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

Estimate 2015–16	\$620.3m
Establishment ceiling 2015–16 (notional annual mid-point salary value) representing an estimated 198 non-directorate posts as at 31 March 2015 and as at 31 March 2016	\$112.1m
In addition, there will be an estimated eight directorate posts as at 31 March 2015 and as at 31 March 2016.	
Commitment balance	\$93.2m

Controlling Officer's Report

Programmes

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

2015–16 (Estimate)	2014–15 (Revised)	2014–15 (Original)	2013–14 (Actual)	
109.0 (+25.3%)	87.0 (-2.7%)	89.4	66.9	Financial provision (\$m)
(or +21.9% on 2014–15 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 Guangdong-Hong Kong Technology Co-operation Funding Scheme (TCFS) under the ITSP supports applied R&D projects which will facilitate economic development in the Greater Pearl River Delta (PRD) region. 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.

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 Funding assistance is provided to Partner State Key Laboratories in Hong Kong and Hong Kong Branches of Chinese National Engineering Research Centres (CNERCs) to enhance their research capabilities. Financial support is also provided to six local universities to enhance their technology transfer capabilities.

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 was increased from ten per cent to 30 per cent with effect from 1 February 2012.

The performance under this programme is indicated by the extent to which the applied R&D activities receiving funding support is 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

	2013 (Actual)	2014 (Actual)	2015 (Estimate)
ΙΤϚΡΨ	()	((
applications received and processed	384	383	389
projects funded and being monitored	235	276	306
PAG		- / 0	••••
applications received and processed	186	234	210
projects funded	121	153	145
R&D centres' projectsy			
Automotive Parts and Accessory Systems R&D Centre			
new projects	8	12	16
projects funded and being monitored	28	35	51
Hong Kong R&D Centre for Information and			
Communications Technologies			
new projects	36	37	50
projects funded and being monitored	95	96	114
Hong Kong R&D Centre for Logistics and Supply			
Chain Management Enabling Technologies	_	10	10
new projects	7	18	18
projects funded and being monitored	32	39	49
Nano and Advanced Materials Institute	17	22	-
new projects	17	32	50
projects funded and being monitored	60	/5	109
Hong Kong Research Institute of Textiles and Apparel	12	27	26
new projects	13	21	26 75
	42	04	15
IUFS	19	10	65
projects funded and being monitored	40	60	03 80
R&D Cash Rebate Scheme	/ 1	09	00
applications received and processed	224	261	275
applications received and processed	218	251	275
approximations approved	210	202	2 15

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". All projects (including TCFS projects and feasibility studies) undertaken and/or monitored by R&D centres Ψ

γ are included.

Ω The drop in the number of TCFS applications received and processed in 2014 was due to the postponement of the solicitation exercise to December 2014 which will close in February 2015. The figure is subject to further adjustment later in 2015.

- 8 During 2015–16, 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,
- process the applications for admission as Hong Kong Branches of CNERCs, 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.

Programme (2): Fostering University-Industry Collaboration

	2013–14 (Actual)	2014–15 (Original)	2014–15 (Revised)	2015–16 (Estimate)
Financial provision (\$m)	7.6	7.2	6.9	6.6
			(-4.2%)	(-4.5%)

(or -8.3% on 2014–15 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 24 applications requesting \$40.7 million in 2014.
- **12** The key performance indicators are:

Indicators

	2013 (Actual)	2014 (Actual)	2015 (Estimate)
UICP			
applications received and processed	18	24	24
projects funded and being monitored	58	70	76

Matters Requiring Special Attention in 2015–16

13 During 2015–16, the Commission will continue to administer the UICP and monitor progress of the funded projects.

Programme (3): Promotion of Technological Entrepreneurship

	2013–14	2014–15	2014–15	2015–16
	(Actual)	(Original)	(Revised)	(Estimate)
Financial provision (\$m)	6.9	7.2	9.0 (+25.0%)	10.4 (+15.6%)

(or +44.4% on 2014–15 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. To encourage more private sector investment in R&D, a new Enterprise Support Scheme (ESS) will be set up to replace the SERAP. 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.

16 The Commission launched in 2014 a new Technology Start-up Support Scheme for Universities (TSSSU). The TSSSU provides funding support, initially for three years from 2014–15, to six local universities to encourage their students, faculty members, etc. to start technology businesses and commercialise their R&D results. In addition, the Commission works closely with the Hong Kong Science and Technology Parks Corporation (HKSTPC), which operates incubation programmes to provide technology start-ups with support in marketing, finance, technology and management in their critical initial years of operation.

- 17 During 2014–15, the Commission:
- administered the SERAP and monitored funded projects,
- launched the TSSSU and worked on the implementation details of the ESS,
- publicised the SERAP and ESS via talks and seminars,
- published the SERAP Company Directory for 2015,
- provided networking support to some SERAP companies, and
- monitored the residual work relating to the ARF.
- 18 The key performance measures are:

Target

	Target working days	2013 (Actual)	2014 (Actual)	2015 (Plan)
informing applicants of the result of their SERAP applications after receipt of full information	50.0	33.0	35.4	35.0
Indicators				
		2013 (Actual)	2014 (Actual)	2015 (Estimate)
SERAP applications received and processed projects funded and being monitored		54 108	48 112	13µ 106

 μ The number of SERAP applications is estimated to drop considerably because the SERAP will be replaced by a new ESS in 2015.

Matters Requiring Special Attention in 2015–16

- **19** During 2015–16, the Commission will continue to:
- administer outstanding applications and cases under SERAP and roll out the ESS which will replace the former with a view to better supporting enterprises to conduct R&D,
- monitor progress of the funded projects under the SERAP and the ESS,
- administer the TSSSU, and
- monitor the residual work relating to the ARF.

Programme (4): Planning for Innovation and Technology Development

	2013–14 (Actual)	2014–15 (Original)	2014–15 (Revised)	2015–16 (Estimate)
Financial provision (\$m)	34.2	39.8	38.7 (-2.8%)	39.1 (+1.0%)
				(or -1.8% on 2014–15 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 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.

22 The Commission supports technology co-operation with the Mainland, and participates 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, exhibitions and student technology competitions 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 and industrial experience, stimulate the interest of graduates in applied R&D activities and help create a larger pool of research talents.

25 During 2014–15, 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) 2014 to promote innovation and technology to the general public, in particular the youth. Activities of the ITM included the InnoCarnival, road shows, 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;
- enhanced promotion at enterprise level through organising a "Hong Kong Pavilion" at the China Hi-Tech Fair 2014; and
- supported the development of Chinese medicines, and co-ordinated various parties in promoting the development of R&D and testing of Chinese medicines through a government-led committee.

26 The key performance indicators are:

Indicators

	2013 (Actual)	2014 (Actual)	2015 (Estimate)
GSP			
applications received and processed	31	30	30
projects funded and being monitored	49	53	62
Internship Programme			
applications received and processed	335	352	360
intern positions funded	592	653	710

Matters Requiring Special Attention in 2015–16

- 27 During 2015–16, the Commission will continue to:
- strengthen technology co-operation with the Mainland through established co-operation mechanisms;
- 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; and
- organise promotional and educational activities such as the "Hong Kong Pavilion" at technology trade shows including the China Hi-Tech Fair 2015.

Programme (5): Infrastructural Support

	2013–14 (Actual)	2014–15 (Original)	2014–15 (Revised)	2015–16 (Estimate)
Financial provision (\$m)	12.1	12.3	11.7 (-4.9%)	12.1 (+3.4%)
				(or –1.6% on 2014–15 Original)

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 planning and development 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 Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI) and the Hong Kong Productivity Council (HKPC) in the process.

- **30** During 2014–15, the Commission:
- worked closely with the HKSTPC on various major initiatives, including implementation of the Phase Three development of the Hong Kong Science Park (HKSP) and review of the effectiveness and long-term development direction of the HKSP and the Industrial Estates (IEs);
- 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.

- **31** During 2015–16, the Commission will continue to:
- work closely with the HKSTPC on implementation of its various new developments and business plans of the HKSP and the IEs; and
- assist the ASTRI in strengthening its R&D capabilities and lead research programmes in the focus areas of communications technologies, integrated circuit (IC) design, sensing and integration, and software and systems.

Programme (6): Quality Support

2015–16 (Estimate)	2014–15 (Revised)	2014–15 (Original)	2013–14 (Actual)	
108.7 (—)	108.7 (+6.2%)	102.4	101.4	Financial provision (\$m)
(or +6.2% on 2014–15 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).

34 Through participation in Mutual Recognition Arrangement (MRA) drawn up by the International Committee for Weights and Measures (CIPM), SCL's calibration certificates are widely accepted by overseas national metrology institutes.

35 Through the MRAs signed with international and regional organisations of accreditation bodies, the endorsed test reports and accredited certificates issued by organisations accredited by the HKAS 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) are recognised worldwide.

- 36 During 2014–15,
- SCL took part in the following international metrology activities to substantiate its CIPM MRA claims for worldwide recognition:
 - participation in inter-laboratory comparisons of measurement standards and proficiency testing programmes,
 - participation in peer reviews of the capabilities and quality systems of other CIPM MRA partners,
 - publication of its technical achievements at international conferences and journals, and
 - participation in the Asia-Pacific Metrology Programme General Assembly/Technical Committees;
- HKAS extended its accreditation service to conformity assessment bodies for:
 - verification of greenhouse gas assertions at product level,
 - product certification for food,
 - testing to new Construction Standards on "Steel Reinforcement Bars for Concrete" and "Aggregates for Concrete", and
 - testing for the purpose of certification that can be undertaken by Hong Kong laboratories for all areas of voluntary certification in Guangdong Province;
- PSIB participated in the Asia-Pacific Economic Cooperation (APEC) Sub-Committee on Standards and Conformance and the International Organization for Standardization (ISO); and
- the Secretariat of HKCTC was set up on a permanent basis subsequent to the approval by the Legislative Council in January 2014. It continued to provide support to HKCTC in implementing measures to further support the development of the testing and certification industry recommended in its Review Report submitted to the Government in March 2013.

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

Targets

	Target working days	2013 (Actual)	2014 (Actual)	2015 (Plan)
processing of quotation for calibration				
services	2	2	2	2
calibration of equipment	13	13	13	13
standards	1	1	1	1
processing of complicated enquiries on product standards	8	8	8	8
issue of quotations for documented	0	0	0	Ū
standards	1	1	1	1
processing of orders for photocopies of				
documented standards	2	2	2	2
Indicators				
		2013	2014	2015
		(Actual)	(Actual)	(Estimate)
SCI				
calibrations performed		1.050	1 091	1 090
revenue generated (\$)8	••••••	2 489 165	2 498 420	2.400.000
overseas national metrology institutes	as the SCL's	_,,	_,,.	_,,
CIPM MRA partners (cumulative):		89	94	94
PSIB				
technical enquiries		370	367	370
sales and photocopying of documented	standards∆	100		
enquiries	••••••	138	94	90
quotations given	••••••	660	417	420
orders placed	••••••	69	23	50
HOKI AS	••••••	84,052	80,904	81,000
accredited laboratories (cumulative)		206	210	213
assessments and re-assessments condu	cted	362	405	410
overseas laboratory accreditation scher	nes with MRA	502	100	
with the HOKLAS (cumulative)		81	84	84
HKCAS				
accredited certification bodies (cumula	tive)	19	23	23
assessments, re-assessments and surve	illance visits			
conducted	• 1	37	48	48
overseas certification bodies accreditat	ion schemes	50	50	50
With MIRA with the HKCAS (cumul	lative)	59	59	59
accredited inspection bodies (cumulativ	ve)	20	21	21
assessments re-assessments and survey	illance visits	20	<i>2</i> 1	21
conducted		24	26	26
overseas inspection bodies accreditatio	n schemes with	- ·		20
MRA with the HKIAS (cumulative)		52	55	56

In recent years, the number of calibrations performed tends to be steady at slightly more than 1 000 per year. §

However, the revenue generated varies around ten per cent, depending on the types of equipment calibrated. This new indicator replaces the indicator "revenue/post (\$)" as from 2015 to indicate SCL's signatory status in the CIPM MRA, through which SCL's measurement standards and calibration certificates are recognised internationally by its MRA partners. The CIPM MRA provides the technical basis aiming for the elimination of unnecessary technical barriers to trade. The actual figures for 2013 and 2014 have been updated accordingly under the new indicator. This new indicator is used because information provided by the previous indicator "revenue/post (\$)" is considered redundant given that "revenue generated (\$)" is already ‡ previous indicator "revenue/post (\$)" is considered redundant given that "revenue generated (\$)" is already reported and SCL staff headcount will remain unchanged in the near future.

The drop in the PSIB figures in recent years is mainly attributed to the ease of obtaining standards through the Internet. Separately, the indicator "revenue/post (\$)" has been deleted because, as from February 2014, Δ the fee charged for selling each standard is calculated according to the time of the post spent on processing the sale. Therefore, the revenue per post remains constant under this fee charging method.

- **38** During 2015–16, the Commission will continue to:
- provide support to HKCTC in implementing measures to support the overall development of the testing and certification industry;
- implement various liberalisation measures relevant to testing and certification industry under the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA);
- liaise with international organisations on matters relevant to testing and certification services including hosting an ISO Technical Committee meeting in Hong Kong in the Commission's capacity as a correspondent member of ISO in 2015;
- 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

2015–16 (Estimate)	2014–15 (Revised)	2014–15 (Original)	2013–14 (Actual)	
				Financial provision (\$m)
192.9 (—)	192.9 (+2.9%)	187.4	187.4	Hong Kong Productivity Council
(or +2.9% on 2014–15 Original)				
141.5 (—)	141.5 (—)	141.5	134.5	Hong Kong Applied Science and Technology Research Institute Company Limited
(or same as 2014–15 Original)				
334.4 (—)	334.4 (+1.7%)	328.9	321.9	Total
(or +1.7% on				

HKPC

Aim

39 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.

2014-15 Original)

Brief Description

40 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.

41 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;
- 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; and
- operating the Automotive Parts and Accessory Systems R&D Centre which undertakes market-led R&D projects in collaboration with industry, universities and research institutions.
- 42 During 2014–15, 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; and
- 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.
- **43** The key performance indicators for the HKPC are:

Indicators

	2013–14 2014–15		2015-16	
	(Actual)	(Revised Estimate)	(Estimate)	
overall income/expenditure ratio (%)	68.3	67.9	69.0	
income from consultancy/technical assistance (\$m)	260.3	290.7	300.0	
income from training courses (\$m)	17.4	19.8	19.0	
income from exhibitions/study missions/conferences (\$m)	7.2	5.5	3.9	
income from manufacturing support/process control (\$m)	26.3	33.1	34.0	
no. of consultancy projects accepted	964	1 250	1 070	
no. of people who attended the HKPC fee-charging training				
courses	4 564	5 800	5 370	
no. of people who attended the HKPC events/networking				
activities for associations/non-fee-charging seminars	24 341	18 160	18 430	
no. of people who attended the HKPC exhibitions	5 390	1 100	1 200	
no. of people who participated in the HKPC study				
missions/conferences	1 084	1 800	980	
no. of R&D projectsβ				
new projects	25	29	29	
on-going projects	49	43	52	

β The figures do not include projects undertaken by the Automotive Parts and Accessory Systems R&D Centre independently, which are reported under the relevant indicators for the Centre under paragraph 7 above.

Matters Requiring Special Attention in 2015–16

- 44 During 2015–16, 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;

- help the retail industry, in particular SMEs, adopt relevant information and communications technology and other technologies to enhance productivity and manage manpower demand through the "Retail Technology Adoption Assistance Scheme for Manpower Demand Management" launched on 1 December 2014;
- assist Hong Kong companies and industries to leverage on the business opportunities arising from the CEPA;
- 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.

ASTRI

Aim

45 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

- 46 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.

47 ASTRI is designated as the R&D Centre for Information and Communications Technologies and currently focusing on four technology areas, namely, communications technologies, IC design, sensing and integration, and software and systems. Its operating strategy is to transfer the technologies and results developed from its R&D projects to industry through licensing, contract research and spinning-off new technology companies. This process will elevate the technology level of Hong Kong industry and accelerate the expansion of its technology industry base to create new employment opportunities and enhance competitiveness. Over the years, ASTRI has become more customer-focused in its R&D business.

48 The key performance indicators for ASTRI are:

Indicators

	2013	2014	2015
	(Actual)	(Actual)	(Estimate)
no. of new full projects ^	23	21	35
no. of new seed projects¶	12	16	15
no. of patents filed	34	27	38
no. of technology transfers	98	82	72
no. of clients engaged in technology transfer	81	57	60
no. of members joining consortia formed by ASTRI	246	292	308
no. of technology workshop/seminars organised	48	56	58
no. of participants of seminars	5 050	6 490	6 600
amount of income from industry (\$m)	82.3	79.5	85.0

∧ 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 lasting normally not more than six months for developing substantive R&D project proposals. The maximum ITF funding support for each of them has been increased from \$2 million to \$2.8 million since July 2013.

- **49** During 2015–16, the ASTRI will continue to:
- transfer technologies developed from its R&D projects to industry and commercialise project deliverables through implementing corporate-level initiatives and encourage more collaborative projects,
- strengthen cooperation with the industry and universities in R&D,
- develop research capabilities in new and emerging technologies and create synergy through clustered-seed projects,
- carry out the research projects initiated in 2014–15 and before,
- enhance institutional R&D infrastructure and research capabilities, and
- contribute to development of local high-technology human capital by recruiting local engineering graduates as fellows under the ITF Internship Programme.

ANALYSIS OF FINANCIAL PROVISION

		2013–14 (Actual) (\$m)	2014–15 (Original) (\$m)	2014–15 (Revised) (\$m)	2015–16 (Estimate) (\$m)
Prog	gramme	(0111)	(\$111)	(¢III)	(\$111)
(1)	Support for Research and				
	Development	66.9	89.4	87.0	109.0
(2)	Fostering University-Industry				
	Collaboration	7.6	7.2	6.9	6.6
(3)	Promotion of Technological				
	Entrepreneurship	6.9	7.2	9.0	10.4
(4)	Planning for Innovation and				
	Technology Development	34.2	39.8	38.7	39.1
(5)	Infrastructural Support	12.1	12.3	11.7	12.1
(6)	Quality Support	101.4	102.4	108.7	108.7
(7)	Subvention: Hong Kong Productivity				
	Council, Hong Kong Applied Science				
	and Technology Research Institute				
	Company Limited	321.9	328.9	334.4	334.4
		551.0	587.2	596.4	620.3
				(+1.6%)	(+4.0%)

(or +5.6% on 2014–15 Original)

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2015–16 is \$22.0 million (25.3%) higher than the revised estimate for 2014–15. This is mainly due to increased provision for salary and cash flow requirements for the Research and Development Cash Rebate Scheme.

Programme (2)

Provision for 2015–16 is \$0.3 million (4.3%) lower than the revised estimate for 2014–15. This is mainly due to decreased provision for general departmental expenses.

Programme (3)

Provision for 2015–16 is \$1.4 million (15.6%) higher than the revised estimate for 2014–15. This is mainly due to increased provision for salary and general departmental expenses.

Programme (4)

Provision for 2015-16 is 0.4 million (1.0%) higher than the revised estimate for 2014-15. This is mainly due to increased provision for salary.

Programme (5)

Provision for 2015–16 is \$0.4 million (3.4%) higher than the revised estimate for 2014–15. This is mainly due to increased provision for general departmental expenses.

Programme (6)

Provision for 2015–16 is the same as the revised estimate for 2014–15.

Programme (7)

Provision for 2015–16 is the same as the revised estimate for 2014–15.



468

Sub- head (Code)		Actual expenditure 2013–14	Approved estimate 2014–15	Revised estimate 2014–15	Estimate 2015–16
		\$'000	\$'000	\$'000	\$'000
	Operating Account				
	Recurrent				
000	Operational expenses	512,539	534,263	539,732	547,580
	Total, Recurrent	512,539	534,263	539,732	547,580
	Non-Recurrent				
700	General non-recurrent	30,042	46,000	46,000	63,000
	Total, Non-Recurrent	30,042	46,000	46,000	63,000
	Total, Operating Account	542,581	580,263	585,732	610,580
	Capital Account				
	Plant, Equipment and Works				
603	Plant, vehicles and equipment	2,137	1,500	5,235	4,315
661	Minor plant, vehicles and equipment (block vote)	6,261	5,400	5,400	5,400
	Total, Plant, Equipment and Works	8,398	6,900	10,635	9,715
	Total, Capital Account	8,398	6,900	10,635	9,715
	Total Expenditure	550,979	587,163	596,367	620,295

Details of Expenditure by Subhead

The estimate of the amount required in 2015–16 for the salaries and expenses of the Innovation and Technology Commission is \$620,295,000. This represents an increase of \$23,928,000 over the revised estimate for 2014–15 and of \$69,316,000 over the actual expenditure in 2013–14.

Operating Account

Recurrent

2 Provision of \$547,580,000 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 2015 will be 206 permanent posts. No change in establishment is expected in 2015–16. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2015–16, but the notional annual mid-point salary value of all such posts must not exceed \$112,071,000.

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

	2013–14 (Actual) (\$'000)	2014–15 (Original) (\$'000)	2014–15 (Revised) (\$'000)	2015–16 (Estimate) (\$'000)
Personal Emoluments				
- Salaries - Allowances - Job-related allowances Personnel Related Expenses	110,762 2,130	120,100 2,175 2	121,846 1,291 2	129,277 2,009 2
- Mandatory Provident Fund contribution	373	528	546	513
Contribution	1,759	1,953	2,138	3,026
- General departmental expenses Subventions	75,621	80,611	79,546	78,390
 Hong Kong Productivity Council Hong Kong Applied Science and Tachnology Research Institute Company 	187,416	187,416	192,885	192,885
Limited	134,478	141,478	141,478	141,478
	512,539	534,263	539,732	547,580

Commitments

Sub- head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2014	Revised estimated expenditure for 2014–15	Balance
			\$'000	\$'000	\$'000	\$'000
Opera	ting Acc	count				
700		General non-recurrent				
	860	Research and Development Cash Rebate Scheme	200,000	71,414	46,000	82,586
			200,000	71,414	46,000	82,586
Capita	l Accou	int				
603		Plant, vehicles and equipment				
	843	For Temperature Laboratory of Standards and Calibration Laboratory to replace an existing humidity chamber	2,800		1,060	1,740
	844	For Length Laboratory of Standards and Calibration Laboratory to set up new service for measurement of three-dimensional spatial coordinates and dimensions	3,000	_	_	3,000
	852	For Acoustics Laboratory of Standards and Calibration Laboratory to set up new calibration service for head and torso simulator	2,300	_	_	2,300
	859	For Low Frequency Laboratory of Standards and Calibration Laboratory to replace the quantum hall resistance system	3,500		_	3,500
	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		4,175	25
			15,800		5,235	10,565
		Total	215,800	71,414	51,235	93,151