# SCOPE

# APPENDIX G
# Incident Response

V10.02

21 September 2020

# Appendix G

# Incident Response

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An Incident is as defined in the Scope. An Incident Response is an action by the Contractor to mitigate the adverse effects of an Incident.

## 1 Incident Response General Requirement

1.1. The *Contractor* shall:

a) Provide and operate a 24-hour dedicated call handling service able to receive reports of Incidents and defects on the Network or adjacent networks and instruct an appropriate response.

b) Provide and operate an Incident Response service 24 hours per day, every day from the Starting Date throughout the duration of the contract. The required Incident Response times are: -

i) Blackwall Tunnel [redacted]

ii) Hangar Lane Tunnel [redacted]

iii) Other road tunnels [redacted]

iv) Critical Pump Stations [redacted]

v) Non-critical pump stations [redacted]

within which time the Contractor shall attend the Incident, assess the situation and take appropriate action. Appropriate action shall be the immediate commencement of a permanent repair, a temporary repair or making safe.

c) Provide experienced managers available on a 24-hour basis to identify and manage the appropriate response to reports of Incidents and defects on the Network.

d) Use the *Client*'s Asset Management Information System, recording and reporting all Incidents and defects together with details of all remedial actions taken.

e) Provide Incident Response Vehicles, equipped as indicated in Clause 6 and capable of meeting the required response times set out above.

f) Use intelligence to resource and prepare to respond appropriately to occurrences of severe weather, planned events, evolving emergency situations and the like.

g) Establish and maintain regular communication with the Police, London Fire Brigade and the Client's Network Management Control Centre (including attending regular meetings, if required) to establish good working relations and to ensure early notification of Incidents.

1.2. The Incident Response is as set out in Clause 4.

1.3. Subject to retaining capability to fulfil the requirements for Incident Response set out in sub-Clause 1, the *Contractor* may deploy resources and facilities to other work in connection with the contract.

1.4. The *Contractor* shall have working knowledge of the Joint Emergency Services Inter-Operability Principles (JESIP), the Road Death Investigation Manual and the CLEAR Guidance. These Principles improve communication and create a greater understanding of the role of the Emergency Services and others in order to enable effective Incident management and recovery. The *Contractor* shall also be familiar with relevant *Client* Incident management protocols.

1.5. If, in the opinion of the *Client*, the *Contractor* at any time fails to take appropriate action to deal with any matter which presents an immediate risk to the highway or the safety of the public, or which causes an obstruction to traffic, the *Client* may instruct the necessary action to be undertaken by another party and deduct costs and expenses from the amounts otherwise due to the *Contractor* under the contract.

## 2 Notification Sources

2.1. Incidents and defects will be reported to the *Contractor* from sources, including but not limited to:

a) safety and service inspections undertaken by Others;

b) the *Contractor*'s own people operating on the Network;

c) the *Client*;

d) the Police or other emergency services;

e) the *Client's* Network Management Control Centre;

f) other highway authorities, agencies and other bodies;

g) members of the public.

2.2. The *Contractor* shall assess all reports received by the 24-hour call handling service to determine the nature of the response required for the reported situation. A risk assessment shall be carried out in accordance with Appendix 33/1C. If it is deemed necessary the *Contractor* shall dispatch an Incident Response Vehicle, or other Incident-appropriate resources, to meet the response time at the reported Incident to deal with the defect or Incident or to provide details of the Incident to enable the *Contractor* to take the appropriate action. If the *Contractor* is unable to determine the nature of the response required from the information provided, it shall be assumed that an urgent response is necessary, and a First Response Vehicle or other appropriate resources shall be dispatched in order to carry out an on-site assessment.

2.3. The call handling service shall respond to every telephone call within five rings and close down 90% within five minutes of the call being connected. Details of all calls shall be electronically recorded at the time the call is closed, when the response time shall commence.

## 3 Assessment of Risk

Risk shall be assessed in accordance with Appendix 33/1C

## 4 Nature of Response

4.1. The nature of the response to be provided by the *Contractor* shall include, but not be limited to:

a) Investigation of reports of hazardous circumstances, including attending the site within the Response Time to undertake an on-site assessment to inform an appropriate response.

b) Making safe any defects which represent an immediate hazard to road users by providing barriers, coning or traffic management or other measures to secure the area from public access, including tunnel closures where appropriate.

c) Removal and disposal of animal carcasses, hazardous, clinical, human or other waste matter to licensed facilities.

d) General assistance to the emergency services following traffic accidents or Incidents.

e) Removal and disposal of debris arising from road traffic accidents or vehicle fires, removal of shed loads, removal of spillage from surfaces and drains, emptying and flushing down drains with clean water in cooperation with the emergency services.

f) Provision and installation of filled sandbags to prevent flooding of properties or other parts of the Network or to prevent spillage entering the drainage system.

g) Provision, installation, maintenance and operation of artificial lighting as required.

h) Provision, installation, maintenance and operation of traffic control via means of stop/go boards or portable traffic signals in consultation with the Police.

i) Clearing debris and silt, replacement of dislodged inspection chamber covers and gully gratings, and other storm-related works.

j) Sweeping and cleaning of the highway.

k) Removal and disposal of broken down or abandoned vehicles or other obstructions causing an immediate or imminent hazard to road users or an immediate or imminent risk of significant traffic disruption.

l) Temporary or permanent repair of any defect which represents an immediate hazard to road users, such as dangerous carriageway, footway or cycle track surfaces, structures or equipment on or adjacent to the highway, or damaged or failed electrical equipment, traffic signs, safety fences, barriers, and the like.

m) Removal of blockages from gullies, grips, drainage channels, slot drains, highway drainage, footway drainage, culverts. Removal of flooding and surface water by gully emptying equipment, pumps, or such means as required.

n) Temporary or permanent repair of failed drainage inspection chamber covers or frames, gulley gratings, or other chambers or cellars.

4.2. In circumstances where the Incident Response Vehicle is unable to undertake the actions outlined in sub-Clause 1 above, it shall, as a minimum, take all reasonable measures to safeguard the public.

4.3. The *Contractor* shall have appropriately skilled and qualified operatives, plant and equipment permanently available to respond to Incidents in Road Tunnels within the response times.

## 5 Communications

5.1. The *Contractor* shall provide an effective means of 24-hour communication by telephone, email or other means authorised by the *Client* to receive instructions, defect reports, notifications of emergencies and to communicate with the *Client*, the emergency services and other relevant authorities. The *Contractor* shall provide one telephone number and one email address to which reports can be transmitted. The telephone and email address shall be continuously monitored by a person able to communicate effectively with the *Contractor*'s workforce. The Contractor shall operate contingency arrangements to cater for any loss of service from the normal communication service provider.

5.2. The *Contractor* shall provide the *Client* with a rota of operatives and supervisory personnel who will operate, manage and supervise the Incident Response Service. The rota shall include mobile telephone numbers. The rota shall be produced for periods of not less than three months and submitted to the *Client* two weeks before the rota is due to commence. Where, due to unforeseen circumstances, the *Contractor* finds it necessary to amend any details of the rota, the *Client* shall be informed immediately the circumstances become known.

5.3. Four weeks prior to the Starting Date, and annually thereafter, or as and when requested by the *Client*, the *Contractor* shall submit to the *Client* a method statement detailing the arrangements for responding to Incidents for the following period.

5.4. Any Incidents causing, or likely to cause, significant traffic disruption shall be immediately notified to the *Client's* Network Management Control Centre with regular updated reports until traffic flows return to normal.

## 6 Incident Response Vehicles

6.1. Incident Response Vehicles shall be suitably equipped with the labour, plant and materials to meet the eventualities set out in Clause 4. The *Contractor* shall provide and maintain stocks of consumable materials in order to ensure these vehicles remain suitably equipped.

6.2. The *Contractor*'s arrangements for training and supervision shall ensure that all operatives are familiar with the types of Incident that can be reasonably expected, how to communicate with the *Client* and emergency services, including any special arrangements necessary during the hours of darkness.

## 7 Specialist Work

7.1. The *Contractor* shall have arrangements in place for the capture, removal and disposal of any hazardous, clinical and human waste materials, and other waste matter arising from accidents or any other cause, together with trained personnel to undertake this work in an appropriate and sensitive manner. The *Contractor* shall attend the Incident within two hours of the instruction being issued.

7.2. The *Contractor* shall have arrangements in place for the provision and operation of a vehicle recovery service to remove broken down, damaged or abandoned vehicles or other heavy items placed or fallen onto the network.

7.3. The *Contractor* shall have contingency arrangements in place for the provision of specialist plant and services that may be needed to attend to Incidents as and when they arise.

## 8 Storage of Removed Items

8.1. On occasions, it may be necessary for materials or items that have been removed from the highway to be placed in temporary storage rather than taken for disposal. The *Contractor* shall adopt methods of loading, transporting, unloading and storage which do not cause damage or deterioration to such materials or items and which comply with the Environmental Protection Act 1990, the DEFRA Waste Duty of Care Code of Practice dated 2016 and the Pollution Prevention and Control Act 1999.

8.2. Wherever practicable, the *Contractor* shall provide storage space at operational compounds or depots. The *Contractor* shall keep detailed records and provide to the *Client* a weekly summary sheet giving details of all materials and items held in temporary storage on each day of the week.

## 9 Local Incidents

In response to Incidents the *Client* shall from time to time instruct the *Contractor* to provide supervisory staff to co-locate to the *Client's* Network Management Control Centre. The *Contractor's* Incident supervisor(s) shall attend within two hours of the instruction to mobilise being given. Supervisors shall be sufficiently equipped, experienced and competent to coordinate the deployment of the *Contractor's* resources in liaison with the Client's staff, the emergency services and the staff of other supporting contractors. The *Contractor* shall provide sufficient trained supervisory staff to maintain a presence in the Network Management Control Centre (NMCC) for an undefined period until the instruction to stand down is given.

## 10 Significant Incidents

10.1. A "Significant Incident" is defined here as involving the closure of a significant part of the TLRN or road tunnel for such a period as to result in a substantial increase in traffic congestion on the TLRN and local roads, causing widespread road traffic disruption for a period more than 90 minutes.

Significant Incidents can be considered to have the same four stages:

a). The initial response;

b). The consolidation phase;

c). The recovery phase; &

d). The restoration of normality or return to normal operation

### 10.2. Tunnel Closures

a). Where the initial response to an Incident has involved the closure of a road tunnel and attendance has been required of the Emergency Services and / or the *Contractor,* the consolidation phase would typically be led by Emergency Services and the *Contractor* shall provide immediate support to the Emergency Services.

b). In transitioning to the recovery phase, the Emergency Services will withdraw from the tunnel and the *Contractor* shall take over the scene of the Incident to inspect, make repairs, recover vehicles (if in Vehicle Recovery Areas), etc. The Service Manager shall require the handover to be documented (either through record of discussion on the NMCC Incident Log or by some other agreed formal means).

c). In the restoration of normality phase, the *Contractor* takes responsibly for the asset and shall inspect the assets (requesting attendance of competent Inspector via NMCC where necessary), carry out works, acknowledge and clear alarms and alerts on the connected assets and systems, ensuring that the Tunnel can be returned into safe operation.

d). When the asset affected by the Incident has been confirmed as safe for traffic and within Minimum Operating Requirements, handover from the *Contractor* to NMCC shall be recorded and all outstanding items programmed to be actioned at a later date.

10.3. **Lessons Learned**

Lessons Learned meetings shall be led by the Tunnel Manager, supported by the Tunnels Safety Officer, after each Significant Incident or from such further information. The *Contractor* shall provide all Incident records, maintenance logs / reports, attendance lists and other relevant documentation to the Incident at least 24hours prior to such meetings, to ensure the effectiveness of the forum.

## 11 Major Incidents

11.1. A Major Incident is as defined through JESIP as an event or situation with a range of serious consequences which requires special arrangements to be implemented by one or more emergency responder agency, with the following notes:

*a.* "Emergency responder agency" describes all category one and two responders as defined in the Civil Contingencies Act (2004) and associated guidance.

b. A major Incident is beyond the scope of business-as-usual operations, and is likely to involve serious harm, damage, disruption or risk to human life or welfare, essential services, the environment or national security.

c. A major Incident may involve a single-agency response, although it is more likely to require a multi-agency response, which may be in the form of multi-agency support to a lead responder.

d. The severity of the consequences associated with a major Incident are likely to constrain or complicate the ability of responders to resource and manage the Incident, although a major Incident is unlikely to affect all responders equally.

*e.* The decision to declare a major Incident will always be a judgement made in a specific local and operational context, and there are no precise and universal thresholds or triggers. Where LRFs and responders have explored these criteria in the local context and ahead of time, decision makers will be better informed and more confident in making that judgement.

11.2. The *Client* is defined in the Civil Contingencies Act 2004 as a Category 2 Responder and shall act in support of any declared Major Incident in accordance with JESIP and the London Resilience Strategic Emergency Plan. When appropriate the *Client* shall instruct the *Contractor* to support the work of the emergency services through the provision of personnel, plant and machinery throughout the Incident and the recovery stage thereafter.

11.3. The *Contractor* shall develop procedures for escalating levels of service. For example, the next level of service beyond the deployment of an Incident Response Vehicle would be the mobilisation of all the *Contractor*'s available resources. Beyond that, the *Contractor* shall be prepared to request (or authorise) support from (or to) other contractors. The general philosophy shall be that the *Contractor* is able to immediately mobilise and clear an Incident as soon as the Police request it.

11.4. The *Contractor* shall be prepared to provide competent personnel on a 24-hours-a-day basis to act as the first point of contact and to receive and safely implement instructions from the emergency services. The *Contractor* shall provide contingency arrangements to ensure that these individuals can manage and deploy the resources required to carry out the instructions. The *Contractor* shall provide the *Client* with a contact list of all those individuals who are to be contacted in the event of a Major Incident; this contact list is to be kept up to date throughout the contract. The *Contractor* shall set out proposed arrangements for Major Incident Response in the Quality Plan.

## 12 Incident Pre-Planning

12.1. Multi-agency coordination is formally achieved through regular contact with TfL, its supply chain partners and all responding agencies, in the first instance be through planned Tunnels Design and Safety Consultation Group (TDSCG) where significant change is being made to a road tunnel. These meetings shall be used as a means of exchange of information and for the revision/amendment of this and individual agency response plans.

12.2. On approximately a 6-monthly basis, a Tunnels Forum shall be used to programme desktop and live exercises. As part of the exercise individual tunnel response plans, responding agency response plans for the tunnel and this plan shall be reviewed.

12.3. Exercises shall be based on scenarios identified and recorded on tunnel specific risk registers. Plans shall be amended to reflect any changes to operation, plant / equipment, local environment etc.

12.4. On an annual basis and to a predetermined programme, at least one live exercise shall be held at one or more tunnel/s with all responding agencies being invited to take part. Each exercise shall conclude with an all agency debrief forum held within one month of completion of the exercise where Incident Response plans shall be reviewed in the light of experiences from the exercise.

## 13 Post Incident Reporting

13.1. The *Contractor* shall provide a weekly report giving details of all Incidents attended, including details of originator, date and time of call, date and time of response, precise location, nature of Incident, material used and works undertaken, including photographic evidence. A nil return is required for days on which there were no Incidents. Where the *Contractor* is called out to attend locations where flooding has occurred, a supplementary report providing details shall be submitted within 48 hours of attendance to the Lead Local Flood Authority.

13.2. Where the *Contractor* is called out to make safe hazards which can be attributed to other parties, e.g. builder's skips, building materials, vehicles involved in road traffic accidents, the *Contractor* shall, as well as making the network safe, record information about the other parties and include it in the daily report. If the *Contractor* takes over or receives an Incident location from the Emergency Services following an Incident or Emergency, noting the rank, name, number and organisation of the person handing over in their report.

## Appendix 33/1C - Assessment of Risk

Defects shall be assessed using the risk based approached described in this appendix, supported by appropriate recognised guidance on risk-based inspections for highways and road tunnels.

The inspector shall assess the risk a hazard or defect poses to highway users and determine the appropriate response category. A risk is assessed by evaluating the consequence rating and the likelihood rating where:

a) Consequence is the outcome (e.g. damage, injury or inconvenience) should a road user encounter a hazard or defect.

b) Likelihood is the probability (or chance) that a road user (e.g. pedestrian, cyclist or motorist) will encounter the hazard or defect.

### Consequences

Consequences are evaluated by assessing the extent of damage, injury or inconvenience likely to be caused given the hazard or defect is encountered. Factors that shall be taken into account when assessing consequences include: speed, road alignment, adjacent facilities (e.g. schools, hospitals), traffic volume, and vulnerability of the road user, e.g. cyclists. It should be noted, that although some factors (e.g. traffic volume) are used to inform likelihood they may also influence consequence.

Consequence shall be rated using the scale in Table 33.2; examples of the consequence are provided; these shall be supplemented by appropriate national guidance and inspector training.

**Table 33.2**

| rating | Assessment | Example |
|---|---|---|
| 1 | little or negligible consequence | No safety impact, minor aesthetic impact or minor inconvenience |
| 2 | minor or low consequence | Personal minor injury, poor aesthetics and causing some inconvenience |
| 3 | moderate consequence | Personal injury and/or moderate network disruption |
| 4 | major, high or serious consequence | Serious personal injury and/or fatalities and/or major network disruption |

**Likelihood**

The likelihood is derived from the hierarchy category at table 33.1 which takes account of the type and number of users. This is adjusted by the safety inspector / person assessing the risk, to take account of the specific location of the defect and road user exposure to it.

**Table 33.1**

| | **Risk Category / hierarchy** | |
|---|---|---|
| Carriageways | R1 | Very High Flows |
| | R2 | High Flows |
| | R3 | Medium Flows |
| | R4 | Low Flows |
| Footways | F1 | High Pedestrian Density |
| | F2 | Medium Pedestrian Density |
| | F3 | Low Pedestrian Density |
| Cycling Facilities | C1 | High Cycle Flows |
| | C2 | Medium Cycle Flows |
| | C3 | Low Cycle Flows |
| Water Bodies | Balancing Ponds<br>Culverts | |

Table 33.3 shows the highest likelihood rating that a defect will normally attract on different elements of the network. For example, the highest likelihood rating for a defect on a footway with Medium Pedestrian Density (F2) would be 3 (Medium likelihood). This is the highest likelihood rating normally attributed to the defect, but local location factors, when appropriate, shall be used by the safety inspector to adjust the likelihood rating.

**Table 33.3**

| | | Hierarchy | | |
|---|---|---|---|---|
| Likelihood Rating | Assessment | Carriageway | Footway | Cycle Track |
| **1** | Very low likelihood | | | |
| **2** | Low likelihood | | F3 | C3 |
| **3** | Medium likelihood | | F2 | C2 |
| **4** | High likelihood | R2, R3, R4 | F1 | C1 |
| **5** | Very high likelihood | R1 | | |

The inspector shall assess if the location of the defect influences the likelihood of it being encountered; for example, if a defect is located under a bench, or close to the built-up edge of the footway it may be considered to have a lower likelihood of being encountered. The location factor may be used, for example, to adjust the likelihood as following:

a) High likelihood that defect will be encountered due to location, e.g. defect in centre of a footpath, cycle route or wheel path – no change to the rating from Table 33.3.

b) Medium likelihood that defect will be encountered due to location, e.g. defect close to street furniture/tree/kerb – reduce rating from Table 33.3 by one or more categories as assessed by the inspector (but not lower than Very low likelihood).

c) Low likelihood that defect will be encountered due to location, e.g. defect under a bench or close to a building – reduce rating from Table 33.3 by two or more categories as assessed by the inspector (but not lower than Very low likelihood).

**Risk**

The risk score determines the defect response as shown in Table 33.4. The risk score is the product of the consequence rating and the likelihood rating, so has a range from 1 to 20.

The person undertaking the risk assessment shall pay particular attention to any individual hazards or defects that they consider expose road users to any immediate risk to life or serious/severe injury and are therefore unsafe to be left without intervention. Such defects shall have their risk factors escalated in order to achieve a risk rating appropriate to the situation, irrespective of the risk rating derived from tables 33.2 and 33.3.

**Table 33.4**

| Risk factor | Category of defect | Response |
|---|---|---|
| 16 or 20 | ECO* | [redacted] |
| 10 to 20 | Cat 1 | [redacted] |
| 6 to 9 | Cat 2H | [redacted] |
| 3 to 5 | Cat 2M | [redacted] |
| 1 or 2 | Cat 2L | [redacted] |

* Emergency Call Out

** Classified 'A' roads. (All of the Client's road tunnels carry classified 'A' roads)