

## *Information and Communications Systems of the Tokyo Fire Department*

The fire department's communications system plays a vital role in times of emergencies like fires and accidents with medical services/rescue work needed. The system is important also for public life safety and efficient administrative services.

The Tokyo Fire Department continues to improve its emergency communications network against earthquakes and other disasters with "the improvement of dependability, security and reliability" as a basic principle.

The information and communication systems of the Tokyo Fire Department consist wire communications systems, command and control systems, radio communications systems, an image/picture transmission, satellite communications and an information processing system.

The current command and control system is already ten years old. The communications equipment is obsolete, while the number of the "119" emergency calls we receive in a year is over 1,000,000. The improvement of the services to metropolitan citizens during a "call congestion" time has been strongly called for.

Further, there has been a long-felt need for ensuring the earlier detection of disasters and a quick operation of the fire department resources. It is also necessary to facilitate information collection activities in the event of a disaster and to share disaster information in such a way that effective emergency responses can be carried out through a close coordination among the incident command post, the TFD's Command and Control Center, Fire District Headquarters and Fire Station Headquarters.

This led us to decide to update our command and control system in a five-year plan (1999 – 2003).

### **New Command and Control System**

#### **\* Basic Functions**

This system receives the "119" calls at the Command and Control Center in the TFD headquarters building and another Center in the Tama area, and orders fire brigades to respond. It has the functions of the automatic display of an emergency phone call site, the transmission of an advance notice to a fire station for emergency responding, the transfer of information on first-aid medical treatment and accident support, etc.

#### **\* Improvements of New System Integration**

- A) Use of ISDN for dialing 119
- B) Improved consoles to cope with an increasing number of “119” calls
- C) Improved resistance against earthquakes
- D) Multi-functioned video equipment for efficient disaster fact-finding
- E) Function for maintaining the control of the resources amid a computer stoppage
- F) A dispatch order is given on-line from the command and control center before a voice dispatch order, and is displayed on a PC at a fire station.
- G) Effective use of weather information
- H) Improved functions of telephone services, and others
- I) Improved systems for the easier updating of the equipment in accordance with technological innovations.

With greater hopes placed on our information and communications systems, the Tokyo Fire Department will continue to improve its information and communications systems so that we can keep up with social changes and provide better and efficient services to citizens.

(475 words)