




G9 Offshore Wind Health & Safety Association

Stephen Rose
Head of Offshore Wind Generation, SSE
G9 Focal Group Leader





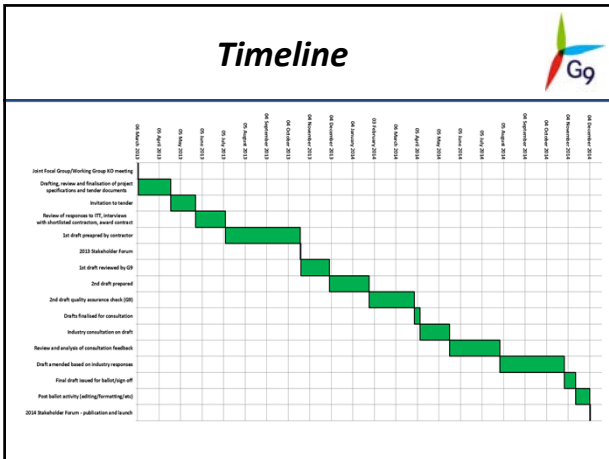
- Work of the Focal Group
 - Development of Industry Good Practice Guidelines
 - Guideline Implementation
 - Collation of SHE Data / Knowledge sharing

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Industry Guidelines



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Consultees

Organisations approached through consultation process*:


- Berufsgenossenschaft Handel und Warenverteilung (BGHW)
- Bundesamt für Seeschifffahrt und Hydrographie (BSH)
- Danish Maritime Authority (DMA)
- Danish Wind Industry Association (DWIA)
- European Agency for Safety and Health at Work (OSHA)
- European Wind Energy Association (EWEA)
- Global Wind Organisation (GWO)
- Health & Safety Executive (HSE)
- Institute of Marine Engineering, Science & Technology (IMarEST)
- International Jack-up Barge Association (IJUBOA)
- International Marine Contractors Association (IMCA)
- International Maritime Organization (IMO)
- Marine Accident Investigation Branch (MAIB)
- Maritime and Coastguard Agency (MCA)
- National Workboat Association (NWA)
- Norwegian Wind Energy Association (NWEA)
- RenewableUK (RUK)
- Stiftung OFFSHORE-WINDENERGIE
- The Crown Estate (TCE)
- VGB PowerTech (VGB)

**Note: Other supply chain companies / offshore wind developers also invited to comment on the consultation papers*

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Feedback

- x33 submissions (individual/company/ trade association) during the consultation feedback (including G9 members)
 - Work at height (198 comments)
 - Marine operations (366 comments)
 - Lifting operations (317 comments)
- Work since June responding to consultation comments and updating guidelines



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Implementation

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Implementation

- Work shops
- Short and Long Term actions
 - Working at Height
 - Management of Service Vessels
 - Lifting Operations
- Development of G9 “Golden Rules”
- Move to Implementation of Guidelines

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Working at Height

ID	Area	Description of the measure
ST-1	Definitions	Develop a common G9 definition of a “dropped object”. Develop a common G9 matrix for determining released energy and the risk associated with dropped objects.
ST-2	Tools dropping	Make a common G9 set of rules (“rules for tools”) to be used for working at height.
ST-3	Radio dropping	Introduce overalls with zip/velcro pockets for storing of radios and mobile phones.
ST-4	Work clothing	Use a securely clipped on light source for the safety helmet mounted work light.
ST-5	Transfer	Make a common G9 matrix of different combinations of transfer of personnel and equipment.
ST-6	Transfer	Populate the common G9 matrix with agreed requirements for safe transfer of personnel and equipment.
ST-7	Access and egress	Decide on a common G9 practice for whether technicians should be attached to a fall-arrest system during transfer to/from vessel, in response to the HSE UK recommendation.
ST-8	Rescue training	Establish G9 forum for sharing experience, coordination and planning of rescue exercises.
ST-9	Rescue path	Make it a G9 golden rule to always plan evacuation by considering the full rescue path and casualty care.
ST-10	Personal equipment	Minimum 275N buoyancy lifejackets should be the mandatory requirement for technicians working in offshore wind.

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Service Vessel Management



ID	Area	Description of the measure
ST-1	Auditing bodies	Use the IMCA 189 audit MSW (electronic version) for service vessel audits.
ST-2	Manning	Start developing a safety case to assess the required manning of small service vessels with regards to relevant risks and applicable procedures.
ST-3	Competence and training	Develop a training requirement matrix for small service vessel crew in cooperation with the key stakeholders such as IMCA, MWMA, MAIB, MCA, IMO and TCE.
ST-4	Competence and training	Make a STCW Master's certificate requirement for new contracts from 1 st January 2016.
ST-5	Competence and training	Make a STCW Master's certificate requirement for existing contracts for 1 st January 2017.
ST-6	Maintenance strategy	Require that vessel operators maintain an active and robust maintenance strategy.
ST-7	Maintenance strategy	Vessel operators should record up-time for the purpose of benchmarking.
ST-8	Stranded personnel	Define stranded personnel on wind turbine as non-emergency and make the definition known to relevant parties such as the RNLI, MCA and MRCC.
ST-9	Passengers	Establish as a G9 golden rule that passengers are not allowed on the bridge during operations.
ST-10	Helicopter transport	The G9 marine operations WG should cooperate with the G9 helicopter operations WG in order to align their respective requirements for transporting personnel.

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Implementation




- Audit Compliance and Implementation early 2015
- Opportunity for Supply Chain and Interested Parties to comment back to G9.
- Expectation that next revisions will be initiated mid 2016.

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Lifting Operations

- Draft document prepared
- Industry feedback is that sufficient standards and guidelines already exist
- G9 will now strive to identify the best practices that do exist and revise the document.
- Still essential we improve record in this high risk area.
- Publication of high level report in Q1 2015



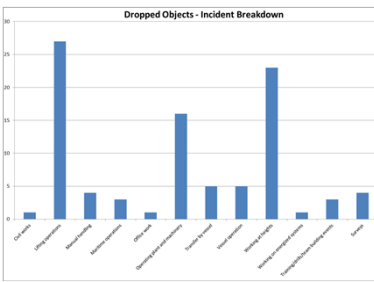
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New data captured in 2014

- Dropped object incidents
- HiPo incidents
- Incidents requiring emergency response / medivac

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Dropped object incidents




Dropped Objects - Incident Breakdown

Dropped Object Incident	Total
Crane	1
Access ladders	5
Transition piece area	2
Yaw gear splice	2
Access	1
Transition external	1
Spindle	1
Transition piece area	1
Turbine tower	1
Vessels - small (<20 m)	1
Medical Treatment Support	1
Subsidiary Quay and personnel	4
Water pits	1
Access ladders	5
Transition external	2
Hardware, Quay and personnel	4
Hull and blades	8
Yards	8
Office	2
Substation work and cable areas	3
Transition piece area	13
Turbine assembly area	2
Turbine tower	17
Vessels - large (>20 m)	2
Vessels - small (<20 m)	5
Workshop	3
Workshop	2
Total	93

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Concluding remarks 

- 2014 Summary
 - Guidelines
 - Stay focussed and pro-active
 - Inclusive of other interested parties
 - Remember reason for G9

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Thank you
Any questions?

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