

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

**Controlling officer:** the Commissioner for Innovation and Technology will account for expenditure under this Head.

<b>Estimate 2013–14</b> .....	<b>\$559.2m</b>
<b>Establishment ceiling 2013–14</b> (notional annual mid-point salary value) representing an estimated 182 non-directorate posts as at 31 March 2013 and as at 31 March 2014 .....	<b>\$93.3m</b>
In addition, there will be an estimated eight directorate posts as at 31 March 2013 and as at 31 March 2014.	
<b>Commitment balance</b> .....	<b>\$162.0m</b>

### Controlling Officer's Report

#### Programmes

<b>Programme (1) Support for Research and Development</b>	These programmes contribute to Policy Area 17: Information Technology and Broadcasting (Secretary for Commerce and Economic Development).
<b>Programme (2) Fostering University-Industry Collaboration</b>	
<b>Programme (3) Promotion of Technological Entrepreneurship</b>	
<b>Programme (4) Planning for Innovation and Technology Development</b>	
<b>Programme (5) Infrastructural Support</b>	
<b>Programme (6) Quality Support</b>	This programme contributes to Policy Area 15: Health (Secretary for Food and Health) and Policy Area 17: Information Technology and Broadcasting (Secretary for Commerce and Economic Development).
<b>Programme (7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited</b>	This programme contributes to Policy Area 17: Information Technology and Broadcasting (Secretary for Commerce and Economic Development).

#### Detail

##### Programme (1): Support for Research and Development

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	<b>2013–14 (Estimate)</b>
Financial provision (\$m)	43.8	41.2	61.3 (+48.8%)	<b>69.7</b> (+13.7%)
				(or +69.2% on 2012–13 Original)

#### *Aim*

**2** The aim is to promote and support applied research and development (R&D) activities which can contribute to innovation and technology upgrading in industry.

#### *Brief Description*

**3** The Commission achieves this aim by providing funding support and putting in place appropriate infrastructural facilities to encourage applied R&D activities. The Innovation and Technology Support Programme (ITSP) under the Innovation and Technology Fund (ITF) supports applied R&D projects with a view to transferring the results to companies in the relevant industry. The Commission also administers the Patent Application Grant (PAG) to provide funding assistance to local companies and individuals applying for patent registration of their own inventions for the first time.

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4 Five R&D centres were established in April 2006 to drive and co-ordinate R&D efforts in five focus areas namely nanotechnology and advanced materials, textile and clothing, automotive parts and accessory systems, logistics and supply chain management enabling technologies, and information and communications technologies (ICT). 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.

5 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 Co-operation 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 2012, the Commission, the Guangdong Provincial Department of Science and Technology and the Science and Technology Innovation Commission of Shenzhen Municipality continued to jointly invite and process applications under the Scheme.

6 To reinforce the research culture among companies 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, companies conducting applied R&D projects with the support of the ITF or in partnership with designated local public research institutions enjoy a cash rebate on their investments. The level of cash rebate has been increased from ten per cent to 30 per cent with effect from 1 February 2012.

7 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 accomplish their research programmes effectively. Performance indicators in respect of the ITSP, PAG, R&D centres, TCFS and R&D Cash Rebate Scheme are as follows:

### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
<b>ITSP<sup>Ψ</sup></b>			
applications received and processed .....	344	366	<b>348</b>
projects funded and being monitored.....	216	233	<b>235</b>
<b>PAG</b>			
applications received and processed .....	235	202	<b>210</b>
projects funded .....	152	146	<b>150</b>
<b>R&amp;D centres' projects<sup>γ</sup></b>			
Automotive Parts and Accessory Systems R&D Centre			
new projects.....	8	6	<b>11</b>
projects funded and being monitored.....	37	25	<b>24</b>
Hong Kong R&D Centre for Information and Communications Technologies			
new projects.....	29	35	<b>42</b>
projects funded and being monitored.....	103	89	<b>100</b>
Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies			
new projects.....	3	12	<b>11</b>
projects funded and being monitored.....	30	34	<b>36</b>
Nano and Advanced Materials Institute			
new projects.....	18	19	<b>28</b>
projects funded and being monitored.....	57	54	<b>74</b>
Hong Kong Research Institute of Textiles and Apparel			
new projects.....	13	17	<b>20</b>
projects funded and being monitored.....	47	46	<b>59</b>
<b>TCFS</b>			
applications received and processed .....	77	70	<b>70</b>
projects funded and being monitored.....	75	56	<b>67</b>
<b>R&amp;D Cash Rebate Scheme</b>			
applications received and processed .....	192	205	<b>250</b>
applications approved .....	191	193	<b>250</b>

Ψ The figures do not include applications submitted or projects undertaken by the five R&D centres, which are reported under the indicators "R&D centres' projects".

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

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### *Matters Requiring Special Attention in 2013–14*

- 8 During 2013–14, the Commission will continue to:
- administer the various funding programmes and monitor progress of the funded projects;
  - support the activities of the R&D centres with emphasis on technology transfer of funded projects;
  - enhance collaboration and monitor the progress on R&D between Hong Kong and Guangdong under the TCFS;
  - provide funding assistance to the Partner State Key Laboratories (PSKLs) in Hong Kong to enhance their research capabilities; and
  - administer the R&D Cash Rebate Scheme to reinforce the research culture among companies and encourage them to establish stronger partnership with designated local public research institutions. A full review of the Scheme will be conducted after its first three years of operation.

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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	6.7	7.0	7.0 (—)	7.8 (+11.4%)
				(or +11.4% on 2012–13 Original)

### *Aim*

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

### *Brief Description*

10 The Commission achieves this aim through administering the University-Industry Collaboration Programme (UICP) under the ITF to support commercial R&D projects undertaken by companies in collaboration with local universities. Companies in the private sector are encouraged to invest and 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, companies contribute half of the project cost in respect of R&D projects taken up jointly with local universities. They are also 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.

- 11 The UICP received a total of 30 applications requesting \$46.9 million in 2012.

- 12 The key performance indicators are:

### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
UICP			
applications received and processed .....	14	30	20
projects funded and being monitored.....	30	42	53

### *Matters Requiring Special Attention in 2013–14*

- 13 During 2013–14, the Commission will continue to administer the UICP and monitor progress of the funded projects.

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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	6.0	7.6	7.9 (+3.9%)	7.5 (–5.1%)
				(or –1.3% on 2012–13 Original)

#### *Aim*

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

#### *Brief Description*

15 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 to support technology entrepreneurs and small enterprises (including start-ups) to carry out R&D on innovation and technology. 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.

16 During 2012–13, the Commission:

- reviewed and launched the enhanced SERAP on 1 April 2012;
- administered the SERAP and monitored its management;
- publicised the SERAP funding scheme via talks and seminars;
- published the SERAP Company Directory for 2013;
- provided networking support to some SERAP companies; and
- monitored the residual work relating to the ARF.

17 The key performance measures are:

#### *Target*

	Target working days	2011 (Actual)	2012 (Actual)	2013 (Plan)
informing applicants of the result of their SERAP applications after receipt of full information .....	50.0	30.4	31.7	32.0

#### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
SERAP			
applications received and processed .....	50	48	65
projects funded and being monitored .....	115	100	125

### *Matters Requiring Special Attention in 2013–14*

18 During 2013–14, the Commission will continue to:

- administer the SERAP with a view to better supporting small and medium-sized enterprises (SMEs) to conduct R&D;
- monitor progress of the funded projects under SERAP; and
- monitor the residual work relating to the ARF.

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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	33.7	35.9	35.3 (–1.7%)	37.0 (+4.8%)
				(or +3.1% on 2012–13 Original)

#### *Aim*

19 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*

20 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 Government's programmes and resources to promote innovation and technology.

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

22 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, exhibitions and student technology competitions which help foster an innovation and technology culture.

23 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 and industrial experience, stimulate the interest of graduates in applied R&D activities and help create a larger pool of research talents.

24 During 2012–13, 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 Co-operation Committee, the Pan-PRD Joint Conference on Regional Co-operation in Science and Technology, the Guangdong/Hong Kong Expert Group on Co-operation in Innovation and Technology, and the Steering Group on Shenzhen/Hong Kong Co-operation in Innovation and Technology;
- organised the InnoTech Month (ITM) 2012 to promote innovation and technology to the general public, in particular the youth. Activities of the ITM included the InnoCarnival, road show, seminars, competitions, technology workshops and publication of science education books for young children;
- implemented the Innovation and Technology Scholarship Award Scheme to nurture young talents to become future leaders in innovation and technology;
- oversaw the operation of the Innovation and Technology Student Club which provides a sustainable and interactive platform and educational opportunities to nurture young innovative talents;
- participated in Innovation, Design and Technology Expo to promote the five R&D centres, and to introduce the Commission'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;
- launched invitation under a new round of applications for PSKLs;
- recommended Hong Kong experts to the National Science and Technology Programmes Expert Database;
- facilitated approvals from the Ministry of Science and Technology for the Hong Kong Science Park (HKSP) to become a "National High-Tech Industrialisation (Partner) Base for Green Technology" and the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI) to be established as the "Hong Kong Branch of the National Engineering Research Centre for Application Specific Integrated Circuit System" respectively;
- enhanced promotion at enterprise level through organising a "Hong Kong Pavilion" at the China Hi-Tech Fair 2012 and other technology trade shows such as the Innovation, Design and Technology Expo;

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- participated in the Asia-Pacific Economic Cooperation (APEC) Industrial Science and Technology Working Group;
- increased the monthly allowance for interns under the Internship Programme; and
- supported the development of Chinese medicines, and set up a new government-led committee to co-ordinate various parties in promoting the development of R&D and testing of Chinese medicines.

**25** The key performance indicators are:

### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
GSP			
applications received and processed .....	22	24	<b>24</b>
projects funded and being monitored.....	23	35	<b>47</b>
Internship Programme			
applications received and processed .....	214	275	<b>275</b>
intern positions funded.....	491	502	<b>550</b>

### *Matters Requiring Special Attention in 2013–14*

**26** During 2013–14, the Commission will continue to:

- strengthen technology co-operation with the Mainland through the Mainland/Hong Kong Science and Technology Co-operation Committee, the Pan-PRD Joint Conference on Regional Co-operation in Science and Technology, and the Guangdong/Hong Kong Expert Group on Co-operation in Innovation and Technology, and the Steering Group on Shenzhen/Hong Kong Co-operation in Innovation and Technology to dovetail with the technology development in the Mainland as guided by the National 12th Five-Year Plan;
- administer the GSP, including Internship Programme, and monitor progress of the funded projects;
- promote innovation and technology culture to the general public and nurture more young innovative talents;
- nominate entries for the State Science and Technology Awards;
- provide funding support to the PSKLs and process the new round of applications and liaise with the Ministry of Science and Technology for the latter to consider whether to admit new PSKLs;
- organise promotional and educational activities such as the “Hong Kong Pavilion” at technology trade shows including the China Hi-Tech Fair 2013; and
- participate in the APEC forum “Policy Partnership on Science, Technology and Innovation”.

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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	11.0	12.0	12.1 (+0.8%)	<b>12.5</b> (+3.3%)
				(or +4.2% on 2012–13 Original)

### *Aim*

**27** 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*

**28** 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, ASTRI and the Hong Kong Productivity Council (HKPC) in the process.

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**29** During 2012–13, the Commission:

- worked closely with the HKSTPC on its policy directions, including implementation of the Phase Three development of the HKSP, revitalisation of the Industrial Estates and the feasibility study on expanding the Yuen Long Industrial Estate;
- worked closely with the ASTRI in strengthening their institutional and research capabilities to develop its ICT R&D Centre; and
- monitored the delivery of value-added support services to the manufacturing and related service industries by the HKPC.

### *Matters Requiring Special Attention in 2013–14*

**30** During 2013–14, the Commission will continue to:

- work closely with the HKSTPC on its various developments and business plans of the HKSP and the Industrial Estates; and
- assist the ASTRI in strengthening its R&D capabilities and lead research programmes in the focus areas of communications technologies, enterprise and consumer electronics, integrated circuit (IC) design, material and packaging technologies and biomedical electronics.

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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	85.2	99.3	96.2 (–3.1%)	106.5 (+10.7%)
				(or +7.3% on 2012–13 Original)

### *Aim*

**31** 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*

**32** 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).

**33** During 2012–13, the SCL participated in seven 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 231 national metrology institutes in 87 economies and four 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 certification of information security management system, energy management system, and green house gas validation and verification. 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 continued to provide support to HKCTC in co-ordinating the implementation of a three-year development plan for the testing and certification industry.

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34 The key performance measures for SCL, PSIB and HKAS are:

### *Targets*

	Target working days	2011 (Actual)	2012 (Actual)	2013 (Plan)
processing of quotation for calibration services .....	2	2	2	2
calibration of equipment.....	13	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

### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
<b>SCL</b>			
calibrations performed .....	891	1,027	900
revenue generated (\$) .....	1,837,285	2,046,435	2,000,000
revenue/post (\$) .....	413,445	413,246	403,869
<b>PSIB</b>			
technical enquiries .....	382	378	380
sales and photocopying of documented standards enquiries.....	221	196	200
quotations given.....	687	940	950
orders placed.....	170	100	100
revenue generated (\$) .....	133,268	151,648	150,000
revenue/post (\$) .....	325,043	369,873	365,853
<b>HOKLAS</b>			
accredited laboratories (cumulative).....	184	196	200
assessments and re-assessments conducted.....	385	356	400
overseas laboratory accreditation schemes with MRA with the HOKLAS (cumulative).....	78	76	77
<b>HKCAS</b>			
accredited certification bodies (cumulative) .....	17	19	19
assessments, re-assessments and surveillance visits conducted .....	33	32	36
overseas certification bodies accreditation schemes with MRA with the HKCAS (cumulative) .....	52	54	54
<b>HKIAS</b>			
accredited inspection bodies (cumulative).....	19	20	21
assessments, re-assessments and surveillance visits conducted .....	32	31	35
overseas inspection bodies accreditation schemes with MRA with the HKIAS (cumulative).....	13	41 <sup>α</sup>	41

α There is a sharp increase because the MRA under the International Laboratory Accreditation Cooperation has been extended to cover inspection since October 2012.

### *Matters Requiring Special Attention in 2013–14*

35 During 2013–14, the Commission will:

- continue to work closely with HKCTC to further develop the testing and certification industry. The Commission is now supporting HKCTC in conducting a review on the implementation of the three-year market oriented industry development plan proposed by HKCTC in March 2010;
- support the testing and certification industry in implementing the new Mainland initiative to expand, on a pilot basis in Guangdong Province, the scope of certification services that can be undertaken by Hong Kong testing organizations to cover food;



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- 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 continue to work closely with HKCTC to promote existing accreditation services to industry;
- 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

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)				
Hong Kong Productivity Council	182.8	178.0	183.7 (+3.2%)	<b>183.7</b> (—)  (or +3.2% on 2012–13 Original)
Hong Kong Applied Science and Technology Research Institute Company Limited	133.5	134.5	134.5 (—)	<b>134.5</b> (—)  (or same as 2012–13 Original)
Total	316.3	312.5	318.2 (+1.8%)	<b>318.2</b> (—)  (or +1.8% on 2012–13 Original)

#### *HKPC*

#### *Aim*

**36** 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 and sustainability.

#### *Brief Description*

**37** 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.

**38** 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 SMEs, through operation management, human resources management, innovation management, knowledge management, strategic business management, corporate social responsibility and sectoral platforming with quality certification schemes;

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- 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.

**39** During 2012–13, HKPC 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. The R&D Centre merged with HKPC in November 2012 to achieve greater synergy and facilitate closer collaboration with the HKPC and enhance commercialisation of project results. After the merger, the R&D Centre will continue to be funded entirely by ITF under a separate provision.

**40** The key performance indicators for the HKPC are:

### *Indicators*

	2011–12 (Actual)	2012–13 (Revised Estimate)	2013–14 (Estimate)
overall income/expenditure ratio (%) .....	66.5	67.5	<b>67.8</b>
income from consultancy/technical assistance (\$m) .....	232.9	229.8	<b>271.1</b>
income from training courses (\$m) .....	21.4	24.6	<b>24.1</b>
income from exhibitions/study missions/conferences (\$m) .....	13.8	10.9	<b>10.1</b>
income from manufacturing support/process control (\$m) .....	21.2	26.1	<b>31.1</b>
no. of consultancy projects accepted .....	1 361	1 420	<b>1 450</b>
no. of people who attended the HKPC fee-charging training courses .....	6 542	6 000	<b>6 050</b>
no. of people who attended the HKPC events/networking activities for associations/non-fee-charging seminars .....	21 694	18 100	<b>20 000</b>
no. of people who attended the HKPC exhibitions .....	1 020	1 600	<b>1 040</b>
no. of people who participated in the HKPC study missions/conferences .....	1 611	1 520	<b>1 760</b>
no. of R&D projects .....			
new projects .....	26	26	<b>24</b>
on-going projects .....	64	40	<b>40</b>

### *Matters Requiring Special Attention in 2013–14*

**41** During 2013–14, the HKPC will continue to:

- provide integrated support to innovative and growth-oriented Hong Kong companies 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, such as through the Enterprise Support Programme under the Dedicated Fund on Branding, Upgrading and Domestic Sales and the integrated support centre "SME One" launched on 25 June 2012 and 17 July 2012 respectively;
- 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 companies operating in the 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 in Hong Kong and the PRD through such initiatives as the CarbonSmart Programme and 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.

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*ASTRI*

### *Aim*

**42** The aim is to provide research capability for Hong Kong's technological development and stimulate the growth of technology-based industry in Hong Kong, and to enhance Hong Kong's competitiveness in technology-based industries through applied research.

### *Brief Description*

**43** 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.

**44** 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, ASTRI now has five technology areas, namely, communications technologies, enterprise and consumer electronics, IC design, material and packaging technologies and biomedical electronics, as its focus areas. ASTRI has become more customer-focused in its R&D business. Companies are encouraged to contribute a significant portion of the total project cost as industry collaborative projects undertaken by the ASTRI.

**45** The key performance indicators for ASTRI are:

### *Indicators*

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
no. of new full projects <sup>^</sup> .....	16	17	25
no. of new seed projects <sup>¶</sup> .....	13	17	17
no. of patents filed .....	43	51	45
no. of technology transfers .....	84	102	105
no. of clients engaged in technology transfer .....	60	84	86
no. of members joining consortia formed by ASTRI .....	186	220	246
no. of technology workshop/seminars organised .....	47	51	45
no. of participants of seminars .....	4 550	5 450	4 500
amount of income from industry (\$m) .....	51.0	66.6	75.0

<sup>^</sup> Full projects are R&D projects with more than \$2.0 million funding support from the ITF, including collaborative projects with the industry.

<sup>¶</sup> Seed projects are feasibility studies for developing substantive R&D project proposals. These studies should not cost more than \$2.0 million nor exceed six months in duration.

### *Matters Requiring Special Attention in 2013–14*

**46** During 2013–14, the ASTRI will continue to:

- pursue the research projects initiated in 2012–13 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 ITF Internship Programme; and
- improve the industrial involvement and contribution on its R&D projects through collaborative projects.

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

**ANALYSIS OF FINANCIAL PROVISION**

<b>Programme</b>	<b>2011-12 (Actual) (\$m)</b>	<b>2012-13 (Original) (\$m)</b>	<b>2012-13 (Revised) (\$m)</b>	<b>2013-14 (Estimate) (\$m)</b>
(1) Support for Research and Development .....	43.8	41.2	61.3	<b>69.7</b>
(2) Fostering University-Industry Collaboration.....	6.7	7.0	7.0	<b>7.8</b>
(3) Promotion of Technological Entrepreneurship .....	6.0	7.6	7.9	<b>7.5</b>
(4) Planning for Innovation and Technology Development .....	33.7	35.9	35.3	<b>37.0</b>
(5) Infrastructural Support .....	11.0	12.0	12.1	<b>12.5</b>
(6) Quality Support .....	85.2	99.3	96.2	<b>106.5</b>
(7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited .....	316.3	312.5	318.2	<b>318.2</b>
	502.7	515.5	538.0 (+4.4%)	<b>559.2 (+3.9%)</b>
				<b>(or +8.5% on 2012-13 Original)</b>

**Analysis of Financial and Staffing Provision**

**Programme (1)**

Provision for 2013-14 is \$8.4 million (13.7%) higher than the revised estimate for 2012-13. This is mainly due to the increased provision for salary, general departmental expenses and cash flow requirements for a non-recurrent item.

**Programme (2)**

Provision for 2013-14 is \$0.8 million (11.4%) higher than the revised estimate for 2012-13. This is mainly due to the increased provision for salary and general departmental expenses.

**Programme (3)**

Provision for 2013-14 is \$0.4 million (5.1%) lower than the revised estimate for 2012-13. This is mainly due to the decreased provision for general departmental expenses, partly offset by the increased provision for salary.

**Programme (4)**

Provision for 2013-14 is \$1.7 million (4.8%) higher than the revised estimate for 2012-13. This is mainly due to the increased provision for salary and general departmental expenses.

**Programme (5)**

Provision for 2013-14 is \$0.4 million (3.3%) higher than the revised estimate for 2012-13. This is mainly due to the increased provision for salary and general departmental expenses.

**Programme (6)**

Provision for 2013-14 is \$10.3 million (10.7%) higher than the revised estimate for 2012-13. This is mainly due to the increased provision for salary, partly offset by the reduced provision for procurement of capital equipment.

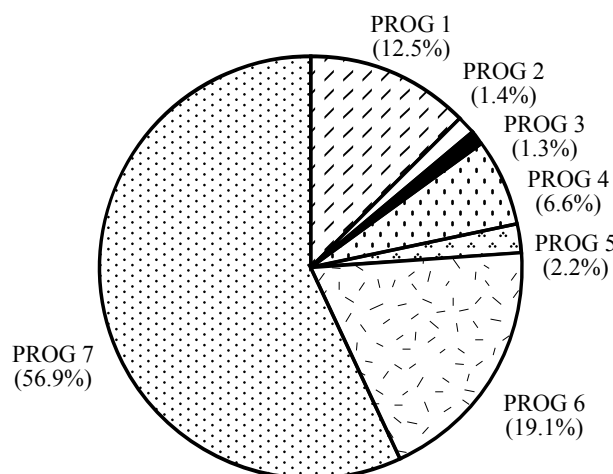
**Programme (7)**

Provision for 2013-14 is the same as the revised estimate for 2012-13.

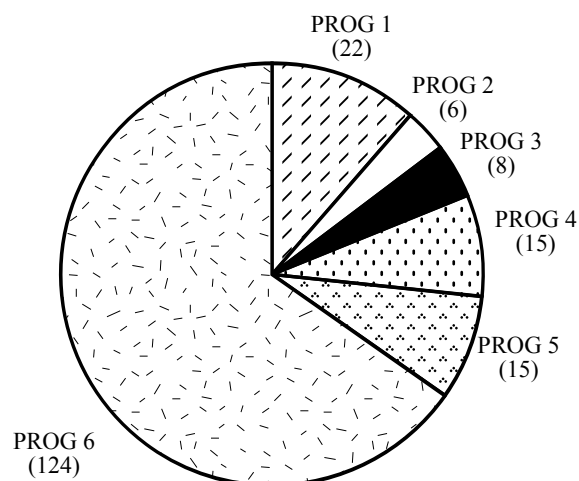
**Head 155 — GOVERNMENT SECRETARIAT:  
INNOVATION AND TECHNOLOGY COMMISSION**

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*Allocation of provision  
to programmes  
(2013-14)*

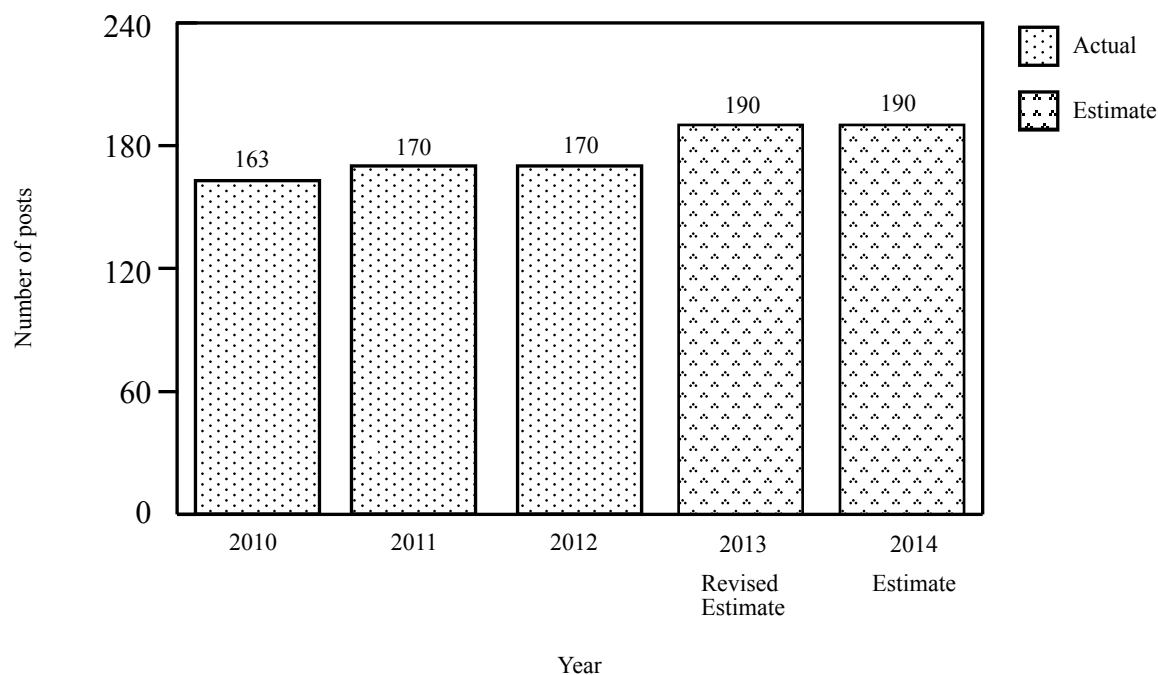


*Staff by programme  
(as at 31 March 2014)*



(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 2011–12	Approved estimate 2012–13	Revised estimate 2012–13	Estimate 2013–14
		\$'000	\$'000	\$'000	\$'000
<b>Operating Account</b>					
	Recurrent				
000	Operational expenses .....	482,402	495,017	500,862	<b>517,904</b>
	Total, Recurrent .....	482,402	495,017	500,862	<b>517,904</b>
	Non-Recurrent				
700	General non-recurrent .....	11,660	8,200	27,000	<b>33,000</b>
	Total, Non-Recurrent .....	11,660	8,200	27,000	<b>33,000</b>
	Total, Operating Account .....	494,062	503,217	527,862	<b>550,904</b>
<b>Capital Account</b>					
	Plant, Equipment and Works				
603	Plant, vehicles and equipment .....	924	2,280	190	<b>2,586</b>
661	Minor plant, vehicles and equipment (block vote) .....	2,857	9,970	9,970	<b>5,738</b>
	Total, Plant, Equipment and Works .....	3,781	12,250	10,160	<b>8,324</b>
	Subventions				
	Hong Kong Productivity Council .....	4,817	—	—	—
	Total, Subventions .....	4,817	—	—	—
	Total, Capital Account .....	8,598	12,250	10,160	<b>8,324</b>
	Total Expenditure .....	502,660	515,467	538,022	<b>559,228</b>

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

### Details of Expenditure by Subhead

The estimate of the amount required in 2013–14 for the salaries and expenses of the Innovation and Technology Commission is \$559,228,000. This represents an increase of \$21,206,000 over the revised estimate for 2012–13 and of \$56,568,000 over the actual expenditure in 2011–12.

#### *Operating Account*

##### Recurrent

**2** Provision of \$517,904,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Innovation and Technology Commission.

**3** The establishment as at 31 March 2013 will be 189 permanent posts and one supernumerary post. No change in establishment is expected in 2013–14. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2013–14, but the notional annual mid-point salary value of all such posts must not exceed \$93,313,000.

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

	2011–12 (Actual) (\$'000)	2012–13 (Original) (\$'000)	2012–13 (Revised) (\$'000)	2013–14 (Estimate) (\$'000)
Personal Emoluments				
- Salaries .....	91,874	102,700	103,000	117,000
- Allowances .....	1,816	2,585	2,413	3,373
- Job-related allowances.....	—	2	2	2
Personnel Related Expenses				
- Mandatory Provident Fund contribution .....	153	210	224	333
- Civil Service Provident Fund contribution .....	512	997	1,093	1,324
Departmental Expenses				
- General departmental expenses .....	76,529	76,067	75,957	77,699
Subventions				
- Hong Kong Productivity Council .....	177,978	177,978	183,695	183,695
- Hong Kong Applied Science and Technology Research Institute Company Limited .....	133,540	134,478	134,478	134,478
	<u>482,402</u>	<u>495,017</u>	<u>500,862</u>	<u>517,904</u>

#### *Capital Account*

##### Plant, Equipment and Works

**5** Provision of \$5,738,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$4,232,000 (42.4%) against the revised estimate for 2012–13. 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 \$'000	Accumulated expenditure to 31.3.2012 \$'000	Revised estimated expenditure for 2012–13 \$'000	Balance \$'000
<b><i>Operating Account</i></b>						
700		<i>General non-recurrent</i>				
	860	Research and Development Cash Rebate Scheme .....	200,000	17,298	27,000	155,702
			<u>200,000</u>	<u>17,298</u>	<u>27,000</u>	<u>155,702</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	924	190	2,136
	882	For Direct Current Laboratory of Standards and Calibration Laboratory to set up new calibration services for luminous flux of reference light sources.....	4,200	—	—	4,200
			<u>7,450</u>	<u>924</u>	<u>190</u>	<u>6,336</u>
		Total .....	<u>207,450</u>	<u>18,222</u>	<u>27,190</u>	<u>162,038</u>