Controlling officer: the Government Chemist will account for expenditure under this Head.	
Estimate 2013–14	\$411.2m
Establishment ceiling 2013–14 (notional annual mid-point salary value) representing an estimated 446 non-directorate posts as at 31 March 2013 rising by six posts to 452 posts as at 31 March 2014	\$222.3m
In addition, there will be an estimated seven directorate posts as at 31 March 2013 and as at 31 March 2014.	
Commitment balance	\$57.7m

Controlling Officer's Report

Programmes

Programme (1) Statutory Testing This programme contributes to Policy Area 2: Agriculture, Fisheries and Food Safety (Secretary for Food and Health) and

Policy Area 15: Health (Secretary for Food and Health).

Programme (2) Advisory and Investigative Services

This programme contributes to Policy Area 2: Agriculture, Fisheries and Food Safety (Secretary for Food and Health), Policy Area 9: Internal Security (Secretary for Security), Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment) and Policy Area 32: Environmental Hygiene (Secretary for Food and

Health)

Programme (3) Forensic Science Services

This programme contributes to Policy Area 9: Internal Security

(Secretary for Security).

Detail

Programme (1): Statutory Testing

	2011–12	2012–13	2012–13	2013–14
	(Actual)	(Original)	(Revised)	(Estimate)
Financial provision (\$m)	152.5	168.2	167.7 (-0.3%)	186.2 (+11.0%)

(or +10.7% on2012–13 Original)

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 Chemist discharges statutory functions 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 classification of dangerous goods for compliance with the Dangerous Goods Ordinance (Cap. 295); 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; the analysis of consumer goods in relation to the fitness with their trade descriptions; and the verification of products and equipment for compliance with the Weights and Measures Ordinance (Cap. 68). The Laboratory provides 24-hour on-call service to assist the Fire Services Department at scenes of accidents involving hazardous chemicals.
- 4 In 2012, the Laboratory continued outsourcing some of the routine food testing work to private testing laboratories. The resources released from outsourcing were deployed to take up test method development, new testing work arising from amendments of food legislation and activities related to outsourcing such as organisation of technical seminars as well as chemical metrology development in support of, among others, the development of the local testing and certification industries. Support was also provided to the Centre for Food Safety to perform tests on the nutritional composition of formula products available in the local market. In another area of health concern, the Laboratory continued to provide full support for urgent samples and investigation into cases of adverse reaction arising from the consumption of proprietary Chinese medicines found containing western drug ingredients, and intoxication incidents related to substitution or contamination of herbs in Chinese herbal medicines.

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

Targets

	Target	2011 (Actual)	2012 (Actual)	2013 (Plan)
Testing of:				
food complaint cases within 25 working				
days (%)	83	85	85	83
urgent samples relating to food incidents	100	100	100	100
within two working days (%)other food samples within reporting time	100	100	100	100
averaging 19 working days (%)#	95	100	99	95
pharmaceuticals (quality control) within	75	100		75
reporting time averaging 14 working				
days (%)#	95	99	99	95
pharmaceuticals (registration) within				
reporting time averaging 30 working	0.0	00	0.0	0.0
days (%)#	90	98	98	90
Chinese medicines within reporting time averaging 30 working days (%)#	95	97	97	95
dangerous goods within reporting time	93	91	91	73
averaging 14 working days (%)#	95	99	100	95
dutiable and other commodities within			100	, ,
reporting time averaging ten working				
days (%)#	95	100	99	95
toys and children's products within				
reporting time averaging 15 working	0.5	06	07	0.7
days (%)#	95	96	97	95
consumer goods within reporting time averaging 35 working days (%)#	95	95	97	95
non-pharmaceutical consumer goods	93	93	91	73
(trade descriptions) within reporting				
time averaging 35 working days (%)#	90	98	97	90

[#] Different samples require different analytical procedures, thus different reporting time applies. The quoted number of working days required represents an average of reporting time for the different types of samples and test requests within the category, while the target (in percentage) is the total compliance rate of the concerned samples and test requests within a particular category against their respective targets.

Indicators

The key indicators for statutory testing are the numbers of tests performed on the various categories of services.

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
Tests performed			
food complaint samples	20 456	17 051	18 000
urgent samples relating to food incidents	6 747	762	N.A.^
other food samples	184 950	185 557	175 000
pharmaceuticals (quality control)	36 758	35 244	31 000
pharmaceuticals (registration)	19 205	20 792	20 000
Chinese medicines	80 579	77 784	80 000
dangerous goods	4 727	4 705	5 000
dutiable and other commodities	9 739	7 775	10 000
non-pharmaceutical consumer goods (trade			
descriptions)	5 375	6 396@	5 000
cigarette samples	12 504	13 536	13 000
toys and children's products	18 642	18 532	18 500
consumer goods	15 081	15 004	15 000

As the testing requirement for urgent food samples relating to food incidents fluctuated in previous years, it is difficult to estimate either the occurrence of this type of food incidents or the number of tests required.

[@] The higher work output in 2012 was due to unforeseen and urgent litigation samples. Such contingency work fluctuates from year to year.

Matters Requiring Special Attention in 2013-14

- 6 During 2013–14, the Laboratory will:
- provide professional advice and develop testing methods in preparation for the implementation of the Pesticide Residues in Food Regulation (Cap. 132CM) in August 2014;
- outsource some of the routine food testing work to the private sector in support of the development of the testing and certification industry in Hong Kong as well as to better utilise the Laboratory's resources in developing and performing new tests regarding legislative amendments;
- provide support to expedite the setting of standards for Chinese herbal medicines commonly used in Hong Kong;
- continue to provide professional advisory and analytical services to support the enforcement of the various orders and regulations under the Trade Descriptions Ordinance (Cap. 362). The services will cover analysis and authenticity tests on consumer goods, in particular those related to valuable goods such as jewellery, dried seafood products and Chinese medicinal products where their authenticity is of public concern.

Programme (2): Advisory and Investigative Services

	2011–12	2012–13	2012–13	2013–14
	(Actual)	(Original)	(Revised)	(Estimate)
Financial provision (\$m)	63.9	66.6	68.8 (+3.3%)	75.2 (+9.3%)

(or +12.9% on 2012–13 Original)

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 The Laboratory provides comprehensive analytical and advisory services to the Government in the management and monitoring of the environment and in the enforcement of various pollution control measures. 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 environment 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 and swimming pool water samples for the Food and Environmental Hygiene Department, analysis of samples related to evaluation of exposure to occupational hazards for the Labour Department, testing of government supplies for conformity to tender specifications and identifying products made from endangered species.
- 9 In 2012, the Laboratory continued to render analytical support and professional advice to the Government in improving the quality of the environment of Hong Kong and engage in scientific research to further enhance its analytical capabilities in environmental analysis. In addition to its routine commitments, the Laboratory was actively involved in various environmental impact studies and ad-hoc projects including the analysis of environmental samples for organic pollutants under the Toxic Substances Monitoring Programme. To support the implementation of the Air Pollution Control (Volatile Organic Compounds) Regulation (Cap. 311W), the Laboratory has been providing analytical services for determining the content of volatile organic compounds in regulated products including architectural paints/coatings, marine vessel paints, printing inks, adhesives and sealants, vehicle refinishing paints and consumer products. In relation to the method development for the analysis of persistent organic pollutants, a special team has been established to speed up the method validation work. In addition, the Laboratory continued to provide analytical service for biodiesel in support of the implementation of the motor vehicle biodiesel specifications in the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311L). The Laboratory also provided over 300 pieces of professional advice relating to over 1 300 items for classification under the Dangerous Goods Ordinance and over 650 pieces of advice 1 000 over items supporting implementation of the Chemical Weapons Ordinance (Cap. 578) and control of strategic commodities.

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

Targets

	Target	2011 (Actual)	2012 (Actual)	2013 (Plan)
Testing of:	_			
air pollution monitoring samples within				
reporting time averaging 20 working days (%)#	95	99	100	95
field investigation (air pollution) samples	75		100	75
within reporting time averaging	06	100	100	0.6
12 working days (%)#air pollution samples for litigation	96	100	100	96
purposes within reporting time				
averaging 18 working days (%)#	97	100	100	97
water quality monitoring samples within reporting time averaging 20 working				
days (%)#	96	98	99	96
days (%)#environmental waste monitoring samples				
within reporting time averaging 27 working days (%)#	95	98	97	95
environmental waste samples for litigation	75	70	71	75
purposes within reporting time	07	100	100	07
averaging 12 working days (%)#radioactivity monitoring samples within	97	100	100	97
reporting time averaging 12 working				
days (%)#	95	100	100	95
pesticides formulation samples within reporting time averaging 36 working				
days (%)#	93	100	100	93
seepage and swimming pool water	0.6	0.7	0.7	26
samples within ten working days (%) other samples within reporting time	96	97	97	96
averaging 25 working days (%)#	90	98	99	90

[#] Different samples require different analytical procedures, thus different reporting time applies. The quoted number of working days required represents an average of reporting time for the different types of samples and test requests within the category, while the target (in percentage) is the total compliance rate of the concerned samples and test requests within a particular category against their respective targets.

Indicators

The key indicators for advisory and investigative services are the numbers of tests performed on the various categories of services.

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
Tests performed			
air pollution monitoring samples	67 885	72 871	69 600
air pollution samples for litigation purposes	2 437	2 961	3 000
field investigation (air pollution) samples	483	502	450
water quality monitoring samples	125 592	123 168	124 600
environmental waste monitoring samples	11 976	12 150	11 200
environmental waste samples for litigation purposes	284	300	200
pesticides formulation samples	378	240	300
seepage and swimming pool water samples	28 832	38 771	40 000
miscellaneous			
radioactivity monitoring samples	4 219	4 594	4 700
other samples	5 009	9 956	8 300

Matters Requiring Special Attention in 2013-14

- 11 During 2013–14, the Laboratory will:
- continue to provide analytical services in support of the implementation of the Air Pollution Control (Motor Vehicle Fuel) Regulation, including the analysis of biodiesel; and
- continue to provide support to government departments in relation to the implementation of the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. In particular, new sophisticated instruments will be acquired to provide technical support for method development in connection with the analysis of the additional groups of chemicals that have come under the control of the two Conventions.

Programme (3): Forensic Science Services

	2011–12 (Actual)	2012–13 (Original)	2012–13 (Revised)	2013–14 (Estimate)
Financial provision (\$m)	130.9	140.4	144.6 (+3.0%)	149.8 (+3.6%)
				(or +6.7% on 2012–13 Original)

Aim

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

Brief Description

- 13 The Laboratory provides comprehensive forensic science services to law enforcement departments, which include mainly the Hong Kong Police Force, the Customs and Excise Department, the Immigration Department and the Fire Services Department. The services are grouped into two main work areas: criminalistics and quality management; and drugs, toxicology and documents. A 24-hour service is also provided for the scientific examination of crime scenes. It covers general crime scenes and scenes requiring specialist knowledge, such as fire investigation, traffic accident reconstruction, blood pattern analysis and illicit drug manufacturing.
- 14 Additionally, the screening and monitoring, through urine testing (urinalysis), of the drug-abuse behaviour of persons under imprisonment, rehabilitation or probation is conducted for the Department of Health (Methadone Maintenance Scheme), the Social Welfare Department, the Correctional Services Department, the Hong Kong Police Force and other organisations requiring this service.
- 15 The targets are defined to be the percentage of completed cases whose individual case-completion time does not exceed a specified number of working day(s). The key performance measures in respect of the forensic science services are:

2011

2012

2012

Targets

	Target	(Actual)	(Actual)	2013 (Plan)
Cases for:	Turget	(Tietuur)	(Tietaar)	(1 1411)
biochemical grouping (DNA profiling) -				
non-complicated cases completed				
within 66 working days (%)	90	98	93	90
complicated cases completed within	00	02	02	00
130 working days (%) DNA database (DNA profiling)	90	93	92	90
completed within 22 working				
days (%)	90	94	93	90
parentage testing (DNA profiling)				
completed within 22 working	00	0.5	0.5	0.0
$days$ (%) Δ	90	95	95	90
trace evidence completed within 66 working days (%)	90	90	90	90
accident reconstruction completed within	70	70	70	70
66 working days (%)	90	94	91	90
illicit drug seizures completed within				
11 working days (%)	90	92	91	90
major illicit drug seizures and				
manufacturing completed within 44 working days (%)	90	90	89	90
11 " OTKING days (70)	70	70	0)	70

	Target	2011 (Actual)	2012 (Actual)	2013 (Plan)
other illegal drug activities completed				
within 120 working days (%)	90	94	99	90
analytical toxicology completed within	0.5	0.7	0.6	0.=
33 working days (%)	85	87	86	85
drug urinalysis - methadone clinics completed within				
11 working days (%)	90	91	91	90
judicial-confirmation (routine)				
completed within 22 working				
days (%)	85	89	93	85
judicial-confirmation (enhanced probation) completed within				
five working days (%)	100	100	100	100
drug-driving completed within	100	100	100	100
33 working days (%) Ω	85	N.A.	89	95
drink-driving completed within		a -		
11 working days (%)	90	97	98	90
handwriting examination completed within 66 working days (%)	85	91	94	85
counterfeiting/forgery completed within	83	71	74	0.5
33 working days (%)	90	93	95	90
express counterfeiting/forgery service				
completed within one working	0.0	0.0	100	00
day (%)	99	99	100	99

 $[\]Delta$ The figures represent the number of working days lapsed between the reception by the Laboratory of samples for genetic testing and the issuing of genetic data after completion of DNA analysis of these samples within the Laboratory.

Indicators

Key indicators for the forensic science services are the number of cases investigated in each category, statutory certificates or technical reports and witness statements issued and crime scenes attended.

	2011 (Actual)	2012 (Actual)	2013 (Estimate)
	(Actual)	(Actual)	(Estimate)
Criminalistics and Quality Management Group			
cases investigated			
DNA database	3 502	3 295	3 500
biochemical sciences -			
non-complicated	430	479	500
complicated	1 441	1 338	1 300
parentage testing	2 409	2 195	2 300
chemical sciences	746	716	720
physical sciences	602	772	700
Drugs, Toxicology and Documents Group			
cases investigated			
controlled drugs	5 414	5 418	5 400
analytical toxicology	2 649	2 688	2 800
drug urinalysis -			
methadone clinics	12 659	13 856	13 000
judicial-confirmation (routine)	30 184	27 711	29 000
judicial-confirmation (enhanced probation)	3 376	2 317	6 000
drug-driving‡	N.A.	44	70
drink-driving	58	58	60
questioned documents	815	700	800
Forensic Science Division			
statutory certificates issued	5 516	5 590	5 600
technical reports/statements	11 416	11 782	11 700
crime scenes attended	391	413	400

New indicator as from 2012. The legislative amendments to introduce stricter measures to combat drug driving more effectively came into effect on 15 March 2012, and cases were submitted after that date.

 $[\]Omega$ New target as from 2012. The legislative amendments to introduce stricter measures to combat drug driving more effectively came into effect on 15 March 2012, and cases were submitted after that date.

Matters Requiring Special Attention in 2013-14

- 16 During 2013–14, the Laboratory will:
- continue to provide analytical support to government departments in the judicial-confirmation urinalysis cases in combating the youth drug abuse problem such as the pilot scheme for enhanced probation, i.e. enhancing the service to include samples from all seven magistracies instead of the existing two.

ANALYSIS OF FINANCIAL PROVISION

Programme	2011–12 (Actual) (\$m)	2012–13 (Original) (\$m)	2012–13 (Revised) (\$m)	2013–14 (Estimate) (\$m)
(1) Statutory Testing(2) Advisory and Investigative	152.5	168.2	167.7	186.2
Services	63.9	66.6	68.8	75.2
(3) Forensic Science Services	130.9	140.4	144.6	149.8
	347.3	375.2	381.1 (+1.6%)	411.2 (+7.9%)

(or +9.6% on 2012–13 Original)

Analysis of Financial and Staffing Provision

Programme (1)

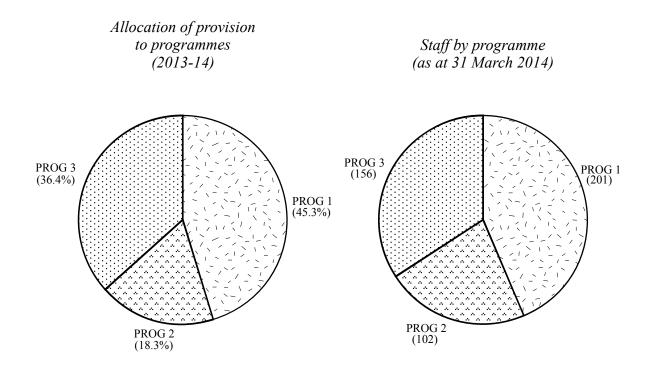
Provision for 2013–14 is \$18.5 million (11.0%) higher than the revised estimate for 2012–13. This is mainly due to a net increase of three posts, and increased requirement for procurement of capital equipment, specialist supplies and other operating expenses.

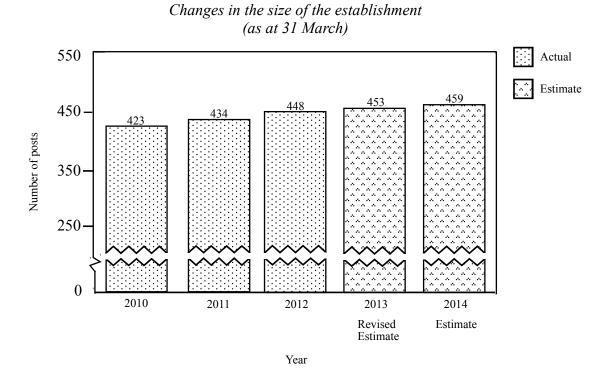
Programme (2)

Provision for 2013–14 is \$6.4 million (9.3%) higher than the revised estimate for 2012–13. This is mainly due to increased requirement for procurement of capital equipment, specialist supplies and other operating expenses.

Programme (3)

Provision for 2013–14 is \$5.2 million (3.6%) higher than the revised estimate for 2012–13. This is mainly due to an increase of three posts, and increased requirement for procurement of capital equipment, specialist supplies and other operating expenses.





Sub- head (Code)		Actual expenditure 2011–12 ** 3,000	Approved estimate 2012–13 \$'000	Revised estimate 2012–13 \$'000	Estimate 2013–14
	Operating Account				
	Recurrent				
000	Operational expenses	312,056	324,520	334,384	340,992
	Total, Recurrent	312,056	324,520	334,384	340,992
	Total, Operating Account	312,056	324,520	334,384	340,992
	Capital Account				
	Plant, Equipment and Works				
603 661	Plant, vehicles and equipment	20,056	35,483	31,469	57,695
001	vote)	15,194	15,225	15,225	12,553
	Total, Plant, Equipment and Works	35,250	50,708	46,694	70,248
	Total, Capital Account	35,250	50,708	46,694	70,248
	Total Expenditure	347,306	375,228	381,078	411,240

Details of Expenditure by Subhead

The estimate of the amount required in 2013–14 for the salaries and expenses of the Government Laboratory is \$411,240,000. This represents an increase of \$30,162,000 over the revised estimate for 2012–13 and of \$63,934,000 over actual expenditure in 2011–12.

Operating Account

Recurrent

- **2** Provision of \$340,992,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Government Laboratory.
- **3** The establishment as at 31 March 2013 will be 453 permanent posts. It is expected that there will be a net increase of six posts in 2013–14. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2013–14, but the notional annual mid-point salary value of all such posts must not exceed \$222,333,000.
 - 4 An analysis of the financial provision under Subhead 000 Operational expenses is as follows:

	2011–12 (Actual) (\$'000)	2012–13 (Original) (\$'000)	2012–13 (Revised) (\$'000)	2013-14 (Estimate) (\$'000)
Personal Emoluments - Salaries	214,179	225,763	235,627	239,529
- Allowances Personnel Related Expenses - Mandatory Provident Fund	1,172	1,391	1,391	1,468
contribution - Civil Service Provident Fund	359	458	518	594
contribution Departmental Expenses	6,347	7,652	7,930	8,661
- General departmental expenses	89,999	89,256	88,918	90,740
	312,056	324,520	334,384	340,992

Capital Account

Plant, Equipment and Works

5 Provision of \$12,553,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$2,672,000 (17.6%) against the revised estimate for 2012–13. This is mainly due to reduced requirement for procurement of replacement and new items in 2013–14.

Commitments

Sub- head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2012	Revised estimated expenditure for 2012–13	Balance
			\$'000	\$'000	\$'000	\$'000
Capita	ıl Acco	unt				
603		Plant, vehicles and equipment				
	814	Replacement of a smoking machine	2,499	_	_	2,499
	816	Acquisition of an equipment for handling speciation of toxic metals in food	5,845	_	4,330	1,515
	819	Acquisition of a set of equipment for verification of chemical standards in supporting new food regulatory control	7,700	_	_	7,700
	884	Replacement of an integrated high performance liquid chromatograph with high resolution mass spectrometry system	4,883	_	_	4,883
	886	Acquisition of a set of instruments for conducting authenticity testing of natural products to support the enforcement of the Trade Descriptions Ordinance	4,782	_	_	4,782
	887	Acquisition of a set of equipment for the new Pesticide Residues in Food Regulation	4,676	_	_	4,676
	888	Replacement of an integrated gas chromatography system for analysis of trace organic pollutants in environmental monitoring samples	4,200	_	_	4,200
	889	Replacement of an integrated liquid chromatograph mass spectrometric system for analysis of pharmaceutical exhibits	4,000	_	_	4,000
	890	Replacement of an integrated liquid chromatograph mass spectrometric system for analysis of western pharmaceutical products	4,000	_	_	4,000
	891	Replacement of an inductively coupled plasma-mass spectrometer system for the enforcement of the Water Pollution Control Ordinance (Cap. 358)	3,150	_	_	3,150
	892	Replacement of a benchtop liquid chromatograph mass spectrometer system with a triple stage quadruple mass spectrometer	2,940	_	_	2,940
	893	Replacement of a liquid chromatograph mass spectrometer system	2,800	_	_	2,800

${\bf Commitments} - {\it Cont'd}.$

Sub- head (Code)	Item) (Code)) Ambit	Approved commitment \$'000	Accumulated expenditure to 31.3.2012 \$'000	Revised estimated expenditure for 2012–13	Balance \$'000
Capia	tal Acco	ount —Cont'd.				
603		Plant, vehicles and equipment—Cont'd.				
	896	Replacement of an integrated liquid chromatograph mass spectrometric system	5,510	_	_	5,510
	897	Replacement of a high performance liquid chromatograph system for the identification of drugs and poisons in biological specimens submitted for				
		toxicological examination	5,040	_	_	5,040
		Total	62,025		4,330	57,695