

For discussion
on 26 April 2010

Panel on Administration of Justice and Legal Services

**Proposal to Implement a Verified, Authenticated and Searchable
Electronic Database of Hong Kong Legislation**

Purpose

This paper seeks Members' support for –

- (a) the implementation of a verified, authenticated and searchable electronic database of Hong Kong Legislation (the Database) to replace the existing Loose-leaf Edition; and
- (b) the introduction of a Bill to give legal status to the Database, and to provide for sufficient editorial powers to alter the texts of legislation in order to conform with current drafting practices.

Background

2. At present, by virtue of the Laws (Loose-leaf Publication) Ordinance 1990, the Loose-leaf Edition of the laws of Hong Kong has statutory status. Anyone who wishes to refer in court to an updated official version of Hong Kong legislation can only rely on the Loose-leaf Edition. The existing Bilingual Laws Information System (BLIS) also provides a consolidated version of the laws of Hong Kong. It was first made available to the public via the internet in November 1997 under the website of the Department of Justice (DoJ). However, it has no legal status. Indeed, it was not designed to carry legal status and is not capable of being re-designed to allow it to be used as a database that enjoys legal status.

Limitations of the Loose-leaf Edition and BLIS

3. The Loose-leaf Edition is the official source of consolidated Hong Kong legislation published under statutory authority and, together with the Gazette, is the official source of new legislation. However, being a printed copy, the period during which it is up-to-date is limited because of the time

required to prepare and issue the updated replacement version. Users are obliged to manually check gazetted legislation and mark relevant amendments on their own copies in the interim, which may run up to as many as nine months. There is a risk that if parties to proceedings, and the court, do not have access to a fully updated version of relevant laws a judgment may result that is based on an incorrect version of the laws. Indeed, this has happened in another jurisdiction on at least one occasion. Furthermore, the subscription to, and maintenance of, the Loose-leaf Edition are costly. As of March 2010, a new order of a complete set of the Loose-leaf Edition costs around \$180,000. The cost for the last replacement issue (i.e. Issue 42) was \$2,120, and it takes a skillful worker two to three working days to complete the task of replacing the pages.

4. While updates to BLIS may be more timely, it does not have any legal status and was not designed to have any. Further, the system lacks the essential security features for it to be given any legal status. It does not have the capability to track changes down to field level and provide an audit log. It is not technically feasible to upgrade BLIS on its current platform, which has been in use for over a decade, to meet the essential security requirements.

5. Within DoJ, supporting the operation of our present dual system of the printed Loose-leaf version and BLIS necessarily results in a duplication of effort in updating and proofreading the two versions. There is also the risk of error in processing the replacement issues and updates. This inefficient use of resources and risk of error have become increasingly unacceptable, in particular when it has been proven in other jurisdictions that it is technologically feasible to implement a computer system that can provide a secure and effective solution to these problems.

6. A number of jurisdictions have already made legislation with legal status available free and online to the public. They include New South Wales, the Commonwealth of Australia (legislative instruments), Tasmania, New Brunswick and Canada (Federal). New Zealand has completed such a system and is in the process of officializing¹ its legislation data. Singapore and Bermuda have started to develop similar systems. Hong Kong is now lagging behind these jurisdictions and this gap will only widen the longer we delay.

¹ Officialization is a term from the New Zealand system which means confirming legislation data as being an accurate and authoritative version of legislation.

The Database

Results of the Feasibility Study

7. In the light of the above, in May 2009, DoJ commissioned a consultant to conduct a feasibility study on the establishment and maintenance of the Database. After considering the experience of overseas jurisdictions in the implementation of similar systems and the architecture of the existing BLIS, the study concluded that a new system should replace BLIS. The consultant recommended that the new system should make electronic legislation data with legal status available to the public and that the hardcopy of legislation should be printed from this single source of data.

8. It is envisaged that the Database will provide the public with a website facilitating free and convenient access to accurate and up-to-date Hong Kong legislation with legal status. Hong Kong legislation will be available in formats facilitating public access and download. In addition, the Database will support the operations of the Law Drafting Division (LDD) of DoJ in the following processes –

- (a) Legislation capture – the capture of required information to facilitate the compilation of consolidated Hong Kong legislation once legislation is gazetted.
- (b) Legislation compilation – the consolidation, proofreading and verification of Hong Kong legislation in the Database.
- (c) Online publication – the generation and publication of Hong Kong legislation for online access by users.
- (d) Full chapter reprint – the generation of full chapter reprints of Hong Kong legislation in a layout similar to the Loose-leaf Edition (or an improved layout) for online access by users.
- (e) Auditing and checking – the auditing and checking of all updates made to the published Hong Kong legislation.

9. The Database will adopt a modular design so as to allow for the independent modification of different system components. This will produce a more flexible and adaptable architecture, enabling subsequent changes to be made to the new system more effectively. It will be designed with essential security features to enable it to be given legal status. Track changes features

will be available in the system to facilitate proofreading and verification. Detailed audit log recording system activities will be available, so that any action taken on the system and changes made to the content of the legislation will be recorded and traceable.

Benefits brought about by the Database

10. More importantly, the Database will bring about the following benefits –

- (a) Timely dissemination of and free access to Hong Kong legislation with legal status

The lead time for updating Hong Kong legislation will be shortened significantly from the existing three to four weeks for BLIS and up to nine months of lead time for the Loose-leaf Edition, to between one and five days under the Database.

- (b) Improved accuracy in compiling Hong Kong legislation

With a single source (i.e. the Database) for compiling Hong Kong legislation, any inconsistency arising from having two separate sources (i.e. BLIS and the Loose-leaf Edition) will be avoided.

- (c) Effect on legal profession

Those in the legal fraternity, including members of the judiciary and the profession as well as the law enforcement agencies, will be able to conveniently and efficiently locate current and historical versions of Hong Kong legislation. Law drafting counsel will be able to focus more of their time in enhancing the quality of legislation to be drafted.

- (d) Effect on Hong Kong generally

The Database will offer free online access to Hong Kong legislation with legal status to the public anywhere, anytime. This will reflect the Government's commitment to providing the public with ready and convenient access to Hong Kong legislation and will greatly improve the image of Hong Kong. In addition, this is in line with the aspiration for Hong Kong to become the regional hub for legal services and dispute resolution, and with the Government's initiative to make Hong Kong a leading digital city.

- (e) Better leverage of technology to support value-added services

The Database will adopt a modular design, including the use of an open data format. This will open up opportunities for third parties, such as legal publishers, to provide value-added services more easily. It will also provide a platform to enable LDD of DoJ to integrate other internal business operations, such as the law drafting process.

- (f) Contribution to a greener lifestyle

With the availability of the full chapter reprint function in the Database, demand for hardcopy of Hong Kong legislation will be reduced. The corresponding savings in paper consumption will contribute to the greener lifestyle being promoted by the Government.

- (g) Benefits arising from phasing out the Loose-leaf Edition

When the whole process of verification of and giving legal status to Hong Kong legislation in the Database (i.e. officialization) is completed, the Loose-leaf Edition can be retired. Efforts and office space required by subscribers outside the Government (mostly legal practitioners and professionals) to perform the replacements for replacement issues and to house the Loose-leaf Edition will be saved. With reference to the Government subscribers indicated in paragraphs 11(c)(i) and (ii) below, estimated savings in staff effort per year and office space would be 2 109 person-days and 276 square metres respectively.

11. We estimate that the proposal will bring about annual savings of \$13,148,000 from 2020-21 onwards, comprising –

- (a) Realizable savings of \$383,000 per annum

This represents the running cost of BLIS, which includes the hardware and software maintenance costs and rental of the data lines. The savings will be ploughed back into the Database to contribute to its recurrent costs.

- (b) Notional savings of \$230,000 per annum

After implementing the Database, notional savings in the staff costs of DoJ will be achieved as less staff effort will be required to maintain the Database and publish Hong Kong legislation. The saved staff effort will be deployed to help ensure that laws are compiled to a quality commensurate with the legal status of the new system.

- (c) Notional cost avoidance of \$12,535,000 per annum

This represents the cost avoidance of –

- (i) \$6,684,000 in staff costs for bureaux and departments (B/Ds) which are subscribers of the Loose-leaf Edition for performing the replacements for replacement issues of the Loose-leaf Edition;
- (ii) \$3,051,000 in office space costs of B/Ds for housing the Loose-leaf Edition; and
- (iii) \$2,800,000 in the provision of replacement issues to non-paying subscribers of the Loose-leaf Edition comprising B/Ds and statutory bodies.

Financial Implications of the Database

12. The financial implications of the Database include –

- (a) Non-recurrent expenditure of \$79,395,000 over a period of six years from 2010-11 to 2015-16 (DoJ will apply to the Finance Committee of LegCo for funding).
- (b) Non-recurrent staff costs of \$35,034,000

This represents a total of about 1 002 person-months of legal, technical and clerical officers for procurement, project management, data conversion and migration, officialization and user-acceptance tests. Of these, 480 person-months are for the officialization process from 2014-15 to 2019-20. DoJ will absorb the requirements.

- (c) Recurrent expenditure, being incurred from 2015-16, with full expenditure of \$14,860,000 per annum being incurred from 2017-18 onwards. DoJ will absorb the requirements.

Implementation Plan for the Database

13. We plan to implement the Database in two phases. Phase one will cover core functions for use by LDD for data maintenance and officialization. Phase two will cover functions for use by the public and B/Ds. BLIS will be retired on completion of phase two. The officialization process will commence at the same time as the commencement of phase two and is expected to take five years. The Loose-leaf Edition will be phased out progressively according to the progress of the officialization. The proposed implementation plan is as follows –

Activity	Target Completion Date
(a) Procurement exercise for the implementation of the Database	December 2011
(b) Contract commencement	January 2012
(c) Phase one	May 2014
(d) Phase two	November 2015
(e) Officialization and retirement of Loose-leaf Edition	May 2019

14. When the Database is in operation, LDD will hold briefing sessions on the use of the Database for judges, government officials and members of the two legal professions. Suitable user guides and notices will also be published under the DoJ website from time to time.

Legislative Backing for the Database

Introduction of a Bill

15. We propose to introduce a Bill to give legal status to the Database. The Bill will also enable certain editorial changes to be made to the consolidated legislation with a view to improving its presentation and user-friendliness and to consolidate some existing provisions providing for editorial changes.

Modernization of presentation for user-friendliness

16. Other leading jurisdictions have been improving the presentation of their legislation. To keep abreast with the current trend, the existing format and styles of our legislation need to be modernized and adjusted to enhance the legislation's presentation and user-friendliness. LDD briefed the Panel on the proposed stylistic and formatting changes to our legislation on 15 December 2009 (see LC Paper No. CB(2)512/09-10(04)) and provided the Panel with a follow-up information paper (see LC Paper No. CB(2)615/09-10(01)).

Editorial powers

17. While we are able to introduce a new format and styles in newly gazetted legislation, we have insufficient editorial powers to update existing legislation to the new format and styles. This may present difficulties when incorporating amendments that have been drafted in the new format and styles into the texts of existing legislation. To ensure a uniform appearance across the whole consolidated text as published, currently, in the Loose-leaf Edition and, in future, in the Database, it will be necessary to provide for new editorial powers that allow the existing texts to be amended to tally with the new format and styles, as well as new drafting practices adopted from time to time. The exercise of the editorial powers would be governed by the overriding principle that any editorial changes cannot alter the effect of the legislation.

Conclusion

18. Access to the law is a fundamental element of a jurisdiction that upholds the rule of law. In the information age, the availability of an updated, free to access, reliable and searchable online consolidated legislation database with legal status is a must. The Database is an important infrastructure for Hong Kong to become the regional hub for legal services and dispute resolution.

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