

## **ITEM FOR FINANCE COMMITTEE**

### **CAPITAL WORKS RESERVE FUND**

### **HEAD 710 - COMPUTERISATION**

### **Education Department**

### **New Subhead “Personnel Information Management System”**

Members are invited to approve a new commitment of \$15.9 million for implementing a Personnel Information Management System in the Education Department.

### **PROBLEM**

At present, personnel information in the Education Department (ED) is handled either manually or through different computer databases which do not integrate with one another. This is inefficient and not conducive to effective human resource management (HRM).

### **PROPOSAL**

2. Director of Education, with the support of Secretary for Education and Manpower and on the advice of Director of Information Technology Services, proposes to create a new commitment of \$15.9 million to develop and implement a computerised Personnel Information Management System (PIMS) in the ED to support its HRM functions.

### **JUSTIFICATION**

#### **Problems with the existing operation**

3. ED has an establishment of about 6 500. At present it keeps personnel information in different divisions/sections overseeing different aspects of HRM and different categories of staff, either in paper files or in stand-alone computers. This gives rise to the following problems -

/(a) .....

- (a) the management has to compile manually a profile of the same staff (e.g. training record and posting history) from information kept by different divisions/sections when drawing up manpower plans or planning staff development;
- (b) where the information is kept in paper files, considerable staff time has to be spent in searching the relevant data;
- (c) the management does not have ready access to an overall picture of the staffing position and staff profile of the entire department for planning at a macro level; and
- (d) the Personnel Registry at the ED Headquarters and other divisions/sections are sometimes keeping the same personnel information to facilitate their respective day-to-day personnel management. This results in duplication of database and staff effort. It is also difficult to ensure data consistency in coverage and format.

4. The present system not only makes the retrieval of personnel information very time-consuming, labour-intensive and inefficient, it also limits ED's capacity for modernised HRM practices which emphasise integration of various HRM functions including recruitment, manpower planning, posting, performance management and staff development and training. The present situation is unsatisfactory, especially as ED has to manage a huge volume of HRM work concerning 35 different grades of staff. For instance, in the past 12 months, ED has dealt with some 1 400 internal posting transfers and arranged 8 200 training placements for its staff in respect of 840 training activities.

### **The Proposed System**

5. In 1999, ED commissioned, with the assistance of the Information Technology Services Department (ITSD), a feasibility study to assess the technical viability and resource implications of implementing a centralised and fully computerised personnel management information system. The study recommended the identification of a suitable software package available in the market and customising it to meet ED's requirements. This approach will save time and costs when compared with developing a purpose-designed system.

6. Based on the recommendations of the feasibility study, ED proposes to introduce a system called PIMS that is capable of handling the personnel data (such as personal particulars, pay point and benefits, posting history, training

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records, performance appraisal records and disciplinary records) of all staff in ED and is able to capture a full range of HRM functions.

7. PIMS will comprise five major sub-systems covering general personnel matters, recruitment, performance management, training, and establishment. The entire system will perform the following functions -

- (a) maintaining a personnel database containing comprehensive, up-to-date and accurate personnel particulars of all staff;
- (b) facilitating short-listing of candidates for purposes like recruitment, posting and training according to prescribed criteria;
- (c) supporting performance management by capturing staff appraisals, hence facilitating a better understanding of staff training and development needs and enabling moderation of appraisal standards where appropriate;
- (d) maintaining staff posting history and training records to facilitate staff posting/development and succession planning;
- (e) maintaining establishment-related information to support manpower planning; and
- (f) generating both regular and ad-hoc statistical reports for various HRM-related purposes.

8. The proposed system will streamline the work processes and enhance ED's capacity for modern HRM practices. It will increase ED's overall efficiency and effectiveness in HRM, to the benefit of both the management and staff. ED will also take the opportunity of this major overhaul in its personnel information system to re-engineer and rationalise its work processes on HRM.

### **Cost and Benefit Analysis**

9. We expect the proposed PIMS will bring about total annual savings of \$10.72 million, comprising -

- (a) realisable savings of \$2.76 million arising from the deletion of five posts (comprising one Senior Executive Officer, two Clerical Officer and two Assistant Clerical Officer posts), made possible upon vigorous business process re-engineering and rationalisation of duties; and

/(b) .....

- (b) notional savings of \$7.96 million, being the cost which would otherwise have to be incurred for employment of additional staff for various HRM functions, plus saving arising from enhanced productivity of existing staff and saving in office space (the latter as a result of deletion of posts and reduced space for storage of paper files).

Encl. 1 10. A detailed cost and benefit analysis is at Enclosure 1. The system is expected to break even in 2005-06.

### Implementation Plan

Encl. 2 11. We estimate that it will take about 19 months to implement PIMS. Subject to approval of funding by Members, ED will proceed with service acquisition and system development, with a view to launching the system in January 2003. An implementation timetable for PIMS is at Enclosure 2.

## FINANCIAL IMPLICATIONS

### Non-recurrent Cost

12. The estimated total non-recurrent cost of PIMS is \$20.4 million. This includes \$4.5 million of staff cost which will be absorbed by ED. A breakdown is as follows -

	<b>2001-02</b>	<b>2002-03</b>	<b>Total</b>
	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>
<b>Expenditure</b>			
(a) Hardware and software (including application software licence)	-	5,902	5,902
(b) Professional services and project management/data conversion services	965	7,295	8,260
(c) Training	-	459	459
(d) Site preparation	-	165	165
(e) Initial consumables	-	323	323
(f) Contingency	48	707	755
<b>Sub-total</b>	<b>1,013</b>	<b>14,851</b>	<b>15,864</b>
(g) ED staff cost (absorbed by ED)	1,589	2,899	4,488
<b>Total</b>	<b>2,602</b>	<b>17,750</b>	<b>20,352</b>

/13. ....

13. As regards paragraph 12(a), the expenditure is for acquisition of computer hardware, system software, network equipment and human resource management software package.

14. As regards paragraph 12(b), the expenditure is for acquisition of project management service (for tender preparation and evaluation, monitoring of the performance of the project implementation service provider and provision of technical advice to ED), as well as acquisition of professional services for configuration and customisation of the application software and for data conversion by temporary data entry clerks.

15. As regards paragraph 12(c), the expenditure is for training ED's project team and for the organisation of 'train-the-trainer' classes for customised applications.

16. As regards paragraph 12(d), the expenditure is for installation of power points and conduits for the computer network.

17. As regards paragraph 12(e), the expenditure is for the procurement of backup tapes, toner cartridges and paper.

18. As regards paragraph 12(f), the expenditure represents a contingency at 5% on the cost items set out in paragraphs 11(a) to (e).

19. As regards paragraph 12(g), the expenditure represents ED's staff costs on the project team responsible for project co-ordination, monitoring, implementation support and user acceptance test. The expenditure will be absorbed by ED within its existing resources.

### **Recurrent Cost**

20. The estimated recurrent expenditure for maintaining and supporting the PIMS is \$2.33 million. This will be fully offset by the realisable savings of \$2.76 million per annum (paragraph 9 above). ED will re-deploy existing staff to manage the new system.

**/BACKGROUND .....**

**BACKGROUND INFORMATION**

21. With the assistance of the ITSD, ED commissioned a consultant to conduct a study in May 1999 to ascertain the feasibility of installing a centralised and fully computerised personnel information management system. The study was completed in March 2000.

22. We consulted the LegCo Panel on Education on 21 May 2001. The Panel had no objection to the proposal.

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Education and Manpower Bureau  
June 2001



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>BENEFITS</b>									
(a) Realisable savings (Note 1)	0	0	1,839	2,759	2,759	2,759	2,759	2,759	15,634
(b) Notional savings (Note 2)	0	0	7,276	7,960	7,960	7,960	7,960	7,960	47,076
<b>Total benefits</b>	<b>0</b>	<b>0</b>	<b>9,115</b>	<b>10,719</b>	<b>10,719</b>	<b>10,719</b>	<b>10,719</b>	<b>10,719</b>	<b>62,710</b>
<b>Net benefits</b>	<b>(2,602)</b>	<b>(18,029)</b>	<b>7,012</b>	<b>8,050</b>	<b>8,050</b>	<b>8,050</b>	<b>8,050</b>	<b>8,050</b>	<b>26,631</b>
<b>Net cumulative benefits</b>	<b>(2,602)</b>	<b>(20,631)</b>	<b>(13,619)</b>	<b>(5,569)</b>	<b>2,481</b>	<b>10,531</b>	<b>18,581</b>	<b>26,631</b>	

\* Absorbed by ED from within its existing resources.

Note 1 - Realisable savings from deletion of five posts will be achieved six months after the full implementation of PIMS. On the assumption that PIMS will roll out in end January 2003, the staff savings will be delivered in August 2003.

Note 2 - Notional savings will be achieved three months after the full implementation of PIMS in May 2003 after users have familiarised themselves with the functions of the system.



**Enclosure 2 to FCR(2001-02)29**

**Implementation Timetable for PIMS**

<b>Activity</b>	<b>Expected commencement date</b>	<b>Expected completion date</b>
Acquisition of project management service	July 2001	September 2001
Acquisition of project implementation service	October 2001	June 2002
System customisation, testing and installation	June 2002	December 2002
System rollout	January 2003	January 2003
System nursing	February 2003	March 2003