);
- (e) the name and telephone number of subject officer responsible for the tender for enquiry purpose.

### **3.9. Intellectual Property Issues**

#### **Map Data and other contents subject to pre-existing copyrights**

3.9.1 Files containing Map Data should be designated as Special Files in the licence conditions in Appendix 2A and Appendix 2B of ETWB TC(W) No. 11/2005 to prevent re-distribution by the tenderers and customers of Authorized Service Providers.

3.9.2 The inclusion of any other contents subject to pre-existing copyrights in EDP's should be avoided. Instead of including these contents, ETW Departments should consider the alternative of providing the Internet addresses for obtaining the information from the copyright owners.