Controlling officer: the Commissioner for Innovation and Technology will account for expenditure under	this Head.
Estimate 2001–02	\$142.7 m
<b>Establishment ceiling 2001–02</b> (notional annual mid-point salary value) representing an estimated 188 non-directorate posts at 31 March 2001 and at 31 March 2002	\$75.4m
In addition there will be an estimated nine directorate posts at 31 March 2001 and at 31 March 2002.	
Capital Account commitment balance	\$14.9m

## **Controlling Officer's Report**

#### **Programmes**

Programme (1) Support for Research and Development

These programmes contribute to Policy Area 6: Commerce and Industry (Secretary for Commerce and Industry).

Programme (2) Fostering University-Industry Collaboration

Programme (3) Promotion of Technological

Entrepreneurship Programme (4) Planning for Innovation

and Technology

Development

**Programme (5) Infrastructural Support** 

**Programme (6) Quality Support** 

Detail

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

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	24.8	25.3 (+2.0%)

<sup>#</sup> The revised estimate for 2000–01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

#### Aim

2 The aim is to promote and support 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 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. The ITSP supports R&D projects whose results have to be transferred to companies in the relevant industry. We also administer the Patent Application Grant to provide funding assistance to local companies and individuals to apply for patent registration of their own inventions. In this way we help ensure that the outcome of our R&D efforts are properly protected.
- 4 Apart from funding support, the Commission also incorporated in January 2000 the Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI Co. Ltd.) to strengthen Hong Kong's capability in midstream research. In institutional terms, our plan is to put the Applied Science and Technology Research Institute (ASTRI) on a statutory footing by early 2002 pending the enactment of the necessary legislation. We are working closely with the ASTRI Co. Ltd. in mapping out its research agenda. Our target is for the ASTRI Co. Ltd. to initiate its first research projects in 2001. In addition, we will set up the Hong Kong Jockey Club Institute of Chinese Medicine Limited (HKJCICM Ltd.) under ASTRI as a focal point for action and co-ordination in respect of applied research in Chinese medicine.
- 5 During 2000–01, we solicited projects with publicised themes for the ITSP. With the technology focuses and project objectives clearly set out at the outset, this approach seeks to strengthen R&D in areas where Hong Kong has the advantage, to give depth to the existing R&D programme and to enable proposal initiators to plan projects in a more focused manner. It also encourages both competition and collaboration among the universities and research institutions. Our plan is to increase the proportion of solicitation in ITSP applications in future.

- **6** We also strengthened the management of the funded projects by, for example, formally launching inspection checks on the recipient organisations of the ITF in 2000–01 to ensure that public money has been properly spent. To enable more efficient administration of the ITF and dissemination of the deliverables of the funded projects, we also commissioned a feasibility study to enhance the existing electronic internet-based technology information system for the ITF.
- 7 The performance of this programme area is reflected in the extent to which the R&D activities receiving funding support are of relevance to industry and the extent to which ASTRI accomplishes its research programmes effectively. Performance indicators in respect of the ITSP and the Patent Application Grant are as follows:

#### **Indicators**

	1999§	2000†	2001
	(Actual)	(Actual)	(Estimate)
Innovation and Technology Support Programme of the Innovation and Technology Fund			
applications received and processed	_	71	182
projects funded and being monitored	_	229	191
Patent Application Grant			
applications received and processed	_	52	170
projects funded	_	15	60

- § The Innovation and Technology Commission was established on 1 July 2000.
- † The column only includes the actual figures covering the period from 1 July 2000 to 31 December 2000.

## Matters Requiring Special Attention in 2001-02

- **8** During 2001–02, we will:
- continue to administer the ITSP and monitor progress of the funded projects. This includes conducting inspection checks on the recipient organisations;
- continue to solicit projects with publicised themes and refine the solicitation arrangements;
- subject to the recommendation of the feasibility study, commission a project to enhance the existing internetbased technology information system for the ITF; and
- continue to work closely with the ASTRI Co. Ltd. in mapping out its research agenda.

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

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	4.7	6.5 (+38.3%)

<sup>#</sup> The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

#### Aim

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

## **Brief Description**

- 10 We achieve this aim through administering the University-Industry Collaboration Programme, a new funding programme introduced under the ITF to support commercial R&D projects undertaken by private companies in collaboration with local universities. The objective is to stimulate private sector investment in R&D through a 50:50 matching fund arrangement to enable companies to leverage on the knowledge and resources of universities. Under this arrangement, collaboration takes three forms, namely, Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme. In short, the Teaching Company Scheme supports local companies to take on graduate students from local universities to assist in proprietary R&D work. The Matching Grant for Joint Research supports R&D projects taken up jointly by private companies and universities. The applying company will cover half of the project cost and will hold the intellectual property rights arising from the project. The Industrial Research Chair Scheme supports research efforts of universities and industry in technology fields which are not yet developed in Hong Kong but for which there is good development potential.
- 11 This programme received good response in 2000–01 and we expect to receive a total of 53 applications requesting \$167 million.
  - **12** The key performance indicators are:

#### **Indicators**

	1999§ (Actual)	2000† (Actual)	2001 (Estimate)
University-Industry Collaboration Programme of the			
Innovation and Technology Fund			
applications received and processed	_	25	63
projects funded and being monitored	_	43	90

<sup>§</sup> The Innovation and Technology Commission was established on 1 July 2000.

## Matters Requiring Special Attention in 2001-02

13 During 2001–02, we will review the issue of ownership of intellectual property arising from the collaboration between industry and universities. We will continue to administer the University-Industry Collaboration Programme and to monitor progress of the funded projects.

## Programme (3): Promotion of Technological Entrepreneurship

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	3.5	4.8 (+37.1%)

<sup>#</sup> The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

#### Aim

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

## **Brief Description**

15 We provide funding support to technology-based entrepreneurial activities through the Small Entrepreneur Research Assistance Programme (SERAP) of the ITF and the Applied Research Fund (ARF). The SERAP provides financing at the pre-venture capital stage for start-ups to carry out R&D and to conduct market validation. The ARF provides funding to technology companies in Hong Kong at the venture capital stage. In addition, we work closely with the Hong Kong Industrial Technology Centre Corporation (HKITCC), which operates an incubation programme to provide technology start-ups with support on marketing, finance, technology and management in their critical initial years of operation.

## **16** During 2000–01, we:

- publicised widely the new SERAP;
- organised events and programmes to encourage technological entrepreneurship in Hong Kong; and
- critically reviewed all the active cases which had received assistance from the ARF before the engagement of fund
  managers and took remedial actions for those cases which were not performing well.
- 17 The key performance measures are:

## Indicators

	1999§	2000†	2001
	(Actual)	(Actual)	(Estimate)
Small Entrepreneur Research Assistance Programme of the			
Innovation and Technology Fund			
applications received and processed	_	42	191
projects funded and being monitored	_	34	74
Applied Research Fund			
new projects funded	_	2	12

<sup>§</sup> The Innovation and Technology Commission was established on 1 July 2000.

The performance of this programme area is also reflected in the extent to which the incubation programme is successfully run by the HKITCC.

<sup>†</sup> The column only includes the actual figures covering the period from 1 July 2000 to 31 December 2000.

<sup>†</sup> The column only includes the actual figures covering the period from 1 July 2000 to 31 December 2000.

## Matters Requiring Special Attention in 2001-02

- **18** During 2001–02, we will:
- · continue to administer the SERAP of the ITF and monitor progress of the funded projects; and
- continue to work closely with the venture capital firms appointed to manage the ARF to ensure effective running
  of the fund

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

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	11.1	21.4 (+92.8%)

# The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

#### Aim

19 The aim is to support the Council of Advisors on Innovation and Technology (CAIT) and the Financial Secretary's Inter-bureau Committee (FSIBC) in formulating policies and in coordinating the Government's efforts to promote innovation and technology.

## **Brief Description**

- 20 The 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. So far, three committees have been set up under the Council to examine issues related to biotechnology, information technology and Hong Kong-Mainland technological collaboration respectively. The Commission provides secretariat support and policy input to the CAIT and its committees. The Commission also supports the FSIBC, which examines policies related to innovation and technology and ensures effective co-ordination among relevant bureaux and departments in formulating and implementing such policies.
- 21 To enhance public awareness and understanding of the importance of innovation and technology, the Commission administers the General Support Programme (GSP) under the ITF to fund projects such as seminars and exhibitions which help foster an innovation and technology culture. The Commission also organises promotional events locally and participates actively in relevant regional activities which help promote innovation and technology.
  - 22 During 2000-01, we:
  - supported and provided input to the inauguration and subsequent processes of the CAIT and FSIBC;
  - conducted a consultancy study to examine the biotechnology capabilities of Hong Kong;
  - launched the Hong Kong Student Science Competition and led a delegation comprising the winning teams to attend the Second Asia-Pacific Economic Cooperation (APEC) Youth Science Festival held in Singapore in July/August 2000;
  - organised several public seminars and workshops to promote the understanding of new technology areas such as biotechnology; and
  - participated actively in a number of regional science and technology cooperation projects in the context of the APEC Industrial Science and Technology Working Group.
  - **23** The key performance indicators are:

### Indicators

	1999§ (Actual)	2000† (Actual)	2001 (Estimate)
General Support Programme of the Innovation and Technology Fund			
applications received and processed	_	33	66
projects funded and being monitored	_	50	39

<sup>§</sup> The Innovation and Technology Commission was established on 1 July 2000.

## Matters Requiring Special Attention in 2001-02

**24** During 2001–02, we will:

<sup>†</sup> The column only includes the actual figures covering the period from 1 July 2000 to 31 December 2000.

- continue to provide secretariat support to the CAIT and the FSIBC;
- continue to administer the GSP and monitor progress of the funded projects;
- organise the Hong Kong Student Science Project Competition;
- organise a large scale promotional event in November 2001 to sustain public awareness and interest in innovation and technology; and
- continue to participate in meetings of the APEC Industrial Science and Technology Working Group.

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

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	66.1	23.2 (-64 9%)

# The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

#### Aim

25 The aim is to develop world-class support infrastructure to facilitate technological upgrading and development of the industry.

## **Brief Description**

26 We achieve the aim through planning, overseeing and rationalising new technological infrastructural projects; providing assistance to innovation and technology projects initiated by the private sector; commissioning relevant consultancy studies; 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 the Hong Kong Industrial Estates Corporation (HKIEC), the HKITCC, the Provisional Hong Kong Science Park Company Limited (PHKSPCL), the ASTRI Co. Ltd. and the Hong Kong Productivity Council (HKPC) in the process.

## **27** During 2000–01, we:

- worked closely with HKIEC, HKITCC and PHKSPCL on their respective development plans;
- worked with the above three organisations on the implementation details to merge them into one single organisation as recommended by the Chief Executive's Commission on Innovation and Technology;
- set up the ASTRI Co. Ltd. to take forward the ASTRI project;
- secured a donation of \$500 million from the Hong Kong Jockey Club Charities Trust to fund the research projects of the HKJCICM Ltd.;
- monitored the delivery of value-added support services to the manufacturing and service industries by the HKPC;
- provided assistance to proposals initiated by the private sector which are related to innovation and technology.

## Matters Requiring Special Attention in 2001-02

#### 28 During 2001–02, we will:

- seek to complete the merger of PHKSPCL, HKIEC and HKITCC and work closely with the merged body on its various development plans;
- continue to assist in the planning and construction of the Hong Kong Science Park at Pak Shek Kok. Phase One of the Science Park is scheduled to open by end 2001;
- assist in the planning of the fourth Industrial Estate;
- continue to assist the ASTRI Co. Ltd. in taking forward the implementation details of the ASTRI project, including building development, programme planning and the legislative process to establish ASTRI as a statutory body;
- assist the HKJCICM Ltd. in formulating its research programmes;
- review HKPC's role, mission and activities in the light of the changing economic landscape of Hong Kong;
- support the Design Centre Project Team formed by four local design associations in setting up a Design Centre for Hong Kong; and

• commission a consultancy study on environmental technology industry in Hong Kong.

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

	1999–2000	2000–01	2000–01#	2001–02
	(Actual)	(Approved)	(Revised)	(Estimate)
Financial provision (\$m)	_	_	47.2	61.5 (+30.3%)

<sup>#</sup> The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

## Aim

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

## **Brief Description**

- **30** We achieve this aim through operating the Standards and Calibration Laboratory (SCL) and the Product Standards Information Bureau (PSIB), and administering the Hong Kong Accreditation Service (HKAS).
- 31 During 2000–01, SCL participated in six international comparison of standards projects and became a signatory of the Global Mutual Recognition Arrangement operated by the International Bureau of Weights and Measure. HKAS provided a comprehensive range of accreditation services under the Hong Kong Laboratory Accreditation Scheme, the Hong Kong Certification Body Accreditation Scheme and the Hong Kong Inspection Body Accreditation Scheme. HKAS became a signatory of the International Laboratory Accreditation Co-operation Multilateral Mutual Recognition Arrangement. PSIB participated in a series of APEC meetings in the areas of standards and conformance.
  - **32** The key performance measures are:

## **Targets**

	Target Working days	1999§ (Actual)	2000† (Actual)	2001 (Plan)
processing of quotation for calibration				
services	6	_	4	6
calibration of equipment	20	_	18	20
provision of technical advice in response to oral enquiries on product standards	1		1	1
processing of simple written enquiries on	1	_	1	1
product standards	1	_	1	1
processing of complicated written	_		_	_
enquiries on product standards	8	_	8	8
issue of quotations for documented				
standards	1	_	1	1
processing of orders for photocopies of	2		2	•
documented standards	2	_	2	2
Indicators		1999§ (Actual)	2000† (Actual)	2001 (Estimate)
Standards and Calibration Laboratory				
calibrations performed		_	402	750
revenue generated (\$)		_	1,174,235	2,417,400
revenue/post (\$)		_	159,419	310,300
Product Standards Information Bureau				
technical enquiries		_	619	1 200
sales and photocopying of documented			935	1 400
enquiries quotations given		_	4 543	8 000
orders placed		_	390	1 200
revenue generated (\$)		_	223,794	700,000
revenue/post (\$)		_	106,064	331,700
Hong Kong Laboratory Accreditation Schem			,-	,
accredited laboratories (cumulative)		_	105	108
assessments and reassessments conduc-	ted	_	123	220

	1999§ (Actual)	2000† (Actual)	2001 (Estimate)
overseas laboratory accreditation schemes with mutual recognition arrangement with HOKLAS			
(cumulative)	_	38	40
Hong Kong Certification Body Accreditation Scheme accredited certification bodies (cumulative)	_	6	7
assessments, reassessments and surveillance		-	
Hong Kong Inspection Body Approximation Scheme	_	6	13
Hong Kong Inspection Body Accreditation Scheme accredited inspection bodies (cumulative)assessments, reassessments and surveillance	_	2	3
conducted	_	1	5

<sup>§</sup> The Innovation and Technology Commission was established on 1 July 2000.

## Matters Requiring Special Attention in 2001–02

## **33** During 2001–02, we will:

- participate in activities to extend the Asia Pacific Laboratory Accreditation Co-operation Multilateral Mutual Recognition Arrangement to include more signatories;
- adopt the new international standards for Quality System (ISO 9000:2000) and Laboratories (ISO/IEC 17025:1999) in our accreditation services;
- participate in the activities of the Global Mutual Recognition Arrangement operated by the International Bureau of Weights and Measures;
- participate in four additional international comparison of standards projects; and
- participate in APEC activities in the areas of standards and conformance.

<sup>†</sup> The column only includes the actual figures covering the period from 1 July 2000 to 31 December 2000.

#### ANALYSIS OF FINANCIAL PROVISION

Prog	gramme	1999–2000 (Actual) (\$m)	2000–01 (Approved) (\$m)	2000–01# (Revised) (\$m)	2001–02 (Estimate) (\$m)
(1) (2)	Support for Research and Development Fostering University-Industry	_	_	24.8	25.3
(3)	CollaborationPromotion of Technological	_	_	4.7	6.5
(4)	EntrepreneurshipPlanning for Innovation and Technology	_	_	3.5	4.8
` '	Development	_	_	11.1	21.4
(5)	Infrastructural Support	_	_	66.1	23.2
(6)	Quality Support			47.2	61.5
		_	_	157.4	142.7 (-9.3%)

<sup>#</sup> The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

## **Analysis of Financial and Staffing Provision**

#### Programme (1)

Provision for 2001–02 is \$0.5 million (2.0%) higher than the revised estimate for 2000–01. This is mainly due to the full-year provision for expenditure under this programme, partly offset by the reduced cashflow requirement of two capital projects one of which was completed in 2000–01.

## Programme (2)

Provision for 2001–02 is \$1.8 million (38.3%) higher than the revised estimate for 2000–01. This is mainly due to the full-year provision for expenditure under this programme.

## Programme (3)

Provision for 2001–02 is \$1.3 million (37.1%) higher than the revised estimate for 2000–01. This is mainly due to the full-year provision for expenditure under this programme.

## Programme (4)

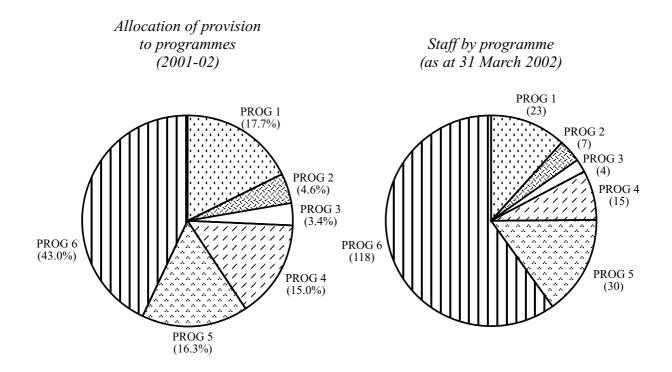
Provision for 2001-02 is \$10.3 million (92.8%) higher than the revised estimate for 2000-01. This is mainly due to the full-year provision for expenditure under this programme, the commencement of three capital projects in 2001-02 and the increase in provision for supporting the activities on the CAIT.

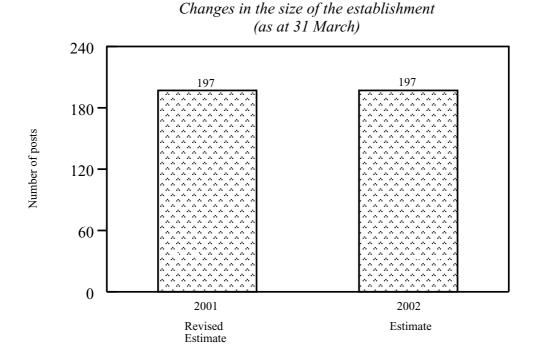
## Programme (5)

Provision for 2001–02 is \$42.9 million (64.9%) lower than the revised estimate for 2000–01. This is mainly due to the suspended cashflow requirement of the capital project – Science Park in 2001–02 in view of the merger of PHKSPCL, HKIEC and HKITCC, partly offset by the full-year provision for expenditure under this programme.

## Programme (6)

Provision for 2001–02 is \$14.3 million (30.3%) higher than the revised estimate for 2000–01. This is mainly due to the full-year provision for expenditure under this programme, partly offset by the reduced cashflow requirement in 2001–02 for two major equipment projects.





Year

Sub- head (Code)		Actual expenditure 1999–2000	Approved estimate 2000–01	Revised# estimate 2000–01	<b>Estimate 2001–02</b>
		\$' 000	\$' 000	\$' 000	\$'000
	Recurrent Account				
000	Operational expenses	_	_	92,826	128,781
	Total, Recurrent Account			92,826	128,781
	Capital Account				
	I — Plant, Equipment and Works				
603 661	Plant, vehicles and equipment	_	_	2,600	886
	vote)	_	_	3,050	3,050
	Total, Plant, Equipment and Works			5,650	3,936
	II — Other Non-Recurrent				
700	General other non-recurrent	_	_	58,935	10,031
	Total, Other Non-Recurrent			58,935	10,031
	Total, Capital Account	_	_	64,585	13,967
	Total Expenditure			157,411	142,748

<sup>#</sup> The revised estimate for 2000–01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

## **Details of Expenditure by Subhead**

The estimate of the amount required in 2001–02 for the salaries and expenses of the Innovation and Technology Commission is \$142,748,000. This represents a decrease of \$14,663,000 against the revised estimate for 2000–01.

#### Recurrent Account

- 2 Provision of \$128,781,000 under Subhead 000 Operational expenses is for the salaries and allowances of staff of the Innovation and Technology Commission and its other operating expenses. The increase of \$35,955,000 (38.7%) over the revised estimate for 2000–01 is mainly due to the full-year provision for expenditure in 2001–02 as the Innovation and Technology Commission has only been established since 1 July 2000, and salary increments for existing staff. Management and control of the Commission's operational expenses takes the form of a one-line vote. The controlling officer is given flexibility in the virement of funds within the subhead to facilitate the achievement of greater efficiency and enhanced productivity.
- **3** As a vote-funded agency, the Commission is subject to establishment control. The establishment at 31 March 2001 will be 196 permanent posts and one supernumerary post. No change in establishment is expected by 31 March 2002. Subject to certain conditions, the controlling officer may under delegated powers create or delete non-directorate posts during 2001–02, but the notional annual mid-point salary value of all such posts must not exceed \$75,361,000.
  - 4 An analysis of financial provision under Subhead 000 Operational expenses is as follows:

	1999–2000 (Actual) (\$' 000)	2000–01 (Original Estimate) (\$' 000)	2000–01# (Revised Estimate) (\$' 000)	2001–02 (Estimate) (\$'000)
Personal emoluments				
- Salaries	_	_	71,728	98,154
- Allowances	_	_	2,401	2,773
Departmental expenses			40.40	A= 0= 4
- General departmental expenses	_	_	18,697	27,854
			92,826	128,781

<sup>#</sup> The revised estimate for 2000-01 represents the provision required for the nine months from 1 July 2000 to 31 March 2001.

<sup>5</sup> Subject to the cash-limited ceiling of \$128,781,000 which will not be increased in the course of the year except for increases to the personal emoluments portion in line with the civil service pay adjustment, the controlling officer may deploy funds freely to meet requirements under each of the various expenditure components. The Administration will provide to Finance Committee quarterly financial reports showing actual spending and any redeployment of funds within *Subhead 000 Operational expenses* based on the above analysis.

## **Capital Account**

## Commitments

Sub- head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2000	Revised estimated expenditure for 2000–01	Balance
			\$' 000	\$' 000	\$' 000	\$' 000
603	208#	Plant, vehicles and equipment Equipment and associated expenses for the expansion of the laboratory accreditation scheme to cover laboratories testing concrete and				
	236#	concrete reinforcing steel	21,627	20,757	400	470
	230m	resistance standard system	2,720	104	2,200	416
			24,347	20,861	2,600	886
700	001	General other non-recurrent Consultancy study on environmental technology industry in Hong Kong	5,500	_	_	5,500
	002	Consultancy studies on Hong Kong- Mainland technological collaboration	5,000	_	_	5,000
	003	Consultancy study on biotechnology industry in Hong Kong	1,300	_	_	1,300
	004	Publicity to raise the community's awareness of the importance of science and technology to our				
	554#	economy TES on textiles and clothing industry	1,685 6,500	1,231	4,738	1,685 531
			19,985	1,231	4,738	14,016
		Total	44,332	22,092	7,338	14,902

<sup>#</sup> Denotes items taken over from the ex-Industry Department.