



G+ BOARD MEMO

Subject: Quick Wins - Emergency Response Plans and Response Procedures

To	G+ Board		
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Introduction

In response to requests from some G+ members, key external stakeholders and as part of the research to identify “quick wins” to improve H&S performance in the offshore wind industry, an assessment of G+ members Emergency Response Plans (ERPs) and Readily Accessible Emergency Response Procedures (Emergency Response cards) has been undertaken to ascertain whether any standardisation on these items can be applied across the G+ membership.

The provision of an Emergency Response Co-operation Plan (ERCoP), which is a regulatory requirement of the MCA in the UK (and likely a regulatory requirement in other operating regions) has been excluded from this paper as the content of these plans are documented in MCA MGN 371.

This proposal has been developed as a number of G+ members have already developed ERPs which are structured in a similar way and contain similar content. Through recent industry efforts (e.g. the IOE-R developed by RUK) the industry has already demonstrated good practice on emergency response and this proposal can add to and compliment what has already been produced. It is not the intent of this proposal to mandate a prescriptive structure and content of ERPs upon G+ members, rather, it is offered as a suggested structure/template with a set of scenarios which can be added to based upon company/ site specific requirements.

ERPs

ERPs define how offshore wind farm operators will respond to any emergencies involving offshore wind operator personnel (or contractors). An ERP defines how emergencies are reported from where they occur, the local action required, the involvement of the emergency services and what roles and responsibilities are taken up and by who. An ERP covers personnel working:

- During the transit to/from the O&M base and the offshore wind farm
- During the transit to/from other ports and the offshore wind farm
- Within any area of the offshore wind farm
- At an operational Wind Turbine Generator (WTG), offshore substation, onshore substation or met mast

Emergency Response cards

The emergency response cards contained within an ERP are scenario based and designed to be simple to use and to provide clear information on the correct procedures. They assist decision making by being in an easily

understandable format to support personnel faced with emergency situations, and are presented as a series of bullet points indicating actions required by specific personnel.

The purpose of these cards are to:

- Ensure that the alarm is raised and that appropriate parties are alerted
- Summon assistance from appropriate sources
- Provide relevant information to those providing assistance
- Ensure that the correct initial actions are taken at the site of the emergency.

Recommendation

A common format for ERPs can be seen across a number of G+ members, where existing ERPs are in the main structured into the following sections which then include specific emergency response scenarios:

- Installations (WTG / met mast)
- Onshore substation
- Offshore substation
- Vessels
- 3rd party
- All

This seems to be a clear and easy to use format for ERPs, and it is therefore recommended that this elements are put forward as suggested good practice for the offshore wind industry.

Consequently at the next planned revision, G+ members ERPs should be updated to incorporate the suggested template/structure and elements in Annex A. This would contain a minimum number of agreed scenarios which G+ members would be able to add to if necessary e.g. for aircraft or other site specific scenarios.

A number of G+ members use a common format for Emergency Response cards, and these have been received favourably by supply chain companies and contractors working on offshore wind farms.

It is therefore recommended at the next planned revision, G+ members develop emergency response cards for their agreed scenarios in the suggested ERP template using existing information. G+ members will also be able to add to the number of scenarios if needed due to site specific activities.

Annex A: Template ERP layout/structure

SECTION A - GENERAL		Page No.
1	Introduction and scope	
2	Wind farm chart and coordinates	
3	Incident notification	
4	Initial notification	
5	List of Contacts	
SECTION B – EMERGENCY PROCEDURES		
Installation (WTG / Met Mast)	Evacuation from installation	
	Fire on installation	
	Evacuation from Transition Piece	
	Stranded by Weather	
	Electrical accident	
	Thunder and lightning / electrical storm	
	Helicopter Rescue (if applicable)	
	Escape from the Nacelle	
	Marine Pollution from Installation	
Vessels	Man Overboard from Vessel in Dock	
	Man Overboard From Vessel	
	Injury to Person on Vessel	
	Fire on Vessel	
	Marine Pollution From Vessel	
	Incapacitated Crew Boat	
	Collision	
Third Party	Unexploded Ordnance	
	Vessels Not Under Command	
	SAR Assistance from the Wind Farm	
Onshore Substation	Fire at installation	
	Thunder and lightning / electrical storm	
	Electrical accident	
	Pollution at installation	
	Hazardous gas release	
Offshore Substation	Evacuation of Personnel	
	Fire at installation	
	Thunder and lightning / electrical storm	
	Electrical accident	
	Pollution at installation	
	Hazardous gas release	
	Stranded by weather	
All	Emergency ashore	
	Bomb threat	
	Hypothermia	
SECTION C –Marine Base Emergency Plans		
Fire at Marine Base		
SECTION D - Supplementary Information		
SECTION E - References		
SECTION F - Appendices		

Annex B: Example - emergency response cards

INJURY TO PERSON ON VESSEL		Vessel Contingency									
Person	Action										
Casualty Boat	<ul style="list-style-type: none"> • Render first aid to casualty • If needed seek medical advice via Coastguard¹ • Inform Marine Coordinator (MC) of incident • Liaise with coastguard to determine whether: <ul style="list-style-type: none"> - Vessel should proceed to port; or - Further coastguard assistance should be requested 										
Other Vessels	<ul style="list-style-type: none"> • Maintain listening watch on VHF and monitor situation • Provide assistance as requested by casualty vessel, or coastguard. 										
Marine Coordination	<ul style="list-style-type: none"> • MC to inform shift supervisor of incident • Initiate and maintain event log • Maintain a listening watch coordinate with coastguard if not already aware • Ensure arrangements are in place for reception and treatment of casualty ashore • Hand over personal / medical details to emergency services • Forward any available personal details on casualty to coastguard 										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Service</th> <th style="width: 33%;">Contact</th> <th style="width: 33%;">VHF</th> </tr> </thead> <tbody> <tr> <td>Coastguard¹</td> <td></td> <td></td> </tr> <tr> <td>Marine Coordination</td> <td></td> <td></td> </tr> </tbody> </table>		Service	Contact	VHF	Coastguard ¹			Marine Coordination			
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Marine Coordination											

¹ If required.