

## **Implementation of IPIECA/IOGP Good Practice Guides in Statoil – contribution to industry standardisation and collaboration**

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### **Introduction**

The IPIECA/IOGP Good Practice Guides (GPG) Series for oil spill contingency and response are divided into 5 categories; strategy, planning, people, response and impacts. Statoil as an international energy company, with high focus on safety and sustainability, has completed a systematic and thorough evaluation of the relevant GPGs with the aim to implement relevant elements and further strengthen the risk based approach in the Statoil Management System. As an outcome of this work several of the GPGs has been implemented in Statoil's Management system.

The Incident Management System (IMS) has been implemented in all Statoil's Incident Management Teams (IMT), approximately 40 in total worldwide. In addition, Statoil has during the last years developed a Global Incident Management Assist Team (GIMAT) consisting of approx. 150 trained employees, which enables us to use the resources and competence across the company and increase our ability to cooperate with other companies within emergency response, e.g joint oil spill response exercises with other large O&G companies.

To meet requirements for standardisation within the company, the Statoil Management System was updated and relevant requirements were implemented in the different business areas in Statoil. This includes the tiered preparedness and response model, the Net Environmental Benefit Analysis (NEBA)/Spill Impact Mitigation Assessment (SIMA) and sensitivity mapping for oil spill response. The development of the GPGs represent a good basis to align the industry, and we will in this paper present examples on how the GPGs have been implemented in Statoil management system and how they have been used in practice.

### **Main Results**

After being involved in the industry working group developing the Good Practice Guides, Statoil continued the work internally after the GPGs were finalised. A core group of the Statoil global Oil Spill Preparedness and Response network was used to establish a small project. The objective was to undertake a thorough evaluation of the GPGs related to the Statoil Management System, and ultimately suggest changes to ensure learning from incidents and exercised, and contribute to standardisation. Based on the improvement proposals Statoil Corporate implemented changes in the management system to further strengthen the risk based approach, with the following examples:

- Modified requirements for use of the Tiered Preparedness and Response (TPR) model and NEBA/SIMA in analysis and plans
- Strengthen specific requirements for capacity and response time for initial response
- Identified need for approval processes necessary to pre-approve response strategies
- Established risk based requirements for sensitivity mapping
- Implemented requirement to use Incident Management System in all IMTs globally
- GPG used in the development and implementation of GIMAT

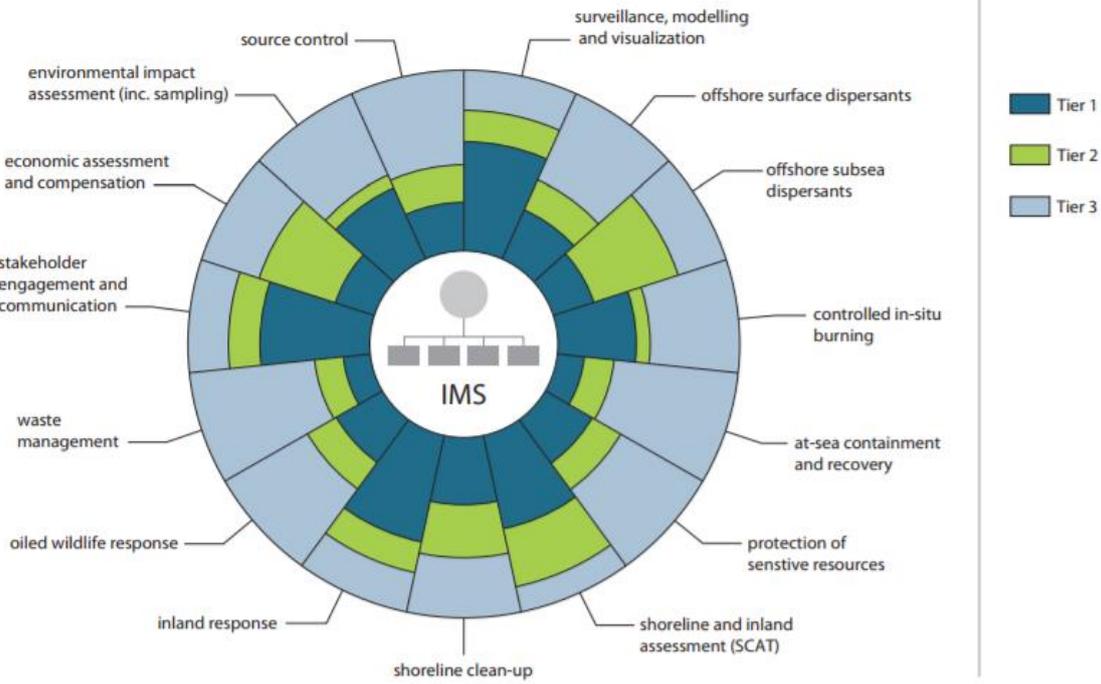
In this paper, a few examples of how the GPGs have been implemented are given.

An important change is strengthening of the requirement to ensure that the oil spill response strategies are based on a NEBA/SIMA. The industry has worked together to develop a guideline on how to perform a good NEBA/SIMA, and Statoil used this guideline with good results in preparation of for exploration drilling offshore east coast of Canada. Statoil is now working to implement NEBA/SIMA methodology as best practice within the company.

Another high impact change in the management system was the strengthening of the Tiered preparedness and response requirement to ensure that all the 15 elements in the TPR model (Figure 1) are included in the oil spill response analysis.

The approach was first used for the Johan Castberg field in the Barents Sea. The use of the TPR model ensured a systematic evaluation of need and capacity for different elements needed to respond to an oil spill. The assessment included description of necessary pre-approval processes for response strategy, e.g use of chemical dispersants (surface and subsea) and use of in-situ burning. Response times for resources in all tier levels were also described.

One of the challenges that was seen using the TPR model was whether the model should illustrate the response need for the specific activity or the response capacity available. Both approaches have advantages and disadvantages. Statoil encourage the industry to develop a common guideline on the use of the model in analysis and plans.



**Figure 1: The elements presented in The Tiered Preparedness and Response (TPR) model shall be included in the oil spill contingency planning, adapted from GPG Tiered Preparedness and Response**

To be able to meet the different contexts in areas where the O&G industry operates there is a need for a location and activity specific approach. The use of the TPR model helps to perform a systematic evaluation of the resources needed and available. Some countries have established Tier 2 resources, and other countries have very limited oil spill response resources. To ensure a robust oil spill response regardless of location, Statoil has specific requirements on capacities and response times in our Management System. Development of an oil spill response analysis requires involvement of oil spill

response specialists that advise on the need for increased Tier 1 or Tier 2 resources based on location and context. This has led to procurement or rental of heavy offshore oil spill response equipment mounted on vessels, and in some projects additional equipment/resources available on the onshore base in cases where the Tier 2 resources are limited. Statoil continually seeks opportunities to cooperate with other O&G companies for sharing oil spill response resources, or use of established Tier 2 agreements in countries. We are actively attempting to influence authorities to develop or change regulations to support cooperation on emergency response including oil spill response.

The GPG for Incident Management System was the basis for the transition of all Statoil IMTs to an IMS structure. To support and ensure a robust emergency preparedness and response in the company, Statoil has developed a Global Incident Management Assist Team (GIMAT), consisting of approx. 150 people, that will assist the local IMTs worldwide. Statoil has established a Corporate Global Support unit that provide services within emergency preparedness and response, including training and exercise on all organisational levels, to all business areas in Statoil to ensure standardisation and common approach. This is an important contribution to achieve Statoil's ambition to ensure a robust, competent and capable organisation able to respond to all incidents.

## **Conclusion**

Statoil has experienced that strong and clear requirements for oil spill response in the Statoil management system enable us to achieve robust oil spill response solutions in different parts of the world. Our specific requirements for planning and capacity are used by the company's oil spill response specialists to give advice to both exploration and development projects. This contributes to standardisation and common approach to oil spill response planning globally, and to support and strengthen achievement of a robust oil spill response solution in combination with access to sufficient personnel through the GIMAT.

Implementation of the Good Practice Guides increases the possibility of cooperation and potentially lead to same level of oil spill preparedness level across the industry.

Statoil would like to learn more on how other companies have implemented and used the GPGs in their management system. Standardisation and collaboration within the O&G industry would benefit the industry as well as the regulators. Statoil works to promote enhancement of this in all arenas where we meet our peers.

## **References**

Good Practice Guides – [www.oilspillresponseproject.org](http://www.oilspillresponseproject.org)

Statoil Management System