

Head 48 —GOVERNMENT LABORATORY

Controlling officer: the Government Chemist will account for expenditure under this Head.

Estimate 2000–01	\$238.7m
Establishment ceiling 2000–01 (notional annual mid-point salary value) representing an estimated 363 non-directorate posts at 31 March 2000 rising by nine posts to 372 posts at 31 March 2001	\$158.4m
In addition there will be an estimated six directorate posts at 31 March 2000 and at 31 March 2001.	
Capital Account commitment balance	\$6.0m

Controlling Officer's Report

Programmes

Programme (1) Statutory Testing	This programme contributes to Policy Area 2: Food Supply and Food Safety (Secretary for the Environment and Food) and Policy Area 15: Health (Secretary for Health and Welfare).
Programme (2) Advisory and Investigative Services	This programme contributes to Policy Area 9: Internal Security (Secretary for Security), Policy Area 15: Health (Secretary for Health and Welfare) and Policy Area 23: Environmental Protection and Conservation (Secretary for the Environment and Food).
Programme (3) Forensic Science Service	This programme contributes to Policy Area 9: Internal Security (Secretary for Security).

Detail

Programme (1): Statutory Testing

	1998–99 (Actual)	1999–2000 (Approved)	1999–2000 (Revised)	2000–01 (Estimate)
Financial provision (\$m)	57.5	73.4 (+27.7%)	72.3 (–1.5%)	71.6 (–1.0%)

Aim

- 2 The aim is to carry out statutory functions as referee analyst under a number of ordinances and regulations.

Brief Description

3 The Government Laboratory has a statutory function as referee analyst under various ordinances and regulations. The work involves the analysis of food products for regulatory compliance, the examination of western and Chinese medicines for registration and quality control, the testing of dutiable commodities for tariff classification, the assessment of toys, children's products and consumer articles for health and safety hazards, the determination of tar and nicotine yields in cigarettes, the assay of gold and platinum articles for fineness and the verification of products and equipment for compliance with the Weights and Measures Ordinance. The laboratory also provides 24-hour on-call service to assist the Fire Services Department and Labour Department at scenes of accidents involving hazardous chemicals.

4 The Laboratory has achieved all its performance targets in 1999. It has managed to provide urgent analytical services for the detection of dioxins and beta-agonists in foods in the past year. Actions taken by the Customs and Excise Department against suspected pharmaceutical products and illicit diesel oil in the past year have resulted in high output of analysis of pharmaceuticals and dutiable commodities respectively.

- 5 The key performance measures in respect of statutory testing are:

Targets

	Target	1998 (Actual)	1999 (Actual)	2000 (Plan)
Testing of:				
samples relating to food poisoning within 1 working day (%)	100	100	100	100

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	Target	1998 (Actual)	1999 (Actual)	2000 (Plan)
food samples for regulatory compliance purposes within target reporting time averaging 19 working days (%)§	92	93	97	92
pharmaceuticals (quality control) within target reporting time averaging 14 working days (%)§	92	80	92	92
pharmaceuticals (registration) within target reporting time averaging 30 working days (%)§	85	85	85	85
Chinese medicines within target reporting time averaging 30 working days (%)§	90	98	100	90
dangerous goods within target reporting time averaging 14 working days (%)§	90	84	91	90
dutiable and other commodities within target reporting time averaging 10 working days (%)§	90	90	87	90
toys and children's products within target reporting time averaging 15 working days (%)§	95	93	99	95
consumer goods within target reporting time averaging 35 working days (%)§	95	98	98	95

§ Different samples require different analytical procedures, thus different target reporting time applies. The quoted number of working days required represents an average of target reporting time for the different samples within the category.

Indicators

	1998 (Actual)	1999 (Actual)	2000 (Estimate)
food samples tested for regulatory compliance purposes	64 862	70 829	77 200
expenditure per test (\$)	350	295	350
pharmaceuticals (quality control) tested.....	12 827	22 805	14 600
expenditure per test (\$)	500	322	580
pharmaceuticals (registration) tested	4 795	5 577	15 000
expenditure per test (\$)	1,682	1,207	1,100
Chinese medicines tested.....	9 866	18 471	21 000
expenditure per test (\$)	509	364	420
dangerous goods tested.....	4 447	6 100	5 600
expenditure per test (\$)	311	321	360
dutiable and other commodities tested	21 680	31 127	24 000
expenditure per test (\$)	252	161	230
cigarette samples tested.....	15 413	15 519	15 500
expenditure per test (\$)	108	92	110
toys and children's products tested	8 589	9 082	9 100
expenditure per test (\$)	555	518	510
consumer goods tested	16 797	16 465	16 900
expenditure per test (\$)	301	295	300

Matters Requiring Special Attention in 2000–01

6 During 2000–01, the Government Laboratory will:

- conduct active research on the quality and safety of Chinese medicines and strengthen collaboration with Mainland testing institutes;
- develop quick screening tests for various toxins and contaminants in food products using the latest technology including molecular biology techniques and radio-immunoassay methods;
- set up new testing facilities for the evaluation of flammability standard for selected furniture items; and
- step up the analytical and advisory support for the implementation of the Dangerous Goods Ordinance.

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Programme (2): Advisory and Investigative Services

	1998-99 (Actual)	1999-2000 (Approved)	1999-2000 (Revised)	2000-01 (Estimate)
Financial provision (\$m)	59.2	60.0 (+1.4%)	60.0 (0.0%)	62.5 (+4.2%)

Aim

7 The aim is to provide a wide range of primarily chemical testing and advisory services to other government departments and public institutions.

Brief Description

8 Chemical testing of air, water and waste samples for a variety of pollution indicators constitutes the main activity under this programme. Specific incidents of emission or leakage of gaseous substances into the atmosphere also involve the Laboratory in on-site investigations. Analytical support is provided to the Hong Kong Observatory's Environmental Radiation Monitoring Programme as well as the Daya Bay Contingency Plan. Other activities include the examination of seepage samples for the Food and Environmental Hygiene Department, testing of government supplies for conformity to tender specifications, analysing feed-stocks for veterinary drugs residue for the Agriculture, Fisheries and Conservation Department, identifying products made from endangered species and examining spurious consumer goods for the law enforcement authorities.

9 The Laboratory has achieved all work targets set for 1999 despite the heavy workload. A comprehensive study of volatile organic compounds in the ambient air of Hong Kong is made possible by the introduction of advanced technology. Likewise, the presence of dioxins and other persistent organic compounds in water and sediment also calls for high level of expertise and technology in the field of environmental analysis. In addition to the ever-increasing demand for expert advice on chemistry-related matters from various client departments, the Laboratory has also been actively involved in various environmental impact study projects which are inevitably resource-demanding.

10 The key performance measures in respect of advisory and investigative services are:

Targets

	Target	1998 (Actual)	1999 (Actual)	2000 (Plan)
Testing of:				
air monitoring samples within target reporting time averaging 20 working days (%)§	94	95	98	95
other field investigation samples within target reporting time averaging 12 working days (%)§	90	96	100	95
water monitoring samples within target reporting time averaging 20 working days (%)§	90	97	98	90
waste monitoring samples within target reporting time averaging 27 working days (%)§	95	96	96	95
waste samples for litigation purposes within target reporting time averaging 12 working days (%)§	95	93	95	95
radioactivity monitoring samples within target reporting time averaging 12 working days (%)§	90	99	99	95
other samples within target reporting time averaging 14 working days (%)§	95	95	96	95

§ Different samples require different analytical procedures, thus different target reporting time applies. The quoted number of working days required represents an average of target reporting time for the different samples within the category.

Indicators

	1998 (Actual)	1999 (Actual)	2000 (Estimate)
air samples tested	92 473	127 385	105 000
expenditure per test (\$)	147	109	130
tests arising from field investigations	3 425	3 869	3 700

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	1998 (Actual)	1999 (Actual)	2000 (Estimate)
expenditure per test (\$)	1,543	888	900
water samples tested	125 395	127 926	121 000
expenditure per test (\$)	127	114	130
chemical waste samples tested.....	9 971	11 262	10 000
expenditure per test (\$)	480	466	500
livestock and other waste samples tested.....	10 191	9 157	10 000
expenditure per test (\$)	148	157	150
waste samples tested for litigation purposes	2 363	2 415	2 200
expenditure per test (\$)	2,227	2,090	2,300
miscellaneous			
radioactivity monitoring samples tested.....	4 471	4 686	4 800
expenditure per test (\$)	777	668	630
other samples tested	28 713	29 054	29 000
expenditure per test (\$)	401	375	380

Matters Requiring Special Attention in 2000-01

11 During 2000-01, the Government Laboratory will:

- strengthen communication and technical exchange with environmental laboratories in Guangdong, in particular, under the South China Sea Regional Monitoring Network, to establish traceability and comparability of pollution data across the border;
- provide analytical and advisory support to the implementation of the Chemical Weapons Convention in the Hong Kong Special Administrative Region; and
- extend the implementation of the ISO 14000 environmental management principles to the operation of the Laboratory.

Programme (3): Forensic Science Service

	1998-99 (Actual)	1999-2000 (Approved)	1999-2000 (Revised)	2000-01 (Estimate)
Financial provision (\$m)	89.8	90.0 (+0.2%)	90.0 (0.0%)	104.6 (+16.2%)

Aim

12 The aim is to provide a comprehensive and unbiased forensic science service to the criminal justice system.

Brief Description

13 The Government Laboratory provides comprehensive forensic science services to law enforcement departments, including the Hong Kong Police Force, the Customs and Excise Department, the Immigration Department and the Independent Commission Against Corruption. In addition, urinalysis monitoring is conducted for the Department of Health (Methadone Maintenance Scheme), the Social Welfare Department, the Correctional Services Department and other organisations requiring this service.

14 The services are grouped into two main work areas: 1) physical and biochemical evidence; and 2) drugs and toxicology. One of the important features of the forensic science services is the provision of round-the-clock scientific examination of scenes of crimes. Other than general crime scenes, this service is also provided to cases where specialist knowledge is required, such as fire investigations, traffic accident reconstructions, blood pattern interpretation and illicit drugs manufacturing.

15 Although the performance of the Government Laboratory fell short of the targets in some areas, it is improving and the number of working days required for the provision of various forensic science services were further reduced in 1999.

16 The key performance measures in respect of forensic science services are:

Targets

Targets are defined as the number of working days required to complete 80% of cases in each category to accommodate the wide variations experienced in forensic casework.

	Target Wkg Days Per Case	1998 (Actual)	1999 (Actual)	2000 (Plan)
biochemical grouping (DNA profiling).....	88	137	87	85

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	Target Wkg Days Per Case	1998 (Actual)	1999 (Actual)	2000 (Plan)
trace evidence.....	66	122	97	90
accident reconstruction.....	66	82	77	74
handwriting examination.....	66	85	84	78
counterfeiting/forgery.....	33	37	33	33
express counterfeiting/forgery service.....	1	1	1	1
routine illicit drug seizures.....	11	19	13	11
major drug seizures and manufacturing.....	44	66	44	44
analytical toxicology.....	33	59	40	38
drug urinalysis (methadone clinics).....	11	20	12	11
drug urinalysis (judicial-screening).....	11	10	7	7
drug urinalysis (judicial-confirmation).....	22	20	17	17
drink-driving.....	11	10	7	7

Indicators

Key indicators for the forensic science services are the number of cases investigated, urinalysis samples tested, statutory certificates or technical reports/witness statements issued and crime scenes attended.

	1998 (Actual)	1999 (Actual)	2000 (Estimate)
Physical and Biochemical Evidence Group			
cases investigated			
biochemical sciences.....	713	750	770
chemical sciences.....	1 739	1 445	1 400
physical sciences.....	447	465	460
questioned documents.....	1 092	1 276	1 300
Total.....	3 991	3 936	3 930
Drugs and Toxicology Group			
cases investigated			
controlled drugs.....	9 572	7 912	8 000
analytical toxicology.....	2 943	2 767	2 800
Total.....	12 515	10 679	10 800
samples tested			
drug urinalysis (methadone clinics).....	24 495	22 463	22 500
drug urinalysis (judicial-screening).....	9 812	11 565	12 000
drug urinalysis (judicial-confirmation).....	11 398	11 162	11 000
drink-driving.....	175	142	150
Total.....	45 880	45 332	45 650
Forensic Science Division			
statutory certificates issued.....	9 823	8 317	8 500
technical reports/statements.....	7 463	7 160	7 500
crime scenes attended.....	620	791	850

Matters Requiring Special Attention in 2000-01

17 During 2000-01, the Government Laboratory will:

- in response to the Court of Final Appeal's ruling on the right of abode of persons born out-of-wedlock of Hong Kong permanent residents, establish a new section to conduct parentage verification by means of DNA profiling techniques; and
- pending approval of the proposed legislation on the taking of intimate and non-intimate samples, set up a new section for the compilation of a DNA profile database of offenders to assist in the detection and investigation of serious crimes.

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ANALYSIS OF FINANCIAL PROVISION

Programme	1998-99 (Actual) (\$m)	1999-2000 (Approved) (\$m)	1999-2000 (Revised) (\$m)	2000-01 (Estimate) (\$m)
(1) Statutory Testing	57.5	73.4	72.3	71.6
(2) Advisory and Investigative Services	59.2	60.0	60.0	62.5
(3) Forensic Science Service	89.8	90.0	90.0	104.6
	<u>206.5</u>	<u>223.4</u>	<u>222.3</u>	<u>238.7</u>
		(+8.2%)	(-0.5%)	(+7.4%)

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2000-01 is \$0.7 million (1.0%) lower than the revised estimate for 1999-2000. This is mainly due to the full-year provision for new posts created in 1999-2000, offset by reduced provision for equipment acquisition and achievement of Enhanced Productivity Programme savings in 2000-01.

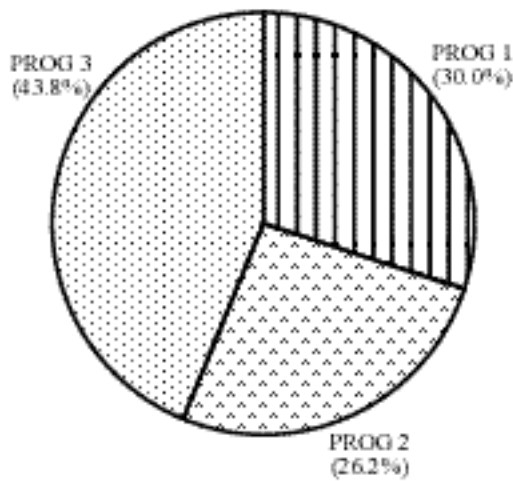
Programme (2)

Provision for 2000-01 is \$2.5 million (4.2%) higher than the revised estimate for 1999-2000. This is mainly due to an increase of two posts relating to the strengthening of the Cross Boundary Co-operation on Environment.

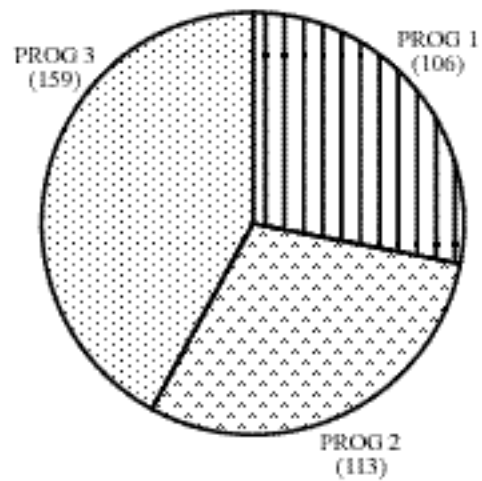
Programme (3)

Provision for 2000-01 is \$14.6 million (16.2%) higher than the revised estimate for 1999-2000. This is mainly due to additional provision for setting up the Parentage Testing Section to conduct parentage verification and for procuring equipment items in 2000-01 and the net creation of seven posts.

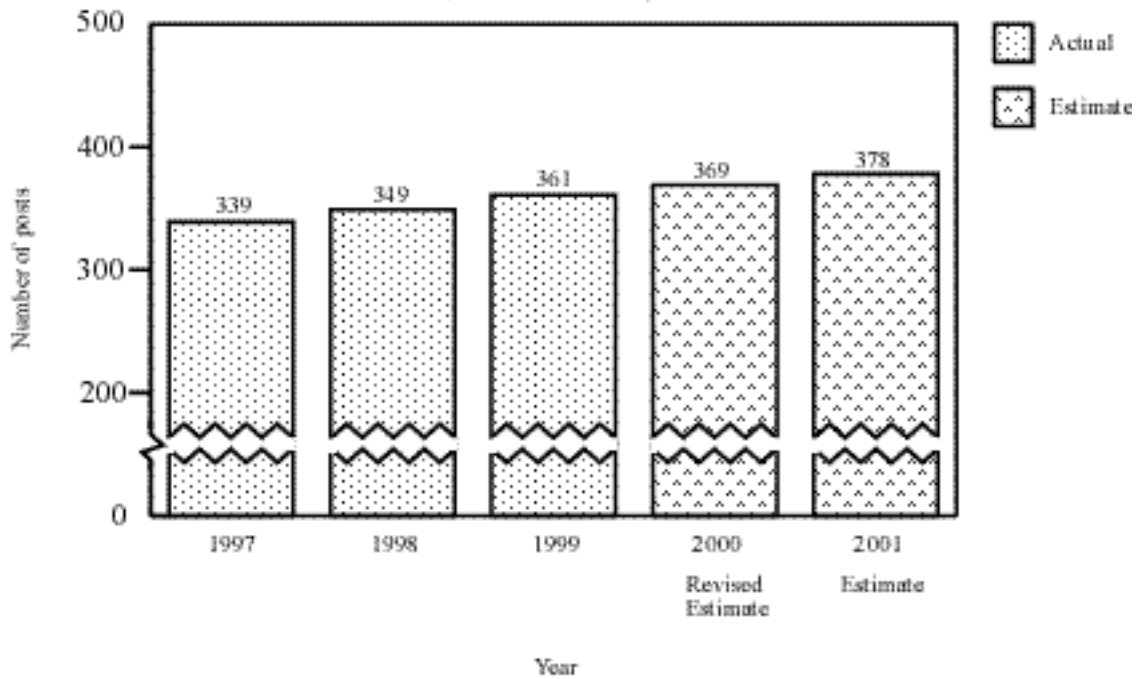
Allocation of provision to programmes (2000-01)



Staff by programme (as at 31 March 2001)



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



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Sub-head (Code)		Actual expenditure 1998-99	Approved estimate 1999-2000	Revised estimate 1999-2000	Estimate 2000-01
		\$ 000	\$ 000	\$ 000	\$ 000
Recurrent Account					
I — Personal Emoluments					
001	Salaries.....	158,114	168,265	167,011	174,626
002	Allowances.....	1,397	1,947	1,530	1,571
007	Job-related allowances.....	92	100	117	168
	Total, Personal Emoluments	<u>159,603</u>	<u>170,312</u>	<u>168,658</u>	<u>176,365</u>
III — Departmental Expenses					
149	General departmental expenses.....	26,401	31,164	31,783	38,630
	Total, Departmental Expenses	<u>26,401</u>	<u>31,164</u>	<u>31,783</u>	<u>38,630</u>
	Total, Recurrent Account	<u>186,004</u>	<u>201,476</u>	<u>200,441</u>	<u>214,995</u>
Capital Account					
I — Plant, Equipment and Works					
603	Plant, vehicles and equipment.....	—	—	—	5,968
661	Minor plant, vehicles and equipment (block vote).....	18,380	19,739	19,739	17,759
	Total, Plant, Equipment and Works	<u>18,380</u>	<u>19,739</u>	<u>19,739</u>	<u>23,727</u>
II — Other Non-Recurrent					
	General other non-recurrent.....	2,121	2,213	2,092	—
	Total, Other Non-Recurrent.....	<u>2,121</u>	<u>2,213</u>	<u>2,092</u>	—
	Total, Capital Account.....	<u>20,501</u>	<u>21,952</u>	<u>21,831</u>	<u>23,727</u>
	Total Expenditure	<u><u>206,505</u></u>	<u><u>223,428</u></u>	<u><u>222,272</u></u>	<u><u>238,722</u></u>

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Details of Expenditure by Subhead

The estimate of the amount required in 2000–01 for the salaries and expenses of the Government Laboratory is \$238,722,000. This represents an increase of \$16,450,000 over the revised estimate for 1999–2000 and of \$32,217,000 on actual expenditure in 1998–99.

Recurrent Account

Personal Emoluments

2 Provision of \$176,365,000 for personal emoluments represents an increase of \$7,707,000 over the revised estimate for 1999–2000 and takes into account posts to be created during 2000–01.

3 The establishment at 31 March 2000 will be 369 permanent posts. It is expected that a net nine posts will be created in 2000–01.

4 Subject to certain conditions, the controlling officer may under delegated powers create or delete non-directorate posts during 2000–01, but the notional annual mid-point salary value of all such posts must not exceed \$158,440,000.

5 Provision of \$1,571,000 under *Subhead 002 Allowances* is for standard allowances.

6 Provision of \$168,000 under *Subhead 007 Job-related allowances* is for standard job-related allowances. The increase of \$51,000 (43.6%) over the revised estimate for 1999–2000 is due to the full-year provision required for on-call duty allowances.

Departmental Expenses

7 Provision of \$38,630,000 under *Subhead 149 General departmental expenses* represents an increase of \$6,847,000 (21.5%) over the revised estimate for 1999–2000. This is mainly due to the full-year provision for the employment of non-civil service contract staff and the anticipated increase in expenditure on procurement of additional stock of chemicals and specialist equipment to cater for new activities earmarked to start in 2000–01.

Capital Account

Plant, Equipment and Works

8 Provision of \$17,759,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$1,980,000 (10.0%) against the revised estimate for 1999–2000. This is mainly due to reduced requirement for the purchase of minor equipment.

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Capital Account

Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.99	Revised estimated expenditure for 1999–2000	Balance
			\$ 000	\$ 000	\$ 000	\$ 000
603		<i>Plant, vehicles and equipment</i>				
	320	Replacement of Scanning Electron Microscope	3,675	—	—	3,675
	321	Provision of DNA testing and analytical facilities for the Parentage Testing Section	2,293	—	—	2,293
		Total	<u>5,968</u>	<u>—</u>	<u>—</u>	<u>5,968</u>