

### 電訊管理局 Office of the Telecommunications Authority

香港特別行政區 Hong Kong Special Administrative Region



二零零二至零三年環保報告 Environmental Report 2002/03

茁壯成長 Flourishing Growth

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### Introduction



he Government of Hong Kong Special Administrative Region has required all government bureaux and departments to annually publish an environmental report since 1999 and this is the third standalone environmental report published by the Office of the Telecommunications Authority (OFTA). It mainly covers OFTA's environmental policy, targets, actions and performance in different environmental

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aspects from 1 Jan 2002 to 31 Dec 2002. The intended readers of this report are staff in OFTA and other government bureaux and departments, suppliers and contractors engaged by OFTA, and members of the public interested in this issue. We would also like to set a good example for the telecommunications industry to encourage environmental reporting and integrate environmental considerations into their business processes.

It is worth highlighting that we have been awarded the Gold Wastewi\$e Logo for use in 2003/04. This is in recognition of the efforts made by OFTA in waste reduction in the recent three years.

## Role of OFTA

was established as an independent government department on 1 July 1993 and is the executive arm of the Telecommunications

Authority (TA). The TA is appointed under the Telecommunications Ordinance (Cap. 106) as the statutory body responsible for regulating the telecommunications industry.

Since June 1995, OFTA has been operating on a trading fund basis, with its funding based mainly on income from licence fees.

The work of OFTA is guided by the following policy objectives:

- to enable Hong Kong to be recognised as a worldclass telecommunications centre for doing business
- to ensure that Hong Kong has available high quality telecommunications services at competitive prices
- to ensure that Hong Kong has high performance in telecommunications as measured against the Organisation for Economic Co-operation and Development (OECD) economies.

With about 340 staff members, OFTA's role is to regulate and facilitate the development of the telecommunications sector of Hong Kong. Its work covers five main areas:



### Technical and Economic Regulation of Telecommunications Services

OFTA's work in this aspect includes licensing and regulation of services; setting equipment and network connection standards; type-approving telecommunications equipment; administering the numbering plan; handling issues concerning right of access to land and seabed for installation and maintenance of telecommunications facilities, including the co-ordination of access to buildings by operators and laying of ducts for telecommunication cables in public roads; and handling and investigating consumer complaints involving breach of provisions in the Telecommunications Ordinance and licence conditions.

### Role of OFTA



#### **Enforcement of Fair Competition**

OFTA enforces the provisions in the Telecommunications Ordinance concerning anti-competitive practices and misleading conduct. It also handles determinations and mediations to resolve industry disputes related to interconnection and sharing of facilities and access. It is responsible for the approval of the tariffs of the dominant operator. In addition, it provides advice on the implementation of competition provisions in the Broadcasting Ordinance.

### Radio Frequency Spectrum Management and Satellite Coordination

The aim is to ensure efficient utilisation of the radio frequency spectrum and the satellite orbital positions. OFTA's responsibilities include the assignment of radio frequencies, investigation into interference complaints, licensing private telecommunications services, prosecution of illegal use of telecommunications equipment, and coordination with frequency management authorities outside Hong Kong to prevent interference between radio services.

#### Advisory and Planning

OFTA advises the Government on telecommunications matters and renders technical support to the Broadcasting Authority on the regulation of broadcasting services.

#### **International Affairs**

In the international arena, OFTA represents Hong Kong in the International Telecommunication Union (ITU) and other international fora and also ensures that the industry complies with various international agreements.

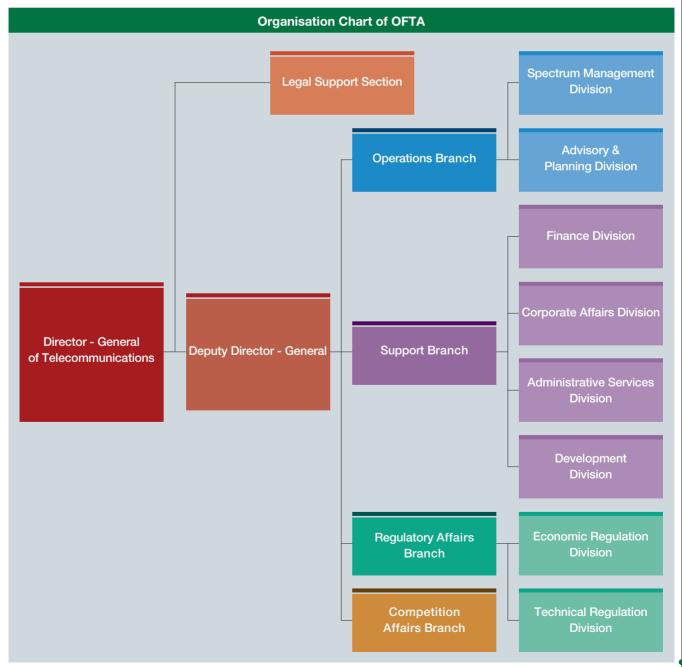
Furthermore, in 2002, the Hong Kong, China Secretariat for ITU TELECOM ASIA 2002 was set up within OFTA to organise the staging of the ITU TELECOM ASIA 2002 event in Hong Kong from 2 to 7 December 2002. This Secretariat comprised about 20 staff during the peak period from October to December 2002.

### Organisation

is headed by the Director-General of Telecommunications. He is underpinned by the Deputy Director-General of Telecommunications who oversees the four main branches of the department, namely Competition Affairs

Branch, Regulatory Affairs Branch, Support Branch and Operations Branch.

More general information regarding the responsibilities of each branch can be found at our website: http://www.ofta.gov.hk.



### Site Information

he headquarters of OFTA is located at Wu Chung House, Wanchai and there is a branch office in Kwun Tong:

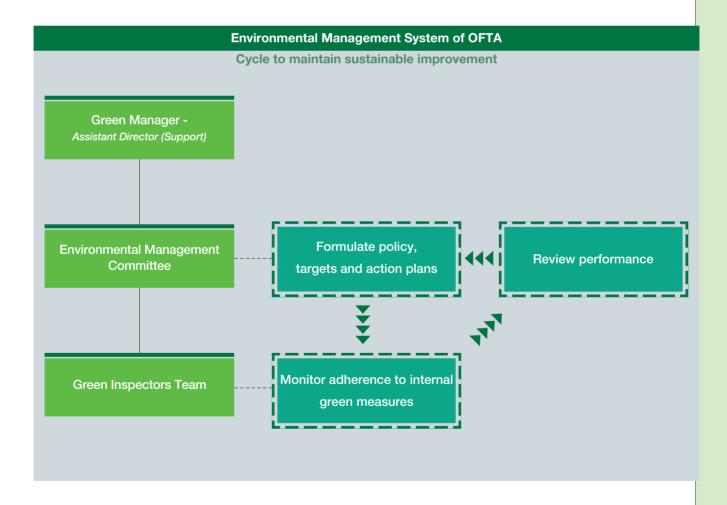
Headquarters in Wu Chung House, Wanchai	Net Floor Area (m <sup>2</sup> )
25/F (part)	349
Rooms 2602-06, 26/F	891
29/F	1,865
Rooms, 3601, 07-10, 36/F	872
Branch Office on top of Ngau Tau Kok Service Reservoir, Kwun Tong	790



# Our Environmental Management System

he Assistant Director (Support) assumes the role of Departmental Green Manager. He chairs the Departmental Environmental Management Committee, which formulates our environmental policy, objectives and targets, monitors our performance in environmental protection measures, as well as initiates the related green action plans. A team of green

inspectors has also been formed to monitor closely our adherence to the established internal green measures. Results or statistics of various environmental indicators are submitted to the Committee for review of the effectiveness of the action plans. Corrective actions and new action plans are then formulated to ensure sustainable improvement.



### **Environmental Policy**

ur Environmental Management Committee has reviewed the operations of OFTA and reckoned that OFTA is basically an "officebased" organisation. The more significant environmental impacts are associated with paper and other solid waste

generation, and power consumption through its daily activities. In view of these impacts, OFTA, since 1999, has published its environmental policy to show commitment in environmental improvement.

#### **Environmental Policy**

The Office of the Telecommunications Authority is committed to implementing environmental protection initiatives in its daily activities and programmes, with regular monitoring measures, in an effort to help improve the environment. To fulfill this commitment, action in the following key areas have been adopted:

#### Use of Energy and Resources

By improving our work procedures, introducing new equipment and advanced technology, and exercising the principle of "Reduce, Reuse and Recycle", we are using our resources and energy in a more efficient way.

#### Prevention of Pollution

We work at reducing or completely avoiding environmental pollution in our daily work by implementing effective environmental protection initiatives.

#### Purchasing and Contracting

We take into consideration the element of environmental protection when selecting items and services to be acquired. We also expect our suppliers and contractors to conform to recognised environmental standards.

#### Education and Training

We educate and train our staff to ensure that they are aware of our departmental environmental policy, initiatives and their responsibilities such that they can participate actively in protecting the environment.

#### Communication

We regularly report to the management progress on our environmental measures and publicise our environmental policy and work progress in an open manner.

#### Industry

We work to promote related environmental measures within the industry.

#### Management Involvement

The management regularly initiates and reviews environmental protection action plans and targets to ensure compliance with the overall environmental policy of the government.

# Environmental Reporting Principles and Limitations

ue to the rapid development of telecommunications services (for example, the mobile phone service subscribers increased from 2.9 million in 1998 to 5.8 million in 2002) and liberalisation of the telecommunications market in Hong Kong, the staff force of OFTA has increased from 287 in 1998 to 345 in 2002 to enhance our capacity in performing the regulatory function and handling consumer complaints . In this connection, additional office premises at 26/F Wu Chung House with a floor area of 891 m<sup>2</sup> was acquired in 2001 to accommodate the expanded staff force. As a result, the net office area has increased from 3,876 m<sup>2</sup> in 1998 to 4,767 m<sup>2</sup> in 2002. In fitting-out the new offices at 26/F Wu Chung House, a new computer server room, with 24-hour standalone air-conditioning facility, was built to meet new service and security requirements.

	1998	2002	Percentage Increase
Staff Strength	287	345	20.2%
Net office area (m <sup>2</sup> )	3,876	4,767	23.0%

We began to collect baseline data on environmental performance in 1998 and set the related performance targets in 1999. Hence the data for 2002 are compared with the 1998 data to evaluate whether the preset targets have been attained or not. Due to the rapid increase in activities in the past few years mentioned above, most performance data are normalised (in terms of per capita or per m<sup>2</sup>) before comparison.

Most of the environmental performance data are collected monthly by our staff directly. A4 paper consumption information is based on the quantity ordered during the report period while alkaline battery consumption data are estimated by the quantity of batteries issued out by the Supplies and Accounts Section. Envelope usage is estimated on the actual number of mails sent out by this department times a factor of 1.2. Waste paper collection volume is provided by the cleaning contractor directly.

For electricity consumption, the meter readings for the four office floors in Wu Chung House only include the consumption caused by internal office lighting, office equipment and the standalone air-conditioning facility installed in the computer server room. Central airconditioning, public corridor lighting and lift service are provided by the management office centrally and thus no related power consumption data can be collected and included in this report. Nevertheless, the electric meter installed in the Kwun Tong branch office captures the power consumption data of the whole office, including the consumption by the central airconditioning facility, the standalone air-conditioners and even the perimeter lighting of the site. Special attention should therefore be drawn if the reported power consumption information is used for comparison with the data obtained from other offices.

Environmental Targets and Performance

Our environmental targets and performance data in 2002 are given below:

Targets in 2002	Performance in 2002	Performance compared with 1998 level	Target Achieved
Use of Energy and Resources			
Reduce A4 photocopying paper consumption per capita by 3% as compared to 1998 level	3,340 reams, i.e. 9.70 reams/person/year	<b>▲</b> 1.5%	No
Reduce envelope consumption per capita by 3% as compared to 1998 level	90,839 pcs, i.e. 264 envelopes/person/year	▼ 22%	Yes
Reduce electricity consumption per capita by 3% as compared to 1998 level	964,680kWh, i.e. 2,800 kWh per capita or 200kWh per m² net	▲ 21% (per capita ) or ▲ 16% (per m²)	No
Prevention of Pollution			
Increase waste paper (including mixed type and A4 paper) collection for recycling per capita by 3% as compared to 1998	6,529 kg, i.e. 19.0 kg/person/year	<b>▲</b> 183%	Yes
To employ a waste paper collector to process all outdated files for paper recycling	_	-	Yes, achieved since 2000
To send electronic Christmas cards rather than paper Christmas cards	-	-	Yes, achieved since 1999
Reduce consumption of alkaline disposable batteries per capita by 30% compared with 1998	942 pcs, i.e. 2.7 pcs/person/year	▼ 77%	Yes, achieved through using rechargeable batteries as far as possible
Purchasing and Contracting			
All A4 photocopying paper procured should be environmentally friendly type, i.e. woodfree paper or containing at least 50% recycled pulp	-	-	Yes, achieved since 2000
Only environmentally friendly disposable batteries should be procured	_	-	Yes, achieved since 1999
To incorporate environmental procurement criteria into tenders and contracts	-	_	Yes, achieved since 2000
Raising Staff Awareness			
To establish green comers in our Wu Chung House offices to educate the staff on environmental issues	-	-	Yes, achieved since 2000

# Interpretation of Environment Performance and Actions Taken

#### Paper and Envelope Consumption

he target on reduced consumption of A4 photocopying paper could not be achieved in 2002. The slight increase in consumption was mainly due to the inevitably heavy workload of the Hong Kong, China Secretariat for ITU TELECOM ASIA 2002 throughout the year.

Some standard paper saving measures adopted in the past few years include using both sides of paper, launching on-line telephone directory service, adopting electronic bulletin board system to circulate most of government circulars, departmental instructions and management statistics internally, and further use of PCfax systems. Press releases, consultation papers, application forms are distributed to members of the public through our website. The annual OFTA Trading Fund Report is distributed mainly in the form of CD-ROM, only supplemented by limited issues in paper format. OFTA also introduced a host of initiatives in 2002 to save more paper. For example, telecommunications operators can now choose to submit guarterly reports for the Billing and Metering Integrity Scheme through email using the electronic certificate authentication method.

Internally, some working procedures have been reengineered by developing more groupware applications to enable the transfer and share of information among various divisions electronically. All press and public enquiries by phone and verbal consumer complaints are now recorded through our self-developed Lotus Notes applications and routed to relevant subject officers for follow-up action. Some small-scale electronic filing systems have also been developed in some sections to enhance reliability of the record keeping system and facilitate later retrieval and sharing of information. We trust that the introduction of such electronic workflow procedures can further reduce the paper consumption in the future.

On envelope consumption, the substantial saving (22%) was mainly achieved by sending fewer reminder letters to our licence holders starting from 1999.

#### **Electricity Consumption**

The overall electricity consumption (per net floor area) increased by 16% in 2002 compared with the 1998 level. More in-depth analysis found that such increase was mainly attributed to the standalone air-conditioning facility installed for the newly built computer server room at 26/F Wu Chung House office which was in operation since September 2001. As most of the servers installed in this computer server room are providing mission-critical services and require 24-hour operation, we can only slightly adjust the temperature setting of this room to a higher level to achieve power saving. We will closely review the operation of this standalone air-conditioning facility and try to optimise the temperature setting conditions for efficient use of electricity.



### Interpretation of Environmental Performance and Actions Taken

#### Waste Reduction

In response to Government's policy on waste reduction, we have joined the Wastewi\$e Scheme since March 2000. This is a recognition scheme organised by the Environmental Protection Department. Subscribers of the scheme have to take measures in achieving different targets every year in the following aspects:

- waste avoidance and reduction;
- collection and recycling of recyclable materials; and
- buying recycled products.

From March 2002 to February 2003, through our efforts in reducing waste, we have attained the following two scheme targets:

- 51 sets of computers (with monitors and keyboards) were donated to charitable organisations through the Compu-Aid scheme.
- More than 1,000 pieces of recycled batteries (about 128 kg) had been collected within OFTA. The batteries would be shipped overseas for recycling.

As OFTA had achieved a total of nine wastewi\$e targets since joining the Scheme in March 2000, OFTA was awarded the Gold Wastewi\$e Logo for use in 2003/04. The Gold Wastewi\$e Logo is synonymous with leadership and continuous commitment in waste reduction.

Furthermore, by launching a scheme to promote the use of rechargeable batteries since 1999, we have reduced the consumption of disposable batteries per capita by 77% in 2002. It is also worth mentioning that all the exhausted laser printer and fascimile machine toner cartridges are now collected by suitable manufacturers specialised in product recycling.





### Interpretation of Environmental Performance and Actions Taken

#### **Purchasing and Contracting**

On procurement, environmental requirement is always one of our specifications. Photocopying paper ordered from the Government Logistics Department is either woodfree type or containing at least 50% recycled pulp. Letterhead paper, namecards, newsletters and other publication materials are printed on paper made from regenerable forest or containing recycled wood pulp. All disposable batteries procured are mercury-free. Nickel-Cadmium type rechargeable batteries will not be procured as long as there are equivalents made of Nickel-Metal Hydride and Lithium-ion batteries which are more environmental-friendly.

Furthermore, when evaluating tender bids for contracts of cleansing and vehicle maintenance, credits will be given to those bidders achieving certain level of environmental standards.

In addition, when re-fitting out new office area, partitioning system that can be reused several times is chosen. Wooden furniture made of loose wood fibre matrix instead of hard wood will be adopted to minimise burden to the forest resource.



#### **Raising Staff Awareness and Staff Commitment**

To enhance staff awareness, green corners posted with articles and activities on environmental protection has been established since 2000. Some environmental tips



on paper saving and "Save Energy" labels are placed at conspicuous locations in the office premises. Colleagues are also encouraged to participate in environmental activities organised by charitable organisations, such as the Community Chest Green Day - "Act, Dress and Ride Green" on 14 June 2002 and the Conservancy Association's "Let Wildlife be Wild" signature campaign on 5 June 2003. In the latter event, only within a few days, 156 signatures were gathered within OFTA. Colleagues will also be awarded for contributing environmental improvement suggestions through our Staff Suggestion Scheme.

Moreover, colleagues show commitment to a greener office. For example, the number of paper subscription of the Civil Service Newsletter has been further cut down from 30 in early 2002 to only eight in 2003. Colleagues are encouraged to read the Internet version available at the Civil Service Bureau homepage. Our smoke-free workplace policy also gains the widest support from our colleagues.

### Interpretation of Environmental Performance and Actions Taken

#### Industry Involvement

OFTA had helped promote a 12-month pilot programme on mobile phone battery recovery and recycling launched in April 2002. Mobile phone battery manufacturers and network service providers had been closely involved in this programme. 103 collection points in town were available to collect the end-of-life mobile phone batteries. The batteries collected would be shipped overseas for recycling instead of dumping into the landfill in Hong Kong.

Together with the Internet and Telecom Association of Hong Kong, OFTA hosted the first Asia Pacific Regional Conference on Environmental Issues in Telecommunications, organised by Global e-Sustainability Initiative (GeSI), at the Hong Kong Convention and Exhibition Centre on 22-23 May 2002. GeSI is a collaborative initiative launched by the International Telecommunication Union and the United Nation Environmental Programme (UNEP). This conference targeted at business leaders and environmental practitioners in the information and communications technology (ICT) sector. Some 80 delegates from eight economies attended the conference. It provided a good opportunity for members of the sector to share experience and understand how a pro-active stance on environmental protection can benefit the ICT industry.



# Managing Challenge and Sustainable Improvement

n 2002, we faced challenge from the substantial workload of organising the ITU TELECOM ASIA 2002 event and thus lagged behind in attaining some environmental targets, in particular, in the areas of energy and paper consumption. We can also foresee the diminishing return from some internal green housekeeping measures in the coming few years. As OFTA has already explored and exhausted many possible means of green measures, we can hardly make further substantial progress in environmental performance without resorting to huge investment that requires full justifications and serious consideration on the payback period.

Nevertheless, all our colleagues, the Environmental Management Committee and the top management will continue to give full support to the Government's latest environmental and sustainable development policy, exploring innovative ideas and new green initiatives. For example, we are proactive in devising suitable and costeffective action plans, taking the financial year (FY) 02/03 as the base year, to reduce power consumption (in kWh) by 6% and photocopying paper consumption by 10% by FY 06/07.



In 2003, with the assistance of the Efficiency Unit, OFTA has committed to conducting a pilot run on an electronic filing system (developed on the Lotus Notes application environment) in our office at a much larger scale. We, being one of the pioneers to participate in the pilot study, trust that the experience earned in this pilot scheme will benefit the whole Government in further developing the electronic records keeping system. All our colleagues are ready to change and rise up to the challenges ahead to attain sustainable improvement in environmental performance.

# Comments and Suggestions

Your valuable comments and suggestions on this report and environmental initiatives in relation to OFTA are always welcome.

Please send them to OFTA via the following channels:

E-mail address	: webmaster@ofta.gov.hk
Fax no.	: 2803 5110
By post	: The Green Manager
	Office of the Telecommunications Authority
	29/F Wu Chung House
	213 Queen's Road East
	Wanchai, Hong Kong

You may also complete and return the attached feedback form via the above-mentioned channels.

# Feedback Form

Your valuable feedback and comments would be most useful for our improving the report and environmental performance in the coming year. Please complete this form and return to the Office of the Telecommunications by one of the following methods:

E-mail address	: webmaster@ofta.gov.hk
Fax no.	: 2803 5110
By post	: Office of the
	Telecommunications Authority
	29/F Wu Chung House
	213 Queen's Road East
	Wanchai, Hong Kong

1. How did you obtain this Report?

- 5. How can we improve this Report?
- 6. In which environmental aspects could OFTA further improve?
- 7. Do you have any new initiatives or suggestions for OFTA on saving energy and paper?
- 8. Any other comments and suggestions?
- 2. Which part of this Report did you find most useful and informative?
- **Optional**

Please provide your email or other contact details for our follow up actions.

3. Which part of this Report did you find most interesting?

4. Which part of this Report requires more elaboration?