

For information

**Legislative Council Panel
on Planning, Lands and Works**

**Provision of Electronic Imaging, Storage
and Retrieval Service of Building Plans and Documents**

PURPOSE

This paper outlines the proposal to implement a computerized Building Records Management System (BRMS) for the storage and retrieval of all building plans and related documents kept by the Buildings Department (BD) in order to, inter alia, provide more cost effective and user-friendly services to the public.

BACKGROUND

2. Building plans and related documents of existing private buildings, collectively known as building records, provide essential information such as the approved layout, means of escape and structural design of buildings. They are important references for business operators, building professionals, government departments and members of the public for such purposes as licence applications, the removal of unauthorized building works and the application for approval of building works involving existing private buildings.

3. BD keeps a repository of the building records of all private buildings in Hong Kong. It operates a service for members of the public to view and/or obtain certified true copies of such records. An average of about 38, 000 applications for the viewing of building records were received per annum in the past two years.

4. A study on the retrieval of building records conducted in January 2000 recommended that BD should digitize the building records and develop an electronic BRMS for more expeditious and quality services.

5. As a trial, in early 2001, we started a pilot project for the digitization of building records and setting up of a small-scale BRMS covering initially, Tsim Sha Tsui and Yau Ma Tei districts, and subsequently extended it to Mongkok and

Wanchai districts. This pilot BRMS has been open to public access since June 2001.

6. With the quantum leap in service delivery when compared with the existing 10-day manual retrieval time based on hard copies, feedback from both building professionals and the public has indicated that the instant retrieval service is well received by the users. Electronic imaging has proved to be a most effective way for managing building records. The Business Advisory Group which has been overseeing the pilot project considers that the pilot BRMS's capability to retrieve records instantaneously would greatly improve BD's plan retrieval service. The Business Advisory Group also recognizes the potential of BRMS for operating on the Internet.

PROPOSED PROJECT

7. Modeled on the successful pilot project, the proposed BRMS will cover the digitization of all existing building records in BD and new building records received by BD. A computer system will also be set up to manage all digitized data. These data include approved plans for building, structural, drainage, site formation and alterations and additions works; record plans as well as related reports and calculations. About 1.03 million paper-based and 0.23 million microfilm-based plans, as well as 10.8 million paper-based and 3.7 million microfilm-based documents will have to be digitized in the conversion exercise.

BENEFITS OF THE PROPOSED PROJECT

8. The proposed BRMS will bring about the following benefits: -

(a) Improving service

Under the existing plan viewing service, 10 days are required for the retrieval of records and customers have to sort out the records they require from a large bundle of documents and plans. The BRMS will eliminate the waiting and sorting processes. Members of the public may visit the Building Information Centre (BIC) of BD to gain instant access to building records.

In addition, the BRMS will allow concurrent access to the same record by more than one user. This kind of concurrent access is impossible under the current paper-based system.

As regards printing, the BRMS will accommodate an automated printing service such that users can place orders for copying the required plans or documents in the viewing process.

(b) Facilitating compliance with statutory requirements

With the BRMS, members of the public can readily check the relevant building records when they need to submit licence applications or carry out alteration and addition works in their premises. This will facilitate compliance with statutory requirements.

(c) Improving record management

Deterioration and damage caused by repeated retrieval and handling of paper records have posed serious problems over the legibility of the records. Building records in electronic format do not have the problems of aging and deterioration. Electronic imaging of building records is a cost-effective solution for preserving the valuable information contained in paper records.

Apart from the problem of deterioration and damage, the repeated retrieval of paper records may also cause loss or misplacement. With the BRMS providing building information through electronic means, paper records do not have to be retrieved, thus eliminating the chance of loss or misplacement of these records.

An additional benefit is the reduction of transit storage space for the building records scheduled for viewing. In the long term, the existing stock of paper records stored in the Tuen Mun Records Centre managed by the Records Management Office could be disposed of, resulting in substantial saving of storage space. The relevant provision empowering the Building Authority to dispose of paper records as proposed in the Buildings (Amendment) Bill 2003 is now undergoing the legislative process.

(d) Enabling Internet-access and e-commerce

Digitization of building records is a pre-requisite for setting up a web-based retrieval system and an electronic submission system (ESS) in the future. BD will further examine the feasibility of the establishment of such systems with a view to further improving the services offered to the public upon the implementation of BRMS.

COST SAVINGS

9. Upon implementation of the proposed system, a total annual savings of \$8,910,000 is expected to be achieved, as follows: -

<u>Item</u>	<u>Amount (\$'000)</u>
(a) Savings in personnel emoluments - through the deletion of two Clerical Assistants posts and one Workman post in the Retrieval Registry of BD	399
(b) Savings in operating costs – resulting from release of 18 temporary clerical staff in BIC of BD	1,399
(c) Savings in rental charge – through the reduction of 422.9 m ² from the accommodation in BD’s Retrieval Registry and BIC	1,542
(d) Savings in operating costs –through the release of storage space of 2700m ² in Record Management Office of Government Record Services Department arising from the disposal of the existing stock of paper records.	5,570
Annual Savings	8,910

FINANCIAL IMPLICATIONS

Non-Recurrent Cost

10. It is estimated that the total capital cost for the project is \$50.3 million spreading over a period of 3 years. A breakdown of the estimate is as follows:

	Total \$'000
Non-recurrent expenditure for which we are seeking a commitment	
(a) Conversion of building records	37,790
(b) Hardware, software and implementation services for an	10,069

in-house BRMS	
(c) Set-up in BIC	210
(d) Project administration	2,000
(e) Contingency	200
Total	50,269

Recurrent Cost

11. It is estimated that the recurrent maintenance and operational expenditure is \$3.2 million per annum. BD will absorb all the recurrent cost of the BRMS by redeploying in-house resources.

12. The recurrent cost includes the expenditures of on-going conversion of records received by BD, hardware and software support maintenance services, consumable and staff for system support.

IMPLEMENTATION PLAN

13. We estimate that the proposed BRMS can commence operation in July 2004 and the conversion of all building records will be completed by December 2005. The proposed implementation plan is as follows:

	Target Completion Date
(a) Tendering	January 2004
(b) Team formation	February 2004
(c) System roll-out of BRMS	July 2004
(d) Completion of full-scale conversion of building records	December 2005
(e) Full-scale operation of BRMS	December 2005

WAY FORWARD

14. Subject to Members' views, a submission will be made to the Finance Committee for the approval of a new commitment of \$50.3 million for the implementation of the system.

**Housing, Planning and Lands Bureau
May 2003**