

## **Bills Committee on Inland Revenue (Amendment) (No. 2) Bill 2001**

### **The Administration's Response and Follow-up Actions on Issues Arising from the Discussion at the Meeting on 13 December 2002**

#### **Introduction**

At the meeting of the Bills Committee held on 13 December 2002, the Administration was requested to -

- (a) improve the proposed system for electronic filing of tax return through the ESD Scheme by -
  - (i) acknowledging receipt of the tax return filed electronically by an e-mail message to the taxpayers concerned, if required;
  - (ii) exploring the feasibility of accepting other Chinese software currently supported by other operating systems, e.g. Linux ;
  - (iii) providing a 'Save and Resume' function for the ESD Scheme after the system had been in operation for a year; and
  - (iv) allowing a taxpayer to retrieve his last electronic tax return so that he would only need to amend a few entries, i.e. without having to input all the data again.
- (b) improve the drafting of the Bill by -
  - (i) amending clause 2(b) of the Bill to distinguish a digital signature from a password that were adopted respectively for the purpose of signing and authenticating a tax return; and
  - (ii) providing revised draft Committee Stage amendments to address members' concerns.
- (c) explore the possibility of providing taxpayers with a stamped self-addressed envelope for submitting tax returns in paper form, and recovering the postage from the tax collected, if considered necessary.

2. The Administration's response and follow-up actions on the above issues are set out in the following paragraphs.

### **Acknowledging receipt of return by an e-mail if required by taxpayer**

3. As requested, the Inland Revenue Department (“IRD”) will enhance the return filing application under the Electronic Service Delivery (ESD) Scheme to give the taxpayer an option to receive a e-mail message from IRD acknowledging receipt of the tax return which he has filed electronically. IRD aims to provide this new function by April 2004.

### **Feasibility of accepting other Chinese software**

4. We understand that this question is related to a member’s query raised during the demonstration on the internet return filing service through the ESD Scheme, i.e. whether the system supports other Chinese input methods including writing pads. Our answer was in the affirmative, pointing out that all input methods supported by “Windows” operating system for producing Chinese characters would be supported by the ESD, including writing pads. As to the question of whether other operating systems, e.g. Linux, are supported by the return filing application under the ESD, we replied that for the time being these were not supported. Nevertheless, IRD will continually review and improve the functionalities and compatibility features of the return filing application under the ESD platform, including the support for other operating systems, such as Linux.

### **Providing a “save and resume” function**

5. IRD will provide a “save and resume” function in the return filing application under the ESD. This new function will enable a taxpayer who is not able to complete all information for his electronic tax return in one go to save the inputted data temporarily. The taxpayer can then retrieve the data later from his computer for amendment or further completion before final submission of the electronic return to the IRD. Given the lead time for system development, IRD aims to implement this new function in April 2004.

### **Providing a “retrieval” function for last year’s electronic tax return data**

6. IRD will enhance the return filing application under the ESD to provide a “retrieval” function. This “retrieval” function will allow a taxpayer who had filed his tax return under the ESD platform in the previous year to retrieve the data of that return for “pre-completing” his electronic return in the current year. As the majority of the taxpayers may only need to update or amend a few entries, the filing process will be simplified, thus providing greater incentive for taxpayers to file electronically. Again, given the lead time for system development, IRD aims to roll out this new function in April 2004.

## **Amending clause 2(b) of the Bill to distinguish a digital signature from a password adopted for the purpose of signing and authenticating a tax return respectively**

7. Clause 2(b) of the Bill introduces a new section 2(5) to the Inland Revenue Ordinance (IRO) which provides that a reference to the act of signing a return required to be furnished under the Ordinance includes a reference to the adopting of a digital signature or a password<sup>1</sup> for the purpose of authenticating or approving the return. This suggestion is to request the Administration to consider to distinguish a digital signature which can be used to sign a return from a password, which should be used to authenticate a tax return rather than to sign it.

8. As stated in the paper on the review of the Electronic Transactions Ordinance submitted by the Commerce, Industry and Technology Bureau (CITB) to the Legislative Council Panel on Information Technology and Broadcasting for consideration at its meeting on 7 November 2002, it is the Administration's view that personal identification number (PIN) should be accepted for satisfying the signature requirement under law in specified cases where the level of security offered by it is commensurate with the risk of the service involved so that users may have a wider choice and greater convenience. We consider that filing of tax returns is one such case.

9. We also wish to point out that PIN can be considered as a form of electronic signature. In the Guide to Enactment of the UNCITRAL (United Nations Commission on International Trade Law) Model Law on Electronic Signatures issued by the UNCITRAL Working Group on Electronic Commerce (see **Appendix**), PIN and even clicking an "OK" box etc. are considered as examples of "electronic signature".

10. We have also researched into the enabling legislation of some of those countries where tax returns can be filed electronically using passwords.

11. In Australia, section 388-60 of the Taxation Administration Act 1953 provides that a person filing a return to the Commissioner must make a declaration in the approved form that any information in the return is true and correct. By section 388-75 of the Act, where the return is lodged electronically, the filer must contain his declaration with his electronic signature. Where the return is given by telephone, the filer must contain his declaration with his telephone signature. Both electronic signature and telephone signature are defined as a unique identification that is approved by the Commissioner, i.e. passwords in practice. Thus, the Australian legislation specifically attributes a password as a signature.

12. In Canada, it is not expressly mentioned whether or not a password is regarded as a signature. However, section 35 of the Personal Information Protection and Electronic Documents Act provides that if a provision of an Act of Parliament

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<sup>1</sup> The original clause 2(b) of the Bill includes a reference to the adopting of "any other signing device" as well which, however, the Administration has agreed to delete as reflected in the draft Committee Stage Amendments submitted to the Bills Committee on 13 December 2002.

establishes a form, the responsible authority in respect of that provision may make regulations respecting an electronic form that is substantially the same as the form established in the provision, and the electronic form may be used for the same purposes as the form established in the provision. In other words, where a paper form requires a signature (as in the case of a tax return), the corresponding electronic form would also require a signature which is satisfied by the adopting of a password in practice.

13. In the UK, section 3 of the Income Tax (Electronic Communications) Regulations 2000 provides that a person may use electronic communications in connection with certain specified matters and upon satisfying certain conditions, one of which is that he must use an approved method for authenticating any information delivered by means of electronic communications. Password is an approved method of authentication for filing tax returns.

14. In the US, section 6061 of the Internal Revenue Code provides that the Secretary shall develop procedures for the acceptance of signatures in digital or other electronic form. Until such time as such procedures are in place, the Secretary may (A) waive the requirement of a signature for; or (B) provide for alternative methods of signing or subscribing, a particular type or class of return, declaration, statement, or other document required or permitted to be made or written under internal revenue laws and regulations. With effect from the year 2000, taxpayers may use a Self-Select PIN to sign their electronic returns. In other words, the Self-Select PIN is accepted as a signature in the US.

15. In Singapore, section 8(1) of the Electronic Transactions Act provides that where a rule of law requires a signature, or provides for certain consequences if a document is not signed, an electronic signature satisfies that rule of law. "Electronic signature" is defined in terms similar to that under our Electronic Transactions Ordinance (ETO), i.e. it means any letters, characters, numbers or other symbols in digital form attached to or logically associated with an electronic record, and executed or adopted with the intention of authenticating or approving the electronic record. This definition obviously covers a password.

16. To sum up, the majority of the tax jurisdictions surveyed accept the use of passwords to sign tax returns for filing electronically, and the Guide to enactment of the UNCITRAL Model Law on Electronic Signatures states that PIN can be considered as electronic signature. This situation is of particular relevance to Hong Kong since a tax return, which is specified by the Board of Inland Revenue, invariably requires the taxpayer's signature. In such circumstances, we need to make sure that the signature (in the form of a password) is added to the electronic return and furnished together with the return. We will then be able to bring the electronic return within the existing legal framework of the IRO, including section 51(5) which provides, among others, that any person signing any return shall be deemed to be cognizant of all matters therein. In other words, the "signing" of an electronic return is the very basis for our enforcement action. Mere authentication is not sufficient for the purpose.

**Feasibility of providing a stamped self-addressed envelope and recover the postage from the tax collected, if considered necessary**

17. We understand that the issue was raised by a member who has found it inconvenient to purchase a stamp in case a taxpayer wishes to submit a paper return to the IRD by post. Whilst we fully appreciate the point raised, this proposal is beset with technical difficulties.

18. First, due to budget constraint, it has been the Government's service-wide policy that "official paid mail" will not be provided by the departments. There would not be any exception for IRD. Hence, it would not be possible for IRD to provide a stamped self-addressed envelope to the taxpayer for submitting the tax return in paper form. Secondly, as "postage" is not a type of tax charged under the IRO, the IRD is not in a position to include it in the notice of assessment of tax issued to the taxpayer concerned, nor to recover it along with the tax that is assessed.

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*UNCITRAL*  
*Model Law on*  
*Electronic Signatures*  
*with*  
*Guide to Enactment*  
*2001*



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three functions (or roles) with respect to electronic signatures, namely, the signatory function, the certification function and the relying function. Two of those functions are common to all PKI models (i.e. creating and relying on an electronic signature). The third function is involved in many PKI models (i.e. certifying an electronic signature). Those three functions should be dealt with irrespective of whether they are in fact served by three or more separate entities (e.g. where various aspects of the certification function are shared between different entities), or whether two of those functions are served by the same person (e.g. where the certification service provider is also a relying party). Focusing on the functions performed in a PKI environment and not on any specific model also makes it easier to develop a fully media-neutral rule to the extent that similar functions are served in non-PKI electronic signature technology.

1. *Electronic signatures relying on techniques other than public-key cryptography*

33. Alongside “digital signatures” based on public-key cryptography, there exist various other devices, also covered in the broader notion of “electronic signature” mechanisms, which may currently be used, or considered for future use, with a view to fulfilling one or more of the above-mentioned functions of handwritten signatures. For example, certain techniques would rely on authentication through a biometric device based on handwritten signatures. In such a device, the signatory would sign manually, using a special pen, either on a computer screen or on a digital pad. The handwritten signature would then be analysed by the computer and stored as a set of numerical values, which could be appended to a data message and displayed by the relying party for authentication purposes. Such an authentication system would presuppose that samples of the handwritten signature have been previously analysed and stored by the biometric device. Other techniques would involve the use of personal identification numbers (PINs), digitized versions of handwritten signatures, and other methods, such as clicking an “OK-box”.

34. UNCITRAL has intended to develop uniform legislation that can facilitate the use of both digital signatures and other forms of electronic signatures. To that effect, UNCITRAL has attempted to deal with the legal issues of electronic signatures at a level that is intermediate between the high generality of the UNCITRAL Model Law on Electronic Commerce and the specificity that might be required when dealing with a given signature technique. In any event, consistent with media neutrality in the UNCITRAL Model Law on Electronic Commerce, the new Model Law is not to be interpreted as discouraging the use of any method of electronic signature, whether already existing or to be implemented in the future.



81. For the assessment of the trustworthiness of the systems, procedures and human resources utilized by the certification service provider, the Model Law provides an open-ended list of indicative factors.

#### *F. A technology-neutral framework*

82. Given the pace of technological innovation, the Model Law provides criteria for the legal recognition of electronic signatures irrespective of the technology used (e.g. digital signatures relying on asymmetric cryptography; biometric devices (enabling the identification of individuals by their physical characteristics, whether by hand or face geometry, fingerprint reading, voice recognition or retina scan, etc.); symmetric cryptography, the use of PINs; the use of “tokens” as a way of authenticating data messages through a smart card or other device held by the signatory; digitized versions of handwritten signatures; signature dynamics; and other methods, such as clicking an “OK-box”). The various techniques listed could be used in combination to reduce systemic risk (see A/CN.9/484, para. 52).

#### *G. Non-discrimination of foreign electronic signatures*

83. The Model Law establishes as a basic principle that the place of origin, in and of itself, should in no way be a factor determining whether and to what extent foreign certificates or electronic signatures should be recognized as capable of being legally effective in an enacting State (see A/CN.9/484, para. 53). Determination of whether, or the extent to which, a certificate or an electronic signature is capable of being legally effective should not depend on the place where the certificate or the electronic signature was issued (see A/CN.9/483, para. 27) but on its technical reliability. That basic principle is elaborated upon in article 12 (see below, paras. 152-160).

### **V. Assistance from the UNCITRAL secretariat**

#### *A. Assistance in drafting legislation*

84. In the context of its training and assistance activities, the UNCITRAL secretariat assists States with technical consultations for the preparation of legislation based on the UNCITRAL Model Law on Electronic Signatures. The same assistance is brought to Governments considering legislation based on other UNCITRAL model laws (i.e. the UNCITRAL Model Law on International Commercial Arbitration, the UNCITRAL Model Law on International Credit Transfers, the UNCITRAL Model Law on Procurement of Goods, Construction and Services, the UNCITRAL Model Law on Electronic Commerce, and the UNCITRAL Model Law on Cross-Border