

London Fire Brigade Incident Management Requirements

1) Communications Equipment

a. General

This requires the provision of radio equipment such that firefighters, while attending emergency incidents below ground, are able to use their normal radio equipment to communicate anywhere between the Rendezvous Point (RVP), the pre arranged point that the LFB will arrive at, and the furthest point that the Tier 1 contractor has responsibility, as though the entire area were in the open. There is also a requirement for a communications system to enable personnel, at a large scale incident, to have verbal contact from the main marshalling area to any control rooms on the site and from the on site control rooms to the Fire Brigade access points.

b. Provision of UHF Radio Communication

The UHF requirement would be a fixed two-frequency duplex base station on UHF "channel 5" on permanent talk through (repeat) and having the transmitter triggered by the receiver squelch. Such a base station has to provide radio cover to and from handheld radios (with a effective radiating power of 1 watt) at the Rendezvous Point (RVP) where fire appliances will draw up when attending emergency incidents at the site. Radio cover must not extend beyond the designated RVP, as there would be a risk of clash with the use on the same radio channel from base stations at nearby incidents not associated with the site.

The frequencies of "channel" 5 are:

Base transmit	457.1375 MHz
Base receive	462.6375 MHz

The bandwidth should be specified for 25 kHz channel spacing but should be readily convertible to 12.5 kHz channel spacing should this be called for in the future. The equipment should also be capable working in the frequency reversal bands should this be called for in the future. The modulation is to be frequency modulation.

At present the Brigade does not use CTCSS on any of its UHF channels. It is possible that in the future CTCSS might be required on UHF equipment so the base equipment should be specified to be capable of modification for CTCSS encoding (transmit) and decoding (receive) using tones listed in MPT 1306.

The London Fire and Emergency Planning Authority, as the user of "channel 5" will be responsible for obtaining the radio license form the OFCOM. As the license holder the Authority will be responsible for satisfying OFCOM that the equipment meets the stipulations of MPT 1326. The base equipment should therefore be specified to meet MPT 1326 (except that it must be for 25 kHz channelling, MPT1326 specifies 12.5 kHz channelling).

c. INSTALLATION AND MAINTENANCE

All communications equipment installed at the site for the purposes of LFB Incident Management is to be installed, commissioned and maintained at no expense to the London Fire Brigade or the London Fire and Emergency Planning Authority.

d. FURTHER INFORMATION

The above information should be sufficient to enable a technical specification to be written. In the event of any technical queries relating to matters contained within this requirement, please contact The London Fire Brigade's Radio Systems Manager, Mr Robert Donovan on 0208 555 1200 x38561

2) Fire Fighting Water Supply

- a. The fire fighting water supply system should be designed, installed, maintained and tested in accordance with BS9990:2015 and BS6164:2011. These documents cover the specification for any wet and dry riser incl. the water pressures and the need for 25mm drain down valves for dry risers to be cleared after use.
- b. As a minimum, there should be one hydrant outlet on the surface worksite, one outlet at each floor level in a shaft and at every 50m along a tunnel length however, the final spacing should be relative to the assessed life risk and flammable material (fire load) within the space.
- c. Each hydrant point should be marked on site with the standard black "H" in a yellow box sign placed at eye level. Further signage should remind the workforce not to obstruct the access to the hydrant point or store materials etc. for a distance of 5m either side.

3) Reception Point Information

The purpose of the Reception point information (Grab Pack) is to be a simplified information folder/pack that is immediately available to the London Fire Brigade on arrival at an incident. Its core function is to provide the incident commander with readily accessible key information needed for them to put the first phase of any plan in to place. Contents should, as a minimum, be the following:-

a. Contact Information for:-

Responsible Person On Site

1st Tier Contractor's Emergency Team Leader

1st Tier Contractor's Silver Representatives















1st Tier Contractor's Gold Representatives

Any relevant person who can assist in making the site safe (i.e. electricians, mechanical fitters/plumbers etc.)

- b. Up to date A3 sized laminated site plans & sections for all levels (i.e. every level descending through a shaft structure as well as platform and ground levels) which are clearly titled with what is shown. Sections should be provided that indicates any change in levels within any specific level shown (i.e. ramps / steps / ladders etc.). The drawings should be as simplistic as possible to aid rapid

understanding by LFB. Beware using construction layout drawings as they are likely to contain superfluous and so confusing information that has the potential to confuse and so misinform / delay the emergency response.

- c. Hazards and equipment should be clearly indicated on the above plans using the following standardised symbols:-

	Access (blue) / Egress (green) Points
	Diesel Storage / Bowser
	Gas Cylinder Location
	Flammable Materials Storage
	Electrical Supply Cabinet / Isolation Point (Use Text To Specify)
	Gas Supply / Gas Supply Isolator (shut off point) –state which
	Fire Fighting Hydrant Point
	Fire Point (locations on site where fire extinguishers etc. are found that have been provided by the Principal Contractor)
	Domestic / Drinking Water Supply Isolation Point (esp. where they separate from a combined source also feeding the fire fighting supply)
	COSSH Store
	Should it be necessary to store any relevant chemicals / materials on site, the standard HAZMAT / HAZCHEM signage and annotation should be used.
	Assembly / Muster Point
	Rendezvous Point (Emergency Services)
	Ventilation Fan (with Controls) Location

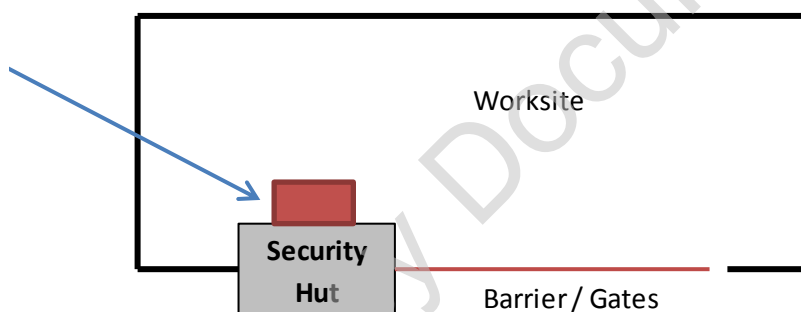
In addition, any items of large fixed plant stating what it is and how it is powered (Diesel / Electric etc.) should be shown.

If by placing the symbol on the correct location on the plan too much other information is obscured, please place it to the side with an arrow pointing to the precise location (especially for HAZMAT / HAZCHEM symbols where the symbol needs to be large enough for the data to be legible)

- d. Keys / Security cards for personnel access as well as to get to isolation switches etc. should be held on a specific emergency key ring. It is not recommended that these are left in the Grab Bag as they are prone to going missing but they should be in a secure location that is easily accessed by the Responsible Person on Site in the event of an incident as well as their deputy and the security guard should that Responsible Person be caught up in the incident.

The Grab Pack should be located in a **RED** painted box clearly marked "LFB INCIDENT USE ONLY", preferably fixed to the secure side of all security huts at the entrance to each and every site location with clear access maintained at all times i.e. as drawn below:-

Location of Grab Pack storage box marked with sign:-



Where a worksite does not have a security hut, the box should be located immediately adjacent to the gates, fixed to the worksite-side of the hoarding.

4) Emergency Preparedness

To ensure that all site personnel are familiar with the emergency procedures, that key personnel are trained in their duties and that the procedures work as planned and anticipated, a drill exercise should take place regularly. Minimum requirement is once every six months but it is suggested that once every three months will ensure that the turnover of labour and trades is accounted for.

The drills should be recorded detailing date and time of the drill, time to clear site, comments/issues arising, planned resolution dates for the issues, sign-off of the resolutions when in completed.

The LFB would welcome the opportunity to input and observe the drill(s) and to help suggest improvements for any issues that may be identified but, where their attendance is not possible, the exercises should go ahead as proposed by the Principal Contractor.

5) Maintenance & Testing

It is the 1st Tier Contractor's duty to ensure that the equipment is in full working order at the time it is required. To That end, the following minimum testing and inspection regime is suggested for each of the

required provisions set out above but the actual regime is to be decided upon by the 1st Tier at each location, taking account of risk of damage / interference to the equipment / installation etc.

a. Communications Equipment.

This should be tested weekly across the site with a record kept of all tests, issues arising from the test and confirmation of closeout of resultant actions. Where a full communications test shows that the signal is not working and will not be rectified for a period of more than 24 hours then the local fire station must be notified.

b. Fire Fighting Water Supply.

This should be tested weekly at every hydrant outlet.

The test should also include for an inspection of the following:-

- i. The rubber seal ring inside the outlet for damage (and replace if necessary)
- ii. The spin lock / release on the outlet to ensure normal operation i.e. returns into place freely.
- iii. Required signage is in place, free from obstruction and clean/clearly visible.
- iv. 5m of clear area either side of the hydrant point is being maintained i.e. no storage of materials.
- v. Valve handle is not obstructed and that the optimum pressure is achieved when the handle is in line with the outlet pipe (and off when at precisely 90 degrees to the outlet).

c. Reception Point Information

A checklist should be created that lists in detail each of the items held in the pack (incl. down to individual drawing numbers/titles and a regime put in place for that to be checked and the inspection recorded at required intervals assessed according to risk of tampering (max weekly).

Furthermore, the packs should be reviewed for accuracy of content at maximum three monthly intervals but more frequently if necessary due to integral changes on site i.e. changes to access egress routes, introduction of additional cylinders, cylinder movements etc.

6) Further Information

Should you require further information or assistance in evaluating provisions of this equipment, frequency of inspections and testing etc, [REDACTED] is the LFB Liaison assigned to Crossrail and he can be contacted by email at:

[REDACTED] [@london-fire.gov.uk](mailto:[REDACTED]@london-fire.gov.uk) or

[REDACTED] [@crossrail.co.uk](mailto:[REDACTED]@crossrail.co.uk)