Motion on "Promoting Research and Development" Progress Report

On 3 June 2009, the Legislative Council carried the motion on "Promoting Research and Development" moved by Dr the Hon PAN Pey-chyou, as amended by Dr the Hon Samson TAM, the Hon Fred LI and the Hon Andrew LEUNG. The wording of the motion is at Annex. This note updates Members on follow-up actions taken by the Administration in respect of the suggestions in the motion.

Promoting Innovation and Technology Industries

- 2. The Task Force on Economic Challenges suggested in June 2009 that the Government should facilitate the development of innovation and technology, making it one of the six economic areas where Hong Kong enjoys clear advantages. The Chief Executive has announced the Government will take the following measures to promote the development of the innovation and technology industry:
 - (a) actively explore the provision of new financial or tax incentives to encourage more R&D investment in the private sector;
 - (b) enhance the technological infrastructure by exploring the development potential of Science Park Phase 3 and facilitating the revitalization of the use of industrial estates in meeting the demand from technology industries;
 - (c) provide more resources to the five R&D Centres to roll our more applied R&D projects and to strengthen their work in commercialization through the ITF:
 - (d) facilitate commercial exploitation of intellectual property in Government's IT systems; and
 - (e) reinforce technology cooperation with Shenzhen under the Shenzhen-Hong Kong Innovation Circle and jointly attract more R&D establishments into the region.

Strengthening and Developing Expertise of Administrative Officers

3. The generalist training of Administrative Officers (AOs), including experiences acquired from working in various policy areas, ensures that they have sufficient experience to be able to take a balanced perspectives addressing the diverse interests of different parts of the technology sector. The insight and experience they accumulate in the area of technology development will also be useful to their work in other policy areas in the future. The Government will review from time to time the training and development for AOs in order to ensure that the members of the Administrative Service have the skill set necessary to allow them to handle the operational need of various policy portfolios.

Fostering a Innovation and Technology Atmosphere

- 4. We will continue to stimulate the interest of the public, particularly youngsters, in technology through a series of publicity and promotion events. These include the Innovation Festival 09 to be held in the Hong Kong Science Park and other districts between October and November this year, setting up the Centre for Creative Science and Technology which will come into operation by the end of this year, the newly established Innovation and Technology Student Club, the Hong Kong Student Science Project Competition, and the Hong Kong Youth 3D Animation Competition. It is our strategy to work with a wide range of partners, such as universities and schools, youth groups, social service organisations, and professional and trade bodies to reinforce the understanding and support of the public towards innovation and technology while at the same time inspiring youngsters' interest in and commitment to innovation and technology.
- 5. In terms of education, science education and technology education will continue to be two of the eight key learning areas in the school curriculum so as to help nurture students' interest in science and technology, and allow them to build up a solid knowledge foundation. Moreover, the New Senior Secondary Curriculum to be implemented this September will continue to encourage students develop their creativity. Many subjects, such as the General Education and the Design and Applied Technology, have taken into account the development of

creativity in their curriculum. The Education Bureau also regularly organises and co-organises different student activities, such as encouraging students to participate in science competitions.

Providing R&D Funding and Cultivating Talents

- 6. We will continue to provide funding under the ITF to foster local R&D activities to meet industries' needs. Over the past decade, the ITF has provided \$4 billion of funding to more than 1,400 projects. To encourage more R&D work by universities and research institutes, we have increased the number of rounds of project proposal solicitation to three times for the Innovation and Technology Support Programme in 2009. The first two rounds attracted 287 and 199 project proposals respectively, and the third round will commence before the end of this year. We have also obtained Finance Committee's approval to extend the operation period of the R&D Centres under the ITF to 2013-14 with an additional funding commitment of \$369 million. The R&D Centres will expand the scope of their research projects and enhance the commercialisation of research results in the coming years.
- 7. Besides, the Government has earlier established an \$18 billion Research Endowment Fund. In the three years between 2009/10 and 2011/12, the Government will also provide 800 additional research places in graduate schools to allow more education opportunities for students who are committed to research undertakings, thereby promoting research culture in the academic field. Furthermore, our immigration policy also enables overseas scientific research talent to pursue their career in Hong Kong.

Strengthening Technology Co-operation with the Mainland

8. In respect of the collaboration in intellectual property, the Intellectual Property Department and the Customs and Excise Department have been working closely with Mainland's authorities in protecting intellectual property rights, and an effective exchange platform has been established to better protect and manage intellectual property rights. The HKSAR Government has collaborated with Mainland authorities including the State Intellectual Property Office, the

Trademark Office of the State Administration for Industry and Commerce, the National Copyright Administration and the General Administration of Customs, and maintained good communication with relevant provincial and municipal governments. For instance, Hong Kong and Guangdong have kept in close contact and enhanced co-operation in different areas of intellectual property protection under the framework of the "Guangdong/Hong Kong Expert Group on the Protection of Intellectual Property Rights". The Intellectual Property Department also participated in the Steering Group on Shenzhen/Hong Kong and Technology established Co-operation in Innovation Shenzhen/Hong Kong Innovation Circle agreement.

- 9. Regarding the establishment of more State Key Laboratories (SKLs), the Ministry of Science and Technology (MOST) gave in-principle approval in June 2009 to appoint 7 laboratories of Hong Kong's universities as Partner SKLs. As a result, the number of Hong Kong's Partner SKLs would eventually increase from 5 to 12. The technology areas engaged by these new Partner SKLs include synthetic chemistry, molecular neuroscience, marine pollution, chiral science, hepatic disease research, ultra-precision machining services, and phytochemisty and sustainable use of plant resources in western China. ITC, MOST and the local universities are now working on the detailed arrangements. We will also continue to liaise with the relevant authorities of the central government so that our R&D institutes and personnel can get involved more directly in major scientific research projects at the national level.
- 10. As for the collaboration with the Pearl River Delta Region, the Guangdong and Hong Kong governments have been working closely to carry out scientific research collaboration and technology exchange to improve environmental quality in the region and will continue to promote collaboration projects through the "Hong Kong-Guangdong Joint Working Group on Sustainable Development and Environmental Protection".
- 11. For the further promotion of clean fuels, since last year the HKSAR Government, the Shenzhen Municipal Government and DuPont have been working on a solar energy research and industrial platform. This is the first major technology project under the Shenzhen-Hong Kong Innovation Circle and

has successfully established a collaboration mode by which R&D is carried out in Hong Kong and production in the Mainland. Through the Guangdong - Hong Kong Technology Cooperation Funding Scheme, we will continue to promote and encourage universities, research institutes and enterprises in Guangdong and Hong Kong to conduct more collaborative R&D projects on environmental protection, facilitate industrial transformation as well as improve the quality of life and environment of the two places.

Bringing in Foreign Enterprises to Set up R&D Centres in Hong Kong

12. The Chief Executive announced in June that the Government will actively explore the possibility of providing financial or tax incentives to encourage the private sector to increase R&D investment. At the same time, we will also reinforce technology collaboration with Shenzhen under the framework of the Shenzhen-Hong Kong Innovation Circle and jointly attract more companies to come to the region using the model of setting up R&D centres in Hong Kong and production facilities in Shenzhen.

Making Optimal Use of Technology Infrastructure

- 13. To ensure that the development of industrial estates keeps pace with the time and brings the best economic benefits to Hong Kong, the Hong Kong Science and Technology Parks Corporation (HKSTPC) is conducting a consultancy study with a view to revitalising and repositioning the industrial estates. It will look into ways to enhance the functions of the industrial estates, explore future market opportunities (including introduction of new industries and attracting new investors), reviewing current practices and examining the feasibility and potential of developing a fourth industrial estate. The study will be completed by the end of this year. We will review the findings of the consultancy report and consider the implementation issue.
- 14. As for the Science Park, the current occupancy rates of Phases 1 and 2 are 92% and 61% respectively. To facilitate the development of renewable energy and environmental industries in Hong Kong, HKSTPC started in early 2009 the development of a new green technology cluster, which is the fifth technology

cluster in the Science Park. The other four clusters are information technology and telecommunications, electronics, biotechnology and precision engineering. As a result, more green technology related companies are attracted to the Science Park, thus strengthening Hong Kong's edge in the promotion of technologies for renewable energy and environmental engineering solutions. Regarding development of Science Park Phase 3, HKSTPC has conducted consultancy studies on the economic efficiency analysis, technical feasibility and sustainability assessment. The Administration is reviewing the findings of the studies and will decide on whether and how to proceed with the Phase 3 development.

15. Regarding the land use plan at the Lok Ma Chau Loop, the Administration has launched a comprehensive feasibility study. One of the main objectives is to formulate development proposals for the Loop based on higher education as the primary land use, to be supplemented by new high-tech research and development facilities and creative industry. The study is expected to be completed before end 2011.

Establishing a Patent Trademark Authority

16. At present, the registration of patent and trademark is administered by the Registry set up by the Intellectual Property Department in accordance with the relevant laws. The registration system has been working effectively with wide recognition from the industry. The Government will study on how to utilise our sound IP protection system and strengthen co-ordination among Intellectual Property Department, professional bodies and the legal sector so as to attract more foreign investors to set up R&D bases in Hong Kong and provide better services to these enterprises.

Commerce and Economic Development Bureau August 2009

Motion on "Promoting research and development" carried by the Legislative Council on 3 June 2009

(Translation)

That, in order to meet the challenges of globalization, the Task Force on Economic Challenges has identified six economic areas where Hong Kong enjoys clear advantages as the targets of focal development to boost Hong Kong's economic growth and provide job opportunities, and in order to successfully promote the development of these economic areas, Hong Kong must lay a solid foundation for research and development ('R&D'); in this connection, this Council urges the Government to:

- (a) set up committees to make recommendations on policies and various complementary measures for promoting R&D, for implementation by bureaux;
- (b) consolidate and coordinate the existing relevant policies as well as the structures and resources of various related public organizations, so as to more effectively boost Hong Kong's technological R&D business;
- (c) improve the existing rotation system of administrative officers to nurture a batch of talents with technological R&D mindset, so that long-term technological research strategies can be implemented effectively;
- (d) through education and publicity, foster an atmosphere that emphasizes technological research and innovation;
- (e) take the lead in allocating more funding to enhance the capability of technological research, and stipulate the interim and long-term targets that government funding in R&D shall represent a certain proportion of local gross domestic product;
- (f) establish negotiation platforms in conjunction with Guangdong Province and other regions in the Mainland to achieve complementarity of edge, maximal application of R&D results and effective protection of intellectual property;
- (g) strive for setting up more state partner laboratories in Hong Kong so that Hong Kong may directly participate in more technological research projects at the

- state level, and assist the relevant industries to strive for participation in formulating the standards for state products;
- (h) formulate policies for nurturing talents in R&D and strategically bring in overseas professionals under the principle of giving priority to local talents;
- (i) introduce tax concessions and other incentives to encourage private organizations to invest in R&D work in Hong Kong, and at the same time bring in multinational enterprises to set up R&D centres in Hong Kong to promote the integration of local and overseas technological research capabilities;
- (j) make optimal use of the land of the existing industrial estates and science park, etc, and expeditiously develop the land in the boundary districts between Hong Kong and Shenzhen for the purposes of technological R&D and talent training, so as to facilitate the establishment of industry clusters;
- (k) introduce concessionary land premium and concessionary loans to encourage private organizations to operate in the above six economic areas;
- (l) collaborate with the cities in the Pearl River Delta region to enhance the promotion of technological research projects on clean fuels (including electricity generation and transport), green construction, effluent treatment and solid waste treatment etc, which can facilitate the transformation of industries and upgrade the quality of life in the region; and
- (m) make optimal use of Hong Kong's comprehensive and effective protection regime for intellectual property rights ('IPR') and consider establishing a 'Patent Trademark Authority' to promote Hong Kong as the IPR service centre in the region, so as to attract local and overseas organizations to allocate more resources to R&D work.