# 立法會 Legislative Council

LC Paper No. FC317/15-16 (These minutes have been seen by the Administration)

Ref: FC/1/1(33)

### **Finance Committee of the Legislative Council**

## Minutes of the 71<sup>st</sup> meeting held at Conference Room 1 of the Legislative Council Complex on Friday, 10 June 2016, at 3:00 pm

### **Members present:**

Hon CHAN Kin-por, BBS, JP (Chairman)

Hon CHAN Kam-lam, SBS, JP (Deputy Chairman)

Hon LEE Cheuk-yan

Hon James TO Kun-sun

Hon TAM Yiu-chung, GBS, JP

Hon Abraham SHEK Lai-him, GBS, JP

Hon Tommy CHEUNG Yu-yan, GBS, JP

Hon WONG Kwok-hing, BBS, MH

Prof Hon Joseph LEE Kok-long, SBS, JP, PhD, RN

Hon Jeffrey LAM Kin-fung, GBS, JP

Hon Andrew LEUNG Kwan-yuen, GBS, JP

Hon WONG Ting-kwong, SBS, JP

Hon Cyd HO Sau-lan, JP

Hon Starry LEE Wai-king, JP

Dr Hon LAM Tai-fai, SBS, JP

Hon CHAN Hak-kan, JP

Dr Hon Priscilla LEUNG Mei-fun, SBS, JP

Hon CHEUNG Kwok-che

Hon IP Kwok-him, GBS, JP

Hon Paul TSE Wai-chun, JP

Hon Alan LEONG Kah-kit, SC

Hon LEUNG Kwok-hung

Hon Albert CHAN Wai-yip

Hon WONG Yuk-man

Hon Claudia MO

Hon Michael TIEN Puk-sun, BBS, JP

Hon James TIEN Pei-chun, GBS, JP

Hon NG Leung-sing, SBS, JP

Hon Steven HO Chun-yin, BBS

Hon WU Chi-wai, MH

Hon YIU Si-wing, BBS

Hon Gary FAN Kwok-wai

Hon MA Fung-kwok, SBS, JP

Hon Charles Peter MOK, JP

Hon CHAN Chi-chuen

Hon CHAN Han-pan, JP

Dr Hon Kenneth CHAN Ka-lok

Hon CHAN Yuen-han, SBS, JP

Hon LEUNG Che-cheung, BBS, MH, JP

Hon Alice MAK Mei-kuen, BBS, JP

Dr Hon KWOK Ka-ki

Hon Dennis KWOK

Hon Christopher CHEUNG Wah-fung, SBS, JP

Dr Hon Fernando CHEUNG Chiu-hung

Hon SIN Chung-kai, SBS, JP

Hon IP Kin-yuen

Dr Hon Elizabeth QUAT, JP

Hon Martin LIAO Cheung-kong, SBS, JP

Hon POON Siu-ping, BBS, MH

Hon TANG Ka-piu, JP

Dr Hon CHIANG Lai-wan, JP

Ir Dr Hon LO Wai-kwok, SBS, MH, JP

Hon CHUNG Kwok-pan

Hon Christopher CHUNG Shu-kun, BBS, MH, JP

Hon Tony TSE Wai-chuen, BBS

#### **Members absent:**

Hon Albert HO Chun-yan

Hon LEUNG Yiu-chung

Dr Hon LAU Wong-fat, GBM, GBS, JP

Hon Emily LAU Wai-hing, JP

Hon Frederick FUNG Kin-kee, SBS, JP

Hon Vincent FANG Kang, SBS, JP

Dr Hon LEUNG Ka-lau

Hon WONG Kwok-kin, SBS

Hon Mrs Regina IP LAU Suk-yee, GBS, JP Hon Frankie YICK Chi-ming, JP Hon Kenneth LEUNG Hon KWOK Wai-keung Dr Hon Helena WONG Pik-wan Hon Alvin YEUNG Ngok-kiu

### **Public officers attending:**

Ms Elizabeth TSE Man-yee, JP Permanent Secretary for Financial

Services and the Treasury (Treasury)

Ms Esther LEUNG, JP Deputy Secretary for Financial

Services and the Treasury (Treasury)1

Mr Alfred ZHI Jian-hong Principal Executive Officer (General),

Financial Services and the Treasury

Bureau (The Treasury Branch)

Mr CHEUK Wing-hing, JP Permanent Secretary for Innovation

and Technology

Mrs Millie NG Deputy Secretary for Innovation and

**Technology** 

Ms Annie CHOI, JP Commissioner for Innovation and

**Technology** 

Mr Johann C.Y. WONG, JP Deputy Commissioner for Innovation

and Technology

Mr Bryan K.F. HA Assistant Commissioner for Innovation

and Technology (Funding Schemes)

### **Clerk in attendance:**

Ms Anita SIT Assistant Secretary General 1

### **Staff in attendance:**

Mr Derek LO Chief Council Secretary (1)5

Mr Raymond SZETO Council Secretary (1)6

Mr Frankie WOO Senior Legislative Assistant (1)3

Ms Michelle NIEN Legislative Assistant (1)5

Item No. 1 - FCR(2016-17)36

RECOMMENDATIONS OF THE ESTABLISHMENT SUBCOMMITTEE MADE AT ITS MEETINGS HELD ON 23 AND 25 MAY 2016

EC(2015-16)21

HEAD 49 – FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT Subhead 000 – Operational expenses

EC(2016-17)1

HEAD 141 – GOVERNMENT SECRETARIAT: LABOUR AND WELFARE BUREAU

Subhead 000 – Operational expenses

The Chairman advised that this item sought the approval of the Finance Committee ("FC") to the funding proposals of the Establishment Subcommittee made at its meetings held on 23 and 25 May 2016, i.e. recommendations contained in papers No. EC(2015-16)21 and EC(2016-17)1. No member requested separate voting for the relevant recommendations at the FC meeting.

2. There being no question from members, the Chairman put the item to vote. The Chairman considered that amongst the members who had voted, the majority were in favour of the item. He declared that the Committee approved the item.

Item No. 2 - FCR(2016-17)37

RECOMMENDATIONS OF THE PUBLIC WORKS SUBCOMMITTEE MADE AT ITS MEETINGS HELD ON 4, 18 AND 21 MAY 2016

PWSC(2016-17)8

**HEAD 711 – HOUSING** 

Transport – Interchanges/bus termini

82TI – Public Transport Interchange at Northwest Kowloon Reclamation Site 6, Sham Shui Po PWSC(2016-17)16

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

**Education Subventions** 

27EA – Extension and conversion to St. Paul's Primary Catholic School at Wong Nai Chung Road, Happy Valley

PWSC(2016-17)19

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Civil Engineering – Land development

**765CL – Development of Anderson Road Quarry Site – Site Formation and Associated Infrastructure Works** 

PWSC(2016-17)11

**HEAD 703 – BUILDINGS** 

Recreation, Culture and Amenities – Open spaces

456RO – Reprovisioning of Shing Yip Street Rest Garden as Tsui Ping River Garden

PWSC(2016-17)17

**HEAD 711 – HOUSING** 

**Transport – Footbridges and pedestrian tunnels** 

187TB - Footbridge improvement works at Siu Hong Road, Tuen Mun

PWSC(2016-17)18

**HEAD 711 – HOUSING** 

Recreation, Culture and Amenities – Sports facilities

289RS – Sports centre at Choi Wing Road, Kwun Tong

PWSC(2016-17)15

**HEAD 711 – HOUSING** 

**Civil Engineering – Land development** 

777CL – Road and infrastructure works for development at Lin Cheung Road, Sham Shui Po

**Civil Engineering – Land development** 

783CL – Infrastructure works for development at Queen's Hill, Fanling

3. <u>The Chairman</u> advised that this item sought the approval of the Committee to the recommendations of the Public Works Subcommittee ("PWSC") made at its meetings held on 4, 18 and 21 May 2016,

i.e. recommendations contained in the papers No. PWSC(2016-17)8, 11, 15 – 19. No member requested separate voting for the relevant recommendations at the FC meeting. The Chairman declared that he was a paid consultant of Munich Reinsurance Company.

4. There being no question from members, the Chairman put the item to vote. The Chairman considered that amongst the members who had voted, the majority were in favour of the item. He declared that the Committee approved the item.

Item No. 3 – FCR(2016-17)38 INNOVATION AND TECHNOLOGY FUND HEAD 111 – INNOVATION AND TECHNOLOGY

New Subhead – "Midstream Research Programme for Universities (Block vote)"

# **HEAD 184 – TRANSFERS TO FUNDS Subhead 992 – Payment to the Innovation and Technology Fund**

- 5. <u>The Chairman</u> advised that this item sought the approval of the Committee to
  - (a) the creation of a new block vote subhead under the Innovation and Technology Fund ("ITF"), with a commitment of \$2 billion, for financing projects under the Midstream Research Programme ("MRP") for universities funded by the University Grants Committee ("UGC"); and
  - (b) give effect to (a) above, a supplementary provision of \$2 billion under Head 184 Subhead 992 Payment to the Innovation and Technology Fund.
- 6. The Innovation and Technology Bureau ("ITB") had consulted the Panel on Commerce and Industry ("CI Panel") on the relevant proposals on 19 January and 17 May 2016. At the invitation of the Chairman, Mr WONG Ting-kwong, Chairman of CI Panel, briefed the Committee on the item. Mr WONG said that CI Panel supported in principle the injection of \$2 billion to ITF as endowment capital for generating investment income to establish MRP for UGC-funded institutions, so as to encourage local universities to conduct more inter-disciplinary and translational research work in key technology areas for making further downstream research and development ("R&D") or product development. A member expressed concern about the

stability of funding to be provided by MRP given the fluctuations in investment returns form time to time, and whether the said funding would overlap with some other fundings currently provided by UGC and the Research Grants Council ("RGC"). Some members were also concerned whether the shift of focus to midstream research as advocated by MRP would affect the basic research work of local universities.

### Promoting cross-institutional collaboration in science and research

- 7. <u>Dr Kenneth CHAN</u> pointed out that there had been vicious competition among institutions in seeking research funding from UGC. He enquired how MRP could encourage cross-institutional collaboration in science and research, so as to achieve a synergy effect. In response, <u>Permanent Secretary for Innovation and Technology</u> ("PS/IT") said that each R&D project was subject to a funding ceiling of \$5 million in general. However, in order to encourage cooperation among institutions, projects involving collaboration of researchers across multiple disciplines or research institutions would be accorded priority consideration and their funding ceiling would be increased to \$10 million as well.
- 8. <u>Dr Kenneth CHAN</u> also pointed out that the prevailing promotion and appraisal system for university researchers placed greater emphasis on their achievements from basic research rather than midstream and applied research. He queried whether MRP could encourage university researchers to conduct midstream and applied researches.
- 9. <u>Ir Dr LO Wai-kwok</u> declared that he was a member of RGC in the past few years. <u>Ir Dr LO</u> pointed out that RGC placed more emphasis on academic standards (such as whether or not academic articles had been published) when vetting funding application for research projects. As such, universities had not been keen on conducting applied research. He enquired about the response of university researchers towards the establishment of MRP and pointed out that the effectiveness of MRP was doubtful if it failed to win their support.
- 10. <u>PS/IT</u> remarked that at present, in so far as the assessment system for university researchers or the UGC's research funding mechanism was concerned, greater emphasis was placed on academic achievements and published articles of the projects. ITB would liaise with the Education Bureau ("EB") to find out if it was possible to include work and achievement of midstream applied research as factors for evaluation. He remarked that the Administration had consulted the management and researchers of UGC-funded institutions on the proposed MRP and the institutions expressed support for the programme.

At the request of Dr Kenneth CHAN, the Administration undertook to provide supplementary information on the gist of discussion between ITB and EB regarding the promotion of midstream research by universities.

[Post-meeting note: Relevant information provided by the Administration issued members vide LC Paper was to No. FC274/15-16(01) on 7 July 2016.]

Dr Kenneth CHAN pointed out that when applying for funding from 11. MRP, the Education University of Hong Kong ("EUHK") and the Lingnan University ("LU") might be worse off than other universities because they both had no faculty of science on offer. <u>CIT</u> responded that the preliminary research themes of the proposed MRP might be related to smart city, healthy robotics technology. **MRP** particularly encouraged cross-institutional and inter-disciplinary applications. EUHK and LU might collaborate with other universities in MRP funding applications. Furthermore, the two universities both offered science subjects and one of them had also indicated the intention to strengthen its research efforts on information technology.

### Commercialization of research outcomes

- 12. <u>Mr WU Chi-wai</u> was concerned whether the research topics selected by the Administration for MRP could help promote re-industrialization in Hong Kong and what corresponding policies would be put in place, such as whether capability of the research project in promoting local re-industrialization would be considered as a major factor for funding approval.
- 13. In response, <u>PS/IT</u> said that the research projects supported by MRP were all within areas considered as having development potential by local research institutions. With regard to policy coordination, the Hong Kong Science and Technology Parks Corporation would develop multi-storey, high-efficiency smart buildings in industrial estates to promote smart manufacturing, and robotics technology was closely related to advanced manufacturing industry too. He further said that the applicant should state in the application the downstream research and commercialization plan of the research project, which would be one of the major vetting criteria of the application. MRP did not require projects seeking funding to have industry sponsorship, yet sponsored projects would be more desirable.

- 14. Mr Charles Peter MOK enquired how MRP could promote applied research and commercialization of research outcomes. In response, <u>CIT</u> said that funded programmes of ITF mainly financed research on the application of R&D projects and product development, where industry sponsorship was normally required. While MRP did not require industry sponsorship for a project, its purpose was to encourage UGC-funded institutions to focus more on midstream research, so as to make available more research outcomes for further downstream research in order to develop new products or services.
- 15. Mr IP Kwok-him remarked that local research outcomes were often not adopted by local Government departments due to the procurement constraints stipulated under the World Trade Organization Agreement on Government Procurement. He enquired if the Public Sector Trial Scheme ("PSTS") could help apply local research outcomes to local public sector and whether there was any example of such projects.
- 16. PS/IT responded that PSTS provided additional funding of up to 100% of the original R&D cost to completed R&D projects funded by ITF for the production of tools/prototypes/samples and the conducting of trials in the public sector. CIT added that PSTS made it possible for new technologies to be tried in the public sector on a small scale. To quote an example of such projects, the Hong Kong Research Institute of Textiles and Apparel, Hong Kong Applied Science and Technology Research Institute and the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies had collaborated in research and successfully developed a type of vest designed for use by dementia patients. The vest would be made of Nu-Torque cotton yarn and fitted with radio-frequency identification tracking system, and would be put to use in local welfare organizations on a trial basis.
- 17. Mr Albert CHAN considered that the Administration's R&D policy failed to ensure that funded research projects of the proposed MRP could integrate with local industries, promote local economic development and create job opportunities. Mr LEUNG Kwok-hung expressed similar views. Mr CHUNG Kwok-pan urged the Administration to formulate policy to assist related industries to return to Hong Kong, so as to enable local manufacturing of products developed from local research outcomes and energize development of local industries.

### Composition and appointment of expert panels

- 18. <u>Mr LEUNG Kwok-hung</u> enquired what criteria the Administration would adopt for appointment of members to expert panels under MRP and how such members could be identified. He was concerned about the transparency of the appointment system.
- 19. In response, <u>PS/IT</u> said that the expert panels would comprise experts from related academic disciplines or industries. Apart from their academic background and qualifications, the Administration would also take into consideration their past contributions in related industries and academic fields, as well as their performance in public services. He pointed out that Innovation and Technology Commission had knowledge about the experts in various technological areas, and would submit proposed membership list of the expert panels for ITB's consideration.
- Mr Albert CHAN opined that it would be difficult to convince the public to support the funding proposal given the many scandals involving universities in recent years. In response, <u>PS/IT</u> said that there had been outstanding R&D outcomes from local universities. For instance, at the International Exhibition of Inventions of Geneva held this year, the Hong Kong Baptist University was awarded the Grand Prix for the technology it developed for making ultra-hard scratch resistant films. Moreover, the research project of the Hong Kong Polytechnic University had also won award.
- 21. Mr Albert CHAN worried that the supporters of the incumbent Chief Executive would be appointed to the expert panels under MRP, resulting in abuse of power for personal gains and transfer of benefits. Dr KWOK Ka-ki expressed concerned about the neutrality of the expert panels. He enquired how the Administration could ensure funding applications of institutions were given fair consideration without political censorship. Mr LEUNG Kwok-hung and Dr KWOK Ka-ki asked about the relative ratio of overseas experts in the proposed expert panels.
- 22. <u>PS/IT</u> reiterated that MRP aimed to enhance midstream research capabilities of institutions, so as to improve the prevailing situation of insufficient applied research due to lopsided emphasis on basic research. MRP could encourage institutions to focus more on midstream research, so that more research outcomes would be available for further downstream research or commercialization. He hoped that members would not view MRP from an over-politicized perspective. He also said that there was no specific ratio of overseas experts in the proposed expert panels.

23. <u>CIT</u> added that at present there were expert panels in various technology areas set up under ITF to vet applications, whose membership include reputable scholars in respective fields. The expert panels would give their evaluation based on the merits of the project under application. Funding approval would be a decision made by the entire panel rather than individual members. Should any member have direct interest in a project under application, he would not be allowed to take part in the discussion and decision of the review. MRP would adopt the above mechanism to ensure that applications were vetted in a fair and impartial manner.

### Proposed research topics

- 24. Mr SIN Chung-kai noted that robotics technology was one of the preliminary topics of the proposed MRP. He enquired if the Administration had assessed the midstream research capability of local institutions in the area of robotics technology, and also, compared with the rest of the world, what role local institutions could play in the midstream research of the relevant technological area.
- 25. In response, <u>CIT</u> said that as a technical aspect, robotics technology covered automation in industrial manufacturing. Local universities, especially those with engineering subjects on offer, had all been engaging in research on robotics technology. She pointed out that when picking research topics for MRP, the research capability of local universities in the relevant technological area would be taken into account.
- 26. Mr CHUNG Kwok-pan pointed out that unlike R&D Centres which only focused on research projects of a particular industry, universities engaged in a very broad scope of research projects that were applicable to various industries. He was concerned whether members of the expert panels under MRP had extensive knowledge about technologies and industries in order to review project applications by institutions.
- 27. In response, <u>CIT</u> said that there would be specific research topics under the proposed MRP, and project applications for each research area would be vetted by the respective expert panel. The Administration hoped to maximize the expert panels' scope of expertise and enlist relevant experts and trade practitioners to advise on the application of the relevant technology.

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28. <u>Dr KWOK Ka-ki</u> enquired whether MRP would finance researches related to medical service for the elderly and the chronically ill (such as pharmacology and medical technologies) for the benefits of local patients. In response, <u>PS/IT</u> said that one of the preliminary research topics of MRP was healthy ageing, which would cover research projects related to the scope of biotechnology and medicine technology.

### **Funding Mechanism**

- 29. Mr IP Kwok-him enquired whether MRP-funded research projects were required to pay back the funding amount to the Government should the outcome was successful. In response, <u>PS/IT</u> said that the intellectual property rights ("IPRs") of the projects would be vested with the lead applicant. There was no need to return funding to the Government regardless of the outcome of the project.
- 30. Mr CHUNG Kwok-pan noted that application under MRP was only open to UGC-funded institutions. He enquired whether the Administration would provide similar funding to R&D Centres under ITF to undertake midstream research. CIT said that ITF subsidized R&D Centres to take on midstream, applied and product development researches. Since universities used to focus more on basic research, the proposed MRP aimed primarily to encourage institutions to undertake inter-disciplinary or cross-institutional midstream research of specific research topics.

### Control Mechanism

31. <u>Dr Fernando CHEUNG</u> mentioned that there had been a case where the management of a university set up a limited company in British Virgin Islands to hide the pecuniary interests obtained from commercialization of research outcomes. He considered that the control mechanism should start from the university governance level and universities should be asked to account for the pecuniary and commercial interests brought about by the companies set up for promoting commercialization of the research outcomes. <u>Dr CHEUNG</u> also pointed out that researchers were often unable to share the benefits brought about by commercialization of research outcomes.

- 32. In response, CIT said that the IPRs of the funded projects would be vested with the lead applicant. Relevant institutions were encouraged to promote their research outcomes to the industries concerned after project completion by means of licensing or contract services. Universities could also set up their own start-up companies to promote commercialization of research outcomes of projects and the actual arrangement of which should be decided by To respect autonomy of universities, the proposed universities on their own. MRP would not impose restrictions in this regard. CIT also pointed out that in recent years, university research teams and universities were getting more and more mature in setting up companies jointly to promote commercialization of research outcomes. Researchers could now share the benefits brought about by commercialization of research outcomes through the ways described above.
- 33. On the financial monitoring of projects, <u>PS/IT</u> advised that the lead applicant would be required to sign a project agreement with the Government. All approved projects would be monitored by ITC against the milestones stated in the applications. Universities had to submit progress reports periodically until project completion. Upon project completion, universities should also submit final reports and audited accounts of the projects to ITC. Moreover, ITC would also track the project outcomes. Two years after completion of a research project, the university would be required to file an evaluation report to ITC, indicating whether and how the project had led to further downstream R&D activities, which in turn might lead to the development of new products or services.
- Mr CHAN Chi-chuen enquired what criteria the Administration would use to determine funding grant to approved projects. CIT said in response that, subject to the fulfilment of the approved project milestones, ITC would disburse funds by instalments in accordance with the prescribed cash flow schedule of each project. In case of non-compliance with the funding guidelines or where project progress was unsatisfactory, ITC might withhold disbursement of funds or terminate the project where appropriate. At the request of Mr CHAN, the Administration undertook to provide information on cases under ITF where disbursement of funds was suspended or terminated due to failure to meet project milestones.

[*Post-meeting note:* The relevant information provided by the Administration was issued to members vide LC Paper No. FC274/15-16(01) on 7 July 2016.]

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### Manpower for handling applications

- 35. Given that some universities and research institutions reflected that ITC had been slow in vetting projects, Mr Charles Peter MOK enquired if ITC had sufficient manpower and resources to handle MRP applications. In response, CIT said that the Administration already earmarked \$3.8 million in the 2016-2017 Estimates to meet recurrent expenditure of MRP, which would mainly be used for employing staff to support the work of the MRP Secretariat.
- 36. The meeting was adjourned at 5:00 pm.

<u>Legislative Council Secretariat</u> 19 September 2016