

# World acclaim for Hong Kong Fire Services

## FIRE SERVICES DEPARTMENT

### World acclaim for Hong Kong Fire Services

Hong Kong Fire Services (FSD) has a reputation as one of the world's busiest but elite fire brigades and is held in high esteem by international fire authorities. The hustle and bustle way of life of almost 7 million people living in a tiny city of about 1,100 square kilometres poses a serious challenge to the fire professionals, who are tasked to protect life and property from fire and other calamity.

*Hong Kong firefighters and ambulancemen join hands in rescuing lives.*

In 2003, the department responded to 37,774 fire calls and 19,918 special service calls (such as traffic and industrial accidents, gas leakages, and flooding etc), as well as a daily average of 1,443 ambulance calls. More than 94% of all building fires in built-up



areas were responded to in six minutes and between nine and 23 minutes to those in areas of dispersed risks and isolated developments. For the 478,109 emergency ambulance calls, more than 93% recorded a response time of within 12 minutes from the time of call to the arrival of an ambulance at the specified street address.

As early as the beginning of the new millennium, the department had already taken steps to pave the way for development of the Third Generation Mobilising System (TGMS) to meet the future demand for fire, rescue and emergency ambulance services. This system, now undergoing rigorous reliability tests and on-line performance and functional tests, will be fully commissioned in mid 2004 with a capacity to handle about 99,000 fire and 781,000 ambulance calls per year.

FSD Senior Divisional Officer Mr Tung Tung-san said: "The new system comes in time to replace the existing Second Generation Mobilising System operated by our Communication Centre."

"We have looked at mobilising systems deployed by leading fire brigades worldwide such as Australia, Canada, Finland, Singapore, the United Kingdom, and the United States. The TGMS is the world's most advanced system," Mr Tung said.



*Firefighters battle the overpowering heat of flames in extinguishing a major fire.*

## Advanced technologies of TGMS system

“With the state-of-the-art system allowing a greater flexibility in handling the projected growth in emergency call volume up to 2013, we are confident that we can achieve the target of one-minute dispatch time in response to emergency fire calls,” he said.

Comprising 21 sub-systems, TGMS will provide a superb command and control system for efficient mobilisation of fire and ambulance resources to emergencies. Direct and effective operational information can be exchanged between Fire Services Communication Centre (FSCC) and frontline personnel at the scene for effective management of fire fighting and rescue operations.

The systems include:

- **Computerised Mobilising System:** a high powered system with pre-emptive multi-task functions to cope with the projected workload.
- **Telephone System:** it facilitates Automatic Call Distribution through the Calling Line Identification System, the calling party’s address information can be retrieved to shorten processing time for incident address confirmation and searching.
- **Geographic Information System:** working with Automatic Vehicle Location System and Computerised Mobilising System, it indicates on a digitised map the nearest available fire and ambulance resources to any reported incident address for efficient mobilisation. It also provides useful information, such as location of hydrants, gas pipe layouts, building information and vehicular access, to assist fire fighting and rescue operations.

Other systems are Wireless Digital Network (transmits data and image for Automatic Vehicle Location System and Mobile Data Terminals, which receives and dispatches incident information, in emergency vehicles), Automatic Vehicle Location System (automatically provides accurate location data of all mobile resources), and Information Management System (records logging, analysis, resource management etc).

Other supporting systems also include Security System, Fault Indication Management System, Intercom System, Uninterruptible Power Supplies System, Telecommunication Network, etc.

These distinctive features have been tailor-made for the FSD because of Hong Kong’s many skyscrapers and tunnels.

Senior Divisional Officer Mr Tung said:

“The traditional Global Positioning System (GPS) is not effective in identifying the real-time locations of around 800 fire engines and ambulances but the new system will help improve the accuracy in locating vehicle positions to the range of 20 metres.”

“All emergency resources dispatched to any reported incident scene will be the nearest available appliances with the calculation based on the shortest path algorithm and generated from road network data provided in the system,” Mr Tung said.

*Coupled with Global Positioning System and Geographical Information System, the Mobile Data Terminal facilitates the display of digitised map and real-time location information for effective navigation and fleet management.*



*Through onscreen buttons, a frontline fireman disseminates and retrieves information on a moving vehicle with the new Communication Centre through the wireless radio network.*

### *World acclaim for Hong Kong Fire Services*

The TGMS will directly convert a dispatch order to turn out firefighters and ambulancemen to scene of incident, generated by the system into automatic broadcast at the respective fire stations/ambulance depots.

“It relieves the control operator from broadcasting orders to individual fire stations, reducing the stress caused by fatigue due to the high number of calls and so eliminates errors,” Mr Tung explained.

Mr Tung said: “With the commissioning of TGMS, our ability to make Hong Kong a safe place to live and work will be further enhanced.”

### **World Firefighters Games spreads Hong Kong’s goodwill**

FSD has begun preparations to host the 2006 World Firefighters Games – the first Asian city to be accorded such an honour.

Announcing Hong Kong’s selection, Executive Director of the World Firefighters Games Western Australia Inc Mr Trevor Pateman wrote:

*“The concept of the hosting of the Games being extended to Asia is an exciting prospect and we believe Hong Kong to be an ideal venue for the staging of the 2006 World Firefighters Games.”*

Hong Kong beats other enthusiastic competitors including Spain, Italy, Japan and the United States in successfully bidding for the right to host the mini-Olympics that promote comradeship among world firefighters and the exchange of experiences.

Hong Kong was selected to host the prestigious games for the world’s fire-fighting community for good reasons – Service members are very supportive and keen to hold the event. The Games has never been held in an Asian city. Hosting the event in Hong Kong would attract favourable response from Mainland and Asia fire authorities and brigades. Besides, Hong Kong has world-class stadiums and venues for all types of sports and the opening of Disneyland in 2005 further adds its tourism attractions to visitors.



*The Hong Kong Fire Services delegation at the 2002 World Firefighters Games in New Zealand.*

### *World acclaim for Hong Kong Fire Services*

As Mr Pateman put it: “Undoubtedly both Hong Kong and Asia will benefit greatly from the hosting of these major international Games.

The Games, held biennially, are similar to an Olympics. They involve a variety of individual and team sporting events and include events which are specific to the firefighters’ emergency service role. FSD’s delegation to the last Games in 2002 held in Christchurch, New Zealand, was very successful, winning 45 gold, 43 silver and 38 bronze medals.

FSD and the Institution of Fire Engineers (Hong Kong Branch) will be the co-hosts of the Games in 2006. In 2000, more than 4,000 athletes and 600 visitors from 56 countries participated in the Games in France.

Chief Fire Officer of the Fire Services Department, Mr Lee Chee-chung, JP, said it was the first time Hong Kong had bid to host the Games and to be successful is a wonderful achievement. Hosting this event in Hong Kong will help promote local tourism industry, and market Hong Kong and the Hong Kong Fire Services internationally.