

For discussion

on 15 January 2008

Legislative Council Panel on Commerce and Industry

Improvements to the University-Industry Collaborative Programme

under the Innovation and Technology Fund

Introduction

At the Panel meeting held on 17 July 2007, Members considered proposals by the Administration to relax the geographical restrictions of the University-Industry Collaboration Programme (UICP) under the Innovation and Technology Fund [LC Paper No. CB(1)2088/06-07(05)]. Pursuant to Members' comments, the Administration conducted a public consultation on the concerned proposals. This paper reports the outcome of the public consultation.

Background

2. At the panel meeting on 17 July 2007, the Administration proposed to the Panel relaxing the geographical restrictions of the UICP to provide further impetus to the development of applied scientific research. Specifically, the proposed relaxation measures are -

- (a) to allow a non-local university to undertake the major part or the whole of the R&D work of a project; and
- (b) to allow a major part or the whole of the R&D work of a project to be conducted outside Hong Kong.

3. A Member opined that as Hong Kong adopted a low threshold for foreign capital to set up registered companies in Hong Kong, the proposed relaxation would open up opportunities for foreign-capital-owned-local-companies to apply for public funding under UICP to engage non-local universities to undertake the R&D work. The Member was concerned that such an arrangement would lead to abuse and defeat the purpose of the Programme, i.e. to encourage a stronger culture of R&D in Hong Kong and to accumulate human capital for the territory through the process.

4. The Administration undertook to consult concerned stakeholders and further deliberate on the proposal. The Administration accordingly issued a consultation paper on the subject. The one-month consultation was conducted between October and November 2007. 20 local education, trade and professional bodies were invited to offer their comments, and the consultation paper was posted on the Administration's website for comments by the public at large. A copy of the consultation paper is at [Annex I](#).

Comments received

5. A total of 16 responses have been received. In essence, there is general support for the relaxation measures. The trade and professional bodies welcomed the proposals which they considered would enable a local company to leverage on an expanded pool of expertise and resources.

6. The local academic institutions also responded positively to the relaxation measures in general. Nevertheless, some universities were concerned that their role in the UICP might diminish, which would not be conducive to the accumulation of local human capital in the long run.

7. Apart from the relaxation measures, some respondents also took the opportunity to comment on other aspects of the UICP and made suggestions on other means to encourage corporate R&D.

8. A summary of the comments received is at **Annex II**.

Conclusion

9. In the light of the comments received, Members' further views are sought on whether the scheme should be relaxed as proposed in LC Paper No. CB(1)2088/06-07(05).

Commerce and Economic Development Bureau

January 2008

**A Consultation Paper on the Proposed
Relaxation Measures of
University-Industry Collaboration
Programme under the Innovation and
Technology Fund**

Innovation and Technology Commission

October 2007

Proposed Relaxation Measure of University-Industry Collaboration Programme under the Innovation and Technology Fund

Purpose

The Financial Secretary announced in the 2007 Budget that the Administration intends to relax the restrictions of the University-Industry Collaboration Programme (UICP) so as to provide further impetus to the development of applied research. This consultation paper invites views on the proposed relaxation of the geographical requirements of the programme.

Background

2. The Innovation and Technology Fund (ITF) was launched in 1999 to finance projects that contribute to innovation or technology upgrading in industry, as well as those essential to the development of industry. UICP is one of the key funding programmes under the ITF. The programme aims to stimulate private sector interest in research and development (R&D) through leveraging on the knowledge and resources of local universities.

Overview

3. The UICP was established to encourage enterprises and local universities to collaborate and undertake applied R&D so as to accumulate human capital through the process. The current mode of operation of the UICP is as follows –

- (a) a private company incorporated in Hong Kong and with substantive connections with Hong Kong, in conjunction with a local university, may apply for UICP grants;
- (b) the majority of the R&D to be undertaken has to be conducted by the concerned local university in Hong Kong;

(c) the participating company has to bear no less than 50% of the project cost in cash; and

(d) disbursement of the UICP grant is subject to the applicant company having disbursed its share to the concerned local university.

4. Since the establishment of UICP, 258 UICP applications have been received. By the end of July 2007, 165 projects have been given funding support, involving a total commitment of \$186.5 million.

5. Details on the modus operandi of the UICP and the statistical figures of the approved projects are set out in the Annexes -

Annex A - Current Mode of Operation of UICP;

Annex B - Statistics of Applications Received and Approved Projects (up to 31 July 2007); and

Annex C – Statistics of Approved Projects among different Technology Areas (as at 31 July 2007)

Proposed Relaxation Measures

6. UICP is a useful tool to foster cooperation between the commercial sector and the academia and in turn brings benefit to both parties. To provide further impetus to applied R&D, the Administration proposes that the geographical requirements of Matching Grant for Joint Research Scheme¹ under UICP be relaxed by -

¹ There are three Schemes under UICP with different purposes and beneficiaries, namely Teaching Company Scheme; Matching Grant for Joint Research and Industrial Research Chair Scheme. Details of each Scheme are outlined in Annex A. The proposals set out in this paper do not apply to the Teaching Company Scheme and Industrial Research Chair Scheme.

- (a) allowing the applicant company to co-operate with local universities or non-local universities to undertake the R&D work of a project; and
- (b) allowing a substantial part of the R&D work of a project to be conducted outside Hong Kong, where appropriate.

7. Under the proposals, local private companies will have a wider choice of their collaborating partners. Apart from local universities, part of the R&D work of a project may be undertaken by universities in the Mainland and overseas, which may own background intellectual property (IP) and technical expertise that is not available locally. The new regime will give more flexibility to the local companies to leverage on the expertise of non-local universities and thereby enhance the attractiveness and effectiveness of the programme.

8. Whilst local universities will continue to play an important role in the R&D projects, the participation of non-local universities in the project will also bring R&D merits to the local enterprise and academia through broadening their scientific and technology knowledge base and networks. The participating companies will be able to better adapt to new technological requirements and increase their competitiveness in the ever changing market. The new regime will also enhance the accumulation of human capital in applied research through the interaction between the local and non-local universities, and may encourage non-local universities to engage in more technology transfer activities with local companies, thereby strengthening Hong Kong's position as a regional technology servicing hub.

9. To encourage the application of knowledge developed from UICP projects to the industries in Hong Kong and the Pearl River Delta (PRD) region, when considering project applications, funding priority will be given to those projects that can contribute substantially to innovation and technology upgrading in the local economy and the PRD region.

Monitoring Mechanism

10. We propose the following monitoring mechanism to be applied to projects involving non-local R&D activities under the relaxed regime -

(a) The eligibility criteria for the applicant company will remain unchanged, i.e. only locally incorporated company with substantial connection to Hong Kong will be eligible to apply under the Scheme. This will deter non-local companies from merely registering in Hong Kong for the purpose of applying for UICP funding, without doing any substantial business in Hong Kong. In demonstrating a “substantial connection” to Hong Kong, consideration will be given to, inter alia, the following factors -

(i) whether the local applicant company has a significant proportion of its research, design, development, production or management activities located in Hong Kong;

(ii) whether the local applicant company has engaged in substantive business operations for 3 years or more;

(iii) any overseas company, representative office, liaison office, “mail box company” and company specifically established for providing certain goods or services to its parent company, though registered in Hong Kong, will not be regarded as companies with substantial connections to Hong Kong.

(b) The Innovation and Technology Commission (ITC) will conduct visits to the local applicant company, if necessary, during the project vetting stage for a better understanding and assessment of the eligibility and capability of the applicant company.

(c) ITC will sign a legally binding agreement with the local applicant company and hold it responsible for compliance with ITF requirements and for indemnifying the Government in the event of misuse of fund. Instead of the collaborating universities (as under the existing arrangement where the collaborating universities are local ones), the project coordinator, who is responsible for the overall coordination of the project, should be the local applicant company.

(d) The ITF funding and the company's contribution shall be paid into a risk-free interest-bearing account held by the local applicant company specifically for processing all receipts and payments of the UICP project.

(e) The local applicant company will need to submit progress reports, incorporating the financial position of the project and audited accounts, to ITC. The ITF funds will be disbursed to the local applicant company in arrears, upon the prescribed milestones having been completed satisfactorily.

(f) ITC will organise visits to or meetings with the local applicant company at regular intervals to examine the progress of the project. The applicant company will be responsible for making available to the ITC the necessary information on the research project from both the local and the non-local universities.

Financial Implications

11. The above proposals are expected to encourage more companies to apply for UICP funding. However, it is difficult to have an accurate estimate of the financial implication at this stage because the amount of actual funds approved would depend on the response of the industry and quality of the proposals.

12. The average funding approved under UICP for the period 2000-2006 is \$26.17 million per year. If we take this as the basis and assume that funding approval would increase by 50%, the estimated financial implication for the next five years will be around \$70 million ($\$26.17 \text{ million} \times 50\% \times 5$). On this basis, we estimate that the ITF should have sufficient funds to cover additional funding in this order in the next five years.

13. In implementing the proposal, additional manpower requirements and departmental costs may be incurred. ITC will try to absorb these additional expenses within the existing resources. In the light of actual operational experience, the financial position will be reviewed in two years' time.

Implementation

14. The Administration plans to implement the above proposal in early 2008.

Invitation for Comments

15. The Administration would like to seek interested parties' views on the proposed relaxation measures. Interested parties are invited to send their views **before 4 November 2007** to the Innovation and Technology Commission by mail, fax or e-mail

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Mailing address: Innovation and Technology Commission
20/F, Wu Chung House, 213 Queen's Road East,
Wanchai, Hong Kong.

E-mail address: itc_consultation@itc.gov.hk

Fax Number: 2957 8726

16. This consultation paper is available at the following websites:
<http://www.itf.gov.hk/eng/Consultation.asp> (for English version),
<http://www.itf.gov.hk/tc/Consultation.asp> (for Traditional Chinese version) and
<http://www4.itf.gov.hk/unigb/www.itf.gov.hk/tc/Consultation.asp> (for Simplified Chinese version).

Innovation and Technology Commission

October 2007

University-Industry Collaboration Programme

University-Industry Collaboration Programme (UICP) aims to increase the added value, productivity and competitiveness of our economic activities. There are three schemes under this programme -

(a) Teaching Company Scheme

The Teaching Company Scheme aims to take on graduate research studies for specific research and development (R&D) projects with a finite duration. The university will provide teaching guidance for the students in handling the projects. The participating companies and Innovation and Technology Commission Fund will each bear half of the costs for hiring the students.

(b) Matching Grant for Joint Research

The aim of the Matching Grant for Joint Research is to foster private enterprise to collaborate with universities in proprietary R&D projects. The university's researchers should be the core project team members and should conduct a major part of the R&D work of the project. In principle, the intellectual property rights of the project results will rest with the applicant company. The participating company is required to bear half of the costs of the projects.

(c) Industrial Research Chair Scheme.

The objective of the Industrial Research Chair Scheme is to assist universities and industry to develop research efforts in technology fields that are not yet developed in Hong Kong but for which there is good development potential in the longer term. The project should be in the natural science and engineering field. Funding will be provided on a matching basis which could also cover the salary of the chairholder for a finite duration. This chairholder will mainly conduct research and will accept a light teaching load.

Current Mode of Operation

2. Under the current mode of operation of the UICP, the Government enters into contract agreement with both the University and the applicant company. The form of funding support is on a matching basis, subject to cash contribution by the applicant company amounting to no less than 50% of the project cost. The disbursement of the UICP grant is subject to the applicant company having disbursed its share to the concerned local university.

3. The ITF funding and the company's contribution shall be paid into a risk-free interest bearing account under the University's name specifically for processing all receipts and payments of the ITF projects. The University shall assign a unique account code specifically for processing all income and expenditure relating to each ITF project.

4. All ITF funding and government share of the interest generated shall be held by the University as trustee for the Government. The latter and any residual ITF funding shall be paid over to the Government on the completion or termination of the ITF project.

5. The participating company and its partner university have to jointly submit ITC half-yearly progress reports as well as annual/final audited accounts for each project.

**Innovation and Technology Fund -
University-Industry Collaboration Programme (UICP)
Statistics of Applications Received and Approved Projects
(As at 31 July 2007)**

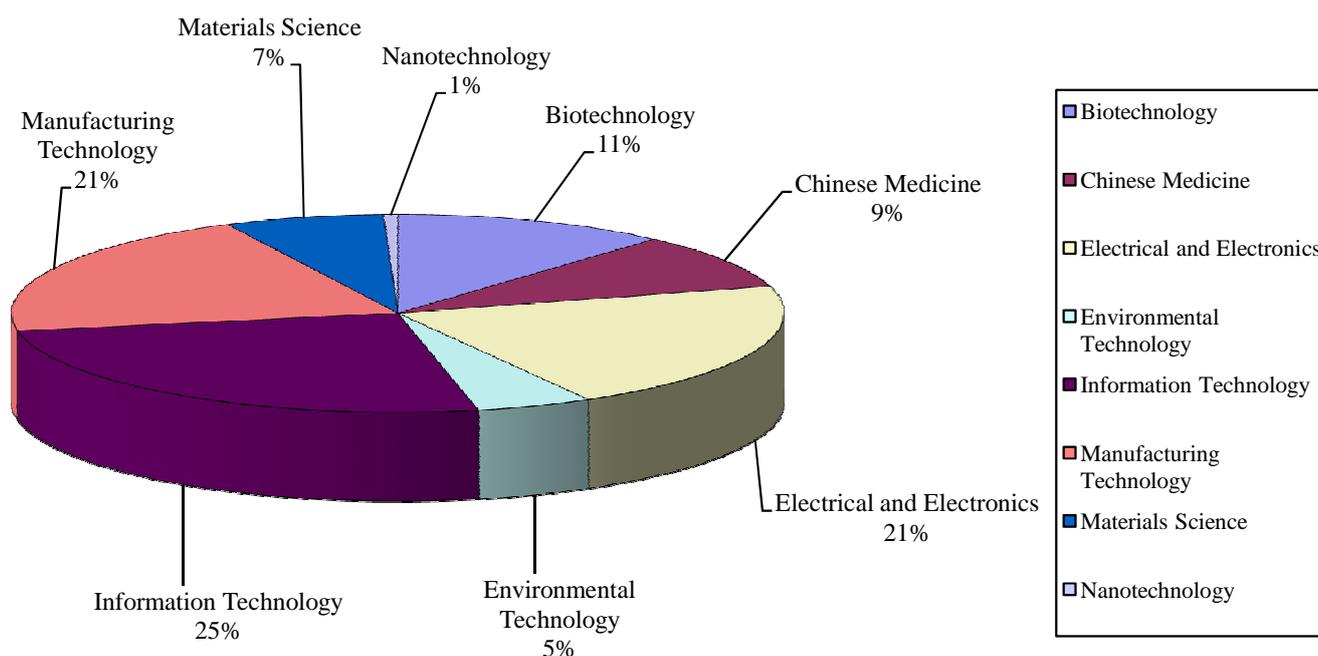
Year	Industrial Research Chair Scheme				Matching Grant for Joint Research Scheme				Teaching Company Scheme				Total			
	Applications Received		Projects Approved		Applications Received		Projects Approved		Applications Received		Projects Approved		Applications Received		Projects Approved	
	Number	Requested Amount (\$M)	Number	Approved Amount (\$M)	Number	Requested Amount (\$M)	Number	Approved Amount (\$M)	Number	Requested Amount (\$M)	Number	Approved Amount (\$M)	Number	Requested Amount (\$M)	Number	Approved Amount (\$M)
1999	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	0	0.0	2	5.0	0	0.0
2000	2	3.2	2	2.9	46	159.4	28	59.4	15	3.8	10	2.2	63	166.4	40	64.5
2001	1	0.6	1	0.6	27	58.7	16	29.9	16	2.9	14	2.4	44	62.2	31	32.9
2002	0	0.0	0	0.0	21	53.5	15	19.5	12	2.2	10	1.9	33	55.7	25	21.4
2003	0	0.0	0	0.0	23	64.1	18	44.5	13	2.2	10	1.8	36	66.3	28	46.3
2004	0	0.0	0	0.0	31	49.5	10	9.2	16	2.9	12	2.2	47	52.4	22	11.4
2005	0	0.0	0	0.0	6	13.1	6	5.2	11	1.8	6	0.9	17	14.9	12	6.1
2006	0	0.0	0	0.0	3	5.1	0	0.0	6	1.0	3	0.5	9	6.1	3	0.5
2007*	0	0.0	0	0.0	3	4.3	1	2.8	4	0.7	3	0.5	7	5.0	4	3.3
Total	3	3.8	3	3.6	162	412.5	94	170.4	93	17.6	68	12.5	258	433.9	165	186.5

*Notes: Up to 31st July 2007

**Innovation and Technology Fund -
University-Industry Collaboration Programme (UICP)
Statistics of Approved Projects among different Technology Areas
(As at 31 July 2007)**

Technology Area	Projects Approved	
	Approved Number	Approved Amount (\$'000)
Biotechnology	19	30,504.9
Chinese Medicine	15	26,897.3
Electrical and Electronics	35	31,326.7
Environmental Technology	8	19,603.2
Information Technology	42	49,150.1
Manufacturing Technology	34	20,827.9
Materials Science	11	6,642.0
Nanotechnology	1	1,500.0
Total	165	186,452.0

UICP Statistics (Among Different Technology Areas)



Trade Associations

Organizations	Comments/Suggestions
1. Federation of Hong Kong Industries	(i) Fully support (ii) Suggest Government to introduce “tax incentives” to encourage more private companies to invest in R&D, design and brand building.
2. The Chinese General Chamber of Commerce	(i) Support (ii) Suggest a review on application requirements of the Innovation Technology Support Programme (ITSP) to encourage more private companies to participate in R&D activities.
3. The Chinese Manufacturers’ Association of Hong Kong	(i) Warmly welcome the proposals (ii) Suggest funding priority be given to projects that involve tripartite partnership, viz applicant company in collaboration with both local and non-local universities.
4. Hong Kong General Chamber of Commerce	• No specific comments (verbal)
5. Hong Kong Chamber of Small and Medium Business Ltd.	• No specific comments
6. Hong Kong Small and Medium Enterprises Association	• No comments received after the closure of the consultation
7. Hong Kong Small and Medium Enterprises General Association	• No comments received after the closure of the consultation

Comments not directly related to the two proposed relaxation measures.

Local universities

Organizations	Comments/Suggestions
1. The University of Hong Kong	(i) Support (ii) R&D may move away from Hong Kong because of lower costs elsewhere (e.g. Mainland). (iii) Suggest priority should be given, as far as possible, to support R&D organizations and institutions in Hong Kong.
2. City University of Hong Kong	(i) Support (ii) Suggest relaxation measures to apply to research institutes set up by local universities in Mainland
3. The Hong Kong University of Science and Technology	(i) No objection (ii) Rules, regulation and procedures of the scheme should be more flexible and responsive. (iii) Ownership of IP by companies leaves little incentive for universities to participate.
4. The Chinese University of Hong Kong	<ul style="list-style-type: none"> • No specific comments
5. The Hong Kong Polytechnic University	(i) Suggest setting a ceiling on the amount of R&D work to be carried outside Hong Kong, and only allowing such activities if there is no local expertise or capability. (ii) Suggest that Institutes should be allowed to negotiate share of IP and benefits with partner companies and non-local institutions (iii) Suggest the differentiation of UICP and programmes administered by R&D Centres should be stipulated (iv) Application procedures are tedious, rigid and over-whelming in terms of the level of documentation required.

Organizations	Comments/Suggestions
6. Hong Kong Baptist University	<p>(i) Reservation</p> <ul style="list-style-type: none"> • proposal benefits local industry only, but lead to keener competition among Hong Kong institutes • if substantial ITF funding allocated to non-local universities, local universities cannot apply their R&D results to industries • public money should not be used to fund projects not based in Hong Kong <p>(ii) Suggest that at least one partner must be local universities</p>

Professional Bodies

Organizations	Comments/Suggestions
1. Hong Kong Information Technology Federation Ltd.	<ul style="list-style-type: none"> • Fully support
2. Hong Kong Medical and Health Care Device Manufacturers	<ul style="list-style-type: none"> (i) Support first proposal (ii) On second proposal, suggest non-local institutions to second researchers come to Hong Kong and work on the collaborative projects in the local universities.
3. Hong Kong Electronic Industries Association	<ul style="list-style-type: none"> (i) Support proposal and monitoring mechanism. (ii) Suggest that sufficient ITF grant have to be set aside to cater for the additional funding in time.
4. Hong Kong Computer Society	<ul style="list-style-type: none"> • Support the proposal, and suggest to specify the definition/criteria of “non-local universities”
5. Modernized Chinese Medicine International Association	<ul style="list-style-type: none"> • No specific comments
6. Hong Kong Association of Pharmaceutical Industry	<ul style="list-style-type: none"> • No comments received after the closure of the consultation
7. Hong Kong Biotechnology Association	<ul style="list-style-type: none"> • No comments received after the closure of the consultation