

## **ITEM FOR FINANCE COMMITTEE**

### **HEAD 190 – UNIVERSITY GRANTS COMMITTEE**

#### **Subhead 700 General non-recurrent**

#### **New item “One-off Special Equipment Grant for UGC-funded Institutions”**

Members are invited to approve a new commitment of \$200 million for providing a one-off grant to the University Grants Committee for establishing a Special Equipment Grant for the acquisition, replacement, establishment or upgrading of research equipment of the University Grants Committee-funded institutions.

### **PROBLEM**

The University Grants Committee (UGC)-funded institutions lack financial support to upgrade their major research equipment. This may hinder their ability in conducting more high quality and collaborative research projects.

### **PROPOSAL**

2. The Secretary for Education proposes to provide a one-off grant of \$200 million in 2008-09 to the UGC for establishing a Special Equipment Grant for the acquisition, replacement, establishment or upgrading of research equipment of the UGC-funded institutions.

### **JUSTIFICATION**

3. Research is vital to the success of our tertiary education institutions. As Hong Kong makes progress as a knowledge-based and technology-driven economy, a tertiary education sector that is strong in research is of critical importance to our competitiveness at the international level and to our ability to

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nurture and develop our talent pool. The Government is thus committed to developing a strong research culture in Hong Kong and fostering collaborative research at the highest international level through financing research activities and upgrading the research capacity of our tertiary institutions. Through the Research Grants Council (RGC) under UGC, public funding channelled to research activities each year amounted to over \$600 million.

4. At present, the UGC-funded institutions are free to deploy the recurrent grants provided by the Administration to acquire research equipment and facilities. RGC may also provide funding for the purchase of necessary equipment to support individual research projects. However, past experience suggests that the institutions tend to use the funding available to support research activities rather than to procure research equipment. This is particularly so when equipment of a high value is involved, as the sacrifice that the institutions will have to make in terms of spending in other priority areas, such as teaching or research activities, can be significant. UGC, RGC and the Administration therefore see merit in providing extra financial support on a one-off basis to the institutions for the acquisition, replacement, establishment or upgrading of research equipment having regard to the following factors –

- (a) a lot of research equipment of the UGC-funded institutions was acquired in the 1990s. With the rapid advancement in technology, such equipment, despite proper maintenance, has become out-dated and is not able to support latest research methodologies;
- (b) as we have already laid a solid foundation for research work in Hong Kong, our tertiary institutions are ready to conduct more research activities in other areas which require more sophisticated equipment; and
- (c) the number of academics in the UGC-funded sector will increase as we implement a four-year undergraduate programme under the new “3+3+4” academic structure. The increase in academic staff, not just in terms of numbers but also in terms of calibre, will enhance the research capacity of the institutions, and in turn lead to a higher demand for research equipment.

### **Operating Principles**

5. To further enhance the research capability of the UGC-funded institutions, the Administration proposes to provide a one-off grant of \$200 million to the UGC for the establishment of a Special Equipment Grant to enable the

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institutions to acquire, replace, establish or upgrade their research equipment. The UGC-funded institutions will be invited to submit proposals to RGC. All proposals will be assessed by academic experts under a peer review process to ensure that there is a genuine need for the equipment and that the research activities to be supported by the equipment are of a high standard. The broad operating principles for the Special Equipment Grant are as follows –

- (a) the Grant should support acquisition, replacement, establishment or upgrading of new and major research equipment / facilities which should primarily be used for publicly-funded research activities<sup>Note</sup>. Such equipment/facilities should be for communal or shared usage / collaborative research by multiple users within or across the institutions, and should exclude consumables, capital works, and recurrent expenditure;
- (b) the funding required for any single piece of equipment under each application should be at least \$2.5 million (including contributions from institutions as set out in (c) below) and each grant should be capped at a ceiling of \$10 million;
- (c) the institutions should contribute a minimum amount of 25% of the cost of the equipment;
- (d) each institution should be allowed to submit up to a total of ten proposals;
- (e) all requests for the Special Equipment Grant will be considered on their own merits;
- (f) whilst UGC will disburse funds to the institutions within the 2008-09 financial year, to allow time for procurement and payment, they will not be required to spend all such funds within this period. Instead, UGC will specify a period (say before the end of 2010-11 financial year) within which the institutions will have to spend all funds disbursed. Any unspent funds beyond that pre-defined period or provisions surplus to the actual requirements will be returned to the Government; and
- (g) the Special Equipment Grant will not cover any recurrent expenditure (including maintenance) that may have to be borne by the institutions in consequence.

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<sup>Note</sup> In case the equipment is used for non-publicly funded research activities, the institutions will levy overhead charges on such activities, so as to avoid cross-subsidisation of public resources to non-publicly funded activities.

### **The Assessment**

6. The Special Equipment Grant will be open for application to all UGC-funded institutions. All applications will be assessed by peers based on their own academic merits under the same assessment procedure and criteria. To ensure effective use of public resources, uphold the principle of value for money, and promote research excellence, it is important for academic merits to prevail. Grants for equipment will only be approved if there is a demonstrated need for such equipment and that the research performed is of an internationally competitive quality. Such assessment basis is the international norm, which has been adopted by the RGC and widely accepted by the local research community. Many of the RGC external reviewers are renowned overseas academics of high achievement and familiar with research achievements of Hong Kong. This mechanism has served Hong Kong well and should be adopted to assess applications for the Grant.

7. Notwithstanding the above, in order to recognise that not all UGC-funded institutions are at the same stage of development, if the academic research merits of proposals are equal, the RGC will, when considering the final allocation of grant, give special/sympathetic consideration to an application if it comes from institutions which would otherwise receive no funding from the Grant.

### **FINANCIAL IMPLICATIONS**

8. The proposal involves the provision of a one-off grant of \$200 million for the establishment of a Special Equipment Grant by the UGC. The Government will earmark sufficient funds in the 2008-09 Draft Estimates for the proposal. The proposal does not have any recurrent financial implications for the Government. The institutions will have to meet all recurrent expenditure (including maintenance) that may arise in consequence using their recurrent grants, research funding from RGC or other sources of income. The Grant, if approved by the Finance Committee, will be placed under Head 190 University Grants Committee. The institutions will be required to account to the UGC and RGC for the proper use of the grants for their approved purposes.

### **IMPLEMENTATION TIMETABLE**

9. Subject to Members' approval, the Special Equipment Grant will be open for application thereafter.

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**PUBLIC CONSULTATION**

10. The UGC and RGC have discussed this proposal extensively and supported the setting up of this Special Equipment Grant. The Legislative Council Panel on Education was consulted on 10 December 2007 and Members supported the proposal. A Member requested a table comparing the total amount of public and private funding for research expressed as a percentage of the Gross Domestic Product of Hong Kong and other economies. The table is now attached at Encl. Enclosure. As regards another Member's concern that the Grant is potentially disadvantageous to some institutions, the UGC has addressed this concern as set out in paragraphs 6-7 above.

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Education Bureau  
January 2008

### Research & Development (R&D) Funding as a share of GDP in 2005

Economies	Total R&D (% GDP)	Business (% GDP)	Public Sector (% GDP)
Japan <sup>1</sup>	3.53	2.52	1.00
United States <sup>2</sup>	2.68	1.87	0.70
Korea <sup>3</sup>	2.63	2.00	0.60
Switzerland <sup>4</sup>	2.57	1.90	0.62
Australia <sup>5</sup>	1.76	0.95	0.77 <sup>6</sup>
New Zealand <sup>7</sup>	1.17	0.49	0.68
Ireland <sup>8</sup>	1.33	0.89	0.43
Hong Kong, China <sup>9</sup>	0.79	0.41	0.38
Taiwan <sup>10</sup>	2.52	1.69	0.82
Singapore <sup>11</sup>	2.36	1.56	0.48
China (Mainland) <sup>12</sup>	1.34	0.91	0.41

Note – Given that some economies have other minor sources of research funding, the above total R&D funding may be larger than the aggregate of the R & D expenditure incurred by the Business and Public Sectors.

<sup>1</sup> Source: Figures of 2005 from Japan Statistics, Statistic Bureau, Ministry of Internal Affairs and Communications.

<sup>2</sup> Source: Figures of 2004 from OECD Factbook 2006: Economic, Environmental and Social Statistics - ISBN 92-64-03561-3 - © OECD 2006.

<sup>3</sup> Source: Figures of 2003 from OECD Factbook 2006: Economic, Environmental and Social Statistics - ISBN 92-64-03561-3 - © OECD 2006.

<sup>4</sup> Source: Figures of 2000 from OECD Factbook 2006: Economic, Environmental and Social Statistics - ISBN 92-64-03561-3 - © OECD 2006.

<sup>5</sup> Source: Figures of 2004/2005 from Australian Bureau of Statistics (data collected in respect of the year ended 30 June 2005).

<sup>6</sup> Data of Higher Education sector collected in respect of the year ended 31 December 2004.

<sup>7</sup> Source: Research and Development Survey 2006 (reference period: 1 October 2005 to 30 September 2006 for business and public sectors).

<sup>8</sup> Source: Figures of 2006 from Forfas Annual Report 2006.

<sup>9</sup> Source: Figures of 2005 from Hong Kong Monthly Digest of Statistics – Statistics on Research and Development of Hong Kong, 2001 – 2005 (May 2007).

<sup>10</sup> Source: Figures of 2005 Indicators of Science and Technology Taiwan 2006.

<sup>11</sup> Source: Figures of 2005 from National Survey of R&D in Singapore 2005.

<sup>12</sup> Source: Figures of 2005 from National Bureau of Statistics of China.