

消防處
消防安全總區

香港九龍尖沙咀東康莊道一號
消防總部大廈七樓



FIRE SERVICES DEPARTMENT
FIRE SAFETY COMMAND
7th Floor, Fire Services Headquarters Building
No. 1 Hong Chong Road
Tsim Sha Tsui East, Kowloon
Hong Kong

本處檔號 **OUR REF:** (15) in FSD FSC GR 13-314/07 V
來函檔號 **YOUR REF:**
圖文傳真 **FAX:** (852) 2312 0376
電話 **TEL. NO.:** (852) 2272 9112

30 April 2026

To: Recipients of FSD Circular Letters

Dear Sir/Madam,

FSD Circular Letter No. 3/2026
Acceptance of Internet of Things Fire Detection System and
Portable Fire Extinguishers as an Alternative Solution
to the Statutory Requirements for Hose Reel and Manual Fire Alarm Systems
in Target Buildings of 6-storey or below regulated under
the Fire Safety (Buildings) Ordinance, Cap. 572

This Circular Letter serves to announce, with immediate effect, the acceptance of Internet of Things (“IoT”) Fire Detection System (“FDS”) and portable fire extinguishers as an alternative solution to the statutory requirements for hose reel and manual fire alarm systems in composite and domestic buildings of 6-storey or below, regulated under the Fire Safety (Buildings) Ordinance, Cap. 572 (“Ordinance”).

Background

The Ordinance has been implemented to enhance the fire safety standards of composite and domestic buildings constructed on or before March 1987 (“target buildings”). The Fire Services Department (“FSD”) has been actively promoting fire safety improvement works and introducing facilitation measures to assist building owners in complying with statutory requirements. Despite these efforts, practical challenges related to coordination, spatial constraints, and financial limitation have been encountered.

In light of technological developments in Chinese Mainland and overseas, the FSD has conducted a series of comprehensive scientific evaluations on the application of IoT technologies in fire detection systems. With fruitful findings, a Pilot Scheme on IoT FDS was launched in the fourth quarter of 2025 to assess the feasibility and effectiveness of the system in 10 selected target buildings of 6-storey or below across the territory. During the trial period in the first quarter of 2026, the IoT FDS in these buildings demonstrated reliable performance, with no false alarm recorded and stable operation. The overall results were satisfactory and met expectations.

.../2

Existing Requirements for Fire Service Installation and Equipment

Under the Ordinance, owners and/or occupiers of target buildings of 6-storey or below are required to comply with the following requirements:

Fire Service Installations and Equipment	Premises/Building Responsible Person		Non-domestic Portion of Composite Building	Domestic Portion of Composite Building	Domestic Building
	Owner	Occupier	Owner	Owner	Owner
Automatic Sprinkler System	✓*				
Hose Reel System	✓		✓	✓	✓
Manual Fire Alarm System	✓		✓	✓	✓
Emergency Lighting (common areas)	✓				
Emergency Lighting (non-common areas)		✓			
Automatic cut-off device for Mechanical Ventilating System (common areas)	✓				
Automatic cut-off device for Mechanical Ventilating System (non-common areas)		✓			

Note: *applicable to a composite building in which the total floor areas of the non-domestic portion exceeds 230m²

For the avoidance of doubt, the provision of an IoT FDS and portable fire extinguishers merely serves as an alternative solution to fulfil the requirements for hose reel and manual fire alarm systems, all other applicable requirements under the Ordinance remain unchanged.

Major Components of the IoT FDS

The IoT FDS comprises both fire service installation and equipment (“FSI”) components and non-FSI components, incorporating several key elements for fire detection, signal transmission, and system monitoring. The major components include:

FSI components

1. Multi-sensor Detectors

Multi-sensor detectors shall be installed within individual units and common areas for early fire detection. These detectors are capable of detecting smoke and carbon monoxide, enhancing detection capability while minimizing false alarms.

2. Gateways

Sufficient number of gateways, incorporating manual call points, alarm sounders and signal transmission facilities, shall be provided in common areas. Signal from multi-sensor detectors are transmitted to the gateways via localized wireless communication method and subsequently relayed to the IoT FDS service provider’s monitoring platform through an external communication network. To ensure the reliability of external communication, dual SIM cards covering different external communication networks shall be provided.

.../3

Non-FSI components

3. Monitoring Platform

A monitoring platform, provided and operated by the IoT FDS service provider, receives and processes signals transmitted from gateways, monitors system status and transmits fire alarm signals to the Fire Services Communications Centre (“FSCC”) via the Computerized Fire Alarm Transmission System (“CFATS”) to enable timely FSD intervention. All signals received by the monitoring platform shall also be sent to the FSD’s server through an Application Programming Interface (“API”) for monitoring and supervision purposes.

4. Mobile application

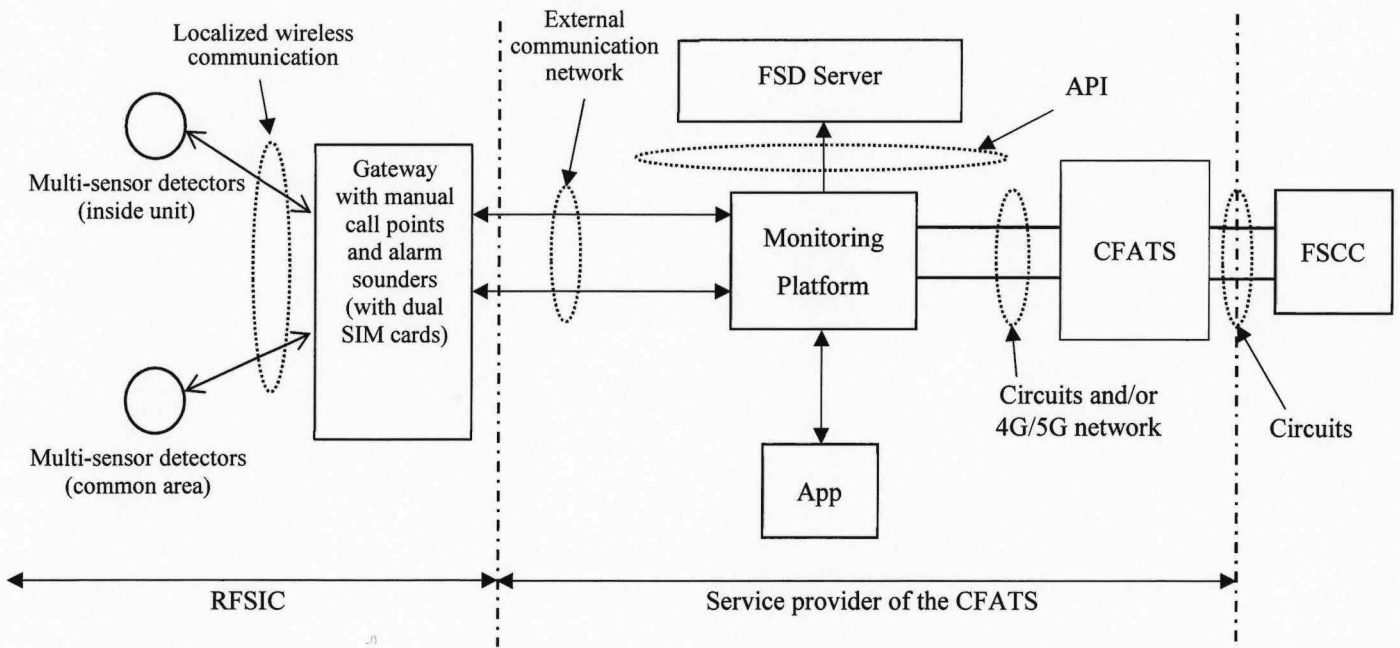
A mobile application shall be provided to the FSD by the IoT FDS service provider to support operational use by frontline firefighters, enabling access to system information and authorized control functions at the incident scene.

Provision of Portable fire extinguishers

At least two numbers of 5 kg powder-type portable fire extinguisher shall be provided on each floor of the target buildings for occupants to operate in the event of a fire.

Operating Principles and Demarcation of Statutory Responsibilities of the IoT FDS

The operating principles and demarcation of statutory responsibilities of the IoT FDS are illustrated in the diagram below.



.../4

Operating Principles

Sufficient multi-sensor detectors shall be installed near the entrance(s) inside each unit, as well as in common areas on each floor. Upon detection of fire or actuation of manual call point, the alarm will sound to alert the building occupants to evacuate, and a fire alarm signal would be transmitted to a nearby gateway via a localized wireless communication network.

The gateway will then forward the fire alarm signal to the monitoring platform via an external communication network. The platform will receive and process relevant information, including the location of fire, status of the activated device, etc., and will duplicate the information to the FSD's server through API for system monitoring and supervision.

Fire alarm signal will then be automatically transmitted from the monitoring platform to the FSCC through CFATS for mobilization of firefighting and rescue resources, enabling timely intervention by the FSD. Upon arrival at the scene, firefighters will use the mobile application to access and control the system.

Duties and Responsibilities

IoT FDS generally comprises components that fall under the management and ownership of different stakeholders. While the service provider of the IoT FDS is responsible for overall coordination, the duties and responsibilities are generally demarcated as follows:

(A) Registered Fire Service Installation Contractor ("RFSIC")

The RFSIC shall be responsible for the installation, maintenance, inspection, and repair of FSI components of IoT FDS installed in the protected premises.

(B) Service Provider of the CFATS

The service provider of the CFATS shall provide and maintain the communication network services, to receive alarm signals from IoT FDS at protected premises installed in accordance with this Circular Letter, process and send the alarm signals to the FSD in a prompt and reliable manner.

Lists of Service Providers for IoT FDS

To facilitate owners in selecting suitable service provider(s), the FSD will shortly publish a list of "Service Providers interested in providing IoT FDS Services" for public reference.

.../5

For enquiries relating to IoT FDS or the relevant application procedures, please approach the FSD Building Improvement Support Centre at 2272 9112 (email: fsdbisc@hkfsd.gov.hk).

Yours faithfully,



(YUNG Kam-hung, Michael)
for Director of Fire Services