

Governing documentClassification: **Internal****Hywind Scotland Emergency Notification Plan - PMS-021**

Health, safety and environment (HSE)
Project Manual, PM408, Final Ver. 1, valid from 2014-09-01

Owner: SSU Leader

Validity area: MPR RE WPR Hywind Scotland/On- and offshore

APPROVAL OF PUBLISHING:**Approve governing documentation**
(MS01, KC0001 (WR0001))

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CONFIRMATION OF ROLL-OUT:**Verify that governing documentation has been launched according to the implementation programme**
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| Owner | SSU Leader | Anne Marit Hansen | | |
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1 Objective, target group and provision

Provision is SF700 and WR 2296 Emergency Response Plan with MPR Addendum.

2 Contents

In the survey and preconstruction phase of Hywind Scotland all contractors are expected to have their own Emergency Preparedness plan for the work to be undertaken. A bridging document between the Contractor and Statoil's Emergency Preparedness plan has to be established before any work can take place. The key element in the bridging document is the notification plan to create a link between the contractor's Emergency response system (Line 1 and Line 2) to Statoil Line 2 and Statoil Line 3, Main Alarm & Notification Center (MANC). Another important aspect is to check that correct set-up of notification to public 1 Line responders and subsequent reporting requirements to the Authorities is reflected in the contractors plans and the bridging document.

Statoil will be the principal contractor for the offshore construction. For onshore work and for survey work the contractor are assigned the principal contractor task.

Statoil will act as Client (ref the [CDM](#) regulation) and the role of Statoil in case of emergency will be to manage Line 3 and to manage Line 2 HR and UK media issues locally in the UK.

2.1 Bridging Notification chart

The notification chart below illustrates a typical set-up for emergency notification for a survey vessel.

Notification of Statoil will happen from the Client Rep (Vessel rep) onboard to MANC. If the vessel rep is not able to notify Statoil this will be done by the Contractor Emergency Response Team. Notification to Statoil Main Alarm and Notification Center shall be done for all emergency situations, all situations that can lead to emergencies, all serious incident (i.e. red incidents in a Statoil context even if an emergency situation is avoided).

In Figure 1 a generic bridging notification chart is presented for an offshore contractor. For an onshore contractor, Figure 2, this will be similar but Vessel Master is replaced with Site Manager at the Principal Contractor and the MRCC is replaced by Police and Medical Emergency / Doctor. For on-shore accidents in the UK the RIDDOR reporting applies.

The Emergency set-up for work prior to Statoil take the role as Principal Contractor (ref CDM regulation), the notification is planned as followed, illustrated in Figure 1 (offshore) and Figure 2 (onshore).

Notification from Line 1 = The accident site will go to Line 2 = ship owners emergency response team or on-shore contractors emergency response team / technical and HR support team. When Statoil have a local Client Rep/Vessel Rep¹ notification to MANC will be done by the CR.

¹ On most contracts Statoil have a Client rep / Vessel rep

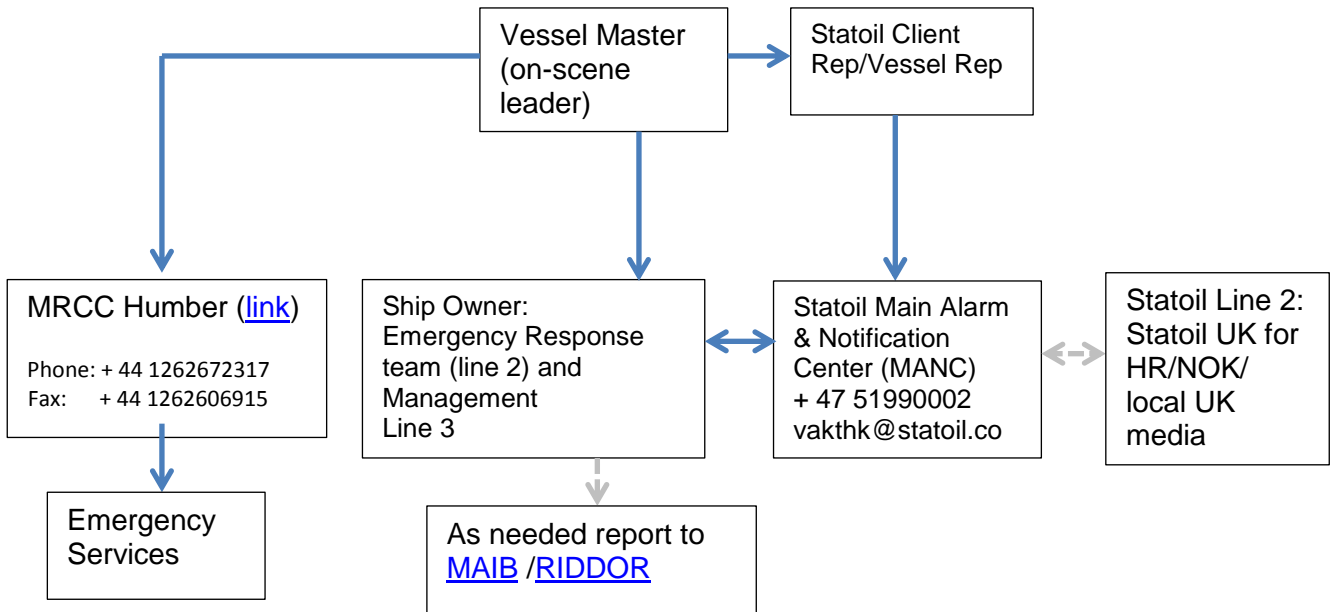


Figure1: Generic Bridging Notification chart of offshore /marine operations pre-construction.



For onshore emergencies the notification in UK is:

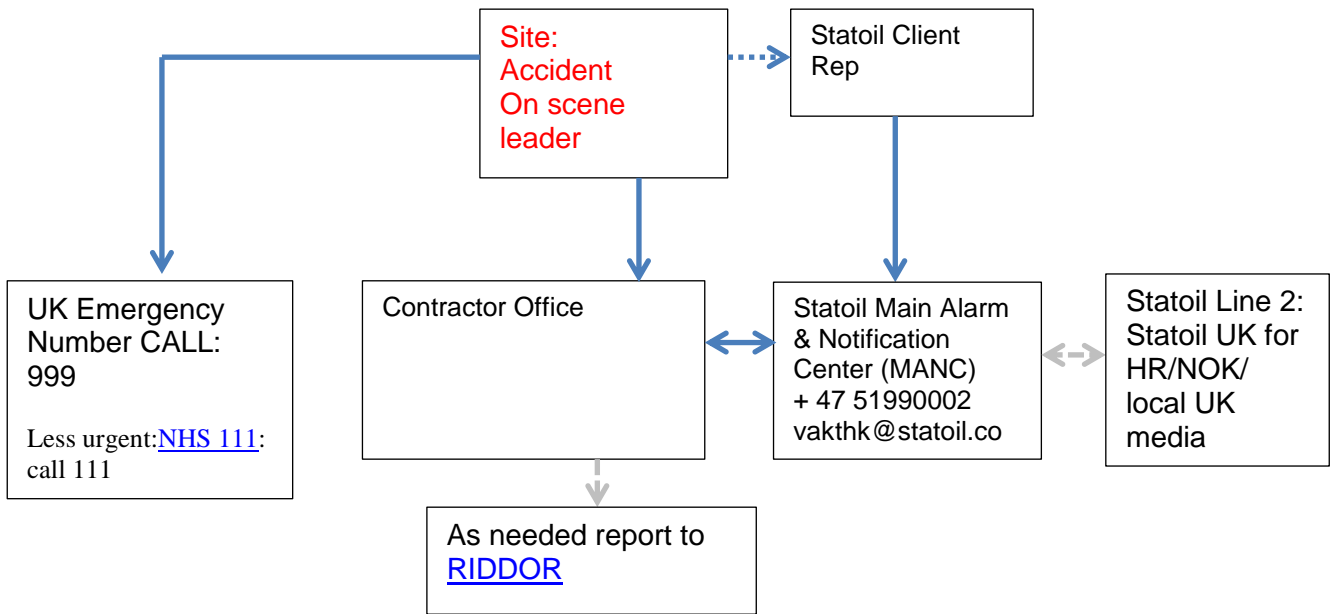


Figure 2: Generic Bridging Notification chart of onshore activities.



In Figure 3, Statoil notification chart is presented, source WR2296 - Emergency response & Crisis management plan (line 3) in the Statoil Group.

3.1 NOTIFICATION OF AN EMERGENCY SITUATION

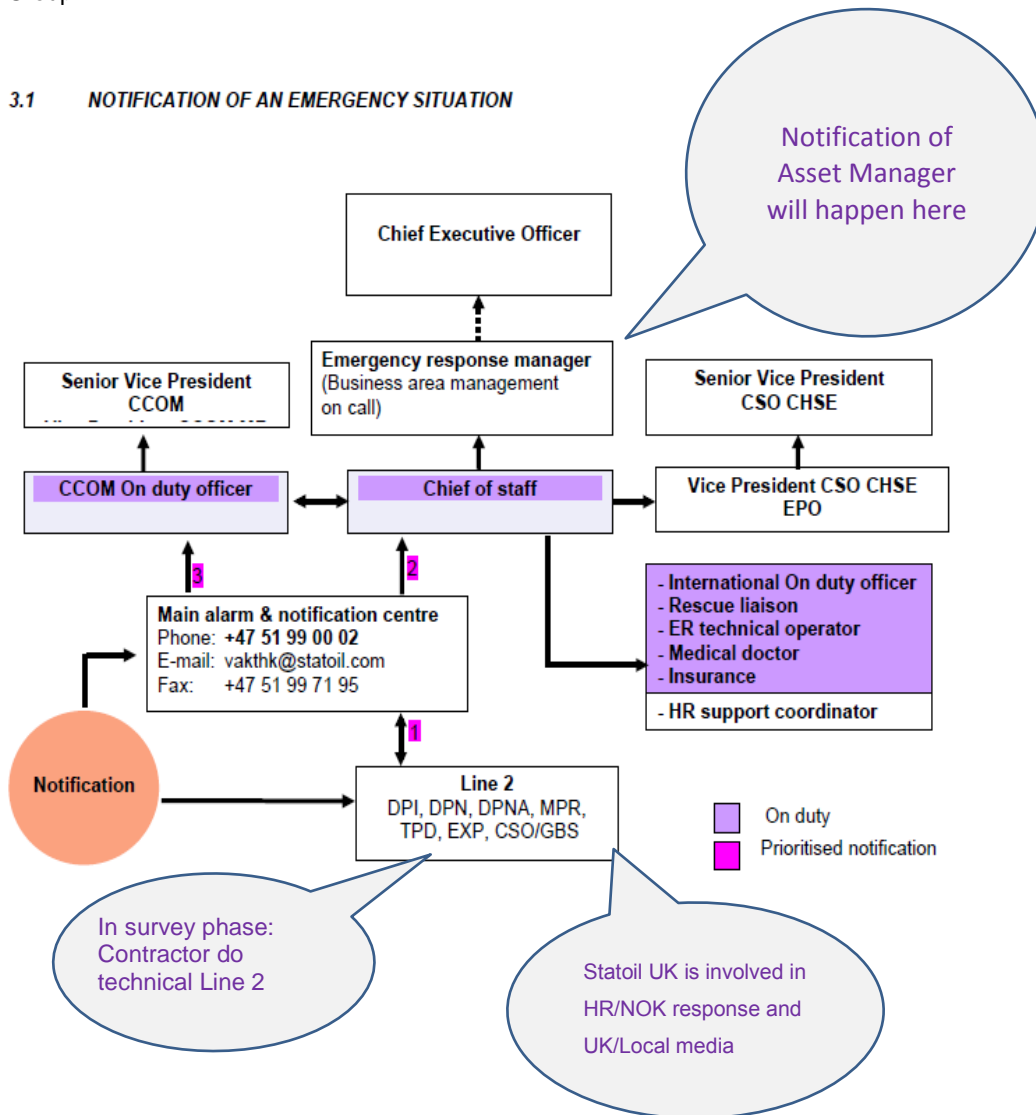


Figure 3: Statoil notification chart, source WR2296 - Emergency response & Crisis management plan (line 3) in the Statoil Group.

3 Defined situations of hazards and accident (DSHA)

Preliminary defined situations of hazards and accidents (DSHA) have been developed based on an emergency preparedness analysis (EPA) for offshore wind and Hywind Demo. The final set of DSHA will be concluded prior to Statoil taking the Principal contractor role.

The DSHA's is a selection of hazardous and accidental events that will be used for the dimensioning of the emergency preparedness in the construction and operation phase. An accidental event is an event or chain of events that may cause loss of life, or damage to health, the environment or assets. The emergency preparedness analysis (EPA) is an analysis which includes establishment of DSHA, establishment of performance standards for emergency preparedness and their fulfillment and identification of emergency preparedness measures. In this stage we have solely developed the preliminary DSHA for Hywind Scotland:

- DSHA #1 Severe personnel Injury – Evacuation from installation
- DSHA #2 Man overboard



- DSHA #3 Environmental damage to sea or land
- DSHA #4 Fire and explosion
- DSHA #5 Ship collision
- DSHA #6 Extreme weather conditions
- DSHA #7 Sabotage
- DSHA #8 Severe lifting accident
- DSHA #9 Mooring failure
- DSHA #10 Accidents during transport of personnel to/from work site

It should be noted that some DSHA's are anticipated involving accidents which based on experience are likely to cause significant damage to personnel, the environment or assets during installation. Further work with regards to the DSHA's and the full emergency response capability will be the subject to the separate emergency preparedness analysis done prior to

4 Facts about Hywind Scotland

The purpose of this fact sheet is to provide a general description of MPR RE WPR Hywind Scotland. A short description of the business unit and their main activities

Statoil ownership = 100%.

Stakeholder Analysis - WPR Hywind Scotland
 Main internal customer's: MPR RE
 Internal Stakeholder: Statoil ASA; MPR, TPD PRO / TEX SMT MMG
 Main internal partners, e.g. main Contractors: not decided
 Most important market / customers: SSE (Southern & Scottish Energy)
 Owners: Statoil
 External Authorities: The UK Crown Estate and Marine Scotland

4.1 Project Background and Description

Statoil ASA (Statoil) is proposing construction of an offshore wind test project, the "Hywind Scotland Project" (Project), in UK national waters off the coast of Scotland. The Project, located approximately 25 km East of Peterhead and would consist of up to five 6-megawatt (MW) floating wind turbines with a nameplate capacity of 30MW producing clean renewable energy.

The floating wind turbines would be anchored to the seabed with a system of three moorings. Each turbine will also have electricity inter-array 34.5kV cables extending from the turbines to the seabed. A buried submarine 34.5kV export transmission cable from the Project turbine array would deliver power from the Project to an interconnection point (substation) with the 33kV electric transmission grid in Peterhead Area. Additional infrastructure may be required for the transmission cable from the landfall site to the onshore substation.

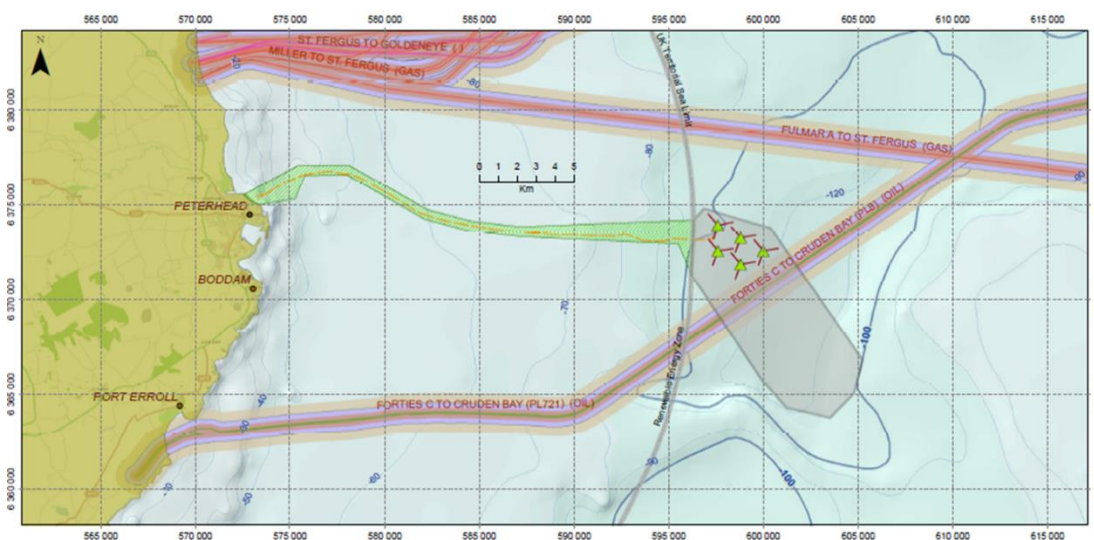


Figure 3: Survey Areas and Location of Project



5 References

SF700 Emergency preparedness and response
SF121 Perform safety risk management
WR 2296 Emergency response 3rd line
WR1920 MPR Emergency Preparedness

Hazid to DG3 for Dudgeon Wind Farm - PM408-DD-024-001

HSE UK, <http://www.hse.gov.uk/riddor/>

MAIB, <http://www.maib.gov.uk/home/index.cfm>

MCA, <https://www.gov.uk/government/organisations/maritime-and-coastguard-agency>

MRCC, <http://www.nidirect.gov.uk/maritime-rescue-coordination-centres>

