UKOPA

United Kingdom Onshore Pipeline Operators' Association

Technical Briefing Note

A short review of UK regulatory guidance in the development of and testing of pipeline emergency plans

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This Technical Briefing Note (TBN) identifies what is considered by UKOPA to represent current UK pipeline industry good practice within the defined scope of the document. All information is guidance and should not be considered obligatory against the judgement of the Pipeline Owner/Operator. Where new and better techniques are developed and proved, they should be adopted without waiting for modifications to this TBN.

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1. INTRODUCTION

This review looks at the current relevant GB legislative guidance with relevance to the onshore[1] pipeline industry preparedness and testing for emergencies relating to pipelines. This can cover immediate response to a public call, up to and including loss of supply (gas only). As a number of UK pipelines are connected to or from storage facilities the COMAH regulations have also been included in order to identify potential overlap or good practice.

The review has, where possible, extracted as much relevant information from the guidance where any is given, on time scales, breadth of testing and stakeholders involved.

The regulations and guidance reviewed are as follows, with annotated sections shown in section 2;

- The Management of Health and Safety at Work Regulations (MHSWR)1999.
- Pipelines Safety Regulation (PSR) 1996.
    - HSE L82 A Guide to the Pipelines Safety Regulations 1996.
- Pressure Systems Safety Regulations (PSSR) 2000.
    - HSE L122 Safety of pressure systems Pressure Systems Safety Regulations 2000.
- Control of Major Accident Hazard Regulations (COMAH) 2015.
    - HSE L111 A guide to the Control of Major Accident Hazards Regulations (COMAH) 2015.
- The Gas Safety (Management) Regulations (GS(M)R) 1996.
    - HSE L80 A guide to the Gas Safety (Management) Regulations 1996.
- Provision and Use of Work Equipment Regulations (PUWER) 1998.
    - HSE L22 Safe use of work equipment Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance.
- Civil Contingencies Act (CCA) 2004 Pt 2.
- IGEM/TD/1 Ed 5 Steel pipelines and associated installations for high pressure gas transmission.
- PD 8010-4:2012 Pipeline systems Part 4: Steel pipelines on land and subsea pipelines – Code of practice for integrity management.

There are pipeline specific demands on operators to develop, maintain, and review emergency plans and establish functionality of such plans. However, the overarching demand on

[1] Onshore in this instance includes near shore i.e. down to low water mark for coastal locations. But also includes long/deep water river crossing which fall under IGEM/TD/1 definitions.

operators will always fall back to the primary legislative demands of the Health and Safety at Work etc. Act 1974. the guidance of which states:

> *"The Act sets out the general duties which employers have towards employees and members of the public, and employees have to themselves and to each other. These duties are qualified in the Act by the principle of 'so far as is reasonably practicable'.*
>
> *In other words, an employer does not have to take measures to avoid or reduce the risk if they are technically impossible or if the time, trouble or cost of the measures would be grossly disproportionate to the risk.*
>
> *What the law requires here is what good management and common sense would lead employers to do anyway: that is, to look at what the risks are and take sensible measures to tackle them."*

The current suite of UKOPA good practice guides[2,3,4] developed in relation to emergency planning, and testing all state that:

> *Under the PSR there is currently no requirement for testing and exercising pipeline emergency plans. However, it is recognised that the testing and exercising of such plans are beneficial and allow appropriate evaluation and scheduling of such exercises to take place within individual companies.*

[2] GPG 010 Guidance on Testing,
[3] GPG011 Emergency Plan Template
[4] GPG012 MAHP Testing and Exercising Proforma

2. GUIDANCE REVIEW

Regulation Number	Requirement	Note
MHSWR Reg 8	(1) Every employer shall— establish and where necessary give effect to appropriate procedures to be followed in the event of serious and imminent danger to persons at work in his undertaking; nominate a sufficient number of competent persons to implement those procedures in so far as they relate to the evacuation from premises of persons at work in his undertaking; and ensure that none of his employees has access to any area occupied by him to which it is necessary to restrict access on grounds of health and safety unless the employee concerned has received adequate health and safety instruction. (2) Without prejudice to the generality of paragraph (1)(a), the procedures referred to in that sub-paragraph shall— so far as is practicable, require any persons at work who are exposed to serious and imminent danger to be informed of the nature of the hazard and of the steps taken or to be taken to protect them from it; enable the persons concerned (if necessary by taking appropriate steps in the absence of guidance or instruction and in the light of their knowledge and the technical means at their disposal) to stop work and immediately proceed to a place of safety in the event of their being exposed to serious, imminent and unavoidable danger; and save in exceptional cases for reasons duly substantiated (which cases and reasons shall be specified in those procedures), require the persons concerned to be prevented from resuming work in any situation where there is still a serious and imminent danger. (3) A person shall be regarded as competent for the purposes of paragraph (1)(b) where he has sufficient training and experience or knowledge and other qualities to enable him properly to implement the evacuation procedures referred to in that sub-paragraph.	A primary regulation to comply with, which does not give much detail on the how, but does state explicitly that procedures shall be in place. Competence is mentioned which directs to training, again although not explicit competency is built on the pillars of development experience being one of them. Hopefully with low number of incidents this is difficult to develop in “real life” so exercises are an alternative option.

Regulation Number	Requirement	Note
MHSWR Reg 13	(1) Every employer shall, in entrusting tasks to his employees, take into account their capabilities as regards health and safety. (2) Every employer shall ensure that his employees are provided with adequate health and safety training— on their being recruited into the employer's undertaking; and on their being exposed to new or increased risks because of— **their being transferred or given a change of responsibilities within the employer's undertaking**, the introduction of new work equipment into or a change respecting work equipment already in use within the employer's undertaking, the introduction of new technology into the employer's undertaking, or the introduction of a new system of work into or a change respecting a system of work already in use within the employer's undertaking. (3) The training referred to in paragraph (2) shall— **be repeated periodically where appropriate**; be adapted to take account of any new or changed risks to the health and safety of the employees concerned; and take place during working hours.	Again, with reference to competency, this section highlights transferring to new roles and the risks that this brings. This is followed by the "periodic training" which would intimate the requirement for some level of exercise exposure.

Regulation Number	Requirement	Note
PSR Reg 23	(1) The operator shall, before the design of a major accident hazard pipeline is completed prepare, and thereafter revise or replace as often as may be appropriate, a document relating to the pipeline containing, subject to paragraph (2) sufficient particulars to demonstrate that - **all hazards relating to the pipeline with the potential to cause a major accident have been identified**. **the risks arising from those hazards have been evaluated**; the safety management system is adequate; and **he has established adequate arrangements for audit and for the making of reports thereof**. (4) In this regulation— “audit” means systematic assessment of the adequacy of the safety management system, carried out by persons who are sufficiently independent of the system (but who may be employed by the operator) to ensure that such assessment is objective; and “safety management system” means the organisation, arrangements and procedures established by the operator for ensuring that the risk of a major accident is as low as is reasonably practicable	Referring to the regulation, demonstrating an audit on response plan would be difficult under anything but exercise running as the details/failures/successes would be hard to evaluate on paper. Although this should be satisfactorily covered by the MAPD documentation
PSR Reg 23 Guide 113	The pipeline MAPD should **be supported by the safety management system** which is in place for the control of the safety of the pipeline throughout its life cycle from its concept design through to decommissioning.	

Regulation Number	Requirement	Note
PSR Reg 23 Guide 119	Specific arrangements for dealing with emergencies form part of the safety management system. The emergencies to be addressed will result from the hazard identification and risk assessment process. Having identified all types of emergency events, plans and procedures should be prepared for dealing with these. The preparation of emergency procedures is covered in Regulation 24	Development of emergency plans and responses should be derived from the assessments that developed the operators MAPD, and show links to such
PSR Reg 23 Guide 120	Audit: Once a systematic and formalised management approach to safety has been implemented, it becomes necessary to audit the system performance. This regulation requires that arrangements are in place for audits to be made of the safety management system which address its adequacy in achieving the safety of the pipeline. This requires a demonstration that there are clearly defined systems for audit of the quality of the design, construction, operation, maintenance and finally decommissioning of the pipeline. As for other aspects of the safety management system, performance standards for the audit and review process should be set and monitored. The people carrying out the audits should be sufficiently independent to ensure that such an audit is objective.	

Regulation Number	Requirement	Note
PSR Reg 24	(1) The operator shall ensure that no fluid is conveyed in a major accident hazard pipeline unless – such appropriate organisation and arrangements as shall have effect; and **the procedures which shall be followed in different circumstances, in the event of an emergency relating to the pipeline have been established and recorded**. (2) **The operator shall revise or replace the record of the organisation, arrangements and procedures referred to in paragraph (1) as often as may be appropriate**. (3) The operator shall ensure that the organisation, arrangements and procedures referred to in paragraph (1) **are tested, by practice or otherwise, as often as may be appropriate**.	Testing as appropriate, very hard to pin down into a definitive time frame. However, when looking at staff turnover and previously highlighted areas, key staff changes may equate a need for an exercise test, likewise, new operating procedures, product, etc, could also require this (Human factors is now very prominent in HSE investigations)
PSR Reg 24 Guide 128	This regulation requires that adequate emergency procedures are prepared for dealing with the consequences of a major accident involving a pipeline. The detail and scope of a major accident will vary according to the pipeline, its location and the fluid conveyed, and the operator will need to consider these aspects when drawing up the emergency procedures.	
PSR Reg 24 Guide 130	For onshore pipelines, it is important that the pipeline operator and local authorities liaise to ensure that the **emergency procedures and the local authorities' emergency plans are dovetailed in order to provide a comprehensive and effective response to emergencies**	The HSE have previously issued notice to LA's for this not being followed so close contact should be maintained.

Regulation Number	Requirement	Note
PSR Reg 24 Guide 131	The emergency procedures **should be kept in an up-to-date operational state. They should be revised as necessary** to ensure that they cater for any changes in operation that might have a significant effect on the procedures.	This may be tested operationally during an emergency, however, given the infrequent nature of these events, testing would be required
PSR Reg 24 Guide 132	**Although this regulation does not specify the frequency at which tests should be carried out, it is important that the procedures are exercised and tested with sufficient frequency and depth so that they can be relied upon to work effectively in an emergency**. The procedures **should be monitored and reviewed in the light of exercises and tests and of any practical experiences** gained from operating the plan in a real emergency, and remedial action identified and taken.	Although not specifically stating a frequency the onus is on the operators to demonstrate sufficient depth and experiences in the deployment of the plans.
PSR Reg 25	(1) A local authority which has been notified by the Executive that there is, or is to be a major accident hazard pipeline in its area shall before the pipeline is first used or within 9 months of such notification, whichever is later, and subject to paragraph (5), prepare an adequate plan detailing how an emergency relating to a possible major accident in its area will be dealt with. (2) In preparing the plan pursuant to paragraph (1) a local authority shall consult the operator of the pipeline, the Executive and any other persons as appear to the authority to be appropriate. (3) A local authority which has prepared a plan pursuant to paragraph (1) shall, as often as is appropriate and, **in any case, at least every three years review the plan and make such revision as is appropriate**.	A three-year review cycle is often a paper exercise by the LA with a variety of technical involvement or engagement. However, taking into consideration the above history of the HSE intervention an exercise can lead to a more robust review rather than a tick box page flick review.

Regulation Number	Requirement	Note
PSR Reg 25 Guide 134	Local authorities at county or equivalent level, once notified of a pipeline by HSE, are required by this regulation to prepare an emergency plan for each major accident hazard pipeline passing through their area. The requirement under these Regulations is for emergency plans which should specifically relate to the protection of the health and safety of people, not environmental damage.	
PSR Reg 25 Guide 142	In discharging their duties, local authorities must take reasonable steps to ensure that they are preparing plans which will prove adequate in the event of major accidents. **This will involve checking and testing the various components of each plan during its development**.	Reasonable steps to involve testing components is a very open statement and from experience not one that has been tested by the HSE. The approach of Local Resilience Forums (LRFs) may well be that they are resource constrained and that the review sessions will cover “testing”
PSR Reg 25 Guide 143	The local authority shall review, and **where necessary, revise and update the plan at suitable intervals so that it can be relied upon to work effectively in an emergency**. The maximum interval for review should be every three years.	Without testing could the plan be relied upon without real time activation?
PSSR Reg 11	(1) The user of an installed system and the owner of a mobile system shall provide for any person operating the system adequate and suitable instructions for— the safe operation of the system; and **the action to be taken in the event of any emergency**	Often overlooked within the pipeline field, PSSR applies to the largest pressure vessel (the pipeline).

Regulation Number	Requirement	Note
PSSR Reg 11 Guide 145	The instructions provided to operators by the user/owner should cover: all procedures and information needed so that the system can be operated safely; and **any special procedures to be followed in the event of an emergency.**	This would be covered sufficiently if compliance with PSR can be demonstrated.
COMAH Reg 11	Every internal emergency plan and external emergency plan prepared for the purposes of these Regulations must have the following objectives – containing and controlling incidents so as to minimise the consequences, and to limit damage to human health, the environment and property; implementing the necessary measures to protect human health and the environment from the consequences of major accidents; communicating the necessary information to the public and to the services or authorities concerned in the area; and providing for the restoration and clean-up of the environment following a major accident	The only regulation to give actual time frames for testing emergency plans. The three-year cycle has been replicated across industries as good practice. It may be difficult to argue this down as this has been in use for a number of years. It also follows the practice of shared learning across industry and beyond. For some operators the use of the COMAH plan as testing can link to pipelines, by the simple fact that the site has a connecting pipeline, thus two regulations covered in one exercise and also gives the operator the ability to demonstrate shared learning and cross industry learning.
COMAH Reg 12(6)	An operator **must at suitable intervals not exceeding three years** – **review and, where necessary, revise the internal emergency plan**; and **test the plan**.	
COMAH Reg 12 Guide 232	To obtain the maximum benefit from **an emergency plan test, it is important to review the lessons learned** to determine where modifications are required to the plan, and to **promote good practice**. A record should be made of the recommendations from a test and the identified lessons. Revisions to the emergency plan should then be followed up to ensure that the identified lessons from testing lead to improvements. Information to the public should also be updated if necessary.	

Regulation Number	Requirement	Note
COMAH Reg 12 Guide 234	There are considerable **benefits to be gained from testing the internal and external emergency plans (or parts of plans) at the same time**, as well as potential financial savings from avoiding duplication. Testing both plans together will demonstrate how well they fit with each other. For example, the designated authorities' roles in mitigation, both on-site and off-site, are described in the external emergency plan rather than in the internal plan, which deals with the role of the operator. Exercising this part of the external emergency plan with the internal emergency plan can test effective co-ordination of all emergency response personnel handling a major accident at the establishment. Agreement will need to be reached on the overall objectives of the testing and the best way of meeting them.	
COMAH Reg 12 Guide 235	**Testing should be carried out at least once every three years**. Testing an emergency plan may consist of a live exercise or a table-top exercise **supported by the testing of other components (which may be done at separate times)**, including the communication arrangements. A table-top exercise should demonstrate whether the constituent parts of the plan, including the emergency response arrangements of different organisations, will work together. The testing of other components should demonstrate whether the plan can be put into effect successfully. The testing of some of the components should be done live, i.e. it should involve deployment of some personnel and resources as if they were responding to a real emergency.	
COMAH Reg 12 Guide 240	The nature of the scenario should vary in each three-year cycle, to examine the range of emergency responses required for the foreseeable accidents	

Regulation Number	Requirement	Note
COMAH Reg 12 Guide 241	All relevant staff across shifts in all the relevant organisations should be trained in their expected response in the event of an emergency. If elements of emergency response are contracted out by the operator, for example spill response and clean up, these contractors should also be included. Although there are clear training benefits to be gained from a test, it is not solely a training exercise; the main purpose is to demonstrate that the plans are accurate, complete and practicable.	
COMAH Reg 12 Guide 242	Dealing with the on-site consequences of major accidents will usually require the assistance of the emergency services and, therefore, it may be appropriate for them to attend many of these tests, but not necessarily all. Other designated authorities also need to be involved in some of the exercises. Within reason, key staff with a role to play in emergency response should have the opportunity to undertake site familiarisation visits.	
GS(M)R Reg 7(4) Guide 43	Gas transporters/emergency service providers should attend the emergency, as soon as reasonably practicable, after receiving a report of a gas escape. They will also need to make arrangements to ensure that reports of emergencies can be received and responded to 24 hours a day. Once at the emergency, appropriate steps should be taken to bring the situation under control, and to make the situation safe as quickly as possible. The 12-hour period contained in the regulation is the maximum time that should normally be taken to stop gas escaping (see also paragraph 47).	

Regulation Number	Requirement	Note
GS(M)R Reg 7(4) Guide 44	Gas transporters/emergency service providers will need to ensure that: where appropriate they are registered with CORGI, i.e. for work on gas fittings and installation pipework; **they employ competent operatives with sufficient knowledge, appropriate equipment, practical skill and experience to deal with all foreseeable emergency situations**. The Health and Safety Commission Approved Code of Practice Standards of training in safe gas installation (ISBN 0 11 883966 7), for example, provides practical guidance on standards of training in safe gas installation; **sufficient numbers of operatives are available** to deal promptly with each emergency no matter how large; **sufficient numbers of operatives, with appropriate rights-of-entry powers**, are available to make situations safe where, for example, gas may have escaped into vacant property; and **they establish written procedures for operatives to follow**.	As for The Management of Health and Safety at Work Regulations 1999, GS(M)R refers to the sufficient experience to deal with foreseeable emergencies, without real life incidents this is difficult to achieve without exercises.
GS(M)R Reg 7(4) Guide 45	The primary duty on gas transporters/emergency service providers in the event of an emergency is to make the situation safe. They will need to: establish the cause of the escape and take action to make the situation safe by preventing gas from escaping;	

Regulation Number	Requirement	Note
GS(M)R Reg 7(4) Guide 89	The requirement in PSR to make suitable arrangements for emergencies is to ensure that these are in place to limit any loss of containment and deal specifically with major accident hazards. GS(M)R, **on the other hand, requires an effective emergency response service to be in place to deal with reports of gas escapes**, either from the network or from gas fittings in consumers' premises. *The arrangements under GS(M)R should particularly focus on local and domestic situations*; although incident investigation should deal with all leaks which caused, or which gave rise to a significant risk of, fire or explosion.	
PUWER Reg 9	(1) **Every employer shall ensure that all persons who use work equipment have received adequate training for purposes of health and safety, including training** in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken. (2) Every employer shall ensure that any of his **employees who supervises or manages the use of work equipment has received adequate training** for purposes of health and safety, including training in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken.	Using the more specific wording of training with this regulation, it leads back to the pillars of competency of the employees.
CCA	The main bulk of **planning should consider how to minimise the effects of an emergency, starting with the impact of the event (i.e. their alerting procedures)** and looking at remedial actions that can be taken to reduce effects. For example, the emergency services may be able to stem the emergency at source by fighting fires, combating the release of toxic chemicals or the extent of floods. The evacuation of people may be a direct intervention which can mitigate the effects of some emergencies.	

Regulation Number	Requirement	Note
	Existing emergency planning duties While responders will need to have regard to any planning requirements imposed by other sector-specific planning regimes and legislation, the Regulations identify only three pieces of legislation pre-dating this Act, which were introduced separately in Britain and Northern Ireland under sector-specific legislation operated by the Health and Safety Executive (HSE) and HSE Northern Ireland. These relate to major accident hazards at industrial establishments (Control of Major Accident Hazards Regulations (COMAH)), to hazardous pipelines (Pipelines Safety Regulations) and to radiation hazards (Radiation (Emergency Preparation and Public Information) Regulations (REPPIR)).	CCA explicitly excluded both COMAH and PSR as they are industry specific. However, as LA's, LRF, RRF and higher will use the CCA and both COMAH and PSR require plans to Dovetail CCA cannot be ignored.

Regulation Number	Requirement	Note
IGEM/TD/1 9.2.1.3	Before commissioning, a certificate of compliance shall be handed to the pipeline operator. Commissioning shall not take place until all operating, maintenance and **emergency procedures are established and in place**.	
IGEM/TD/1 12.2.1.2	**A separate Emergency Procedures Manual (EPM) shall be provided to deal with situations which necessitate emergency actions** (see clause 12.2.3.8). The EPM **should include details of the organisational response to emergencies, the safety precautions to be observed in preventing loss of life, injury and damage to property and the means of resourcing specialist services and equipment**. The preparation of the EPM shall take account of local authority emergency plans.	
IGEM/TD/1 12.2.3.2	Training **Personnel engaged in activities on high pressure pipelines shall be adequately and regularly trained. The training shall cover all aspects of safety and emergency procedures and equipment**, as well as technical matters concerning the operation and maintenance of high-pressure pipelines and associated equipment.	

Regulation Number	Requirement	Note
IGEM/TD/1 12.2.3.8	Emergency procedures The following requirements are provided as a general guide with respect to emergency procedures and reference should be made to IGE/SR/20: • both operative and supervisory staff level shall be adequate at all times to handle reported escapes. Procedures shall be established in order to ensure that there is a system in place which can identify the likely source of escapes and will enable mobilisation of the appropriate resources as soon as is reasonably practical **• emergency procedures shall be established, and all operational personnel shall be made aware of them including any requirement of themselves under such procedures** **• emergency procedures shall be reviewed periodically and updated as changes in circumstances occur**.	
PD 8010 4.4.6	Emergency response Certain failures within a system can be so critical as to require an immediate response to protect safety or the environment. This immediate response is referred to as emergency response, and procedures, with action check lists, **should be available to the control room operators and the organization's central emergency response team prior to the pipeline being brought on stream for the first time**. The priority listing from the risk assessment should be used to identify all possible emergency scenarios that could affect the system, and emergency response procedures should be drawn up for each.	Does not specifically require the testing/exercising of the emergency response, and procedures, or action check lists.

3. LESSONS FROM OTHER INCIDENTS

3.1 Buncefield Major incident investigation board

The investigation into the incident that occurred at the Buncefield COMAH site in December 2005 resulted in over 30 recommendations to be considered by all stakeholders involved in the response. The Health and Safety Commission (HSC) directed the investigation using its powers under section 14(2)(a) of the Health and Safety at Work etc. Act 1974.

The recommendations are based on an on-site incident on a COMAH facility; however, it was felt prudent to include relevant recommendations here due to the connectivity of the pipeline industry and their involvement with similar stakeholders as the Buncefield incidents. (Not all recommendations are listed here only ones relevant for consideration.)

Recommendation		Note
4	Operators should review and where necessary revise their on-site emergency arrangements to ensure that relevant staff are trained and competent to execute the plan and should ensure that there are enough trained staff available at all times to perform all actions required by the onsite emergency plan.	As in the legislative review. Without testing and reviewing how would an operator gain confidence in their abilities to answer this recommendation?
19	Local authorities should ensure their revised off-site emergency arrangements for COMAH sites are tested within 12 months of production. Exercise scenarios based on real incidents should be compiled by Civil Contingencies Secretariat (CCS) and the Competent Authority and available for multi-agency exercise developments: • All Category 1 responders[5] should ensure their staff are trained within 6 months of production to deliver the emergency response • Local authorities should arrange for all councillors and elected officials to have awareness training regarding their roles in planning for and responding to and recovering from emergencies to effectively represent their communities.	This recommendation is not reflected in the current COMAH regulations guidance, and no evidence of LAs conducting such exercises at review stage has been found.

[5] Category 1 and 2 responders are defined and explained within the Civil Contingencies act.

4. CONCLUSIONS

There are no regulations other than COMAH which stipulate explicitly a time dependency or frequency of emergency plan testing.

The COMAH Reg 12(6) states "*an operator must at suitable intervals not exceeding three years – review and, where necessary, revise the internal emergency plan; and test the plan".* Whilst operators with COMAH sites could align both COMAH and PSR testing in to one exercise, this is not possible for operators without COMAH connected facilities.

Operators of pipelines should consider their testing and review frequencies in line with their business structures such as safety critical document review frequencies. This would enable an evaluation of the plan to be undertaken with any revision, addition and gaps addressed in the document review.

It should be noted that almost all regulations reviewed within this TBN cited that staff should be competent, trained, and available to undertake roles during the activation of the plan. Therefore, a change in staffing may trigger a risk to the plan (through a human factors management of change control process) that may require a review or even testing of the plan.

Whilst the UK has a very good operational history, the lack of activation of such plans should not lead to a complacency in the preparation and readiness of them. Plans must be relevant to the structure of the organisation including the roles identified within it. This applies not only to the operator but should "dove tail" external stakeholders who are detailed in the plan.

Operators must take a pragmatic and reasoned approach to their own testing and review frequencies. However, plans shall be reviewed periodically and updated as changes in circumstances occur to ensure they justify:

- Plan relevance to organisational structure and operation parameters
- Competence of staff
- Experience of staff
- Training of staff (not just "in field operations" but all levels of the organisation who could be involved in emergency operations)
- "Dove tailing" and complementing other plans such as fire, police (category 1) and local authority (category 2)
- Development of plan from lesson learnt during operations, activation or from others.