General Format, Manner and Procedure for the Submission of Electronic Information under Law by virtue of the Electronic Transactions Ordinance (Chapter 553)

Points to Note

(This Note aims to set out the format, manner and procedure we have stipulated under section 11(2) of the Electronic Transactions Ordinance (Cap. 553) for the submission of electronic information under law. It is for general reference by members of the public only. The format and manner of electronic submissions are governed by Electronic Transactions Ordinance (Cap. 553) as promulgated in the Gazette Notice 1170 on 2 March 2009, which is available for downloading at the website of the HKSAR Government at http://www.ogcio.gov.hk/eng/eto/ecap553.htm.)

The information given or presented, document served or the signature made in the form of an electronic record, as the case may be, for the purposes of the Inland Revenue Ordinance (Cap. 112) (the Ordinance) to which the Electronic Transactions Ordinance applies will not satisfy the Ordinance unless it complies with all the requirements herein specified.

- 1. Electronic records which contain English characters only shall be coded in American Standard Code for Information Interchange (ASCII) or ISO 10646-1:2000.
- 2. Electronic records which contain Chinese characters shall be coded as follows:
 - (a) Chinese characters shall be coded in Big-5 and English characters shall be coded in ASCII, and the set of Chinese characters is restricted to the characters defined in Big-5 or the characters included in the Hong Kong Supplementary Character Set (HKSCS) published by the Government in 2001; or
 - (b) Chinese and English characters shall be coded in ISO 10646-1:2000, and the set of Chinese characters is restricted to the Chinese characters within the Chinese-Japanese-Korean (CJK) Unified Ideographs defined in ISO 10646-1:2000 or the characters included in the HKSCS published by the Government in 2001.
- 3. Where electronic records are compressed, the following compression standards shall be followed: -
 - (a) Zip file (.zip); or
 - (b) GNU zip file (.gz)
- 4. Electronic records shall be sent as follows:-
 - (a) through electronic mail conforming to the Simple Mail Transfer Protocol (SMTP), and either the Multipurpose Internet Mail Extension (MIME) or the Secure Multipurpose Internet Mail Extension (S/MIME) standard and with size not exceeding 10 MB;
 - (b) in the form of 1.44MB diskette with size of 3.5 inches in MS-DOS format for files not exceeding one diskette's storage capacity;

- (c) in the form of CD-ROM in ISO 9660 format; or
- (d) in the form of CD-ROM in ISO 13346 format.
- 5. An electronic record and all electronic records contained in it shall be given, served and presented in the following file format standards:-
 - (a) Plain text (TXT);
 - (b) Microsoft Rich Text Format (RTF);
 - (c) Hypertext Mark Up Language (HTML) Format;
 - (d) Adobe Portable Document Format (PDF) v1.2, 1.3, 1.4, 1.5, 1.6 or 1.7 (ISO 32000-1) (compatible to Acrobat version 3, 4, 5, 6, 7 or 8);
 - (e) Encapsulated PostScript Files (EPSF) for graphics / images only;
 - (f) Tag Image File Format (TIFF) for graphics / images only;
 - (g) Portable Network Graphics (PNG) for graphics / images only;
 - (h) Graphics Interchange Format (GIF) for graphics / images only;
 - (i) Joint Photographic Experts Group (JPEG) for graphics / images only; or
 - (j) Autodesk Drawing Exchange Format (DXF) for Computer Aided Design (CAD) drawings only.
- 6. An electronic record given, presented or served under a statutory provision must be signed with a digital signature if:-
 - (a) the provision expressly requires the signature of a person; or
 - (b) the provision requires the submission to be made in a specified form and the specified form has a signature requirement.
- 7. A digital signature shall be attached to an electronic record in accordance with the Secure Multipurpose Internet Mail Extension (S/MIME) standard, the Public-Key Cryptography Standards (PKCS#7) or PDF v1.5/1.6/1.7 (ISO 32000-1).
- 8. For an electronic record which comprises multiple electronic records and which has to be signed, each individual record shall be separately signed digitally.
- 9. Electronic records given, presented or served shall not contain any computer instructions, including but not limited to:-
 - (a) computer viruses; and
 - (b) macros, scripts and fields that depend on the execution environment and the execution of which will cause changes to the electronic record itself or the information system displaying the electronic record.

- 10. For submission of Government forms to Government, the Electronic Government Forms (in the form of a software) should be used to generate electronic records and, if required, to make digital signatures. The format of individual supporting document, if any, attached in an electronic record should comply with all the relevant requirements specified in 1 to 9.
- 11. The following words or terms used in this Note shall have the meanings as stipulated below:-

Adobe Portable Document Format (PDF)	The document format promulgated by Adobe Systems Incorporated [Document reference and version: PDF Reference, Version 1.2, Version 1.3, Version 1.4, Version 1.5, Version 1.6 and Version 1.7 (ISO 32000-1)].
American Standard Code for Information Interchange (ASCII)	The standard for the coding of characters promulgated by the American National Standards Institute (ANSI) [Document reference: ANSI-X3.4-1986 (R1997)] and the International Organization for Standardization [Document reference: ISO-14962:1997].
Arc/Info Export Format (E00)	The format for the exchange of spatial data for the use in Arc/Info, which is a Geographical Information System (GIS) software developed by the Environmental Systems Research Institute, Inc. (ESRI).
Arc/Info Native Format (COV)	The format for the exchange of spatial data for the use in Arc/Info, which is a Geographical Information System (GIS) software developed by the Environmental Systems Research Institute, Inc. (ESRI).
AutoCAD Format	The graphics file format for the use in AutoCAD, which is a Computer Aided Design (CAD) software developed by Autodesk, Inc.
Autodesk Drawing Exchange Format (DXF)	The three-dimensional graphics file format for the use in Computer Aided Design (CAD) systems promulgated by Autodesk, Inc. [Document reference: AutoCAD Release 13 DXF Ref. – v.u13.1.01, AutoCAD Release 14 DXF Ref. – v.u14.1.04 and AutoCAD 2000 DXF Ref – v.u15.0.02 & v.u16.1.01].
Big-5	The standard for the coding of Chinese characters promulgated by the Institute for Information Industry of Taiwan [Document reference and version: Computer Chinese Glyph and Character Code Mapping Table and Technical Report C-26 (May 1984)].
CAD Standard for Works Projects (CSWP)	The common set of CAD standards used for CAD files and drawings for works projects promulgated by the Development Bureau. [Document reference and version: CSWP Document Version 1.03.00 (November 2007)]
Chinese-Japanese-Korean (CJK) Unified Ideographs	The Chinese, Japanese and Korean unified ideographs coded in the ISO10646-1:2000 standard.

E-applications System for Strategic Commodities Licensing (E-SC)	E-applications System for Strategic Commodities Licensing (E-SC) is the information system designated and used by the Trade and Industry Department for providing specific public services online to, and receive electronic information from, members of the community through the Internet in relation to the application and issuance of licences for the purpose of Section $6A(2)$ and (4) of the Import and Export Ordinance (Cap. 60).
Electronic Government Forms	Government forms, in the form of a software, provided by Government to generate electronic records in a pre-defined format for members of the public to fill in electronically and submit to Government through electronic means.
Encapsulated Postscript Files (EPSF)	The graphics file format promulgated by Adobe Systems Incorporated [Document reference and version: Encapsulated PostScript File Format Specification Version 3.0 (May 1992)].
GNU Zip File Compression Standard	GNU Zip (gzip) is a compression utility. [Document reference and version: The format of the GNU Zip file (.gz) version 4.3 (IETF RFC 1952) (May 1996)].
GovHK	The Information System designated and used by Government for providing specified public services or information online to, and receive electronic information from, members of the community through the internet and other electronic means.
Graphics Interchange Format (GIF)	The graphics file format version 89a promulgated by CompuServe Incorporated [Document reference and version: Graphics Interchange Format Version 89a (July 1990)].
Hong Kong Supplementary Character Set (HKSCS)	The set of Chinese characters promulgated by the Government of the Hong Kong Special Administrative Region [Document reference: Document of HKSCS-2001 (December 2001)].
Hypertext Mark Up Language Format (HTML)	The document format promulgated by the World Wide Web Consortium (W3C) [Only those HTML features that are implemented in common by Microsoft Internet Explorer $6/7$ and Mozilla Firefox $2.0.x/3.0.x$ should be used.].
Initial Graphics Exchange Specification (IGES)	The graphics file format for the exchange of information in Computer Aided Design (CAD) systems promulgated by the American National Standards Institute (ANSI) [Document Reference: ANSI/US PRO/IPO 100-1996].
ISO 9660	The universal standard for the volume and file structure of CD-ROM for information interchange promulgated by the International Organization for Standardization (ISO) [Document reference: ISO 9660:1988].

ISO 10646-1:2000	The universal standard for the coding of characters in a multi-language environment promulgated by the International Organization for Standardization (ISO) [Document reference: ISO/IEC 10646-1:2000]. The standard is also commonly known as Unicode.
ISO 13346	The universal standard for the volume and fire structure of write-once and rewritable media using non-sequential recording for information interchange promulgated by the International Organization for Standardization (ISO) [Document reference: ISO 13346: 1995].
Joint Photographic Experts Group (JPEG)	The graphics file format promulgated by the International Organization for Standardization (ISO) [Document Reference: ISO/IEC 10918-1:1994] and the International Telecommunication Union (ITU) [Document Reference: ITU-T T.81 (09/92)].
MB	The measure of the size of an electronic record. A byte is a standard unit for computer information. One MB (mega-byte) means 1 048 576 bytes of information.
Microsoft Rich Text Format (RTF)	The document format promulgated by Microsoft Corporation [Document reference and version: RTF Version 1.6 (May 1999)].
MicroStation DGN Format	The two-dimensional and three-dimensional graphics file format for the exchange of information in Computer Aided Design (CAD) systems used in the MicroStation software developed by Bentley Systems.
Multipurpose Internet Mail Extension (MIME)	MIME is an extension of the SMTP protocol that enables the exchange of different kinds of data files on the Internet: audio, video, images, application programs, and other kinds, as well as ASCII handled in the original protocol. [Document reference: IETF RFCs 2045, 2046, 2047, 2048, 2049, 2231, 2387, 2392, 2557, 2646 and 3023].
1.44MB diskette with size of 3.5 inches in MS-DOS format	A diskette with 1.44MB capacity and size of 3.5 inches complying with the format specified by Microsoft Corporation for the use in the MS-DOS operating system.
Plain Text (TXT)	The document format in which a sequence of characters and the words they form are encoded into computer-readable format using language encoding schemes (i.e. American Standard Code for Information Interchange (ASCII), Big-5 with Hong Kong Supplementary Character Set (HKSCS) and ISO10646-1:2000 with HKSCS) specified in this Note. Plain text does not contain formatting or structural information. It can be in the form of "content-type:text/plain" in an electronic mail or a file that can be opened by common text editors.

Portable Network Graphics (PNG)	The standard for image compression published by the Internet Engineering Task Force (IETF) [Document reference and version: PNG second edition (ISO/IEC 15948:2003) (November 2003)].
Public-Key Cryptography Standards (PKCS#7)	A general syntax defined by RSA Security, Inc. for data that may have cryptography applied to it. [Document reference and version: PKCS #7: Cryptographic Message Syntax Standard Version 1.5 (IETF RFC 2315 (March 1998))].
Secure Multipurpose Internet Mail Extension (S/MIME)	S/MIME is the standard of the format of electronic mail message promulgated by the Internet Engineering Task Force (IETF) [Only those S/MIME (version 3) features that are implemented by both Microsoft Outlook Express 6.x and Mozilla Thunderbird v1.5 or above should be used.].
Simple Mail Transfer Protocol (SMTP)	The standard for the protocol for the exchange of electronic mail among computer systems promulgated by the Internet Engineering Task Force (IETF) [Document reference and version: IETF RFCs 2821 and 2822 (April 2001)].
Tag Image File Format (TIFF)	The graphics file format promulgated by Adobe Systems Incorporated [Document reference and version: TIFF Version 6.0 (June 1992)].
Zip File Compression Standard	The standard for file compression promulgated by WinZip Computing Incorporated [Document reference and version: IETF RFC 1951 (May 1996)]

12. This Note shall not apply unless the information is given or presented, the document is served or the signature is made, in the form of an electronic record, to a government entity as defined in the Electronic Transactions Ordinance, or a person acting on behalf of that government entity.

(Cap553e)