

**Common Assessment Framework for Lessons Learned: response during major oil pollution incidents at sea**

*1. Incident information (general)*

<b>Name of the incident</b>	
Date	Ship name
Location (latitude/longitude)	IMO nr
Incident area	Ship type
Type of pollutant	Gross Tonnage
Quantity spilled	Flag
Incident nature (reason for the spill)	Year built
Nature of the pollutant	Cargo transported
Weather conditions at time of incident	Amount of bunker fuel
Lead agency	Name of the user
<b>Comments/additional information:</b>	

2. *The Contingency Plan (general)*

<b>Notes – this section should be used to give specific recommendations or suggestions of modifications/additions to the contingency plan, if appropriate including comments from the persons responding in the field.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
Was a contingency plan in place?	
Did the contingency plan identify a lead agency?	
Was the plan relevant?	
Was the plan up to date?	
Was the plan activated in time?	
Was the plan useful (did it provide guidance to the lead agency in all of the areas of the response)?	
Were the people involved in the response trained in the use of the contingency plan?	
Was the response conducted according to the contingency plan?	
Is there an agreed mechanism for feedback of lessons learned into the contingency plan?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

3. Initial notification and first response (general)

<b>Notes – this section is focussed on the response by the lead agency with overall responsibility for responding to the oil spill (rather than vessel crew, salvors, etc.)</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
Were actions to stop the spill of oil (shutdown, stabilising vessel, emergency towing, emergency lightering etc.) taken quickly?	
Was the first aerial surveillance flight carried out quickly and by trained observers?	
Was adequate information available to the lead agency on the initial situation?	
Did the initial alert and notification process work quickly and effectively?	
Were response resources (equipment and personnel) mobilised quickly after receiving the alert?	
Did those personnel involved in the initial response know their roles and responsibilities?	
Were roles and responsibilities for initial response defined in the contingency plan?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

4. *Monitoring and surveillance of oil and its fate/behaviour (at-sea response)*

<b>Notes – if applicable, poor weather should be mentioned under comments/additional information as a significant limiting factor to the effectiveness of monitoring and surveillance operations.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
Were regular aerial surveillance flights conducted by trained observers and information fed to the lead agency?	
Were satellite images (if available) requested quickly?	
Once satellite images were available, was interpretation (confirm presence of oil) performed by a suitably trained person?	
Was remote sensing conducted regularly to verify the appearance and thickness of the oil?	
Was remote sensing performed effectively by suitably trained crews?	
Was access to local meteorological and oceanographic data available?	
Was access to oil spill modelling software available?	
Did the oil spill model output provide a reasonable projection of oil location, extent and fate (compared to the actual situation)?	
Was remote sensing used to verify model predictions?	
Was oil / water sampling performed?	
<i>How much did monitoring and surveillance cost approximately throughout the entire operation?</i>	€
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

5. Choice of response strategy (at-sea response)

Assessment Factors	Y/N
<i>Please specify the oil type, extent and physical condition of the oil and response strategy (or sequence/combination of strategies chosen)</i>	
Was the overall choice of response strategy/ies (mechanical recovery/dispersants/monitoring /shoreline clean-up) made quickly?	
Was a formal decision-tree used to decide the response strategy/ies?	
Was the overall choice of response strategy/ies made based on environmental and technical considerations only?	
Did media and/or public perception affect the response decision?	
Were all relevant parties involved in the decision-making process?	
Were the decisions regularly reviewed and re-evaluated?	
<b>Requests for external assistance</b>	
<i>Please specify what type of assistance (personnel, equipment, aircraft etc.) was requested.....</i>	
Was assistance requested through regional agreement?	
Was EMSA assistance requested?	
Was other international assistance requested?	
Once decided that it was required, was international/regional assistance requested according to defined procedures?	
Was the request sufficiently detailed, and easy to understand and interpret?	
Were there any delays in processing the request for international assistance?	
Were there significant delays in the assistance being delivered/deployed on site?	
Did the assistance provided meet the stated objectives?	

Approximately how much did equipment/resources provided by external assistance cost approximately throughout the entire operation?	€
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

### 6. Salvage operations (general)

Notes -	
Assessment Factors	Y/N
Was emergency intervention (salvage, availability of Emergency Towage Vehicles) addressed in the national contingency plan?	
From the Member State(s) involved, was there a single representative with ultimate responsibility for salvage operations?	
Were public resources used in the salvage intervention?	
Were private resources used in the salvage intervention?	
Was a commercial salvage contract concluded between the relevant parties?	
Was anchoring possible?	
Could the ship be accessed by helicopter?	
Did the event occur in an area of high traffic density?	
Was there adequate sea room and depth of water to allow the ship to drift?	
Had places of refuge been identified in advance for the area concerned?	

Were appropriate procedures in place to ensure access to the place of refuge?	
Had a maritime assistance service (MAS) been established?	
Were sea safety zones or restrictions established in the surrounding sea area?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

7. Mechanical recovery (at-sea response)

<b>Notes –Heavy weather should (if applicable) be mentioned in comments/additional information as a significant limiting factor to the effectiveness of mechanical recovery (operational limitations of equipment and personnel safety considerations).</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<i>Please specify the type of equipment used.....</i>	
Was mechanical recovery the only response chosen?	
Was a sweeping arm used?	
Was a combination of boom and skimmer used?	
Was a pump used?	
Was sufficient equipment available?	
Did the equipment perform as expected?	
Were protective booms deployed?	
Was mechanical recovery equipment deployed quickly (no significant delays in sourcing local/national equipment)?	

Was there enough mechanical recovery equipment available to respond to the volume of oil spilt?	
Were sufficient vessels available to deploy all equipment?	
Was mechanical recovery equipment deployed properly (without damage) and effectively by trained crew?	
Did vessels and pumps have sufficient heating capacity for recovery of heavier/viscous oils (if applicable)?	
Did vessels have sufficient oil/water separation systems to minimise the quantity of water taken up with recovered oil?	
Were there limitations to on board storage capacity?	
If additional storage (lightering) capacity was required, was adequate capacity available?	
If additional storage (lightering) capacity was required, was this sourced and deployed quickly and effectively?	
Was aerial support available to guide response vessels to highest concentrations of oil?	
Were operations performed at night?	
Were there any problems of compatibility/interoperability (e.g. connecting different types of boom)?	
Was mechanical recovery stopped at the right time (i.e. not continued once no longer effective or needed)?	
<i>How long was mechanical recovery equipment deployed for as proportion of total time spent on site?</i>	
<i>How much oil was recovered in the first X (please specify) hours of deployment?</i>	
<i>How much oil was recovered in total?</i>	<i>t/m<sup>3</sup></i>
<i>How much oil was recovered in total as a proportion of the total amount spilt?</i>	<i>%</i>
<i>Approximately how much did deployment of mechanical recovery equipment (excluding that from international assistance) cost throughout the entire operation?</i>	<i>€</i>
<b>Comments/additional information:</b>	



<b>Main assessment results (lessons learned):</b>
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8. *Chemical dispersants (at-sea response)*

<b>Notes – as dispersants are not commonly accepted as a response strategy across Europe, disregard this section if dispersants were not used.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<i>Please specify the oil type and type of dispersant(s) used</i>	
Was using dispersants the right choice (whether used alone or in combination with other techniques) for this spill, based on environmental factors i.e. environmental effects of treated oil versus untreated oil (net environmental benefit)?	
Was the decision to use dispersants taken quickly enough (window of opportunity) for dispersants to be effective?	
Were dispersants applied properly so as not to cause undue environmental damage?	
If necessary, was access to environmental expertise regarding the use of dispersants available?	
Was a proper calculation made of the amount of dispersant needed based on the amount of oil spilled (20:1 ratio)?	
Were there enough dispersants available?	
Were dispersants applied/sprayed (from aircraft and/or vessels) properly by trained operators?	
Were dispersants effective at dispersing the oil into the water column?	
Was application of dispersants stopped at the right time (i.e. discontinued once no longer effective or needed)?	
<i>How much oil was dispersed as a proportion of the total amount spilled?</i>	<i>t/m<sup>3</sup></i>
<i>Approximately how much did dispersant application cost in total?</i>	<i>€</i>
<b>Comments/additional information:</b>	

<b>Main assessment results (lessons learned):</b>
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9. Shoreline clean-up (shoreline clean-up)

<b>Notes – this section can be divided into primary clean-up (removing free oil and heavy contamination) and secondary (removal of residue) clean-up stages as necessary. Waste management issues are addressed separately below and specific issues of security and volunteers are under Health and Safety.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<i>Please specify the type of shoreline(s), type of clean-up equipment and technique(s) used</i>	
Was shoreline clean-up properly organised and planned?	
Was the combination of equipment and techniques (mechanical, manual and chemical) appropriate for the oil type and physical state of the oil?	
Was the combination of equipment and techniques appropriate for the shoreline type (e.g. rocky shore, salt marsh etc.)?	
Was there enough shoreline clean-up equipment (mechanical and manual) available?	
Was there enough labour (people) available to undertake shoreline clean-up?	
Were regular assessments made of the extent of shoreline oiling and information passed back to the lead agency?	
Was a reasoned assessment, based on technical and environmental considerations, made on when to stop the clean-up?	
<i>What length of shoreline was contaminated by oil and to what extent?</i>	<i>Km/heavy/ light oiling</i>
<i>How much oil was recovered from the shoreline?</i>	<i>m<sup>3</sup></i>
<i>How many people were used for shoreline clean-up in total?</i>	

<i>How much did shoreline clean-up operations cost?</i>	€
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

### 10. Waste Management (shoreline clean-up)

<b>Notes – long term treatment and disposal methods are not considered.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<i>Please specify the type of waste generated</i>	
Was a waste management plan already in place?	
Were proper decontamination procedures (waste minimisation) implemented as part of the shoreline clean-up?	
Was waste properly segregated and categorised (e.g. standard waste, hazardous waste)??	
Were there any legal implications to be considered as a result of the categorization?	
Was sufficient equipment available for temporary storage of oily waste?	
Were there any delays in sourcing equipment for temporary storage of oily waste?	
Were suitable locations with adequate access available for temporary storage of oily waste?	
Were suitable locations available for disposal of oily waste?	
Were there any delays in sourcing equipment for transport of oily waste to disposal sites?	
Was it possible to recover/reuse any oily waste?	
Was it possible to clean and return any oiled beach material (e.g. sand) to its original location?	

How much waste was generated in total?	t/m <sup>3</sup>
Approximately how much did shoreline clean-up operations cost in total?	€
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

### 11. Environmental Impacts in the Marine Environment (general)

<b>Notes -</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
Was a formal assessment conducted (e.g. post-hoc Environmental Impact Assessment, Natural Resource Damage Assessment)?	
Were any threatened, endangered or rare species impacted?	
Were any sites of special scientific interest impacted?	
Was the area impacted part of a nature reserve, natural park, or otherwise identified area of ecological importance or outstanding natural beauty?	
Were fisheries impacted?	
Were amenity beaches impacted?	
Was there an impact on marine mammals (e.g. sea otters, dolphins, seals)?	
Was this quantified?	
Was there an impact on reptiles and amphibians?	
Was this quantified?	

Was there an impact on fish?	
Was this quantified?	
Was there an impact on invertebrates?	
Was this quantified?	
Was there an impact on marine flora?	
Was this quantified?	
Did the accident occur during a period of particular importance (e.g. bird migrations, fish spawning)?	
Was a wildlife response operation undertaken?	
Was any environmental restoration/remediation undertaken?	
Was water analysis undertaken?	
<b>Comments/additional information (if any studies were conducted and/or remediation work undertaken, please indicate how long these took):</b>	
<b>Main assessment results (lessons learned):</b>	

*12. Health and safety (at sea and during shoreline clean-up)*

<b>Notes –</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<b>General</b>	
Was a thorough assessment made of the health risks of spilled oil?	

Was air sampling undertaken?	
Was vessel and/or site security adequately addressed?	
Were there any serious accidents/injuries?	
<b>At sea</b>	
Were health and safety aspects on board vessels monitored?	
Had the crew of Oil Spill Response Vessels received adequate training?	
Did the vessels apply safe working practices in accordance with written procedures?	
Was adequate personal protective equipment (PPE) available for all staff on board response vessels?	
<b>Shoreline</b>	
Were there sufficient personnel available for shoreline clean-up for the duration of the response operation?	
Were shoreline clean-up personnel properly briefed and (if necessary) trained?	
If volunteers were used in the shoreline clean-up, were they properly briefed and trained?	
Were health and safety aspects of shoreline clean-up operations supervised and monitored?	
Was adequate PPE available for all shoreline clean-up personnel and volunteers?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

*13. Management and coordination (general)*

<b>Assessment Factors</b>	<b>Y/N</b>
Were there any issues raised in relation to jurisdiction?	
Was it clear which entity should take lead responsibility?	
Does the contingency plan provide a clear command structure?	
Were response personnel trained for their roles and responsibilities?	
Was there good cooperation between the different governmental authorities involved?	
Was there good cooperation between the technical teams/persons (e.g. operations, planning, logistics, etc.)?	
If external contractors were used, did they achieve their agreed objectives?	
Did the lead agency have adequate access to specialised information from other agencies/organisations?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

*14. Communications and information (general)*

<b>Notes – categories can be divided further if necessary and particular areas where there was a lack of information should be highlighted.</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
<b>Communication between stakeholders and public relation procedures</b>	
Was there an adequate flow of information between lead agency and the responsible party (e.g. ship owner or representative)?	

Was there an adequate flow of information between lead agency and political level of government?	
Was there an adequate flow of information between lead agency and public?	
Was a communications/Public Relations plan already in place?	
Were dedicated personnel identified to deal with media enquiries?	
Was there an adequate flow of information between lead agency and media?	
Was a log kept of all telephone calls made and received within the lead agency?	
Were all documents/emails/faxes relating to the response catalogued and recorded?	
<b>Internal Communications</b>	
Was there an adequate flow of information between aircraft/vessels/shoreline responders/central command?	
Were there adequate tools and equipment for communications in the field?	
Did enough information pass between the different technical teams/persons (operations, logistics, etc.)?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

*15. Cost recovery and claims management (general)*

<b>Notes -</b>	
<b>Assessment Factors</b>	<b>Y/N</b>
Was a financial controller appointed at the beginning of the incident?	
Was there sufficient record keeping?	



Were there adequate templates (matrix, forms, logging) in place to facilitate record keeping?	
Had a price structure for response equipment and personnel been defined before the incident?	
Were the equipment tariffs and personnel costs considered as reasonable and justifiable when settling the claim?	
Does the national contingency plan include a section on cost recovery?	
Were the EU States Claims Management Guidelines used?	
Were other publications/manuals on pollution damage used during the incident and when compiling the dossier?	
Does the national legislation in force offer a satisfactory basis for claiming compensation?	
Were the relevant International Conventions ratified at the time of the incident?	
Were the compensation limits in place under the relevant Conventions reached?	
Was there adequate cooperation between the responsible party (e.g. ship owner or representative) and the national authorities in charge of the response operations?	
Was a financial security provided by the ship owner at an early stage of the incident?	
<b>Comments/additional information:</b>	
<b>Main assessment results (lessons learned):</b>	

### 16. General Conclusions and Recommendations (Lessons Learned)

<b>Assessment Factors</b>	<b>Y/N</b>
Was the response proportionate to the pollution threat?	
How long did the response operation last?	
Were there any new/atypical considerations that need to be taken into consideration and analysed in the future?	

What do you think should be approached differently next time?	
<i>What are the 3 most significant findings from the previous sections?</i>	<i>1.</i> <i>2.</i> <i>3.</i>
<i>What investment needs have been identified?</i>	<i>Detail</i>
<i>What training needs and for which persons/teams have been identified?</i>	<i>Detail</i>
<i>What modifications are required to the contingency plan?</i>	<i>Detail</i>