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

Estimate 2005–06	\$453.7m
<b>Establishment ceiling 2005–06</b> (notional annual mid-point salary value) representing an estimated 166 non-directorate posts as at 31 March 2005 reducing by one post to 165 posts as at 31 March 2006.	\$63.4m
In addition, there will be an estimated seven directorate posts as at 31 March 2005 and as at 31 March 2006.	
Commitment balance	\$417.1m

## **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, Industry and Technology).
Programme (6) Quality Support	This programme contributes to Policy Area 15: Health (Secretary for Health, Welfare and Food) and Policy Area 17: Information Technology and Broadcasting (Secretary for Commerce, Industry and Technology).
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, Industry and Technology).

#### Detail

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision (\$m)	22.9	24.7	22.8 (-7.7%)	<b>23.7</b> (+3.9%)
				(or -4.0% on

#### (or -4.0% on 2004–05 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. Of particular relevance is the Innovation and Technology Support Programme (ITSP) under the Innovation and Technology Fund (ITF) administered by the Commission. ITSP supports applied R&D projects of which the results have to be transferred to companies in the relevant industry. We also administer the Patent Application Grant (PAG) to provide funding assistance to local companies and individuals applying for patent registration of their own inventions so as to help ensure that the outcome of their R&D efforts is properly protected.

**4** To strengthen Hong Kong's research capability for technological development and to stimulate the growth of technology-based industry in Hong Kong, we have been working closely with the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI) in building up its institutional and research capabilities to support its R&D activities, and formulating its strategic plan and business policy. 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 ASTRI and HKJCICM will be further described under Programme (7).

**5** To support the further development of innovation and technology with emphasis on five key elements, i.e. focus, market relevance, industry participation, leverage on the Mainland, and better co-ordination among different elements of the innovation and technology programme, the Government plans to set up a number of R&D centres to drive and co-ordinate R&D efforts in selected technology areas. The establishment of these centres will be supported through ITSP funding.

**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. The Commission and the Guangdong Provincial Department of Science and Technology have jointly announced themes under six technology areas for inviting applications under the TCFS.

7 Apart from the technical monitoring of the progress of funded projects, we continued to conduct inspection checks on the recipient organisations of the ITF in 2004–05 to ensure proper use of public money.

**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 ASTRI and HKJCICM accomplish their research programmes effectively. Performance indicators in respect of the ITSP, TCFS, R&D centres, ASTRI and the PAG are as follows:

## Indicators

	2003 (Actual)	2004 (Actual)	2005 (Estimate)
	(Actual)	(Actual)	(Estimate)
ITSP			
applications received and processed	150	—#	91
projects funded and being monitored	164	147	136
TCFS§			
applications received and processed	—	79	79
projects funded and being monitored			24
R&D centres $\phi$			
applications received and processed			4
projects funded and being monitored			4
Innovative Product Development Assistance Scheme			
(IPDAS)@			
applications received and processed	34	42	
projects approved	16	17	
New ASTRI projects funded by the ITF	9	4	10
PAG			
applications received and processed	183	173	173
projects funded	59	84	84

# With the consultation of the new funding strategy and the introduction of the TCFS, invitation for ITSP applications was not made in 2004.

§ New indicator as from 2004.

 $\phi$  New indicator as from 2005.

@ IPDAS was introduced on a trial basis for one year from 1 April 2003 to 31 March 2004.

#### Matters Requiring Special Attention in 2005–06

- 9 During 2005–06, the Commission will:
- fund the establishment of R&D centres in selected technology areas;
- solicit projects with publicised themes with a view to enhancing the focus and depth of ITF-funded projects, and collaboration on R&D between Hong Kong and Guangdong;
- continue to give more emphasis to the technology transfer plans of funded projects;

- · evaluate the performance of completed ITF projects; and
- continue to work closely with ASTRI and HKJCICM in building up their research capabilities and developing and
  implementing their research projects and transferring technologies to industry for commercialisation.

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision (\$m)	6.6	7.0	6.4 (-8.6%)	<b>6.6</b> (+3.1%)
				(or -5.7% on 2004–05 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 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 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 UICP received a total of 48 applications requesting \$56 million in 2004.

13 The key performance indicators are:

#### Indicators

	2003 (Actual)	2004 (Actual)	2005 (Estimate)
UICP			
applications received and processed	36	48	40
projects funded and being monitored	113	100	96

#### Matters Requiring Special Attention in 2005–06

14 During 2005–06, the Commission will continue to administer the UICP and monitor progress of the funded projects.

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision (\$m)	7.1	7.7	7.7 (—)	<b>7.2</b> (-6.5%)
				(

(or -6.5% on 2004–05 Original)

## Aim

15 The aim is to promote technological entrepreneurship in Hong Kong and provide essential support to technologybased 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 and the Applied Research Fund (ARF). SERAP provides financing at the pre-venture capital stage for start-ups to carry out R&D activities and to conduct market validation. ARF provides funding to technology companies in Hong Kong at the venture capital stage. In addition, we work 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 2004–05, the Commission:
- administered the SERAP and ARF programme;
- publicised the SERAP funding scheme via talks and seminars;
- published the SERAP Company Directory for 2005;
- organised topical seminars (e.g. entrepreneurship, sales and marketing) for SERAP companies;
- launched a pilot mentorship programme for SERAP companies;
- · provided networking support to some SERAP and ARF companies; and
- monitored the management of SERAP and ARF investee companies.

**18** The key performance measures are:

## Indicators

	2003 (Actual)	2004 (Actual)	2005 (Estimate)
SERAP			
applications received and processed	143	114	120
projects funded and being monitored	64	44	50
new projects funded by the ARF	2	0	1

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

## Matters Requiring Special Attention in 2005–06

**19** During 2005–06, the Commission will continue to:

- administer SERAP and oversee ARF to support technology start-ups;
- · provide value-adding services to companies participating in SERAP and ARF; and
- monitor progress of the funded projects.

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision (\$m)	12.9	31.7	25.2 (-20.5%)	<b>34.6</b> (+37.3%)
				(

(or +9.1% on 2004–05 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 Council of Advisors on Innovation and Technology (CAIT) is a high-level standing advisory body responsible for making recommendations to the Chief Executive on matters related to innovation and technology with a view to optimising their contributions to Hong Kong's economic development. The Commission provides secretariat support and policy input to the CAIT.

22 The Commission also provides secretariat support and policy input to a new high-level Steering Committee on Innovation and Technology, chaired by Secretary for Commerce, Industry and Technology, in examining policy issues and co-ordinating the various elements of the Government's programme and resources to promote innovation and technology.

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

**24** 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 ITF to fund projects such as seminars and exhibitions which help foster an innovation and technology culture.

**25** An Internship Programme was introduced under the GSP in July 2004 for universities with projects funded under the ITSP or the Matching Grant for Joint Research Scheme of the UICP to recruit interns to assist in the projects. It aims to provide opportunities for fresh graduates from tertiary institutions to acquire research/industrial experience at local universities/companies, stimulate the interest of fresh graduates in applied R&D activities and help create a larger pool of research talents.

**26** During 2004–05, the Commission:

- consulted the public on the new strategic framework for innovation and technology development. The new strategy aims to improve the relevance of applied R&D to the needs of the industry and to strengthen the co-ordination among different elements of the innovation and technology programme. As a key initiative of the new strategy, the Commission plans to set up R&D centres in selected focus areas in 2005–06;
- supported and provided input to the policy deliberations of the CAIT and the Steering Committee on Innovation and Technology;
- established the Mainland and Hong Kong Science and Technology Cooperation Committee, enhanced technology co-operation with Guangdong Province through the Expert Group on Cooperation in Innovation and Technology under the Hong Kong-Guangdong Cooperation Joint Conference framework, and participated in the Pan Pearl River Delta Regional Conference on Cooperation in Science and Technology;
- organised the Hong Kong Student Science Project Competition and arranged a delegation comprising the winning teams to attend the 3rd APEC Youth Science Festival held in Beijing, China in August 2004;
- nominated entries from the HKSAR in two categories of the State Science and Technology Awards;
- organised a 'Hong Kong Pavilion' at the China Hi-Tech Fair 2004 to showcase the latest technological achievements of Hong Kong enterprises and to underline the Government's commitment to promote innovation and technology; and
- participated actively in the Asia-Pacific Economic Cooperation (APEC) Industrial Science and Technology Working Group, and assumed the role of Lead Shepherd starting from January 2004.
- **27** The key performance indicators are:

#### Indicators

	2003	2004	2005
	(Actual)	(Actual)	(Estimate)
GSP applications received and processed	28	20	20
projects funded and being monitored Internship Programmeβ	16	16	14
applications received and processed	_	39	38
projects funded and being monitored		30	38

 $\beta$  New indicator as from 2004.

#### Matters Requiring Special Attention in 2005–06

- **28** During 2005–06, the Commission will continue to:
- enhance technology co-operation with the Mainland through the Mainland and Hong Kong Science and Technology Cooperation Committee, the Expert Group on Cooperation in Innovation and Technology under the Hong Kong-Guangdong Cooperation Joint Conference, and the Pan Pearl River Delta Regional Conference on Cooperation in Science and Technology;
- administer the GSP (including Internship Programme) and monitor progress of the funded projects;

- organise the Hong Kong Student Science Project Competition, Innovation Expo and other events to foster and promote an innovation and technology culture in the community;
- participate in the nominations for the State Science and Technology Awards;
- organise the Hong Kong Pavilion at the China Hi-Tech Fair 2005; and
- participate in meetings of the APEC Industrial Science and Technology Working Group as Lead Shepherd.

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision (\$m)	13.4	12.7	40.4 (+218.1%)	<b>61.9</b> (+53.2%)
				(or +387.4% on 2004–05 Original)

#### Aim

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

#### **Brief Description**

**30** 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. We work closely with relevant industry support organisations such as HKSTPC, ASTRI, HKJCICM, the Hong Kong Productivity Council (HKPC) and the Hong Kong Design Centre (HKDC) in the process.

**31** The Commission provides secretariat support and policy input to the Steering Group on the Promotion of Innovation and Design, chaired by Secretary for Commerce, Industry and Technology, in examining policy issues and co-ordinating the various elements of the Government's programme and resources for the promotion of innovation and design in industry.

**32** In June 2004 the Commission launched the DesignSmart Initiative with a funding commitment of \$250 million. The Initiative comprises a Design Support Programme (DSP) and a one-stop shop for a design cluster. The DSP operates four funding schemes to support projects in four categories – design research; design/business collaboration; design professional continuing education; and fostering the culture of design. The one-stop shop, to be operated by HKSTPC and HKDC, is for creating and sustaining a cluster of high value-added design activities among design professionals and interns, and companies, where creative ideas with functionality will be stimulated, nurtured, researched, promoted, commercialised and branded.

**33** During 2004–05, the Commission:

- worked closely with HKSTPC on its policy directions and development plans, as well as the planning and construction of Phase Two of the Hong Kong Science Park (HKSP) at Pak Shek Kok;
- worked closely with ASTRI and HKJCICM on building up their institutional and research capabilities to support their research programmes;
- facilitated the relocation of ASTRI to the HKSP;
- monitored the delivery of value-added support services to the manufacturing and related service industries by HKPC;
- worked closely with HKPC to follow up the recommendations made in the consultancy study on its public mission, role, management and operations;
- · worked closely with HKDC to promote design as a value-added activity and integrate it into business processes;
- supported and provided input to the policy deliberations of the Steering Group on the Promotion of Innovation and Design; and
- launched the DSP and worked closely with HKSTPC and HKDC to develop the one-stop shop for the design cluster.

## 34 The key performance indicators are:

## Indicators

	2003	2004	2005
	(Actual)	(Actual)	(Estimate)
DSPΩ applications received and processed projects funded and being monitored		37 4	90 30

 $\Omega$  New indicator as from 2004.

## Matters Requiring Special Attention in 2005–06

**35** During 2005–06, the Commission will continue to:

- work closely with the HKSTPC on its various development and business plans;
- assist in the planning and construction of the Phase Two of the HKSP;
- assist ASTRI in formulating its business policy, building up its institutional and research capabilities and planning for the construction of its permanent building at the HKSP;
- assist HKJCICM in building up its institutional capabilities and developing and implementing its research programmes;
- assist HKDC in promoting design as part and parcel of the innovative capability essential for our industry's progression into higher value-added activities;
- · administer the DSP and monitor progress of the funded projects; and
- work closely with HKSTPC and HKDC in building up the one-stop shop for the design cluster.

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

	2003–04	2004–05	2004–05	2005–06
	(Actual)	(Original)	(Revised)	(Estimate)
Financial provision (\$m)	63.9	57.2	55.3 (-3.3%)	<b>51.8</b> (-6.3%)

(or -9.4% on 2004–05 Original)

#### Aim

36 The aim is to promote internationally accepted standards and conformity assessment services to underpin technological development and international trade.

## **Brief Description**

**37** The Commission achieves this aim through operation of the Standards and Calibration Laboratory (SCL), the Product Standards Information Bureau (PSIB), and the Hong Kong Accreditation Service (HKAS).

**38** During 2004–05, SCL participated in eight projects on international comparison of standards. Its capabilities in the metrology areas of dimension, mass, electromagnetism and thermometry have been listed in the technical schedules of the Global Mutual Recognition Arrangement operated by the International Bureau of Weights and Measures. 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). HKAS signed the Multilateral Recognition Arrangement of International Accreditation Forum in October 2004. Through this new Multilateral Recognition Arrangement and other Arrangements signed before, reports and certificates bearing the HKAS accreditation marks issued by organisations accredited by HKAS are widely recognised world-wide. PSIB represented Hong Kong, China in the APEC Sub-Committee on Standards and Conformance.

**39** The key performance measures are:

## Targets

	Target working days	2003 (Actual)	2004 (Actual)	2005 (Plan)
processing of quotation for calibration				
services	5	4	3	4
calibration of equipment	17#	15	16	17
provision of technical advice in response				
to oral enquiries on product standards	1	1	1	1
processing of simple written enquiries on				
product standards	1	1	1	1
processing of complicated written				
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 shortened from 18 days to 17 days as from 2004.

## Indicators

	2003 (Actual)	2004 (Actual)	2005 (Estimate)
	(Actual)	(Actual)	(Estimate)
SCL	o 1 <b>0</b>		<
calibrations performed	842	776¢	776
revenue generated (\$)	1,578,950	1,477,410	1,477,410
revenue/post (\$)	344,018	320,095	320,095
PSIBA	(02	500	= ( 0
technical enquiries	683	598	560
sales and photocopying of documented standards	7(2)	10.1	=00
enquiries	763	494	500
quotations given	4 094	3 308	3 800
orders placed	466	356	360
revenue generated (\$)	266,066	246,322	200,000
revenue/post (\$)	126,098	158,917	150,000
HOKLAS		110	100
accredited laboratories (cumulative)	117	118	133
assessments and reassessments conducted	235	254	270
overseas laboratory accreditation schemes with mutual			
recognition arrangement with HOKLAS	16	50	
(cumulative)	46	53	55
HKCAS	0	0	10
accredited certification bodies (cumulative)	8	9	10
assessments, reassessments and surveillance conducted.	8	12	12
overseas certification bodies accreditation schemes			
with multilateral recognition arrangement with		22	25
HKCAS (cumulative) $\Omega$		33	35
HKIAS	-	-	10
accredited inspection bodies (cumulative)	1	7	10
assessments, reassessments and surveillance conducted.	14	12	15
overseas inspection bodies accreditation schemes with			
multilateral recognition arrangement with HKIAS		7	-
(cumulative) $\Omega$		7	7

φ The number of calibrations performed decreased in 2004 mainly due to a decrease in requests from government

φ The humber of calibrations performed decreased in 2004 manny due to a decrease in requests non government departments.
 Δ The drop in the indicators in respect of PSIB in 2004 was mainly due to the increasing avenues for obtaining standards, such as the Internet.
 Ω New indicator as from 2004.

## Matters Requiring Special Attention in 2005–06

- **40** During 2005–06, the Commission will:
- participate in activities to promote the Mutual Recognition Arrangements of Asia Pacific Laboratory Accreditation Co-operation and the International Laboratory Accreditation Co-operation, as well as the Multilateral Recognition Arrangements of the Pacific Accreditation Co-operation and the International Accreditation Forum;
- · develop plans to extend accreditation services to other areas to support industry;
- participate in the activities of the Global Mutual Recognition Arrangement operated by the International Bureau of Weights and Measures, and in the activities of the Asia Pacific Metrology Programme;
- participate in more projects on international comparison of standards;
- strengthen interactions between staff of 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 to offer professional advice on-site; and
- · participate in APEC activities in the areas of standards and conformance.

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

	2003–04 (Actual)	2004–05 (Original)	2004–05 (Revised)	2005–06 (Estimate)
Financial provision# (\$m)				
Hong Kong Productivity Council	194.6	184.4	182.9 (-0.8%)	<b>174.6</b> (-4.5%)
Hong Kong Applied Science and Technology Research Institute Company Limited	90.2	86.7	96.2 (+11.0%)	<b>93.3</b> (-3.0%)
Total	284.8	271.1	279.1 (+3.0%)	<b>267.9</b> (-4.0%)
				( 1.00/

<sup>(</sup>or -1.2% on 2004–05 Original)

# The provision for the Hong Kong Productivity Council and the Hong Kong Applied Science and Technology Research Institute Company Limited are transferred from the former Head 177—Subventions: Non-Departmental Public Bodies to Head 155 with effect from 2004–05.

Hong Kong Productivity Council

#### Aim

**41** 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**

**42** Pursuant to a consultancy study completed in 2002 on its role, management and operations, the HKPC has repositioned its service focus to provide 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.

**43** The work of HKPC is guided by three strategies: to enhance manufacturing technology and process upgrading, to tap new manufacturing opportunities arising from the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA), and to provide regionalisation and globalisation support to improve the cost-effectiveness of manufacturing activities. Its activities mainly fall in the following areas:

• 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 and strategic business management;
- 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.

44 The Design Innovation (HK) Limited and the Clothing Technology Demonstration Centre Company Limited, as subsidiaries of HKPC, operate along commercial lines and aim to increase efficiency and cost-effectiveness of the sectors involved to meet market needs.

**45** In 2004–05, HKPC set up two new subsidiaries. The HKPC Technology (Holdings) Company Limited would function as a vehicle for commercialisation of patents, technologies and projects deliverables of HKPC and other R&D institutes. The Productivity (Holdings) Limited set up consulting firms in Guangzhou, Shenzhen and Dongguan to strengthen HKPC's integrated support and services for Hong Kong firms operating in PRD.

**46** In 2004–05, HKPC further strengthened its services focusing primarily on the SMEs in manufacturing and related service sectors. At the same time, it was withdrawing from services in mature markets where there was ample supply of private service providers.

47 The key performance measures are:

#### **Indicators**

	2003–04 (Actual)	2004–05 (Revised Estimate)	2005–06 (Estimate)
overall income/expenditure ratio (%)	64.8	63.8	63.9
income from consultancy/technical assistance (\$m)	184.2	176.1	170.3
income from training courses (\$m)	55.9	49.7	38.6
income from training courses (\$m) income from exhibitions/study missions/conferences (\$m)	8.1	7.7	9.9
income from manufacturing support/process control (\$m)	35.6	23.9	23.5
no. of people who attended HKPC training courses	12 380	13 000	13 200
no. of people who attended HKPC exhibitions no. of people who participated in HKPC study	33 000	35 000	37 500
missions/conferences	3 840	3 800	2 200

#### Matters Requiring Special Attention in 2005–06

**48** During 2005–06, HKPC will continue to:

- follow up on the recommendations of the consultancy study on its role, management and operation;
- realign its services and activities with reference to its new role and focus;
- provide integrated support to innovative and growth-oriented Hong Kong firms across the value chain, with the main sectoral focus on manufacturing, particularly in Hong Kong's foundation industries, and related service activities;
- meet the needs of Hong Kong companies and industries to capitalise on the new opportunities arising from CEPA; and
- enhance its support to Hong Kong firms operating in PRD, through subsidiary consulting firms set up in Guangzhou, Shenzhen and Dongguan.

Hong Kong Applied Science and Technology Research Institute Company Limited

#### Aim

**49** 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**

- 50 ASTRI's missions are to:
- perform relevant and high quality R&D and transfer the technologies and results to industry;
- promote greater application of technology in industry;
- become a focal point for attracting outside R&D personnel 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.

**51** ASTRI's research areas include photonics technologies, Internet applications, wireless communications and integrated circuit design. Its operating strategy is to transfer the technologies and results developed from its R&D projects to industry for commercialisation. 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.

**52** In 2004–05, ASTRI continued to strengthen its institutional and research capabilities to support its R&D activities. Upon successful completion of the photonics packaging technology projects, ASTRI has transferred the technologies to a local company for commercialisation, thereby supporting the development of photonics industry in Hong Kong. A few wireless communications projects have also reached their completion stage and ASTRI is making efforts to transfer the related technologies to the industry. Other on-going projects, including three on photonics technologies, four on wireless communications and three on integrated circuit design have been making good progress.

**53** ASTRI's subsidiary, HKJCICM, promotes and supports the modernisation and further development of Chinese medicine in Hong Kong. The Hong Kong Jockey Club Charities Trust has pledged to donate \$500 million to fund the R&D activities managed by HKJCICM while ASTRI provides premises and supporting facilities to HKJCICM and funds its recurrent operating costs.

**54** In 2004–05, HKJCICM formulated a Platform Areas R&D Plan to take forward Chinese medicine research in ageing-related endocrinology and neuroscience. Since its set-up, HKJCICM has funded nine projects in collaboration with local universities and Mainland institutions, including the setting up of a Chinese medicine laboratory and associated network to strengthen pharmacognosy and quality control of Chinese medicine.

55 The key performance measures are:

#### Indicators

	2003	2004	2005
	(Actual)	(Actual)	(Estimate)
no. of patents filed $\Omega$		17	23
no. of technology licensing arranged $\Omega$		5	7
no. of spin-off completed $\Omega$		1	1
no. of technology workshop/seminars organised $\Omega$		7	15

 $\Omega$  New indicator as from 2004.

#### Matters Requiring Special Attention in 2005–06

56 During 2005–06, ASTRI will:

- continue to build up its R&D capabilities;
- continue with the research projects initiated in 2004–05 and before;
- lead R&D initiatives in the following four areas: electronics, communications technologies, IC design and optoelectronics;
- set up a new research group of material technology to initiate research programme for the development of next generation electronic and opto-electronic devices and key component technologies;
- 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;
- promote ASTRI's R&D activities with a view to raising public awareness of the work of ASTRI;
- plan the construction of ASTRI's building at the HKSP; and
- assist HKJCICM in building and promoting its identity and business to pursue its public mission, and in starting up its R&D programmes in key platform areas and initiating new projects.

#### ANALYSIS OF FINANCIAL PROVISION

Programme	2003–04 (Actual) (\$m)	2004–05 (Original) (\$m)	2004–05 (Revised) (\$m)	2005–06 (Estimate) (\$m)
<ol> <li>Support for Research and Development</li></ol>	22.9	24.7	22.8	23.7
<ul> <li>(2) Fostering University-Industry Collaboration</li></ul>	6.6	7.0	6.4	6.6
<ul><li>Entrepreneurship</li><li>(4) Planning for Innovation and</li></ul>	7.1	7.7	7.7	7.2
<ul><li>Technology Development</li><li>(5) Infrastructural Support</li></ul>	12.9 13.4	31.7 12.7	25.2 40.4	34.6 61.9
<ul> <li>(6) Quality Support</li> <li>(7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology</li> </ul>	63.9	57.2	55.3	51.8
Research Institute Company Limited	284.8	271.1	279.1	267.9
	411.6	412.1	436.9 (+6.0%)	453.7 (+3.8%)

<sup>(</sup>or +10.1% on 2004–05 Original)

#### Analysis of Financial and Staffing Provision

#### Programme (1)

Provision for 2005–06 is \$0.9 million (3.9%) higher than the revised estimate for 2004–05. This is mainly due to the increased provision arising from the employment of non-civil service contract staff, partly offset by the reduced departmental expenses to achieve efficiency savings and the full-year effect of the 2005 civil service pay cut.

#### **Programme (2)**

Provision for 2005–06 is \$0.2 million (3.1%) higher than the revised estimate for 2004–05. This is mainly due to the increased provision arising from the employment of non-civil service contract staff, partly offset by the full-year effect of the 2005 civil service pay cut and the reduced departmental expenses to achieve efficiency savings.

#### Programme (3)

Provision for 2005–06 is \$0.5 million (6.5%) lower than the revised estimate for 2004–05. This is mainly due to the reduced departmental expenses to achieve efficiency savings, lower requirement for the employment of non-civil service contract staff and the full-year effect of the 2005 civil service pay cut, partly offset by the provision for filling vacant posts.

#### **Programme (4)**

Provision for 2005–06 is \$9.4 million (37.3%) higher than the revised estimate for 2004–05. This is mainly due to the increased cash flow requirement for non-recurrent items (e.g. Innovation Expo), partly offset by the lower requirement for the employment of non-civil service contract staff and contract service.

#### **Programme (5)**

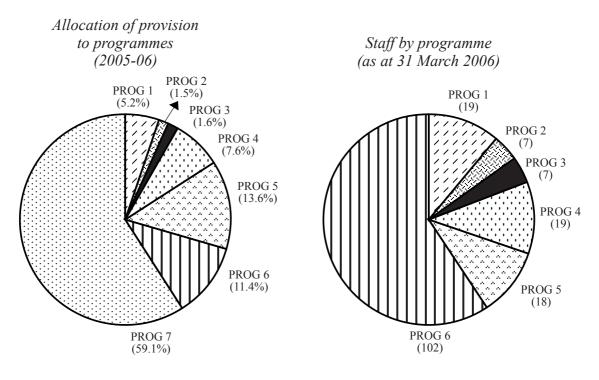
Provision for 2005–06 is \$21.5 million (53.2%) higher than the revised estimate for 2004–05. This is mainly due to increased cash flow requirement for a non-recurrent item (DesignSmart Initiative), partly offset by full-year savings from posts deleted in 2004–05 and deletion of one post in 2005–06.

#### Programme (6)

Provision for 2005–06 is \$3.5 million (6.3%) lower than the revised estimate for 2004–05. This is mainly due to the reduced cash flow requirement for existing capital items, full-year savings from posts deleted in 2004–05, reduced departmental expenses to achieve efficiency savings and the full-year effect of the 2005 civil service pay cut, partly offset by the provision for filling of vacancies.

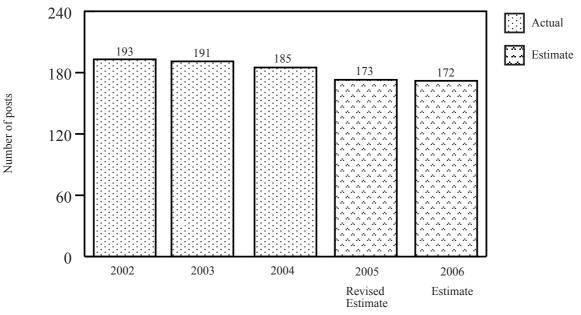
## Programme (7)

Provision for 2005–06 is \$11.2 million (4.0%) lower than the revised estimate for 2004–05. This is mainly due to the reduced cash flow requirement for the capital project of ASTRI and staff cost and operating expenses for HKPC, partly offset by the increased provision for ASTRI to cater for its expanding operational needs.



(No government staff under PROG 7)

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



Year

Sub- head (Code)		Actual expenditure 2003–04	Approved estimate 2004–05	Revised estimate 2004–05	Estimate 2005–06
		\$'000	\$'000	\$'000	\$'000
	<b>Operating Account</b>				
	Recurrent				
000	Operational expenses	123,078	381,346	376,569	371,806
	Total, Recurrent	123,078	381,346	376,569	371,806
	Non-Recurrent				
700	General non-recurrent	873	27,901	47,129	79,878
	Total, Non-Recurrent	873	27,901	47,129	79,878
	Total, Operating Account	123,951	409,247	423,698	451,684
	Capital Account				
	Plant, Equipment and Works				
603 661	Plant, vehicles and equipment Minor plant, vehicles and equipment (block	—	30	865	5
001	vote)	2,810	2,801	2,801	2,050
	Total, Plant, Equipment and Works	2,810	2,831	3,666	2,055
	Subventions				
	Hong Kong Applied Science and Technology Research Institute Company Limited	_	_	9,500	_
	Total, Subventions			9,500	
	Total, Capital Account	2,810	2,831	13,166	2,055
	Total Expenditure	126,761	412,078	436,864	453,739

#### Details of Expenditure by Subhead

The estimate of the amount required in 2005–06 for the salaries and expenses of the Innovation and Technology Commission is \$453,739,000. This represents an increase of \$16,875,000 over the revised estimate for 2004–05 and of \$326,978,000 over actual expenditure in 2003–04.

#### **Operating** Account

#### Recurrent

**2** Provision of \$371,806,000 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 2005 will be 173 permanent posts. It is expected that one post will be deleted in 2005–06. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2005–06, but the notional annual mid-point salary value of all such posts must not exceed \$63,380,000.

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

	2003–04 (Actual) (\$'000)	2004–05 (Original) (\$'000)	2004–05 (Revised) (\$'000)	2005–06 (Estimate) (\$'000)
Personal Emoluments				
- Salaries	91,363	89,599	87,057	84,971
- Allowances	1,772	1,830	1,675	1,025
- Job-related allowances		4	1	4
Personnel Related Expenses				
- Mandatory Provident Fund				
contribution	22	22	22	22
Departmental Expenses				
- General departmental expenses	29,921	36,891	35,915	35,459
Subventions				
- Hong Kong Productivity Council	—	166,262	165,162	157,073
<ul> <li>Hong Kong Applied Science and</li> </ul>				
Technology Research Institute				
Company Limited		86,738	86,737	93,252
	123,078	381,346	376,569	371,806

#### Capital Account

## Plant, Equipment and Works

**5** Provision of \$2,050,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$751,000 (26.8%) against the revised estimate for 2004–05. This is mainly due to the reduced requirement for new equipment.

#### Commitments

Sub- head (Code)	Item (Code)	Ambit	Approved commitment \$'000	Accumulated expenditure to 31.3.2004 \$'000	Revised estimated expenditure for 2004–05 \$'000	Balance \$'000
Opera	ting A	ccount				
700		General non-recurrent				
	002	Consultancy studies on Hong Kong - Mainland technological collaboration	5,000	120	300	4,580
	003	Consultancy study on biotechnology industry in Hong Kong	1,300	_	200	1,100
	006	Impact studies on Innovation and Technology Fund projects	5,000	198	200	4,602
	008	Innovation Expo	10,000		1,000	9,000
	047	Hong Kong Productivity Council : Repayment of loan to the Loan Fund#	548,690	356,138	17,739	174,813
	438	DesignSmart Initiative	250,000	_	27,000	223,000
			819,990	356,456	46,439	417,095
Capit	al Acco	unt				
603		Plant, vehicles and equipment				
	208	Equipment and associated expenses for the expansion of the laboratory accreditation scheme to cover laboratories testing concrete and concrete reinforcing steel	21,627	20,757	865	5

# This item is transferred from the former Head 177—Subventions: Non-Departmental Public Bodies Subhead 905 Hong Kong Productivity Council with effect from 2004–05.

841,617

377,213

47,304

417,100

Total .....