

9.2 Operational Delivery Guide (UK)

OECD GP Activity	UN SF Activity	UN SD Goals / Targets
9. Natech risk in enforcement and in follow up to Natechs9. Natech risk in enforcement and in follow up to Natechs	2. Strengthening disaster risk governance to manage disaster risk	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

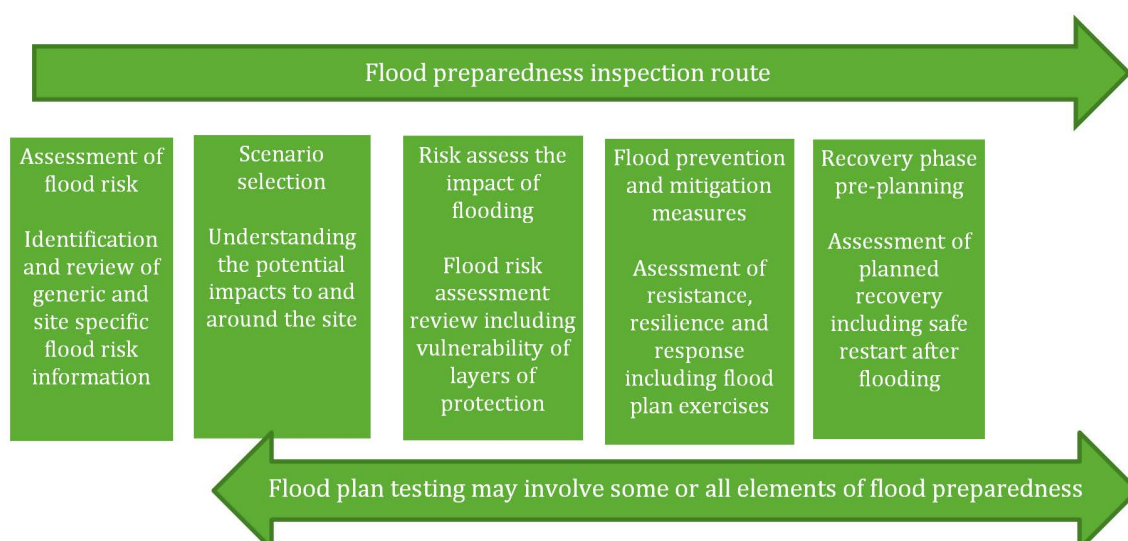
Classification according to OECD Guiding Principles, UN Sendai Framework Priorities/Activities, and UN SDGs and Targets

Table 1: Flood Major Accident Scenarios (at COMAH Sites) for prioritization of intervention

Flooding Major Accident Scenario (FMAS)	Typical site arrangements vs. flood zones
1. Flood within the establishment directly causes major accident	COMAH dangerous substances present in flood risk area
2. Flood within the establishment can indirectly cause or escalate Major Accident	No dangerous substance in flood area but Major Accident hazard relevant equipment / utilities / access routes susceptible to challenge from flooding
3. Flood outside establishment	Establishment near flood risk areas which could challenge protection layers
4. National wide area flooding exacerbates Major Accident risk	Flooding in another part of the country but not near establishment

Source: Operational Delivery Guide

Figure 1: Main Areas of Inspections (at COMAH Sites)



Source: © UBA based on Operational Delivery Guide

Short Facts:	Natural Hazard(s) Considered:
Governance approach: National policy Source: Environment Agency, England Entry into force: 2018 Targeted Stakeholders: COMAH Competent Authorities Scope of applicability: National, enterprises, sites, establishments	• Flooding Climate change: Climate change impacts are taken into account

Description

The Guide was developed because Government and industry regarded flood preparedness as a high priority and the COMAH Competent Authorities (authorities for the enforcement of the regulations implementing the Seveso-Directive (2012/18/EU) are to undertake targeted inspections on this topic. It is supported by the CDOIF Guidance document 'Preparing for a Flood: Guidance and Best Practice' (see 8.6).

The guide applies to COMAH establishments (upper and lower tier) where flooding has been identified as a risk with the potential to initiate or aggravate a major accident. First, the guide aims to help direct the resources for inspections to activities that give rise to the greatest risk or are managed least effectively. For this purpose the four 'Flood Major Accidents Scenarios' (see Figure 51) can be used, explained further in Appendix 1 of the guide. Second, inspectors are to use the guide to verify whether operators have identified and characterized the flood risks to their establishments (direct and indirect) and implemented appropriate risk reduction measures as reasonably practicable. Appendix 2 gives information on the areas being inspected, the expected level of response by the operator and some key questions that may assist the inspections. By comparing the key findings from the inspections with the success criteria in Appendix 2 the operator's performance shall be rated, in line with the scores provided in Appendix 4.

Appendix 2 lists for five inspections areas / assessment steps the equivalent expectations and issues, the key questions, and success criteria.

Table 2: Appendix 2 – Inspection areas and proposed subjects

Inspection areas	Proposed subjects:
Assessment of flood risks:	Ensure the information on current flood risks has been shared with the establishment operators, confirming agreement with the operators understanding of flooding as a hazard within their Major Accident Hazard identification
Scenario selection:	Are the representative scenarios realistic in context of the site and its wider setting, the infrastructure on site and the potential impacts and the sub-stances stored? Are the extent of the consequences to people and the environment identified and accounted for? Are the wider infrastructure elements considered e.g. drainage systems, on or off site effluent treatment plant, utilities and communication infrastructure etc.
Risk assessment and the impact of flooding:	Has the operator of the establishment undertaken suitable and sufficient flood risk assessments for the scenarios identified? Are the assessments consistent with the safety Report or Major Accident Policy and other documentation on site? Has the operator comprehensively assessed the potential flood resilience measures for the site to reduce Major Accident risk?

Inspection areas	Proposed subjects:
Flood prevention and mitigation measures:	Ensuring that the actions on site are adequate and reflect the outcomes of any risk assessments. Are the mitigation measures being appropriately assessed and are they practical? Is a specific flood plan in place for the site based on the thorough understanding of the risks and scenarios identified in steps 1 to 3 above?
Recovery phase pre-planning:	Recovery phase activities are often as dangerous as the flooding event that caused them. Recovery may also begin before the end of the flooding event. The preparations that have been made prior to the event can be key to ensuring the risk to people and the environment is minimised.

Source: Operational Delivery Guide

Appendix 3 presents sample points for the areas: flood preparedness, access and egress, loss of utilities, structural integrity, process interruption, and loss of containment, which can be used for inspections.

Link/Contact:

<https://www.gov.uk/government/publications/preparing-for-flooding-a-guide-for-regulated-sites>

Comments by the UN/OECD Natech-Steering Group:

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