



**Head 155 — GOVERNMENT SECRETARIAT:  
INNOVATION AND TECHNOLOGY COMMISSION**

4 The Commission has been working closely with the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI) in strengthening its institutional and research capabilities to support the activities of its R&D Centre for Information and Communications Technologies (ICT R&D Centre). The ASTRI's subsidiary, the Hong Kong Jockey Club Institute of Chinese Medicine Limited (HKJCICM) promotes and supports the modernisation and further development of Chinese medicine in Hong Kong. The work of the ASTRI and the HKJCICM will be further described under Programme (7).

5 Five R&D centres were established in April 2006 to drive and co-ordinate R&D efforts in the technology areas of nanotechnology and advanced materials, textile and clothing, automotive parts and accessory systems, logistics and supply chain management enabling technologies, and information and communications technologies. The R&D projects carried out by these centres, except for those contract researches the full costs of which are borne by sponsoring companies, are funded mainly by the ITF.

6 To enhance the level of collaboration on R&D between organisations in Hong Kong and those in the Guangdong Province, the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) was introduced under the ITSP in September 2004. The TCFS supports applied R&D projects which will facilitate the economic development in the Greater Pearl River Delta (PRD) region. In 2009, the Commission, the Guangdong Provincial Department of Science and Technology and the Shenzhen Science & Technology, Industry, Trade and Information Committee continued to jointly invite applications for the Scheme.

7 To reinforce the research culture among business enterprises and encourage them to establish stronger partnership with designated local public research institutions, the R&D Cash Rebate Scheme was introduced in April 2010. Under the scheme, enterprises conducting applied R&D projects with the support of the ITF or in partnership with local designated research institutions enjoy a cash rebate equivalent to ten per cent of their investments.

8 The performance under this programme is reflected in the extent to which the applied R&D activities receiving funding support are of relevance to industry and the extent to which the R&D centres, the ASTRI and the HKJCICM accomplish their research programmes effectively. Performance indicators in respect of the ITSP, PAG, ASTRI, R&D centres, TCFS and R&D Cash Rebate Scheme are as follows:

**Indicators**

	2009 (Actual)	2010 (Actual)	2011 (Estimate)
<b>ITSP</b>			
applications received and processed .....	395	335	<b>340</b>
projects funded and being monitored .....	183	213	<b>235</b>
<b>PAG</b>			
applications received and processed .....	147	186	<b>228</b>
projects funded.....	86	102	<b>122</b>
ASTRI projects funded and being monitored <sup>^</sup> .....	1	0	<b>0</b>
<b>R&amp;D centres' projects</b>			
Automotive Parts and Accessory Systems R&D Centre			
new projects .....	17	8	<b>12</b>
projects funded and being monitored.....	37	44	<b>56</b>
Hong Kong R&D Centre for Information and Communications Technologies			
new projects .....	48	45	<b>60</b>
projects funded and being monitored.....	109	128	<b>138</b>
Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies			
new projects .....	9	3	<b>12</b>
projects funded and being monitored.....	26	29	<b>41</b>
Nano and Advanced Materials Institute			
new projects .....	15	15	<b>26</b>
projects funded and being monitored.....	30	43	<b>65</b>
Hong Kong Research Institute of Textiles and Apparel			
new projects .....	11	13	<b>15</b>
projects funded and being monitored.....	38	44	<b>50</b>
<b>TCFS</b>			
applications received and processed .....	79	64	<b>64</b>
projects funded and being monitored.....	102	95	<b>77</b>

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	2009 (Actual)	2010 (Actual)	2011 (Estimate)
R&D Cash Rebate Scheme@			
applications received and processed .....	N.A.	179	<b>360</b>
applications approved .....	N.A.	153	<b>310</b>

Ψ The figures do not include applications submitted by or projects undertaken by the five R&D centres and the ASTRI, which are reported under the indicators “R&D centres’ projects” and “ASTRI projects funded and being monitored”.

^ The figures do not include projects undertaken by the ICT R&D Centre hosted by the ASTRI, which are reported under the indicator “R&D centres’ projects”. Since 2007, all new ASTRI projects are undertaken by the ICT R&D Centre.

γ All projects (including TCFS projects and feasibility studies) undertaken and/or monitored by R&D centres are included.

@ New indicators adopted since 2010.

**Matters Requiring Special Attention in 2011–12**

9 During 2011–12, the Commission will continue to:

- administer the various funding programmes and monitor progress of the funded projects;
- support the activities of R&D centres with emphasis on technology transfer of funded projects;
- enhance collaboration on R&D between Hong Kong and Guangdong under the TCFS;
- work closely with the ASTRI and the HKJCICM in strengthening their research capabilities, developing and implementing their research projects and transferring technologies to industry for commercialisation;
- provide funding assistance to the Partner State Key Laboratories in Hong Kong to enhance their research capabilities; and
- administer the R&D Cash Rebate Scheme to reinforce the research culture among business enterprises and encourage them to establish stronger partnership with designated local public research institutions.

**Programme (2): Fostering University-Industry Collaboration**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	2011–12 (Estimate)
Financial provision (\$m)	7.5	7.3	7.0 (–4.1%)	<b>6.6</b> (–5.7%)

(or –9.6% on  
2010–11 Original)

**Aim**

10 The aim is to promote university-industry partnership in R&D projects.

**Brief Description**

11 The Commission achieves this aim through administering the University-Industry Collaboration Programme (UICP) under the ITF to support commercial R&D projects undertaken by private companies in collaboration with local universities. Companies in the private sector are encouraged to invest and to leverage on the knowledge and resources of local universities through three schemes under the UICP, namely, the Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme. The Teaching Company Scheme provides financial incentives to local companies to take on graduate students from local universities to assist in proprietary R&D work. Under the Matching Grant for Joint Research, private companies will contribute half of the project cost, in respect of R&D projects taken up jointly with local universities. They will also be able to hold the intellectual property rights arising from the projects. The Industrial Research Chair Scheme provides funding support to research efforts of universities and industry in technology fields which are not yet developed in Hong Kong but have good development potential.

12 The UICP received a total of 18 applications requesting \$25.1 million in 2010.

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**13** The key performance indicators are:

*Indicators*

	2009 (Actual)	2010 (Actual)	<b>2011 (Estimate)</b>
UICP			
applications received and processed .....	10	18	<b>14</b>
projects funded and being monitored .....	21	25	<b>31</b>

*Matters Requiring Special Attention in 2011–12*

**14** During 2011–12, the Commission will continue to administer the UICP and monitor progress of the funded projects.

**Programme (3): Promotion of Technological Entrepreneurship**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	<b>2011–12 (Estimate)</b>
Financial provision (\$m)	6.4	7.4	7.0 (–5.4%)	<b>6.2</b> (–11.4%)
				(or –16.2% on 2010–11 Original)

*Aim*

**15** The aim is to promote technological entrepreneurship in Hong Kong and provide essential support to technology-based entrepreneurial activities.

*Brief Description*

**16** The Commission provides funding support to technology-based entrepreneurial activities through the Small Entrepreneur Research Assistance Programme (SERAP) of the ITF. The SERAP provides financing at the pre-venture capital stage for start-ups to carry out R&D activities and to conduct market validation. The Applied Research Fund (ARF) provides funding to technology companies in Hong Kong at the venture capital stage but has been on a winding down mode since 2005. In addition, the Commission works closely with the Hong Kong Science and Technology Parks Corporation (HKSTPC), which operates an incubation programme to provide technology start-ups with support in marketing, finance, technology and management in their critical initial years of operation.

**17** During 2010–11, the Commission:

- administered the SERAP and the ARF programme;
- publicised the SERAP funding scheme via talks and seminars;
- published the SERAP Company Directory for 2011;
- provided networking support to some SERAP companies; and
- monitored the management of SERAP and ARF companies.

**18** The key performance measures are:

*Targets*

	Target working days	2009 (Actual)	2010 (Actual)	<b>2011 (Plan)</b>
informing applicants of the result of their SERAP applications after receipt of full information .....	50.0	48.2	30.0	<b>30.0</b>

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*Indicators*

	2009 (Actual)	2010 (Actual)	2011 (Estimate)
SERAP			
applications received and processed .....	86	71	<b>85</b>
projects funded and being monitored .....	115	122	<b>125</b>

The performance under this programme is also reflected by the extent the incubation programme is successfully run by the HKSTPC.

***Matters Requiring Special Attention in 2011–12***

**19** During 2011–12, the Commission will continue to:

- administer the SERAP and oversee the ARF to support technology start-ups;
- monitor progress of the funded projects; and
- pursue the exit of ARF projects through fund managers.

**Programme (4): Planning for Innovation and Technology Development**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	2011–12 (Estimate)
Financial provision (\$m)	27.6	29.3	31.5 (+7.5%)	<b>35.1</b> (+11.4%)
				(or +19.8% on 2010–11 Original)

***Aim***

**20** The aim is to support the formulation and co-ordination of innovation and technology policies and sustain public awareness of innovation and technology.

***Brief Description***

**21** The Commission provides secretariat support and policy input to the Steering Committee on Innovation and Technology, chaired by the Financial Secretary with the Secretary for Commerce and Economic Development as the Deputy Chairman, in examining policy issues and co-ordinating the various elements of the Government's programme and resources to promote innovation and technology.

**22** The Commission supports technology co-operation with the Mainland, and participates actively in relevant regional activities which help promote innovation and technology.

**23** To enhance public awareness and understanding of the importance of innovation and technology, the Commission organises promotional events locally and administers the General Support Programme (GSP) under the ITF to fund projects such as seminars and exhibitions which help foster an innovation and technology culture.

**24** The Commission also administers an Internship Programme which provides financial support for organisations undertaking R&D projects funded by the ITF to recruit interns to assist in the projects. It aims to provide opportunities for graduates from tertiary institutions to acquire research/industrial experience, stimulate the interest of graduates in applied R&D activities and help create a larger pool of research talents.

**25** During 2010–11, the Commission:

- enhanced technology co-operation with the Mainland at the central, regional, provincial and municipal levels through various co-operation mechanisms, including the Mainland/Hong Kong Science and Technology Cooperation Committee, the Pan-PRD Joint Conference on Regional Cooperation in Science and Technology, the Guangdong/Hong Kong Expert Group on Cooperation in Innovation and Technology, and the Steering Group on Shenzhen/Hong Kong Co-operation in Innovation and Technology;
- organised the InnoTech Month (ITM) 2010 to promote innovation and technology to the general public in particular the youth. Activities of the ITM included the InnoCarnival, road shows, seminars, competitions and technology workshops;
- oversaw the operation of the Innovation and Technology Student Club which provides a sustainable and interactive platform to nurture youth innovative talents;
- organised the Hong Kong Youth 3D Animation Competition 2010 which encourages the youth to develop their potentials in innovation, technology and design through the promotion of three-dimensional animation technology;

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- funded the operation of the Hong Kong RFID (Radio Frequency Identification) Centre to promote an innovation and technology culture;
- funded the operation of Creative Centre of Science and Technology in the Hong Kong Science Park (HKSP);
- participated in Innovation, Design and Technology Exposition (held together with the Business of Design Week) to promote the five R&D centres established under the Government's strategy of innovation and technology development, and the HKJCICM, and to introduce ITC's funding schemes to visitors;
- nominated entries from the Hong Kong Special Administrative Region in two categories of the State Science and Technology Awards, namely, the State Technological Invention Award and the State Scientific and Technological Progress Award;
- processed applications for setting up state key laboratories in Hong Kong;
- organised a 'Hong Kong Pavilion' and a 'Shenzhen-Hong Kong Innovation Circle Pavilion' at the China Hi-Tech Fair 2010; and
- participated in the Asia-Pacific Economic Cooperation (APEC) Industrial Science and Technology Working Group.

26 The key performance indicators are:

### *Indicators*

	2009 (Actual)	2010 (Actual)	2011 (Estimate)
GSP			
applications received and processed .....	8	11	<b>13</b>
projects funded and being monitored .....	9	12	<b>14</b>
Internship Programme			
applications received and processed .....	365	329	<b>330</b>
intern positions funded .....	323	579 $\Omega$	<b>610</b>

$\Omega$  The increase in 2010 is mainly due to the extension of the Internship Programme to the five R&D centres established under the ITF and private sector companies undertaking ITF-funded projects since 2009.

### *Matters Requiring Special Attention in 2011–12*

27 During 2011–12, the Commission will continue to:

- strengthen technology co-operation with the Mainland through the Mainland/Hong Kong Science and Technology Cooperation Committee, the Pan-PRD Joint Conference on Regional Cooperation in Science and Technology, and the Guangdong/Hong Kong Expert Group on Cooperation in Innovation and Technology, and the Steering Group on Shenzhen/Hong Kong Co-operation in Innovation and Technology;
- administer the GSP, including Internship Programme, and monitor progress of the funded projects;
- promote innovation, technology and design culture to the general public and nurture more creative young talents;
- nominate entries for the State Science and Technology Awards;
- assist the Ministry of Science and Technology in implementing and monitoring the State Key Laboratory Scheme;
- organise the 'Hong Kong Pavilion' at the China Hi-Tech Fair 2011; and
- participate in the APEC Industrial Science and Technology Working Group.

### **Programme (5): Infrastructural Support**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	2011–12 (Estimate)
Financial provision (\$m)	13.7#	13.0	13.3 (+2.3%)	<b>11.5</b> (–13.5%)
				(or –11.5% on 2010–11 Original)

# For comparison purpose, the figure excludes relevant provisions for design which have been transferred to Head 55—Government Secretariat: Commerce and Economic Development Bureau (Communications and Technology Branch) for the establishment of the Create Hong Kong office (CreateHK) with effect from 1 June 2009.

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### *Aim*

**28** The aim is to develop world-class support infrastructure to facilitate technological upgrading and development of the industry and to promote innovation and technology.

### *Brief Description*

**29** The Commission achieves the aim through planning, supporting and overseeing technological infrastructural projects; and participating actively in the formulation and implementation of policies by other government bureaux and departments which impinge on innovation and technology development in Hong Kong. The Commission works closely with relevant industry support organisations such as the HKSTPC, the ASTRI, the HKJCICM and the Hong Kong Productivity Council (HKPC) in the process.

**30** During 2010–11, the Commission:

- worked closely with the HKSTPC on its policy directions, including the construction of the last building of Phase Two of the HKSP at Pak Shek Kok, obtaining agreement for funding for Phase Three of the HKSP and giving consideration to the study on the repositioning and revitalisation of the Industrial Estates;
- worked closely with the ASTRI in strengthening their institutional and research capabilities to develop its ICT R&D Centre;
- monitored the delivery of value-added support services to the manufacturing and related service industries by the HKPC; and
- worked closely with the HKSTPC, the Hong Kong Design Centre and CreateHK to develop the InnoCentre for the design cluster.

### *Matters Requiring Special Attention in 2011–12*

**31** During 2011–12, the Commission will continue to:

- work closely with the HKSTPC on its various development and business plans, including the implementation of appropriate recommendations of the study on the repositioning and revitalisation of the Industrial Estates;
- assist in the long-term development of the HKSP;
- assist the ASTRI in strengthening its R&D capabilities and lead research programmes in the four focus areas of communications technologies, consumer electronics, integrated circuit (IC) design and opto-electronics, as well as the emergent area of biomedical engineering; and
- assist the HKJCICM in developing research and assisting local Chinese medicine development.

### **Programme (6): Quality Support**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	<b>2011–12 (Estimate)</b>
Financial provision (\$m)	60.6	76.3	72.9 (–4.5%)	<b>82.0</b> (+12.5%)
				(or +7.5% on 2010–11 Original)

### *Aim*

**32** The aim is to promote:

- internationally accepted standards and conformity assessment services to underpin technological development and international trade; and
- the development of the testing and certification industry in Hong Kong.

### *Brief Description*

**33** The Commission achieves this aim through the operation of the Standards and Calibration Laboratory (SCL), the Product Standards Information Bureau (PSIB), the Hong Kong Accreditation Service (HKAS) and the Secretariat of the Hong Kong Council for Testing and Certification (HKCTC).

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**34** During 2010–11, the SCL participated in five projects on inter-laboratory comparison of measurement standards. Its capabilities in the metrology areas of length, acoustics, mass and related quantities, electricity, thermometry, and time and frequency have been listed in the technical schedules of the Mutual Recognition Arrangement (MRA) drawn up by the International Committee for Weights and Measures (CIPM). The SCL is a signatory of the CIPM MRA and SCL's calibration certificates bearing the CIPM MRA logo are internationally accepted by 210 national metrology institutes in 76 economies and three international organisations. The HKAS provides a comprehensive range of accreditation services under the Hong Kong Laboratory Accreditation Scheme (HOKLAS), the Hong Kong Certification Body Accreditation Scheme (HKCAS) and the Hong Kong Inspection Body Accreditation Scheme (HKIAS). Accreditation services have been extended to cover proficiency testing in 2007. Through the MRAs signed between the HKAS and the international and regional organisations of accreditation bodies, reports and certificates bearing the HKAS accreditation marks issued by organisations accredited by the HKAS are widely recognised world-wide. The PSIB represented Hong Kong, China in the APEC Sub-Committee on Standards and Conformance. The Secretariat of HKCTC provided support to HKCTC in co-ordinating the implementation of a three-year development plan for the testing and certification industry.

**35** The key performance measures are:

**Targets**

	Target working days	2009 (Actual)	2010 (Actual)	2011 (Plan)
processing of quotation for calibration services .....	2#	2	2	2
calibration of equipment.....	13α	13	13	13
processing of simple enquiries on product standards .....	1	1	1	1
processing of complicated enquiries on product standards.....	8	8	8	8
issue of quotations for documented standards .....	1	1	1	1
processing of orders for photocopies of documented standards.....	2	2	2	2

# This target has been revised from three to two days as from January 2010.

α This target has been revised from 14 to 13 days as from January 2010.

**Indicators**

	2009 (Actual)	2010 (Actual)	2011 (Estimate)
<b>SCL</b>			
calibrations performed .....	819	802§	810
revenue generated (\$).....	1,448,276	1,622,305§	1,635,000
revenue/post (\$) .....	417,056	411,632	412,171
<b>PSIBΔ</b>			
technical enquiries .....	464	426	400
sales and photocopying of documented standards enquiries.....	438	271	270
quotations given.....	1 672	1 418	1 400
orders placed.....	291	198	160
revenue generated (\$).....	171,000	138,679	110,000
revenue/post (\$) .....	417,073	338,241	377,000
<b>HOKLAS</b>			
accredited laboratories (cumulative).....	167	173	179
assessments and re-assessments conducted.....	308	350	370
overseas laboratory accreditation schemes with MRA with the HOKLAS (cumulative).....	68	74	75
<b>HKCAS</b>			
accredited certification bodies (cumulative) .....	15	17	18
assessments, re-assessments and surveillance visits conducted .....	15	21	23
overseas certification bodies accreditation schemes with multilateral recognition arrangement with the HKCAS (cumulative) .....	40	45	46

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	2009 (Actual)	2010 (Actual)	2011 (Estimate)
<b>HKIAS</b>			
accredited inspection bodies (cumulative) .....	20	21	<b>22</b>
assessments, re-assessments and surveillance visits conducted .....	30	34	<b>38</b>
overseas inspection bodies accreditation schemes with multilateral recognition arrangement with the HKIAS (cumulative) .....	11	12	<b>12</b>

§ The decrease in calibrations performed in 2010 was due to less calibration requests from government departments which are not subject to fees and charges. The revenue generated for 2010 was higher than that of 2009 because some calibrations from the private sector were of higher complexity and charged at higher calibration fees.

Δ The drop in this indicator in recent years is mainly attributed to the ease of obtaining standards through the internet and across the border. The manpower required to provide the service will be reduced accordingly.

**Matters Requiring Special Attention in 2011–12**

**36** During 2011–12, the Commission will:

- co-ordinate Government's support to HKCTC in adopting a dual approach to further develop the testing and certification industry – making general improvements to the accreditation service and factors of production of the industry to enhance its competitiveness, while focusing on the four selected trades with good potential in using testing and certification services. The four trades are Chinese medicine, construction materials, food and jewellery;
- participate in activities to promote the MRAs of the Asia Pacific Laboratory Accreditation Co-operation, the International Laboratory Accreditation Co-operation, the Pacific Accreditation Co-operation, and the International Accreditation Forum;
- develop plans to extend accreditation services to other areas to support industry and expand its accreditation service in the area of food testing;
- participate in the activities of the CIPM MRA and the Asia Pacific Metrology Programme;
- participate in more projects on inter-laboratory comparison of measurement standards;
- strengthen interactions between staff of the SCL and local metrology users with a view to disseminating measurement techniques and knowledge to local industries;
- conduct visits to SCL customers to gauge their needs and offer professional advice on-site;
- participate in APEC activities in the areas of standards and conformance; and
- participate in international standardisation activities.

**Programme (7): Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited**

	2009–10 (Actual)	2010–11 (Original)	2010–11 (Revised)	2011–12 (Estimate)
Financial provision (\$m)				
Hong Kong Productivity Council	186.2	198.7	194.3 (–2.2%)	<b>176.6</b> (–9.1%)  (or –11.1% on 2010–11 Original)
Hong Kong Applied Science and Technology Research Institute Company Limited	123.1	106.1	106.1 (—)	<b>133.5</b> (+25.8%)  (or +25.8% on 2010–11 Original)
<b>Total</b>	<b>309.3</b>	<b>304.8</b>	<b>300.4</b> (–1.4%)	<b>310.1</b> (+3.2%)  (or +1.7% on 2010–11 Original)

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*Hong Kong Productivity Council*

### **Aim**

37 The aim is to promote productivity excellence through the provision of integrated support across the value chain of the industry, in order to achieve more effective utilisation of resources, enhance the value-added content of products and services, and enhance the industry's international competitiveness.

### **Brief Description**

38 The HKPC provides integrated support to innovative and growth-oriented Hong Kong firms across the value chain. Its principal sectoral focus is on manufacturing, particularly in Hong Kong's foundation industries, and related service activities. The main geographical focus is Hong Kong and the PRD.

39 The work of the HKPC is anchored on its core competence of manufacturing technologies, management systems, information technologies and environmental technologies, including the following:

- providing one-stop services to the manufacturing industries, particularly the foundation industries, in the areas of manufacturing and materials technology, product design and development, technology commercialisation and e-manufacturing;
- promoting the application of good management practices and continuous benchmarking across the value chain for innovative and growth oriented enterprises, especially small and medium enterprises (SMEs), through operation management, human resources management, innovation management, knowledge management, strategic business management, corporate social responsibility and sectoral platforming with quality certification schemes;
- assisting information technology (IT) service providers, in particular SMEs, to improve their quality, capacity and productivity, and supporting the integration of IT services across the value chain; and
- providing environmental technology support in green manufacturing, efficient energy and resource usage, compliance with environmental legislation and internal standards, as well as environmental methods and technology transfer.

40 During 2010–11, HKPC completed the follow-up on the recommendations made by the Audit Commission and the Public Accounts Committee of the Legislative Council to strengthen the governance and administration of the organisation. It also runs the following subsidiaries:

- the HKPC Technology (Holdings) Company Limited which functions as a vehicle for commercialisation of patents, technologies and projects deliverables of the HKPC and other R&D institutes;
- the Productivity (Holdings) Limited which operates consulting firms in Guangzhou, Shenzhen and Dongguan to strengthen the HKPC's integrated support and services for Hong Kong firms operating in the PRD; and
- the Automotive Parts and Accessory Systems R&D Centre Limited which undertakes market-led R&D projects in collaboration with industry, universities and technology institutes and is funded entirely by the ITF.

41 The key performance indicators for the HKPC are:

### **Indicators**

	2009–10 (Actual)	2010–11 (Revised Estimate)	<b>2011–12 (Estimate)</b>
overall income/expenditure ratio (%).....	66.0	64.0	<b>63.1</b>
income from consultancy/technical assistance (\$m) .....	171.3	181.5	<b>183.4</b>
income from training courses (\$m) .....	27.9	31.5	<b>26.7</b>
income from exhibitions/study missions/conferences (\$m).....	7.5	11.2	<b>6.4</b>
income from manufacturing support/process control (\$m) .....	24.6	25.5	<b>23.2</b>
no. of consultancy projects accepted.....	965	914	<b>980</b>
no. of people who attended the HKPC fee-charging training courses.....	4 400	6 755	<b>6 200</b>
no. of people who attended the HKPC events/networking activities for associations/non-fee-charging seminars.....	22 792	13 500	<b>14 000</b>
no. of people who attended the HKPC exhibitions .....	400	1 445	<b>1 000</b>
no. of people who participated in the HKPC study missions/conferences.....	4 280	1 760	<b>2 200</b>
no. of R&D projects			
new projects .....	24	16	<b>26</b>
on-going projects .....	56	38	<b>44</b>

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### *Matters Requiring Special Attention in 2011–12*

42 During 2011–12, the HKPC will continue to:

- provide integrated support to innovative and growth-oriented Hong Kong enterprises across the value chain, with the main sectoral focus on manufacturing, particularly in Hong Kong’s foundation industries, and related service activities;
- assist local manufacturers in industrial upgrading, business transformation or relocating their operations under the challenges of the Mainland’s processing trade policy;
- assist Hong Kong companies and industries to leverage on the business opportunities arising from the Mainland and Hong Kong Closer Economic Partnership Arrangement;
- enhance its support to Hong Kong enterprises operating in PRD, through subsidiary consulting firms set up in Guangzhou, Shenzhen and Dongguan;
- operate the Automotive Parts and Accessory Systems R&D Centre;
- promote the adoption of cleaner production technologies and practices by Hong Kong owned-factories in the PRD through such initiatives as the Cleaner Production Partnership Programme; and
- support R&D institutions in commercialising advanced manufacturing and processing technologies, and promote technology commercialisation and effective intellectual property management to Hong Kong and Mainland enterprises.

### *Hong Kong Applied Science and Technology Research Institute Company Limited*

#### *Aim*

43 The aim is to provide research capability for Hong Kong’s technological development and stimulate the growth of technology-based industry in Hong Kong.

#### *Brief Description*

44 The ASTRI’s missions are to:

- perform high quality R&D and transfer the technologies developed to industry;
- promote greater application of technology in industry;
- become a focal point for attracting international R&D talent to work in Hong Kong;
- enhance Hong Kong’s technological human resources development;
- act as a spawning ground for technology entrepreneurs; and
- provide a focal point for industry-university collaboration.

45 Over the years, the ASTRI’s research areas include photonics technologies, internet applications, wireless communications, IC design and biomedical electronics. Its operating strategy is to transfer the technologies and results developed from its R&D projects to industry for technology dissemination through licensing arrangements, contract research arrangements and spinning-off new technology companies. This process will elevate the technology level of Hong Kong industry and accelerate the expansion of the technology industry base, thereby creating new employment opportunities. Since the launching of the ICT R&D Centre which focuses on four technology areas, namely, communications technologies, enterprise and consumer electronics, IC design and material and packaging technologies, the ASTRI has become more customer-focused in its R&D business. Commercial companies are encouraged to contribute a significant portion of the total project cost as industry collaborative projects undertaken by the ASTRI.

46 ASTRI has one subsidiary company, the HKJCICM, in which it has a 50 per cent shareholding - the other 50 per cent is held by the Hong Kong Jockey Club (Charities) Limited. The Hong Kong Jockey Club Charities Trust has pledged to donate \$500 million to fund the R&D activities managed by the HKJCICM relating to Chinese medicine. ASTRI provides supporting resources and funds the institute’s operating costs. Since its set-up, the HKJCICM has funded 20 projects in collaboration with local universities and Mainland institutions.

47 The key performance indicators for ASTRI are:

#### *Indicators*

	2009 (Actual)	2010 (Actual)	2011 (Estimate)
no. of new full projectsΛ.....	23	33	<b>40</b>
no. of new seed projects¶.....	25	12	<b>20</b>
no. of patents filed .....	60	50	<b>50</b>
no. of technology transfers.....	100	79	<b>115</b>

**Head 155 — GOVERNMENT SECRETARIAT:  
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	2009 (Actual)	2010 (Actual)	2011 (Estimate)
no. of clients engaged in technology transfer.....	63	66	<b>81</b>
no. of members joining consortia formed by ASTRI.....	83	100	<b>100</b>
no. of technology workshop/seminars organised .....	39	43	<b>44</b>
no. of participants of seminars .....	3 950	4 030	<b>4 400</b>
amount of income (\$m).....	44.5	57.9	<b>69.0</b>

Λ Full projects are R&D projects with more than \$2 million funding support from the ITF, including collaborative projects with the industry.

¶ Seed projects are feasibility studies for developing substantive R&D project proposals. These studies should not cost more than \$2 million nor exceed six months in duration.

***Matters Requiring Special Attention in 2011–12***

**48** During 2011–12, the ASTRI will continue to:

- pursue the research projects initiated in 2010–11 and before;
- strengthen its institutional and research capabilities;
- promote and transfer technologies developed from its R&D projects to industry;
- work closely with the local industry and universities on the latest development of manufacturing technology and market trend with a view to fostering closer collaboration;
- enhance local high-technology human resources development by recruiting engineering graduates of local universities as fellows under the extended ITF Internship Programme; and
- improve the industrial involvement and contribution on its R&D projects through collaborative projects.

**49** During 2011–12, the HKJCICM will continue to enhance Chinese medicine R&D and provide support for the development of the local Chinese medicine industry through project incubation, technology intermediary and information and dissemination exchange.

**Head 155 — GOVERNMENT SECRETARIAT:  
INNOVATION AND TECHNOLOGY COMMISSION**

**ANALYSIS OF FINANCIAL PROVISION**

<b>Programme</b>	2009–10 (Actual) (\$m)	2010–11 (Original) (\$m)	2010–11 (Revised) (\$m)	<b>2011–12 (Estimate) (\$m)</b>
(1) Support for Research and Development .....	25.7	28.0	38.7	<b>46.7</b>
(2) Fostering University-Industry Collaboration.....	7.5	7.3	7.0	<b>6.6</b>
(3) Promotion of Technological Entrepreneurship .....	6.4	7.4	7.0	<b>6.2</b>
(4) Planning for Innovation and Technology Development .....	27.6	29.3	31.5	<b>35.1</b>
(5) Infrastructural Support .....	13.7#	13.0	13.3	<b>11.5</b>
(6) Quality Support .....	60.6	76.3	72.9	<b>82.0</b>
(7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited .....	309.3	304.8	300.4	<b>310.1</b>
	450.8#	466.1	470.8 (+1.0%)	<b>498.2 (+5.8%)</b>
				<b>(or +6.9% on 2010–11 Original)</b>

# For comparison purpose, the figures exclude relevant provisions for design which have been transferred to Head 55—Government Secretariat: Commerce and Economic Development Bureau (Communications and Technology Branch) for the establishment of CreateHK with effect from 1 June 2009.

**Analysis of Financial and Staffing Provision**

**Programme (1)**

Provision for 2011–12 is \$8.0 million (20.7%) higher than the revised estimate for 2010–11. This is mainly due to the increased cash flow requirement for a non-recurrent item and increased provision for general departmental expenses.

**Programme (2)**

Provision for 2011–12 is \$0.4 million (5.7%) lower than the revised estimate for 2010–11. This is mainly due to the reduced provision for general departmental expenses.

**Programme (3)**

Provision for 2011–12 is \$0.8 million (11.4%) lower than the revised estimate for 2010–11. This is mainly due to the reduced provision for general departmental expenses.

**Programme (4)**

Provision for 2011–12 is \$3.6 million (11.4%) higher than the revised estimate for 2010–11. This is mainly due to the increased provision for general departmental expenses, partly offset by the reduced cash flow requirement for a non-recurrent item.

**Programme (5)**

Provision for 2011–12 is \$1.8 million (13.5%) lower than the revised estimate for 2010–11. This is mainly due to the reduced provision for general departmental expenses.

**Programme (6)**

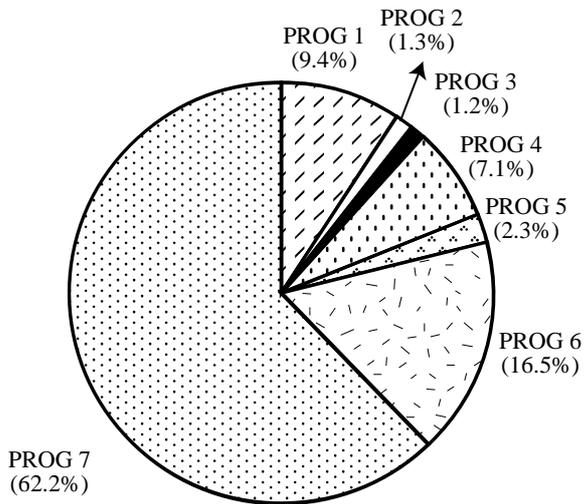
Provision for 2011–12 is \$9.1 million (12.5%) higher than the revised estimate for 2010–11. This is mainly due to the increased provision for general departmental expenses and procurement of capital equipment. In addition, there will be a decrease of one post in 2011–12.

**Programme (7)**

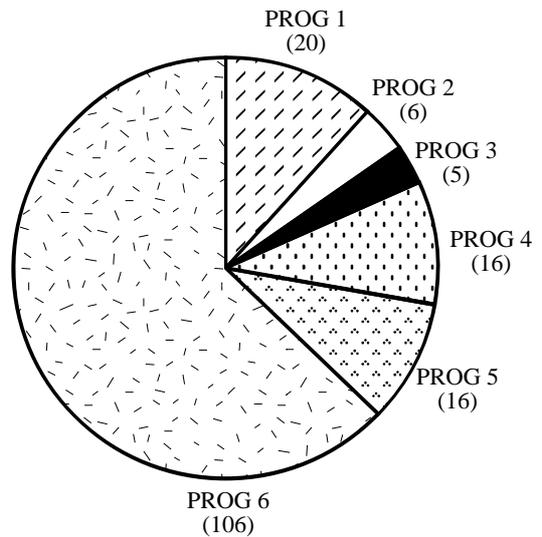
Provision for 2011–12 is \$9.7 million (3.2%) higher than the revised estimate for 2010–11. This is mainly due to the increased provision for the ASTRI, partly offset by the decreased cash flow requirement for a non-recurrent item of HKPC.

**Head 155 — GOVERNMENT SECRETARIAT:  
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*Allocation of provision  
to programmes  
(2011-12)*

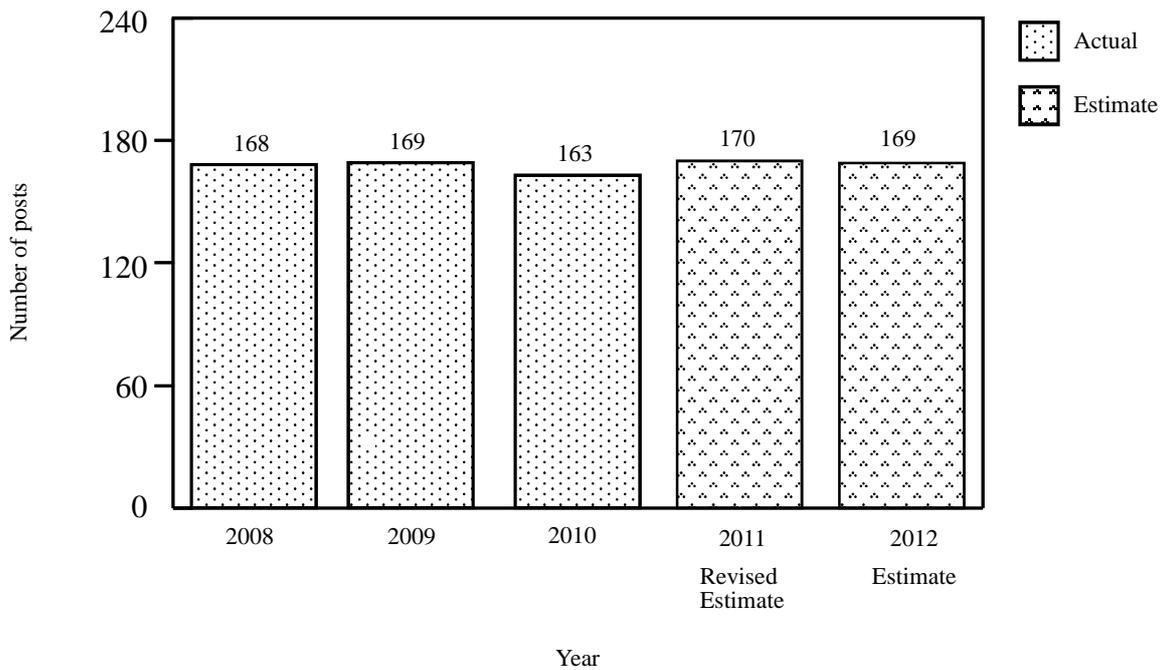


*Staff by programme  
(as at 31 March 2012)*



(No government staff under PROG 7)

*Changes in the size of the establishment  
(as at 31 March)*



**Head 155 — GOVERNMENT SECRETARIAT:  
INNOVATION AND TECHNOLOGY COMMISSION**

Sub-head (Code)	Actual expenditure 2009–10	Approved estimate 2010–11	Revised estimate 2010–11	Estimate 2011–12	
	\$'000	\$'000	\$'000	\$'000	
<b>Operating Account</b>					
Recurrent					
000	Operational expenses.....	433,312#	433,968	433,968	<b>473,736</b>
	Total, Recurrent .....	433,312#	433,968	433,968	<b>473,736</b>
Non-Recurrent					
700	General non-recurrent .....	28,425#	14,658	24,538	<b>15,136</b>
	Total, Non-Recurrent .....	28,425#	14,658	24,538	<b>15,136</b>
	Total, Operating Account.....	461,737#	448,626	458,506	<b>488,872</b>
<b>Capital Account</b>					
Plant, Equipment and Works					
603	Plant, vehicles and equipment .....	—	—	—	<b>1,350</b>
661	Minor plant, vehicles and equipment (block vote).....	2,385	3,400	3,400	<b>2,810</b>
	Total, Plant, Equipment and Works .....	2,385	3,400	3,400	<b>4,160</b>
Subventions					
85B	Hong Kong Productivity Council.....	—	14,100	8,900	<b>5,200</b>
	Total, Subventions .....	—	14,100	8,900	<b>5,200</b>
	Total, Capital Account .....	2,385	17,500	12,300	<b>9,360</b>
	Total Expenditure .....	464,122#	466,126	470,806	<b>498,232</b>

# For consistency with previous estimates, the figures include relevant provisions for design which have been transferred to Head 55—Government Secretariat: Commerce and Economic Development Bureau (Communications and Technology Branch) for the establishment of CreateHK with effect from 1 June 2009.

## Head 155 — GOVERNMENT SECRETARIAT: INNOVATION AND TECHNOLOGY COMMISSION

### Details of Expenditure by Subhead

The estimate of the amount required in 2011–12 for the salaries and expenses of the Innovation and Technology Commission is \$498,232,000. This represents an increase of \$27,426,000 over the revised estimate for 2010–11 and of \$34,110,000 over the actual expenditure in 2009–10.

#### Operating Account

##### Recurrent

**2** Provision of \$473,736,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Innovation and Technology Commission. The increase of \$39,768,000 (9.2%) over the revised estimate for 2010–11 is mainly due to the increased provision for the ASTRI and general departmental expenses.

**3** The establishment as at 31 March 2011 will be 169 permanent posts and one supernumerary post. It is expected that one supernumerary directorate post will be deleted in 2011–12. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2011–12, but the notional annual mid-point salary value of all such posts must not exceed \$69,791,000.

**4** An analysis of the financial provision under *Subhead 000 Operational expenses* is as follows:

	2009–10 (Actual)# (\$'000)	2010–11 (Original) (\$'000)	2010–11 (Revised) (\$'000)	2011–12 (Estimate) (\$'000)
Personal Emoluments				
- Salaries .....	90,012	89,050	89,500	<b>88,300</b>
- Allowances .....	1,241	2,571	2,125	<b>2,315</b>
- Job-related allowances .....	—	2	2	<b>2</b>
Personnel Related Expenses				
- Mandatory Provident Fund contribution .....	119	145	156	<b>141</b>
- Civil Service Provident Fund contribution .....	70	73	196	<b>466</b>
Departmental Expenses				
- General departmental expenses .....	47,077	65,458	64,482	<b>77,571</b>
Subventions				
- Hong Kong Productivity Council .....	171,687	170,563	171,401	<b>171,401</b>
- Hong Kong Applied Science and Technology Research Institute Company Limited .....	123,106	106,106	106,106	<b>133,540</b>
	433,312	433,968	433,968	<b>473,736</b>

# For consistency with previous estimates, the figures include relevant provisions for design which have been transferred to Head 55—Government Secretariat: Commerce and Economic Development Bureau (Communications and Technology Branch) for the establishment of the Create Hong Kong office with effect from 1 June 2009.

#### Capital Account

##### Plant, Equipment and Works

**5** Provision of \$2,810,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$590,000 (17.4%) against the revised estimate for 2010–11. This is mainly due to the decreased requirement for minor plant and equipment.

**Head 155 — GOVERNMENT SECRETARIAT:  
INNOVATION AND TECHNOLOGY COMMISSION**

**Commitments**

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2010	Revised estimated expenditure for 2010-11	Balance
			\$'000	\$'000	\$'000	\$'000
<b><i>Operating Account</i></b>						
700		<i>General non-recurrent</i>				
	006	Impact studies on Innovation and Technology Fund projects.....	5,000	2,603	736	1,661
	860	Research and Development Cash Rebate Scheme .....	200,000	—	8,900	191,100
			<u>205,000</u>	<u>2,603</u>	<u>9,636</u>	<u>192,761</u>
<b><i>Capital Account</i></b>						
603		<i>Plant, vehicles and equipment</i>				
	831	For Direct Current Laboratory of Standards and Calibration Laboratory to set up new facility for calibration services for spectral power and irradiance responsivity of photo-detectors.....	3,250	—	—	3,250
			<u>3,250</u>	<u>—</u>	<u>—</u>	<u>3,250</u>
85B		<i>Hong Kong Productivity Council</i>				
	848	Upgrading the reliability testing services of the Hong Kong Productivity Council.....	4,200	—	3,700	500
	849	Setting up a new Electromagnetic Compatibility Chamber in the Hong Kong Productivity Council.....	9,900	—	5,200	4,700
			<u>14,100</u>	<u>—</u>	<u>8,900</u>	<u>5,200</u>
		Total .....	<u>222,350</u>	<u>2,603</u>	<u>18,536</u>	<u>201,211</u>