G+ Global offshore wind health and safety organisation

2016 incident data report

G+ Global Offshore Wind
Health & Safety
Organisation

www.gplusoffshorewind.com

About the G+ Global offshore wind health and safety organisation

The primary aim of the G+ is to deliver world class health and safety performance in the offshore wind industry. To achieve this, senior executives of the G+ member companies have committed resources from their companies, and have also met under the auspices of the G+ Board, to actively lead the industry in finding solutions to safety challenges faced by offshore wind projects throughout their lifecycle, from design to development through construction and in operation.

Through the sharing and analysis of health and safety incidents provided by G+ member companies, an evidence-based understanding has been developed of the risks encountered during the development, construction and operational phases of a wind farm project. This information is being used by the G+ to identify the risks in the offshore wind industry, allowing the group's work to be focused in areas of higher risk exposure.

The health and safety incident data shared amongst G+ members in 2016 is presented in this report.

Contents

Introduction from the Chairman

The safety agenda remains top priority of all the G+ Global offshore wind health & safety organisation (G+) member companies. With this in mind, I am delighted to present our 2016 annual incident data report. Several important milestones were achieved by the G+ in 2016: we appointed our first General Manager following the Health & Safety Executive (HSE) Offshore Wind Leaders' event in November 2015, which has assisted greatly with our mandate to take on a more visible industry leadership role on health and safety issues. I was keen to demonstrate to industry how the G+ as a collective can influence health and safety performance, so in 2016 the Focal Group prepared several "Quick Win" items which can be immediately implemented by member companies. I was proud to launch these with G+ colleagues at our annual Stakeholder Forum in December 2016.

On the content of our 2016 incident data report: it provides an overview of the health and safety performance of the G+ members' offshore wind activities across Northern Europe, and continues to provide the benchmarking metrics LTIF and TRIR which were first introduced in the 2014 report. We have made available anonymised incident data as an Annex to this report for further independent analysis. Our commitment to openness and transparency is a fundamental aspect of the G+, and we strongly believe that sharing our methods and data is necessary to improve health and safety performance across the offshore wind industry.

Based on learnings from this and previous reports, in 2017 there will be changes to the type of information we collect. I am pleased to highlight that further information on the direct and underlying causes of lost work day incidents will be collected throughout the G+ and feature in the 2017 annual report. There is a real need to understand the organisational causes of incidents if there is to be significant improvement across the industry.

Readers of this report will recall that a few areas of higher risk were identified in the 2015 data, including manual handling and dropped object incidents (both with high potential consequences recorded in several cases). The G+ Focal Group used the 2015 data to create detailed work proposals on these topics. I and other members of the Board supported these and authorised funding to deliver on these work streams. Additionally, the Board approved updates to the 2014 Working at Height and Small Service Vessel guidelines to ensure that they remain fit for purpose and valuable to industry.

In conclusion, I would like to say that 2017 will be an important year for the G+, and also the wider offshore wind industry, as we look to reduce the number of incidents occurring on our sites in construction and operation. The industry is becoming much more competitive and driving efficiencies in many areas, which is reflected in recent strike prices for new offshore wind farms. However, the safety agenda must remain at the forefront and not be relegated to the side-lines. Through our own work programme, those of other organisations, collaboration with key stakeholders and our partnership with the Energy Institute, our focus continues to be on improving the health and safety performance of our own companies and the industry as a whole.

Jonathan Cole
Chairman – G+ Global Offshore Wind Health and Safety Organisation
Managing Director – Offshore
ScottishPower Renewables

Overview of 2016 incident data report: sites and method of work

Overview of G+ member sites

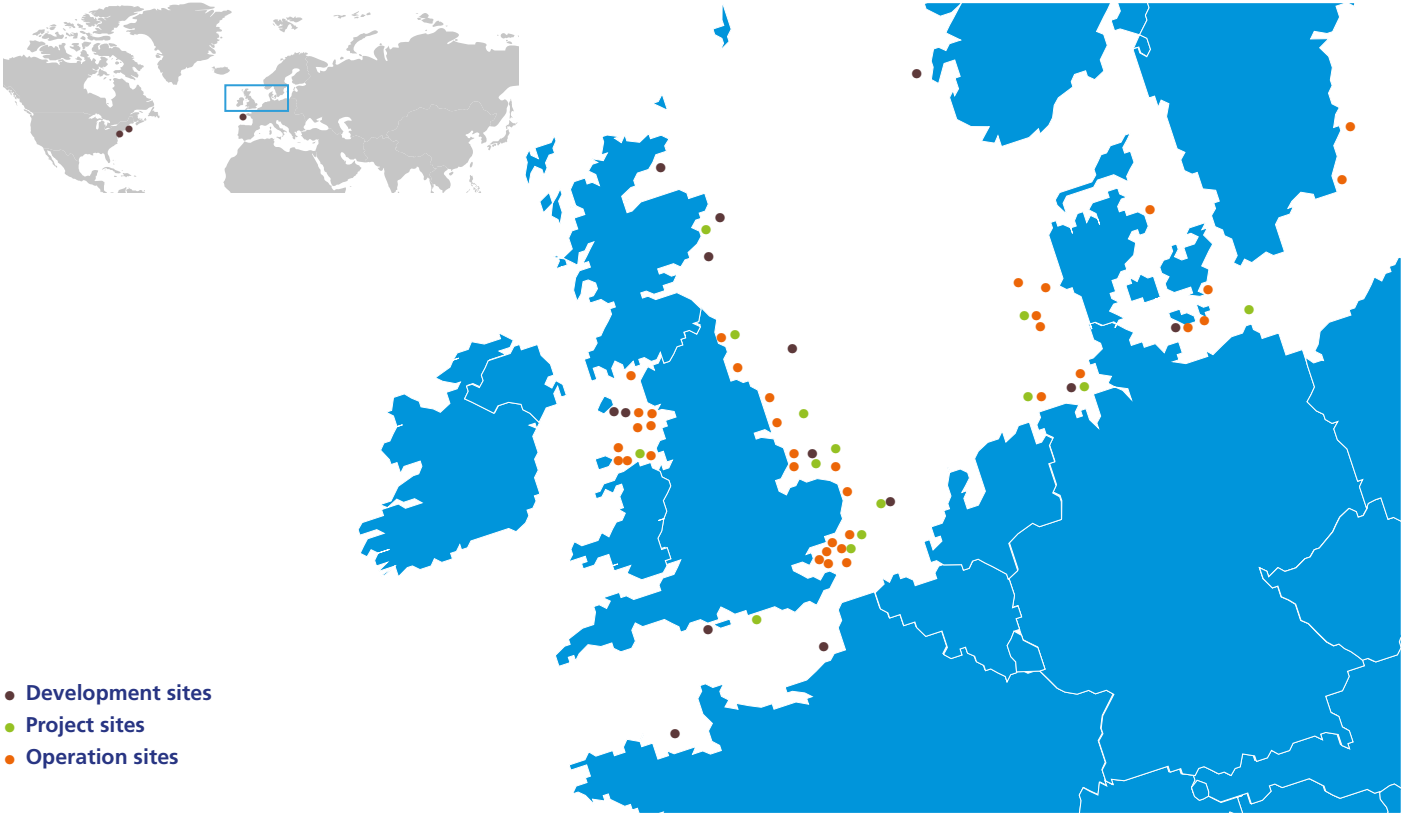


Figure 1: G+ member sites that have provided incident data

Method of work

Throughout 2016, the data from each quarter have been provided by G+ members and analysed internally by the EI, with a quarterly report produced for review by the G+ Board and G+ Focal Group. Data have been collected and categorised into the development, project and operational phases of an offshore wind farm project. For further insight on the incident data categorisation (work process, incident area, consequence, etc.) please see Annexes A and B.

2016 highlights

2016: key facts and figures

Key facts

987	reported incidents
0	**fatalities**
43	total **lost work day** incidents
17	incidents resulting in an **emergency reponse** or **medical evacuation**
623	incidents occurred on **operational** sites
353	incidents occurred on **project** sites
4	incidents occurred during **development** work

Work process

218	incidents during **marine operations***
133	incidents during **lifting operations**
134	incidents when **working at heights**
74	incidents occurred when **operating plant and machinery**

Incident area

420	incidents occurred in the **turbine** region
284	incidents occurred on **vessels**

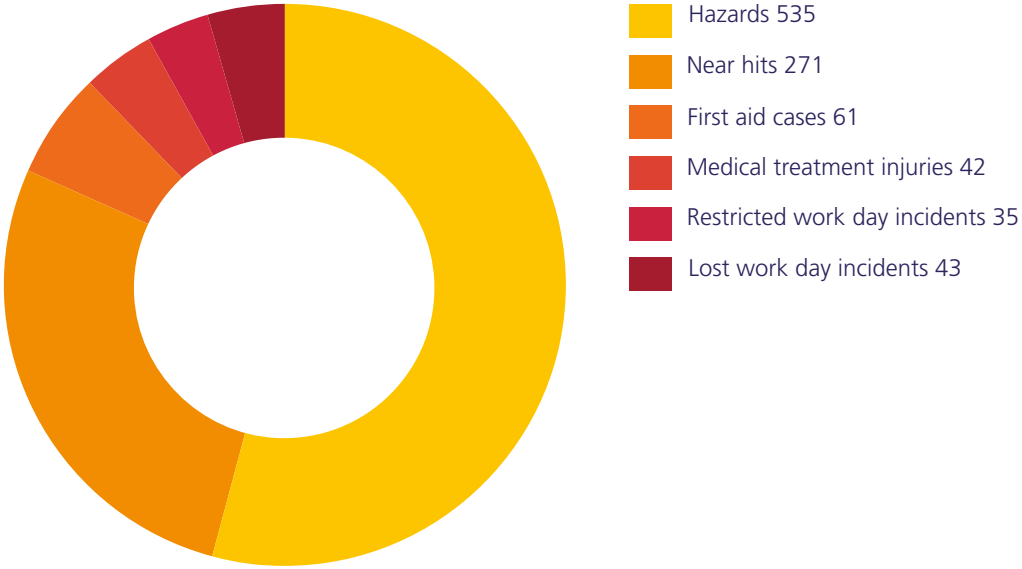


Figure 2: 2016 incident consequence summary

* For further analysis of marine operations see page 13

Safety statistics for 2016

Hours worked

	2016 (2015)	Relative to 2015
Hours worked*	**21 726 000** (21 220 000)	+ 2%

Industry benchmarking metrics

	2016 (2015)	Relative to 2015
Fatalities	**0** (0)	No change
Lost work day incidents	**43** (41)	+ 5%
Restricted work day incidents	**35** (32)	+ 9%
Medical treatment injuries	**42** (54)	-22%
Total	**120** (127)	-6%
Total recordable injury rate	**5,52** (5,99)	**-8%**
Restricted work injury frequency	**1,61** (1,51)	**+ 6%**
Lost time injury frequency	**1,98** (1,93)	**+ 3%**

Total recordable injury rate (TRIR)

The number of recordable injuries (fatalities + lost work day incidents + restricted work day incidents + medical treatment injuries) per 1 000 000 hours worked.

Restricted work injury frequency (RWIF)

The number of recordable injuries (restricted work day incidents) per 1 000 000 hours worked.

Lost time injury frequency (LTIF)

The number of recordable injuries (fatalities + lost work day incidents) per 1 000 000 hours worked.

* Hours worked rounded up to nearest 10 000.

Emergency response or medical evacuation incidents

Summary – breakdown by incident area and work process

In 2016, there were 17 emergency response or medical evacuation (ERME) incidents reported, 7 on operational sites and 10 on construction sites. 47% of all ERMEs were from a vessel, 24% from a turbine, and 23% from an offshore substation (see Figure 3). Of all the incidents which resulted in an ERME, 41% were classified as high potential (see Figure 4). Data shows that most ERME incidents took place when the injured person was undertaking manual handling activity (see Figure 5).

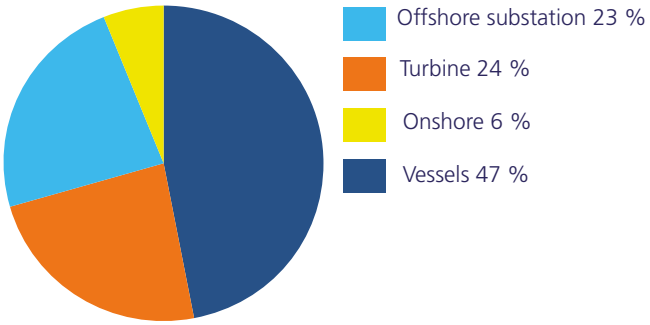


Figure 3: Incident area from which the ERME took place

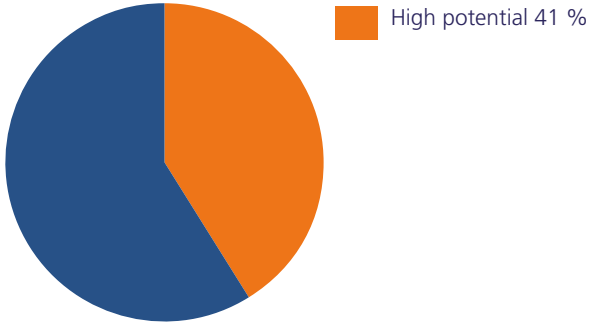
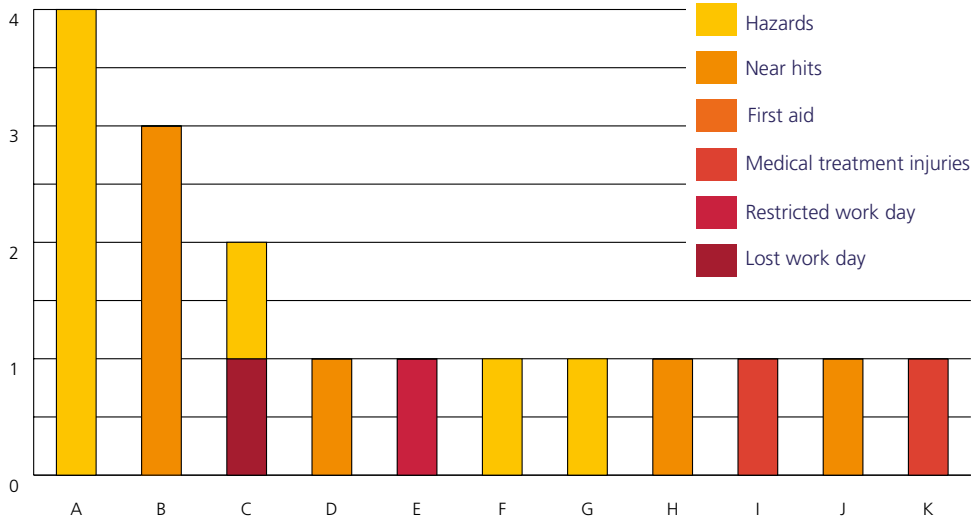


Figure 4: Percentage of ERME incidents which were classified as high potential



Key

A	Manual handling
B	Working with chemicals and hazardous substances
C	Working at heights
D	Other
E	Catering/cleaning
F	Training/drills/team building events
G	Lifting operations
H	Hot works
I	Working with hand tools/power tools
J	Marine operations*
K	Operating plant and machinery

Figure 5: Work process breakdown of ERME incidents by the actual consequence of the incident

* For further analysis of marine operations see page 13

Lost work day incidents

Summary – breakdown by incident area and work process

There were 43 lost work day incidents reported in 2016. 39% (17) of these incidents occurred on vessels, 33% (14) occurred on a turbine, 28% (9) onshore, which includes 7% (3) on onshore substations (see Figure 6).

When analysing the work process data, the highest number of lost work day incidents occurred during manual handling (14), working with hand/power tools (5), working at height (4) and training/drills/team building events (4) (see Figure 7). Whilst these data show the actual consequence, it is also important to recognise that 8 of the 43 lost work day incidents were also classified as high potential by G+ members.

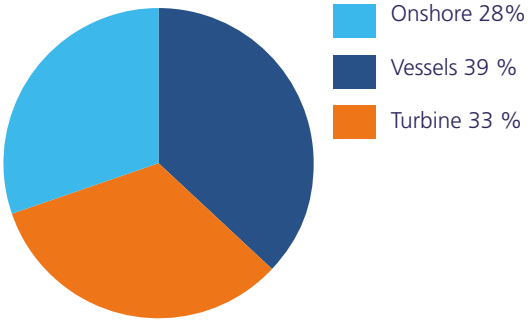
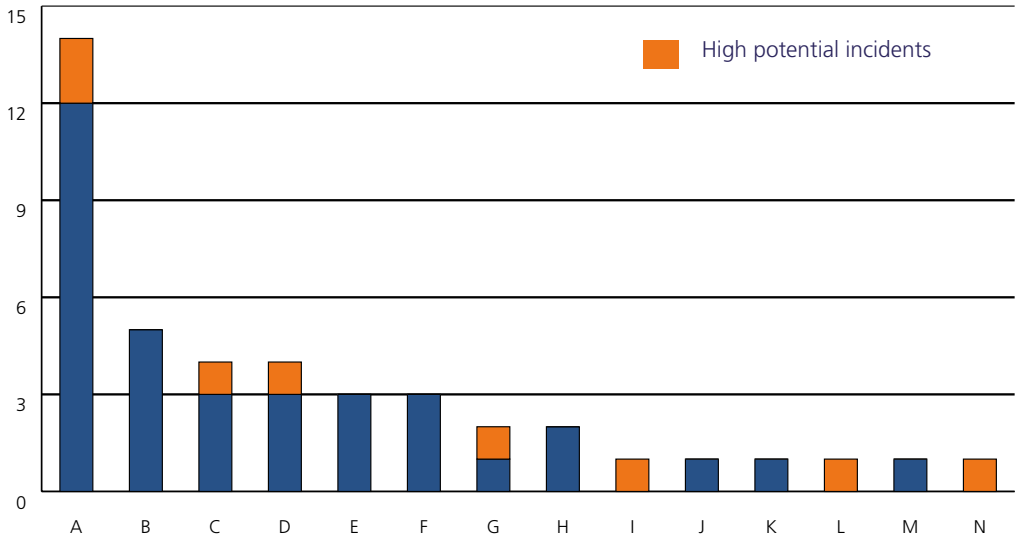


Figure 6: Lost work day – incident area breakdown



Key

- A Manual handling
- B Working with hand tools/power tools
- C Working at heights
- D Training drills/team building events
- E O&M building maintenance
- F Marine operations*
- G Civil work
- H Office work
- I Business travels
- J Operating plant and machinery
- K Working in confined spaces
- L Surveys
- M Other
- N Lifting operations

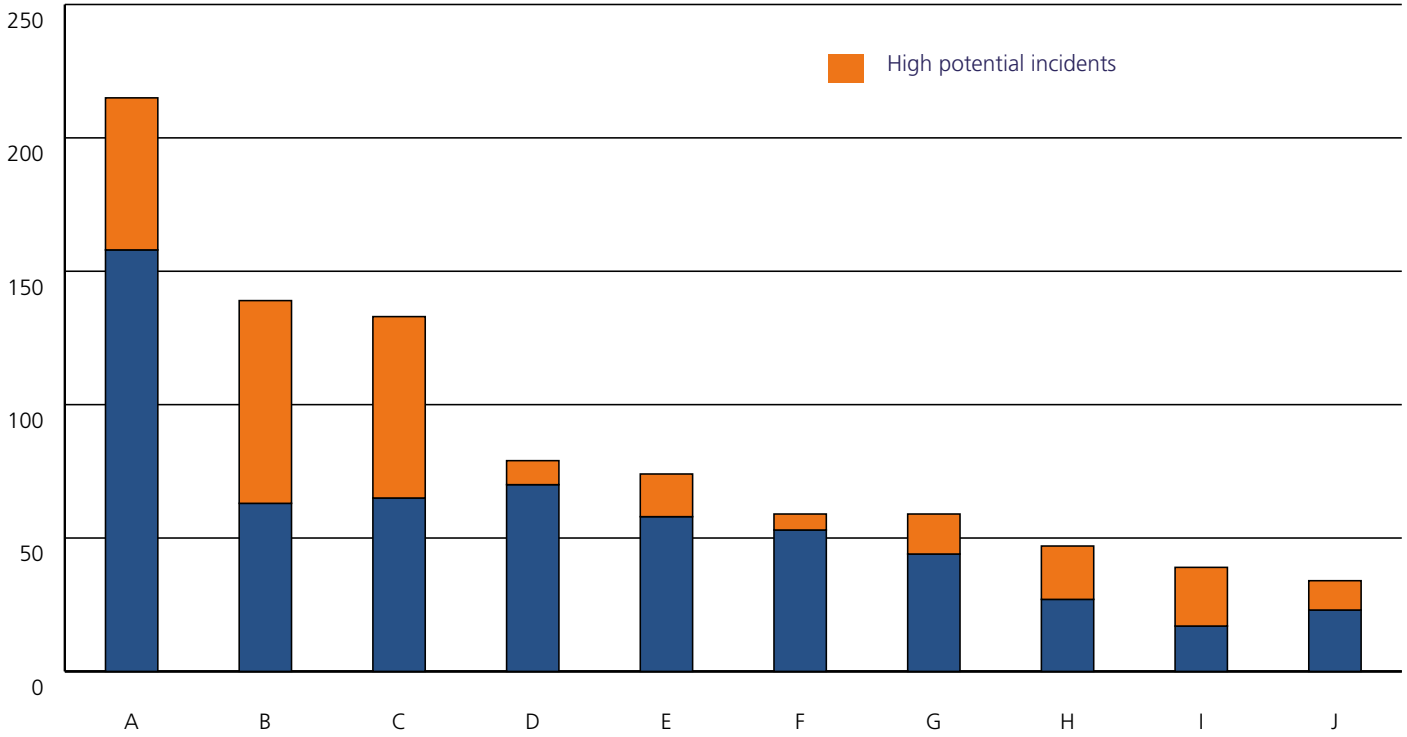
Figure 7: Lost work day – work process breakdown with high potential incidents identified

* For further analysis of marine operations see page 13

Incident data summary – work process

For 2016 reporting, there were a total of 25 work processes categories that could be selected by G+ members for submission and analysis (see Annex A for the full listing). For the purposes of this report the top 10 work processes are shown, and the proportion of high potential incidents which occurred within these specific work processes has been identified (see Figure 8). This shows that a considerable number of high potential incidents occurred during lifting operations (68) and when working at height (76).

The 'other' category covers work processes which did not fit into any of the 25 categories.



Key

A Marine operations*	E Operating plant and machinery	I Civil works
B Working at heights	F Other	J Working with hand tools/power tools
C Lifting operations	G O&M building maintenance	
D Manual handling	H Working on energized systems	

Figure 8: Work process – top 10 work processes with the highest number of incidents reported, with high potential incidents

* For further analysis of marine operations see page 13

Work process analysis: Manual handling

Summary – breakdown by incident area and consequence

In 2016, there were 79 manual handling incidents on vessels with a range of consequences (see Figure 9); these incidents mostly occurred on installation vessels (9 – cable installation, 12 – major component installation) and on CTVs (6). In the turbine, most incidents occurred in the nacelle (9), turbine tower (6) and transition piece area (5) (see Figure 10). In total 14 manual handling incidents resulted in lost work day incidents. Most incidents classified as high potential occurred in the nacelle (3).

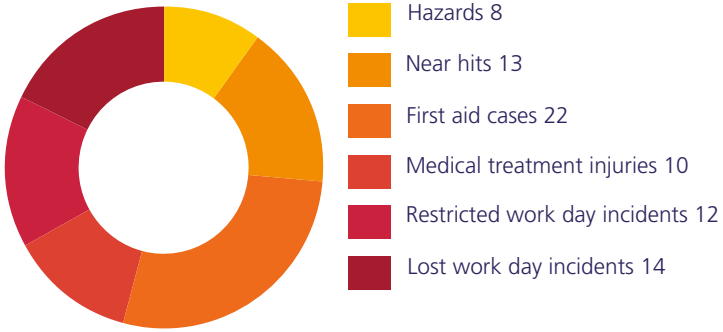


Figure 9: Manual handling – incident consequence

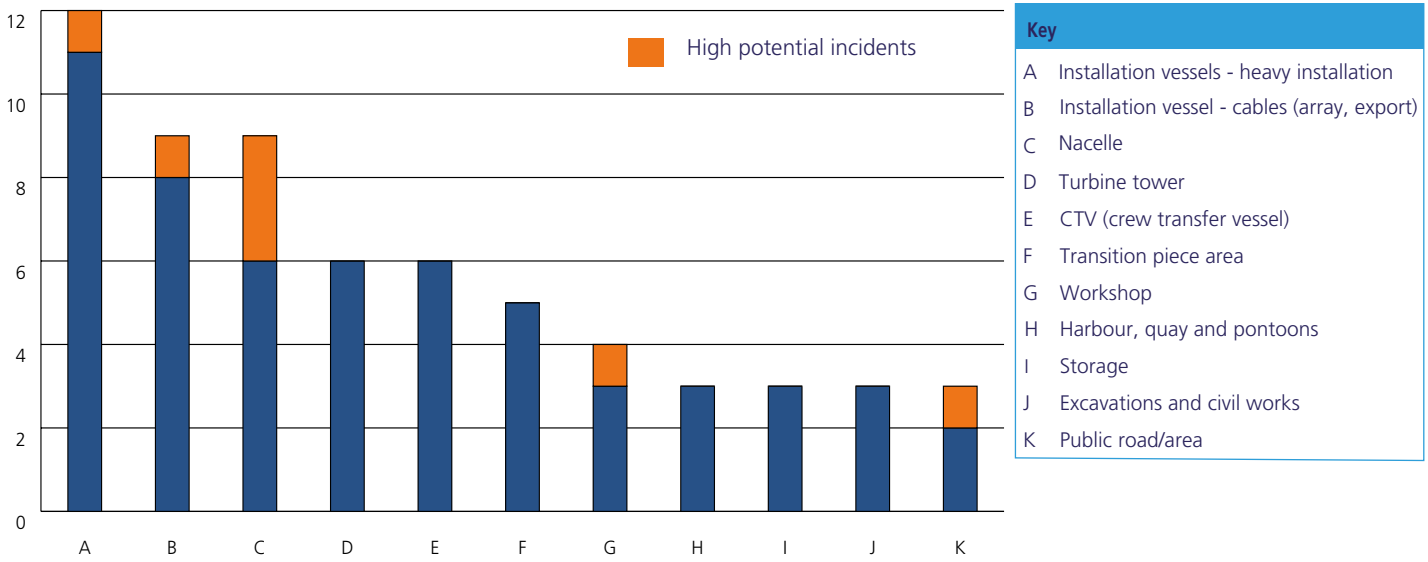


Figure 10: Manual handling – incident area breakdown with high potential incidents identified

Working with hand/power tools

Summary – breakdown by incident area and consequence

In 2016, there were 34 incidents relating to the use of hand/power tools, 5 of which resulted in a lost work day incidents (see Figure 11). Most of these occurred in the turbine (5 each in the turbine tower and hub and blades, with 4 each in the transition piece area and the nacelle (see Figure 12)). Outside of the turbine and supporting infrastructure 4 also occurred on installation vessels. Further analysis of the data show that when working with hand/power tools, the majority of high potential incidents occurred either in the nacelle or on installation vessels.

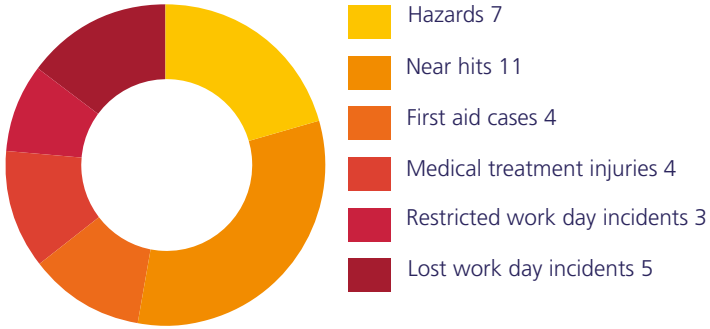
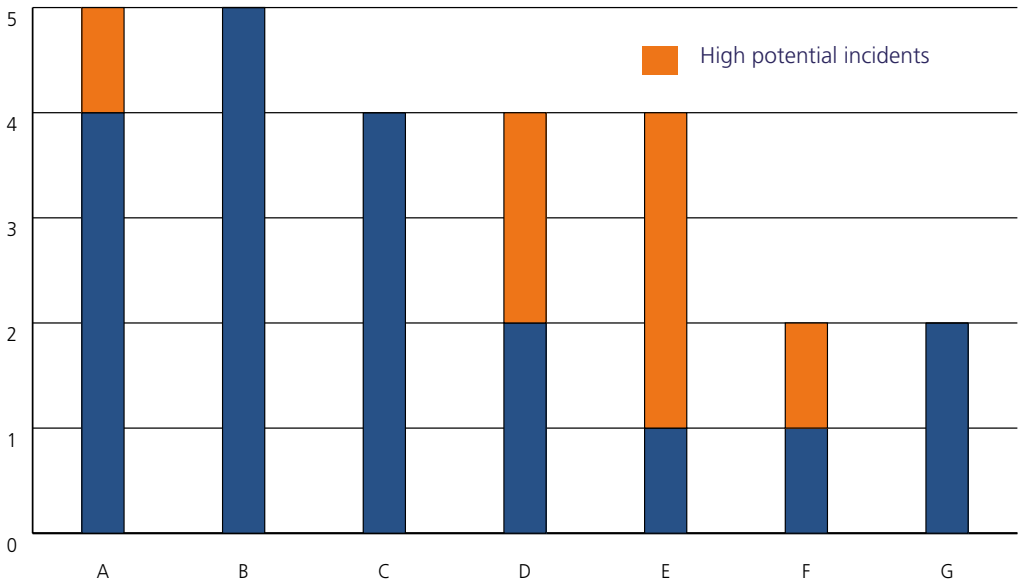


Figure 11: Working with hand/power tools – incident consequence



Key

A	Turbine tower
B	Hub and blades
C	Transition piece area
D	Installation vessels - heavy installation
E	Nacelle
F	Substation work and cable areas
G	Harbour, quay and pontoons

Figure 12: Working with hand/power tools – incident area breakdown with incidents of high potential

Working at height

Summary – breakdown by consequence and incident area

In 2016, there were 134 incidents while working at height, and whilst the majority of these were classified as hazards 4 of the incidents resulted in lost work days (see Figure 13). Further analysis of the data shows that 74 out of the 134 incidents recorded were classified as high potential by G+ members, with a significant number of these (35) occurring when working in either the turbine tower, nacelle or transition piece area (see Figure 14).

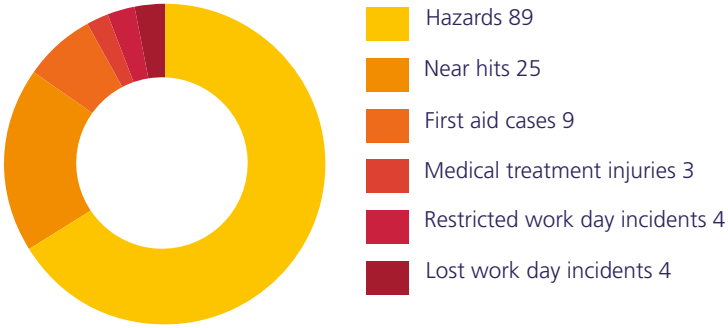
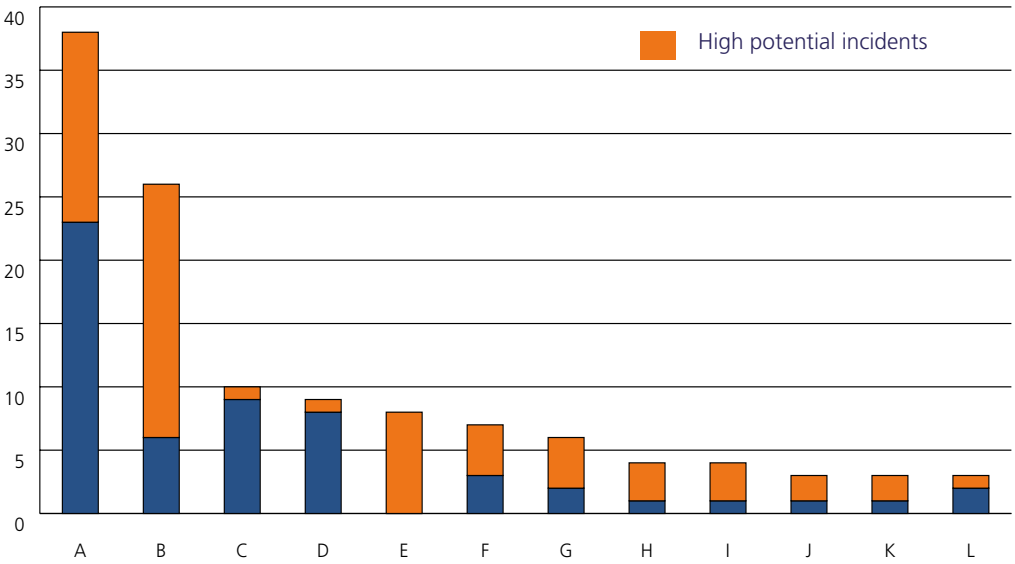


Figure 13: Working at height – incident consequence



Key	
A	Turbine tower
B	Nacelle
C	Transition piece area
D	Access ladders
E	Substation work and cable areas
F	Yaw gear space
G	Hub and blades
H	Excavations and civil works
I	CTV (crew transfer vessel)
J	Foundation external
K	Foundation internal
L	Vessel - other

Figure 14: Working at height – incident area breakdown showing high potential incidents

Lifting operations

Summary – breakdown by consequence and incident area

Lifting operations continue to present a challenge in 2016 to the offshore wind industry when reviewing the G+ incident data. Although only 1 incident resulted in a lost work day incident, a high number of hazards and near hits were reported and of the total number of incidents reported (133), 57 were classified as having high potential, with the highest number of these being reported when working on installation vessels (14) or in the turbine tower (9) (see Figures 15 and 16).

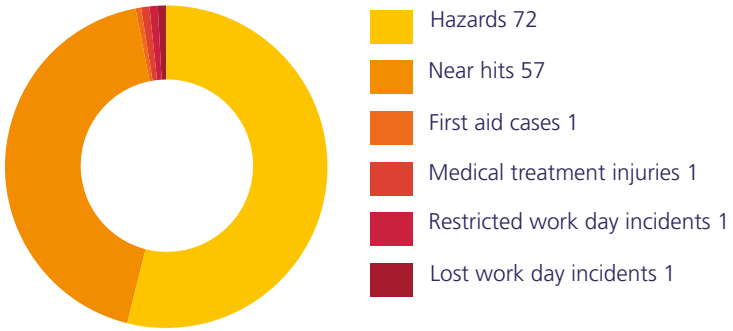


Figure 15: Lifting operations – incident consequence

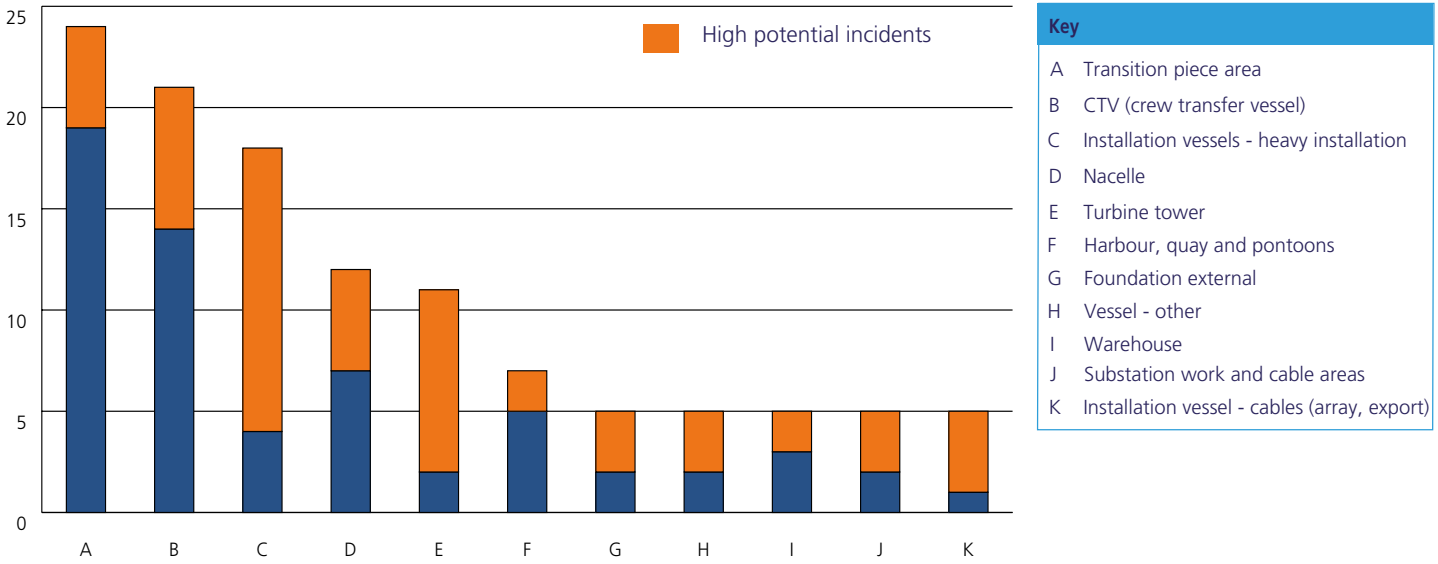


Figure 16: Lifting operations – incident area breakdown including high potentials

Marine operations

Summary – breakdown by incident area and consequence

Marine operations comprise the following work processes: maritime operations, transfer by vessel, transit by vessel, vessel operations, and vessel mobilization. When analysing the data relating to marine operations, 46% occurred during transfer by vessel and 12% occurred during transit by vessel (see Figure 18). The G+ has already implemented a change to the reporting protocol to break down the types of vessel where the incident occurred, as previously a vessel was only categorised as either small or large. Figure 17 shows the breakdown by incident consequence and of the total number of incidents which did occur on CTVs (96), 20 were recorded as having high potential (see Figure 19).

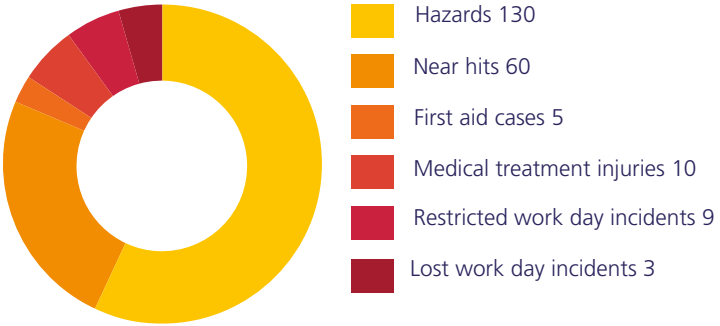


Figure 17: Marine operations – incident consequence

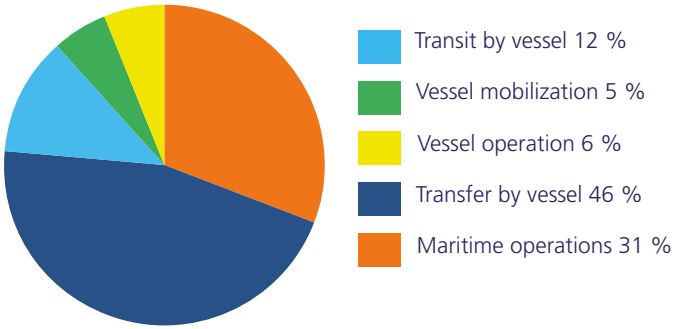
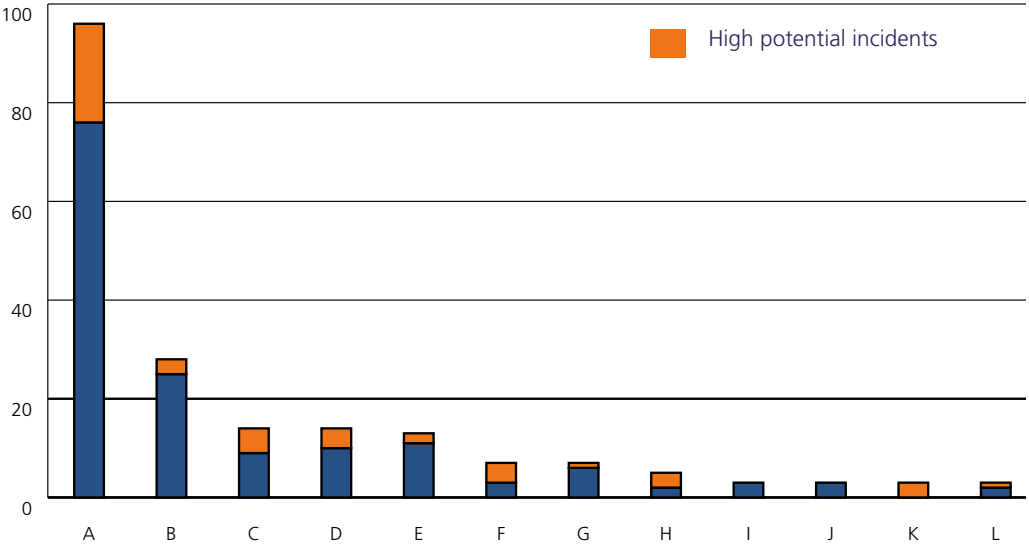


Figure 18: Marine operations – work processes



Key	
A	CTV (crew transfer vessel)
B	Transition piece area
C	Harbour, quay and pontoons
D	Installation vessels – heavy installation
E	Vessel – other
F	Boatlanding
G	Installation vessel – cables (array, export)
H	Tug
I	Turbine/substation outside
J	Accommodation vessel
K	Substation work and cable areas
L	Survey vessel

Figure 19: Marine operations – incident area breakdown with high potentials identified

Dropped object incidents

Summary – breakdown by incident area, consequence and work process

In 2016, there were 84 dropped object incidents. 56% of all dropped object incidents occurred on the turbine, 27% on vessels and 13% during onshore activity (see Figure 20). 43% of incidents occurred during lifting operations and 14% while working at height (see Figure 22). There was one lost work day incident resulting from a dropped object (see Figure 21) however 47% of dropped object incidents were classified as having high potential.

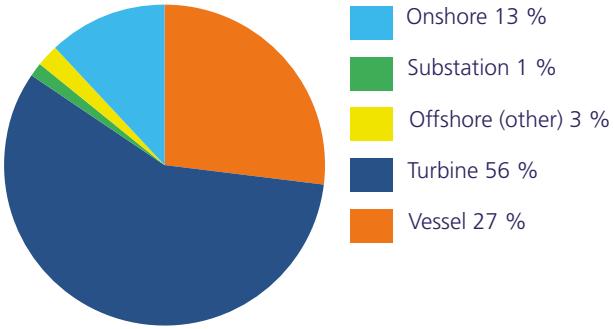


Figure 20: Dropped objects – incident area summary

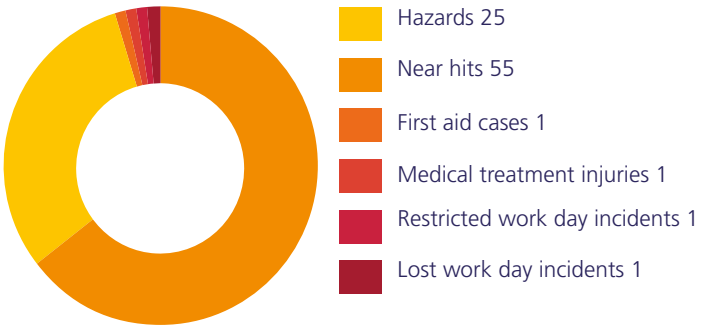
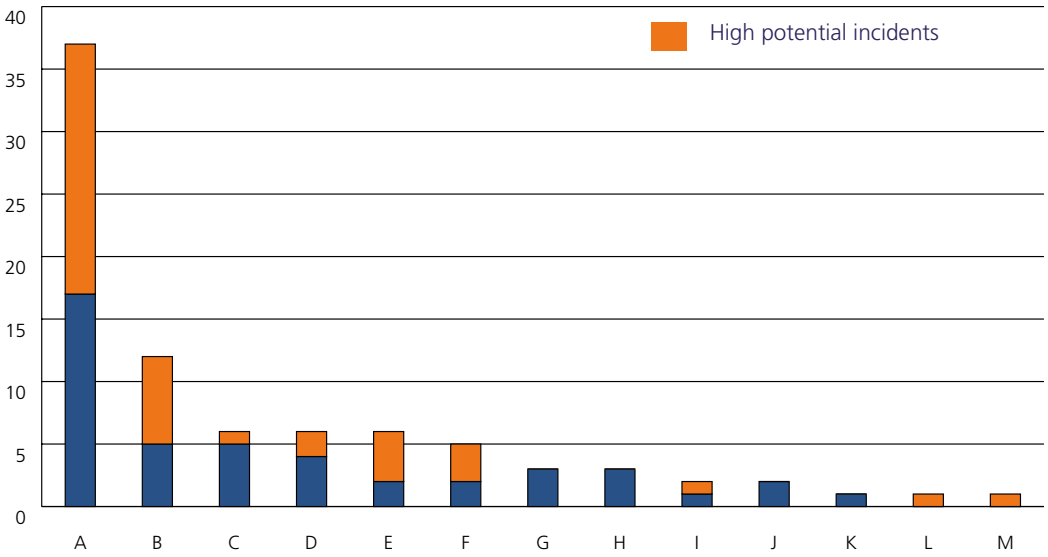


Figure 21: Dropped objects – incident consequence



Key

- A Lifting operations
- B Working at height
- C Operating plant and machinery
- D Manual handling
- E Marine operations*
- F Working with hand tools/power tools
- G Surveys
- H O & M building maintenance
- I Civil works
- J Training/drills/team building events
- K Catering/cleaning
- L Transfer by helicopter
- M Office work

Figure 22: Dropped objects – work process breakdown including high potential consequence

* For further analysis of marine operations see page 13

High potential incidents

Summary – breakdown by incident area, consequence and work process

In 2016, 340 incidents were reported as high potential. When considering the area where the incident occurred, 38% occurred on the turbine, 26% on vessels and 22% during onshore activity (see Figure 23). In terms of work processes 22% of incidents occurred whilst working at height, 20% during lifting operations and 17% during marine operations* (see Figure 24). Whilst in some instances there may be no actual consequence or injury occurring, given the incident has been recorded as having high potential it warrants further analysis and investigation and this is something the G+ are committed to undertaking. Eight lost work day incidents were classified as high potential and 56 % of all high potential incidents reported were classified as hazards and 35 % as near hits (see Figure 25).

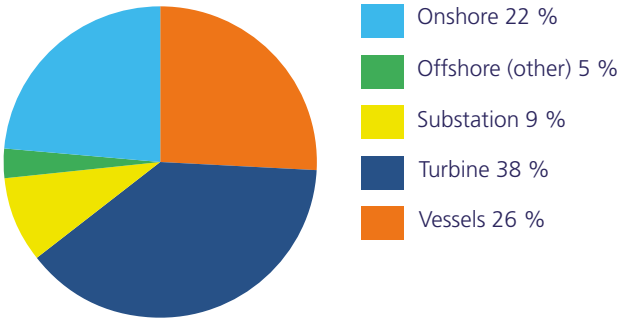


Figure 23: High potential – incident area summary

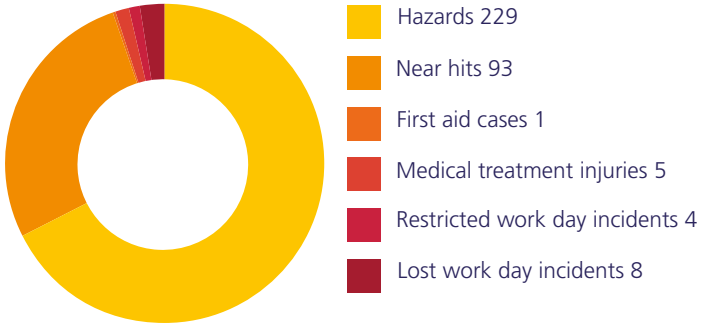
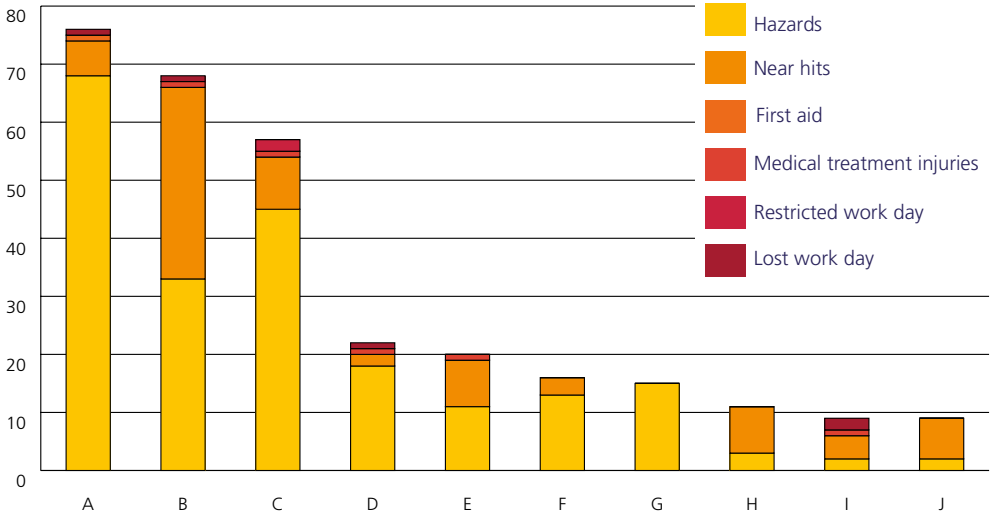


Figure 24: High potential – incident consequence



Key

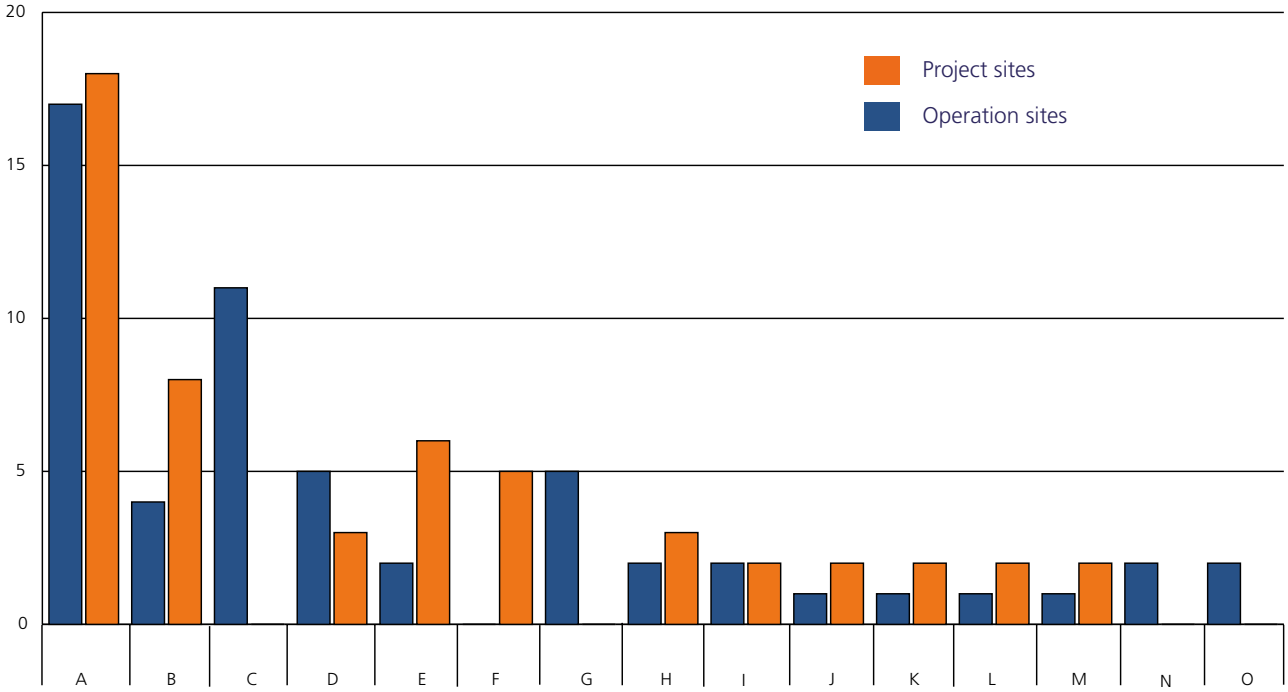
A	Working at height
B	Lifting operations
C	Marine operations*
D	Civil works
E	Working on energized systems
F	Operating plant and machinery
G	O&M building maintenance
H	Working with hand tools/power tools
I	Manual handling
J	Transfer by helicopter

Figure 25: High potential – work process breakdown

* For further analysis of marine operations see page 13

Project and operation sites

G+ member offshore wind farms comprise projects which are in either the development, projects (construction), or operational phases. These are defined as:
Project site: Commissioning and construction
Operation site: Site in operation producing power
Development phase: Development and consenting
A breakdown on the incident data (for incidents resulting in medical treatment injuries, restricted work days or lost work days) in either the project or operational phases for the top 15 work processes is shown in Figure 26. From this information, it can be seen that manual handling activity has resulted in the highest number of injuries on project and operational sites.



Key					
A	Manual handling	F	Civil works	K	Other
B	Working with hand tools/power tools	G	Operating plant and machinery	L	Vessel operation
C	Working at heights	H	Training/drills/team building events	M	Lifting operations
D	Transfer by vessel	I	O&M building maintenance	N	Working in confined spaces
E	Maritime operations	J	Office work	O	Transit by vessel

Figure 26: Work process – project/operation site breakdown

Conclusions and next steps

Publication of the G+ incident data is an important step in ensuring information is provided in a transparent and open way. It is only with this approach that genuine improvements can be made to the offshore wind industry's health and safety performance. Whilst the key headlines from this data are presented in this report, the G+ encourages further analysis of the data and any insights which can be gleaned from this.

Ultimately the data is one input into the lessons learned cycle and there is a commitment from G+ members to understand how it can be best used to draw out valuable lessons and share learnings across the industry. The focus in this report on high potential incidents identifies topic areas which may be considered for future G+ work streams should there be a gap in industry knowledge and a need to do so. However, the work processes which resulted in the greatest number of lost work day incidents (manual handling, working with hand/power tools) did not match up with the work processes where the most high potential incidents occurred and so there is a need to focus on these as well.

For future learnings and collection in 2017, the G+ members have agreed to provide additional information for lost work day incidents on immediate causal factors and underlying causes, which will help to identify opportunities for organisational learning across industry. This will be of value to decision makers and bring the G+ data reporting in line with the current thinking on barrier based incident analysis utilised in other industries. The first G+ analysis along these lines will be presented in the 2017 annual report.

Additionally, some environmental consequence metrics are being introduced into the reporting system, which will be incorporated into the G+ incident reporting template. However even with this being collected for future analysis the G+ will remain focussed on health and safety issues.

Annex A

All of the G+ incident data for 2016 are provided in these tables for further analysis and assessment.

Table A1: Incident data reported – Business travels

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Car park	Business travels	No	Near Hits	No	No
Project site	Excavations & civil works	Business travels	No	Near Hits	Yes	No
Project site	Excavations & civil works	Business travels	No	Near Hits	Yes	No
Operation site	Nacelle	Business travels	No	Restricted Work Day	No	No
Operation site	Public road/area	Business travels	No	Near Hits	Yes	No
Other	Public road/area	Business travels	No	Lost Work Day	Yes	No
Operation site	Public road/area	Business travels	No	Near Hits	Yes	No
Project site	Public road/area	Business travels	No	Near Hits	No	No

Table A2: Incident data reported – Catering/cleaning

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Car park	Catering/cleaning	No	Medical Treatment Injuries	No	No
Operation site	CTV (Crew transfer vessel)	Catering/cleaning	No	First Aid	No	No
Project site	Installation vessel – cables (array, export)	Catering/cleaning	No	Near Hits	No	No
Project site	Kitchen & canteen	Catering/cleaning	No	First Aid	No	No
Operation site	Kitchen & canteen	Catering/cleaning	No	First Aid	No	No
Project site	Substation work and cable areas	Catering/cleaning	No	Hazards	Yes	No
Operation site	Vessel – other	Catering/cleaning	No	Hazards	No	Yes
Operation site	Warehouse	Catering/cleaning	Yes	Near hits	No	No

Table A3: Incident data reported – Civil works

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Access ladders	Civil works	Yes	Near Hits	No	No
Project site	Access roads	Civil works	No	Near Hits	No	No
Project site	Administration	Civil works	No	Near Hits	No	No
Project site	Car park	Civil works	No	Near Hits	No	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Medical Treatment Injuries	No	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Medical Treatment Injuries	No	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Near Hits	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No

Table A3: Incident data reported – Civil works (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Excavations & civil works	Civil works	No	Hazards	Yes	No
Project site	Excavations & civil works	Civil works	No	First Aid	No	No
Project site	Excavations & civil works	Civil works	No	First Aid	No	No
Project site	Excavations & civil works	Civil works	No	Medical Treatment Injuries	Yes	No
Project site	Excavations & civil works	Civil works	No	First Aid	No	No
Project site	Excavations & civil works	Civil works	No	Hazards	No	No
Project site	Foundation internal	Civil works	No	Lost Work Day	No	No
Project site	Foundation internal	Civil works	No	Lost Work Day	Yes	No
Project site	Foundation internal	Civil works	No	Near Hits	No	No
Project site	Foundation internal	Civil works	No	First Aid	No	No
Project site	N/A	Civil works	No	Hazards	Yes	No
Operation site	Nacelle	Civil works	Yes	Hazards	Yes	No
Project site	Office	Civil works	No	Hazards	Yes	No
Operation site	Public road/area	Civil works	No	Hazards	No	No
Other	Public road/area	Civil works	No	Medical Treatment Injuries	No	No
Project site	Substation work and cable areas	Civil works	No	Near Hits	Yes	No
Project site	Substation work and cable areas	Civil works	No	Hazards	Yes	No
Project site	Substation work and cable areas	Civil works	No	Hazards	Yes	No
Project site	Substation work and cable areas	Civil works	No	Hazards	Yes	No
Project site	Substation work and cable areas	Civil works	No	First Aid	No	No
Project site	Substation work and cable areas	Civil works	No	Hazards	No	No

Table A4: Incident data reported – Diving operations

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Diving vessel	Diving operations	No	Near Hits	Yes	No
Operation site	Diving vessel	Diving operations	No	Near Hits	Yes	No
Project site	Diving vessel	Diving operations	No	Near Hits	No	No
Project site	Diving vessel	Diving operations	No	Near Hits	Yes	No

Table A5: Incident data reported – Hot works

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Hot works	No	Hazards	Yes	No
Project site	Other	Hot works	No	Near Hits	Yes	No
Project site	Substation HV areas (>1000 V)	Hot works	No	Near Hits	Yes	Yes
Project site	Substation work and cable areas	Hot works	No	Hazards	Yes	No
Operation site	Warehouse	Hot works	No	Hazards	No	No

Table A6: Incident data reported – Lifting operations

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Access ladders	Lifting operations	No	Hazards	Yes	No
Project site	Access roads	Lifting operations	No	Near Hits	Yes	No
Operation site	Accommodation platform	Lifting operations	No	Near Hits	No	No
Operation site	Accommodation vessel	Lifting operations	No	Hazards	No	No
Project site	Barge	Lifting operations	No	Lost Work Day	Yes	Yes
Project site	Barge	Lifting operations	No	Hazards	Yes	No
Project site	Barge	Lifting operations	No	Near Hits	Yes	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	Yes	Near Hits	No	No
Project site	CTV (Crew transfer vessel)	Lifting operations	Yes	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Lifting operations	Yes	Near Hits	Yes	No
Project site	CTV (Crew transfer vessel)	Lifting operations	No	Near Hits	Yes	No
Project site	CTV (Crew transfer vessel)	Lifting operations	Yes	Near Hits	Yes	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Medical Treatment Injuries	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	Yes	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	lifting operations	Yes	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	Yes	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	Yes	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Lifting operations	Yes	Near Hits	No	No
Project site	Excavations & civil works	Lifting operations	No	Hazards	Yes	No
Project site	Excavations & civil works	Lifting operations	No	Near Hits	Yes	No
Operation site	Foundation external (excluding boatlanding and TP)	Lifting operations	No	Hazards	Yes	No
Operation site	Foundation external (excluding boatlanding and TP)	Lifting operations	No	Hazards	Yes	No
Project site	Foundation external (excluding boatlanding and TP)	Lifting operations	No	Near Hits	No	No
Project site	Foundation external (excluding boatlanding and TP)	Lifting operations	No	Near Hits	Yes	No
Project site	Foundation external (excluding boatlanding and TP)	Lifting operations	No	Near Hits	No	No
Project site	Foundation internal	Lifting operations	No	Hazards	Yes	No
Operation site	Harbour, quay and pontoons	Lifting operations	Yes	Near Hits	No	No
Project site	Harbour, quay and pontoons	Lifting operations	No	Hazards	Yes	No
Project site	Harbour, quay and pontoons	Lifting operations	Yes	Near Hits	No	No
Operation site	Harbour, quay and pontoons	Lifting operations	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Lifting operations	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Lifting operations	No	Near Hits	Yes	No
Operation site	Harbour, quay and pontoons	Lifting operations	No	Hazards	No	No
Project site	Hub and blades	Lifting operations	No	Restricted Work Day	Yes	No
Operation site	Hub and blades	Lifting operations	No	Hazards	Yes	No
Operation site	Hub and blades	Lifting operations	No	Hazards	Yes	No
Operation site	Hub and blades	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	No	No
Project site	Installation vessel – cables (array, export)	Lifting operations	No	Hazards	Yes	No
Project site	Installation vessel – cables (array, export)	Lifting operations	Yes	Near Hits	Yes	No
Project site	Installation vessel – cables (array, export)	Lifting operations	No	Near Hits	Yes	No

Table A6: Incident data reported – Lifting operations (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Installation vessel – cables (array, export)	Lifting operations	No	Hazards	No	No
Project site	Installation vessel – cables (array, export)	Lifting operations	No	Hazards	Yes	No
Operation site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	Yes	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	Yes	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	Yes	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Lifting operations	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	lifting operations	No	Hazards	No	No
Operation site	Nacelle	Lifting operations	No	Hazards	Yes	No
Operation site	Nacelle	Lifting operations	Yes	Near Hits	Yes	No
Project site	Nacelle	Lifting operations	No	Hazards	Yes	No
Operation site	Nacelle	Lifting operations	Yes	Near Hits	Yes	No
Operation Site	Nacelle	Lifting operations	No	Near Hits	No	No
Operation site	Nacelle	Lifting operations	Yes	Near Hits	No	No
Operation Site	Nacelle	Lifting operations	No	Near Hits	No	No
Operation site	Nacelle	Lifting operations	No	Hazards	Yes	No
Operation site	Nacelle	Lifting operations	Yes	Near Hits	No	No
Operation site	Nacelle	Lifting operations	Yes	Near Hits	No	No
Operation site	Nacelle	Lifting operations	No	Hazards	No	No
Operation site	Nacelle	Lifting operations	No	Hazards	No	No
Project site	Substation work and cable areas	Lifting operations	No	Hazards	Yes	No
Project site	Substation work and cable areas	Lifting operations	No	Hazards	Yes	No
Operation site	Substation work and cable areas	Lifting operations	No	Hazards	Yes	No
Operation site	Substation work and cable areas	Lifting operations	No	Hazards	No	No
Operation site	Substation work and cable areas	Lifting operations	No	First Aid	No	No
Operation site	Turbine tower	Lifting operations	Yes	Near Hits	Yes	No

Table A6: Incident data reported – Lifting operations (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	No	No
Project site	Transition piece area	Lifting operations	No	Hazards	Yes	No
Project site	Transition piece area	Lifting operations	Yes	Near Hits	Yes	No
Project site	Transition piece area	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	Yes	No
Project site	Transition piece area	Lifting operations	Yes	Near Hits	No	No
Operation site	Transition piece area	lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	Yes	Near Hits	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Hazards	No	No
Operation site	Transition piece area	Lifting operations	No	Near Hits	No	No
Operation site	Turbine assembly area	Lifting operations	Yes	Hazards	No	No
Operation site	Turbine tower	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Turbine tower	Lifting operations	No	Hazards	Yes	No
Operation site	Turbine tower	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Turbine tower	Lifting operations	No	Hazards	Yes	No
Operation site	Turbine tower	Lifting operations	No	Hazards	Yes	No
Operation site	Turbine tower	Lifting operations	No	Hazards	Yes	No
Operation site	Turbine tower	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Turbine tower	Lifting operations	No	Hazards	Yes	No
Operation Site	Turbine tower	Lifting operations	No	Near Hits	No	No
Operation site	Turbine tower	Lifting operations	Yes	Hazards	Yes	No
Project site	Turbine tower	Lifting operations	Yes	Near Hits	No	No
Project site	Vessel – other	Lifting operations	No	Near Hits	Yes	No
Project site	Vessel – other	Lifting operations	Yes	Near Hits	Yes	No
Operation site	Vessel – other	Lifting operations	No	Hazards	Yes	No
Operation site	Vessel – other	Lifting operations	No	Hazards	No	No
Project site	Vessel – other	lifting operations	No	Hazards	No	No
Operation site	Warehouse	Lifting operations	Yes	Near Hits	Yes	No
Project site	Warehouse	Lifting operations	No	Hazards	Yes	No
Operation site	Warehouse	Lifting operations	No	Hazards	No	No
Operation site	Warehouse	Lifting operations	No	Hazards	No	No
Operation site	Warehouse	Lifting operations	No	Hazards	No	No

Table A7: Incident data reported – Manual handling

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Barge	Manual handling	No	Medical Treatment Injuries	No	No
Project site	Barge	Manual handling	No	Lost Work Day	Yes	Yes
Operation site	Boatlanding	Manual handling	No	Hazards	No	No
Operation site	Company vehicle	Manual handling	Yes	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Restricted Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Lost Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Restricted Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Medical Treatment Injuries	No	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Manual handling	No	Medical Treatment Injuries	No	No
Project site	Excavations & civil works	Manual handling	No	Lost Work Day	No	No
Project site	Excavations & civil works	Manual handling	No	First Aid	No	No
Project site	Excavations & civil works	Manual handling	No	First Aid	No	No
Project site	Foundation external (excluding boatlanding and TP)	Manual handling	No	Restricted Work Day	No	No
Operation site	Foundation external (excluding boatlanding and TP)	Manual handling	No	Restricted Work Day	No	No
Project site	Foundation internal	Manual handling	No	Near Hits	No	No
Project site	Foundation internal	Manual handling	No	Near Hits	No	No
Project site	Harbour, quay and pontoons	Manual handling	No	Medical Treatment Injuries	No	No
Operation site	Harbour, quay and pontoons	Manual handling	No	First Aid	No	No
Operation site	Harbour, quay and pontoons	Manual handling	No	Hazards	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	Hazards	Yes	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	Lost Work Day	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	Lost Work Day	No	Yes
Project site	Installation vessel – cables (array, export)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – cables (array, export)	Manual handling	Yes	Lost Work Day	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Medical Treatment Injuries	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Medical Treatment Injuries	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Lost Work Day	No	Yes
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Lost Work Day	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	Lost Work Day	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	No	First Aid	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Manual handling	Yes	Medical Treatment Injuries	No	No

Table A7: Incident data reported – Manual handling (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Nacelle	Manual handling	No	First Aid	No	No
Operation site	Nacelle	Manual handling	No	First Aid	No	No
Operation site	Nacelle	Manual handling	No	Near Hits	Yes	No
Operation site	Nacelle	Manual handling	Yes	Near Hits	Yes	No
Project site	Nacelle	Manual handling	No	Restricted Work Day	No	No
Operation site	Nacelle	Manual handling	No	Restricted Work Day	No	No
Operation site	Nacelle	Manual handling	No	Medical Treatment Injuries	No	No
Operation site	Nacelle	Manual handling	No	Near Hits	Yes	No
Operation site	Nacelle	Manual handling	No	Lost Work Day	No	No
Operation Site	Office	Manual handling	No	Near Hits	No	No
Operation site	Public road/area	Manual handling	No	Near Hits	No	No
Other	Public road/area	Manual handling	No	Medical Treatment Injuries	Yes	No
Operation Site	Public road/area	Manual handling	No	Near Hits	No	No
Project site	Storage	Manual handling	Yes	Restricted Work Day	No	No
Operation site	Storage	Manual handling	No	Restricted Work Day	No	No
Operation site	Storage	Manual handling	No	First Aid	No	No
Project site	Substation work and cable areas	Manual handling	No	First Aid	No	No
Operation site	Transition piece area	Manual handling	No	Lost Work Day	No	No
Operation site	Transition piece area	Manual handling	No	Lost Work Day	No	No
Operation site	Transition piece area	Manual handling	No	Near Hits	No	No
Project site	Transition piece area	Manual handling	Yes	Near Hits	No	No
Project site	Transition piece area	Manual handling	No	Hazards	No	No
Project site	Turbine assembly area	Manual handling	No	Medical Treatment Injuries	No	No
Operation site	Turbine tower	Manual handling	No	Restricted Work Day	No	No
Operation site	Turbine tower	Manual handling	No	Lost Work Day	No	No
Project site	Turbine tower	Manual handling	No	First Aid	No	No
Operation site	Turbine tower	Manual handling	No	Hazards	No	No
Operation site	Turbine tower	Manual handling	No	First Aid	No	No
Operation site	Turbine tower	Manual handling	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Manual handling	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Manual handling	No	First Aid	No	No
Project site	Vessel – other	Manual handling	No	First Aid	No	No
Operation site	Warehouse	Manual handling	No	Restricted Work Day	No	No
Operation site	Warehouse	Manual handling	No	Restricted Work Day	No	No
Operation site	Workshop	Manual handling	No	Restricted Work Day	No	No
Survey Phase	Workshop	Manual handling	No	First Aid	No	No
Project site	Workshop	Manual handling	No	First Aid	No	No
Project site	Workshop	Manual handling	No	Lost Work Day	Yes	Yes

Table A8: Incident data reported - Maritime operations

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Administration	Maritime operations	No	Hazards	Yes	No
Project site	Array cable installation vessel	Maritime operations	No	Restricted Work Day	No	No
Project site	Barge	Maritime operations	No	Hazards	Yes	No
Project site	Barge	Maritime operations	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	No	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Medical Treatment Injuries	No	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	Yes	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Medical Treatment Injuries	No	No
Operation Site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	No	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	Yes	No
Project site	CTV (Crew transfer vessel)	Maritime operations	No	Near Hits	Yes	No
Project site	Diving vessel	Maritime operations	No	Hazards	Yes	No
Project site	Foundation external (excluding boatlanding and TP)	Maritime operations	No	Hazards	Yes	No
Project site	Foundation external (excluding boatlanding and TP)	Maritime operations	No	Hazards	No	No
Project site	Harbour, quay and pontoons	Maritime operations	No	Hazards	Yes	No
Operation site	Harbour, quay and pontoons	Maritime operations	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Maritime operations	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Maritime operations	No	Hazards	No	No
Project site	Harbour, quay and pontoons	Maritime operations	No	Restricted Work Day	Yes	No
Project site	Installation vessel – cables (array, export)	Maritime operations	No	Hazards	Yes	No
Project site	Installation vessel – cables (array, export)	Maritime operations	No	Restricted Work Day	No	No
Project site	Installation vessel – cables (array, export)	Maritime operations	No	Near Hits	No	No
Project site	Installation vessel – cables (array, export)	Maritime operations	Yes	Hazards	No	No
Project site	Installation vessel – cables (array, export)	Maritime operations	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Medical Treatment Injuries	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Maritime operations	No	Hazards	No	No
Operation site	Nacelle	Maritime operations	Yes	Hazards	Yes	No
Project site	Office	Maritime operations	No	Hazards	Yes	No
Project site	Other	Maritime operations	Yes	Hazards	Yes	No
Project site	Other	Maritime operations	Yes	Hazards	Yes	No
Project site	SOV (Service operation vessel)	Maritime operations	No	Medical Treatment Injuries	Yes	No
Project site	SOV (Service operation vessel)	Maritime operations	No	Hazards	No	No
Project site	Substation work and cable areas	Maritime operations	No	Hazards	Yes	No
Project site	Survey vessel	Maritime operations	No	Hazards	No	No
Project site	Transition piece area	Maritime operations	No	Hazards	Yes	No

Table A8: Incident data reported - Maritime operations (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Tug	Maritime operations	No	Hazards	Yes	No
Project site	Tug	Maritime operations	No	Hazards	Yes	No
Project site	Tug	Maritime operations	No	Hazards	No	No
Operation site	Turbine tower	Maritime operations	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Maritime operations	No	Near hits	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Maritime operations	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Maritime operations	No	Hazards	No	No
Project site	Vessel – other	Maritime operations	No	Near Hits	Yes	No
Project site	Vessel – other	Maritime operations	No	Near Hits	No	No
Project site	Vessel – other	Maritime operations	No	Hazards	No	No
Project site	Vessel – other	Maritime operations	No	Hazards	No	No
Project site	Vessel – other	Maritime operations	No	Near Hits	No	No
Operation site	Vessel – other	Maritime operations	No	First Aid	No	No
Project site	Vessel – other	Maritime operations	No	Near Hits	No	No
Project site	Vessel – other	Maritime operations	No	Hazards	No	No
Project site	Vessel – other	Maritime operations	No	Near Hits	No	No
Project site	Vessel – other	Maritime operations	No	Hazards	No	No
Operation site	Workshop	Maritime operations	No	Restricted Work Day	No	No
Operation site	Yaw gear space	Maritime operations	No	First Aid	No	No

Table A9: O&M building maintenance

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Access ladders	O&M building maintenance	No	Lost Work Day	No	No
Project site	Access roads	O&M building maintenance	No	Hazards	Yes	No
Project site	Administration	O&M building maintenance	No	Hazards	Yes	No
Other	Administration	O&M building maintenance	Yes	Hazards	No	No
Operation site	Boatlanding	O&M building maintenance	No	Hazards	No	No
Operation site	Car park	O&M building maintenance	No	Lost Work Day	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	Yes	No
Project site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	Yes	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	O&M building maintenance	No	Hazards	No	No
Operation site	Nacelle	O&M building maintenance	No	Hazards	Yes	No
Operation site	Nacelle	O&M building maintenance	No	Hazards	Yes	No

Table A9: O&M building maintenance (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Nacelle	O&M building maintenance	No	Hazards	Yes	No
Operation site	Nacelle	O&M building maintenance	Yes	Hazards	No	No
Operation site	Nacelle	O&M building maintenance	Yes	Hazards	No	No
Operation site	Nacelle	O&M building maintenance	No	Hazards	No	No
Operation site	Nacelle	O&M building maintenance	No	Hazards	No	No
Operation site	Nacelle	O&M building maintenance	No	Hazards	No	No
Operation site	Office	O&M building maintenance	No	Hazards	No	No
Operation site	Office	O&M building maintenance	No	Near Hits	No	No
Operation site	Public road/area	O&M building maintenance	No	Hazards	Yes	No
Project site	Substation HV areas (>1000 V)	O&M building maintenance	No	Near Hits	No	No
Project site	Substation HV areas (>1000 V)	O&M building maintenance	No	Lost Work Day	No	No
Operation site	Substation work and cable areas	O&M building maintenance	No	Hazards	Yes	No
Project site	Substation work and cable areas	O&M building maintenance	No	Hazards	Yes	No
Operation site	Substation work and cable areas	O&M building maintenance	No	Hazards	Yes	No
Operation site	Transition piece area	O&M building maintenance	No	Hazards	No	No
Operation site	Transition piece area	O&M building maintenance	No	Hazards	No	No
Operation site	Transition piece area	O&M building maintenance	No	Hazards	No	No
Operation site	Turbine tower	O&M building maintenance	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	O&M building maintenance	No	Hazards	Yes	No
Operation site	Turbine/substation outside (not dedicated work areas)	O&M building maintenance	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	O&M building maintenance	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	O&M building maintenance	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	Yes	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	Yes	No
Project site	Warehouse	O&M building maintenance	No	First Aid	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Near Hits	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Near Hits	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Warehouse	O&M building maintenance	No	Hazards	No	No
Operation site	Workshop	O&M building maintenance	No	Medical Treatment Injuries	No	No
Project site	Workshop	O&M building maintenance	No	Hazards	Yes	No

Table A10: Incident data reported – Office work

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Accommodation vessel	Office work	No	Lost Work Day	No	No
Other	Administration	Office work	No	Hazards	Yes	No
Operation Site	Administration	Office work	No	Near Hits	No	No
Operation Site	Administration	Office work	No	Near Hits	No	No
Project site	Administration	Office work	No	Hazards	No	No
Operation site	Hub and blades	Office work	Yes	Hazards	Yes	No
Operation site	Office	Office work	No	Near Hits	Yes	No
Other	Office	Office work	No	Hazards	Yes	No
Project site	Office	Office work	No	Hazards	Yes	No
Project site	Office	Office work	No	Hazards	Yes	No
Project site	Office	Office work	No	First Aid	No	No
Operation site	Office	Office work	No	First Aid	No	No
Project site	Office	Office work	No	Hazards	No	No
Project site	Office	Office work	No	Hazards	No	No
Project site	Office	Office work	No	First Aid	No	No
Operation site	Public road/area	Office work	No	Near Hits	No	No
Project site	Staircase	Office work	No	Lost Work Day	No	No
Project site	Survey vessel	Office work	No	Restricted Work Day	No	No
Operation site	Warehouse	Office work	No	Hazards	No	No

Table A11: Incident data reported – Operating plant and machinery

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Access roads	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Access roads	Operating plant and machinery	No	Hazards	Yes	No
Operation Site	Access roads	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Access roads	Operating plant and machinery	No	Near Hits	No	No
Operation site	Accommodation platform	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Accommodation platform	Operating plant and machinery	No	Hazards	No	No
Operation Site	Administration	Operating plant and machinery	No	Near Hits	No	No
Operation site	Administration	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Administration	Operating plant and machinery	No	Near Hits	No	No
Operation site	Car park	Operating plant and machinery	Yes	Near Hits	No	No
Operation site	Car park	Operating plant and machinery	No	Medical Treatment Injuries	No	No
Project site	Car park	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Company vehicle	Operating plant and machinery	No	Near Hits	No	No
Project site	Company vehicle	Operating plant and machinery	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Operating plant and machinery	No	First Aid	No	No
Operation Site	CTV (Crew transfer vessel)	Operating plant and machinery	No	Near Hits	No	No
Project site	Excavations & civil works	Operating plant and machinery	No	Hazards	Yes	No
Project site	Excavations & civil works	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Foundation external (excluding boatlanding and TP)	Operating plant and machinery	Yes	Near Hits	No	No
Operation site	Harbour, quay and pontoons	Operating plant and machinery	No	Near Hits	Yes	No
Project site	Harbour, quay and pontoons	Operating plant and machinery	No	Near Hits	No	No
Operation site	Harbour, quay and pontoons	Operating plant and machinery	No	Medical Treatment Injuries	No	No
Operation site	Hub and blades	Operating plant and machinery	No	Lost Work Day	No	No
Operation site	Hub and blades	Operating plant and machinery	No	First Aid	No	No

Table A11: Incident data reported – Operating plant and machinery (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Hub and blades	Operating plant and machinery	No	Hazards	No	No
Operation site	Hub and blades	Operating plant and machinery	No	Hazards	No	No
Operation site	Hub and blades	Operating plant and machinery	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Nacelle	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Nacelle	Operating plant and machinery	No	Near Hits	No	No
Operation site	Nacelle	Operating plant and machinery	No	First Aid	No	No
Operation site	Nacelle	Operating plant and machinery	No	Medical Treatment Injuries	No	Yes
Operation site	Nacelle	Operating plant and machinery	No	Near Hits	No	No
Operation site	Nacelle	Operating plant and machinery	No	Near Hits	No	No
Operation site	Nacelle	Operating plant and machinery	No	Hazards	No	No
Operation site	Nacelle	Operating plant and machinery	No	Hazards	No	No
Operation site	Nacelle	Operating plant and machinery	No	First Aid	No	No
Operation site	Nacelle	Operating plant and machinery	No	Medical Treatment Injuries	No	No
Operation site	Nacelle	Operating plant and machinery	No	Near Hits	No	No
Operation site	Storage	Operating plant and machinery	Yes	Near Hits	No	No
Operation Site	Transition piece area	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Transition piece area	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Transition piece area	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Transition piece area	Operating plant and machinery	No	Near Hits	No	No
Operation site	Transition piece area	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Transition piece area	Operating plant and machinery	No	Hazards	No	No
Operation site	Transition piece area	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine tower	Operating plant and machinery	No	Near Hits	Yes	No
Operation Site	Turbine tower	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Turbine tower	Operating plant and machinery	No	Near Hits	No	No
Operation Site	Turbine tower	Operating plant and machinery	No	Near Hits	No	No
Operation site	Turbine tower	Operating plant and machinery	No	Near Hits	No	No
Operation site	Turbine tower	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine tower	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine tower	Operating plant and machinery	Yes	Hazards	No	No
Operation site	Turbine tower	Operating plant and machinery	Yes	Hazards	Yes	No
Operation site	Turbine tower	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Operating plant and machinery	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Operating plant and machinery	No	Hazards	No	No
Project site	Vessel – other	Operating plant and machinery	No	Near Hits	Yes	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Project site	Warehouse	Operating plant and machinery	No	Hazards	Yes	No
Operation Site	Warehouse	Operating plant and machinery	No	Near Hits	No	No
Operation site	Warehouse	Operating plant and machinery	No	First Aid	No	No
Operation site	Warehouse	Operating plant and machinery	No	Hazards	No	No
Operation site	Yaw gear space	Operating plant and machinery	Yes	Hazards	No	No
Operation site	Yaw gear space	Operating plant and machinery	No	Hazards	No	No

Table A12: Incident data reported – other

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Access roads	Other	No	Medical Treatment Injuries	No	No
Operation site	Accommodation platform	Other	No	Near Hits	No	No
Project site	Administration	Other	No	Hazards	Yes	No
Operation site	Administration	Other	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Other	No	Near Hits	No	Yes
Operation site	CTV (Crew transfer vessel)	Other	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Other	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Other	No	Hazards	No	No
Project site	Helicopter hoisting and landing area	Other	No	Hazards	No	No
Project site	Hub and blades	Other	No	Hazards	Yes	No
Project site	Hub and blades	Other	No	Hazards	Yes	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Hub and blades	Other	No	Hazards	No	No
Operation site	Nacelle	Other	No	First Aid	No	No
Operation site	Nacelle	Other	No	Restricted Work Day	No	No
Operation site	Nacelle	Other	No	Hazards	No	No
Operation site	Nacelle	Other	No	Hazards	No	No
Operation site	Nacelle	Other	No	Hazards	No	No
Operation site	Nacelle	Other	No	Near Hits	No	No
Operation site	Office	Other	No	Near Hits	No	No
Operation site	Office	Other	No	Hazards	No	No
Operation site	Other	Other	No	Hazards	Yes	No
Operation site	Public road/area	Other	No	Hazards	No	No
Project site	Substation work and cable areas	Other	No	Lost Work Day	No	No
Operation site	Transition piece area	Other	No	First Aid	No	No
Project site	Transition piece area	Other	No	Hazards	Yes	No
Operation site	Transition piece area	Other	No	Hazards	No	No
Operation site	Transition piece area	Other	No	Hazards	No	No
Operation site	Transition piece area	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Near Hits	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Near Hits	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine tower	Other	No	Hazards	No	No
Operation site	Turbine Tower	Other	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Near Hits	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No

Table A12: Incident data reported – other (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No
Project site	Turbine/substation outside (not dedicated work areas)	Other	No	Hazards	No	No
Operation site	Warehouse	Other	No	Near Hits	Yes	No
Operation site	Warehouse	Other	No	Hazards	No	No
Operation site	Yaw gear space	Other	No	Hazards	No	No
Project site	Yaw gear space	Other	No	Hazards	No	No
Operation site	Yaw gear space	Other	No	Hazards	No	No
Operation site	Yaw gear space	Other	No	Hazards	No	No

Table A13: Incident data reported – Replacing major components

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Nacelle	Replacing major components	No	Restricted Work Day	No	No

Table A14: Incident data reported – Rigging/slinging

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Rigging/slinging	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Rigging/slinging	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Rigging/slinging	No	Medical Treatment Injuries	Yes	No
Operation site	Nacelle	Rigging/slinging	No	Hazards	No	No
Project site	Substation work and cable areas	Rigging/slinging	No	Hazards	Yes	No
Project site	Substation work and cable areas	Rigging/slinging	No	Hazards	Yes	No

Table A15: Incident data reported – Surveys (geophysical, environmental, meteorological)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Excavations & civil works	Surveys	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Surveys	No	Near Hits	No	No
Survey Phase	Survey vessel	Surveys	No	Near Hits	No	No
Project site	Survey vessel	Surveys	No	Near Hits	No	No
Project site	Survey vessel	Surveys	No	Near Hits	No	No
Project site	Survey vessel	Surveys	Yes	Hazards	No	No
Project site	Survey vessel	Surveys	Yes	Hazards	No	No
Project site	Survey vessel	Surveys	Yes	Hazards	No	No
Project site	Survey vessel	Surveys	No	Lost Work Day	Yes	No
Operation Site	Transition piece area	Surveys	No	Near Hits	No	No

Table A16: Incident data reported – Training/drills/team building events

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	CTV (Crew transfer vessel)	Training/drills/team building events	No	Hazards	No	No
Project site	Excavations & civil works	Training/drills/team building events	No	Lost Work Day	No	No
Operation site	Harbour, quay and pontoons	Training/drills/team building events	No	Hazards	No	No
Operation site	Hub and blades	Training/drills/team building events	No	Hazards	Yes	No
Project site	Public road/area	Training/drills/team building events	No	Restricted Work Day	No	No
Survey phase	Public road/area	Training/drills/team building events	No	Lost Work Day	No	No
Project site	Public road/area	Training/drills/team building events	No	Lost Work Day	No	No
Operation site	Public road/area	Training/drills/team building events	No	Medical Treatment Injuries	No	No
Project site	Substation HV areas (>1000 V)	Training/drills/team building events	No	Near Hits	No	No
Operation site	Turbine tower	Training/drills/team building events	No	Hazards	Yes	No
Operation site	Turbine tower	Training/drills/team building events	Yes	Near Hits	No	No
Operation site	Vessel – other	Training/drills/team building events	No	Lost Work Day	Yes	Yes
Operation site	Warehouse	Training/drills/team building events	Yes	Near Hits	No	No

Table A17: Incident data reported – Transfer by helicopter

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Accommodation platform	Transfer by helicopter	No	Hazards	Yes	No
Operation site	Administration	Transfer by helicopter	No	Hazards	Yes	No
Project site	Helicopter hoisting and landing area	Transfer by helicopter	No	Near Hits	Yes	No
Project site	Helicopter hoisting and landing area	Transfer by helicopter	No	Near Hits	Yes	No
Operation site	Helicopter hoisting and landing area	Transfer by helicopter	No	Near Hits	Yes	No
Project site	Helicopter hoisting and landing area	Transfer by helicopter	No	Near Hits	Yes	No
Operation site	Helicopter hoisting and landing area	Transfer by helicopter	No	Hazards	No	No
Operation site	Helicopter hoisting and landing area	Transfer by helicopter	No	Hazards	No	No
Project site	Helicopter hoisting and landing area	Transfer by helicopter	No	Near Hits	Yes	No
Project site	Hub and blades	Transfer by helicopter	No	Near Hits	Yes	No
Operation site	Nacelle	Transfer by helicopter	Yes	Near Hits	Yes	No

Table A18: Incident data reported – Transfer by vessel

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Access ladders	Transfer by vessel	No	First Aid	No	No
Operation site	Access ladders	Transfer by vessel	No	Hazards	No	No
Operation site	Accommodation vessel	Transfer by vessel	No	Hazards	No	No
Operation site	Accommodation vessel	Transfer by vessel	No	Hazards	No	No
Operation site	Accommodation vessel	Transfer by vessel	No	Near Hits	No	No
Operation Site	Administration	Transfer by vessel	No	Near Hits	No	No
Project site	Boatlanding	Transfer by vessel	No	Restricted Work Day	No	No
Project site	Boatlanding	Transfer by vessel	No	Medical Treatment Injuries	No	No
Operation site	Boatlanding	Transfer by vessel	No	Hazards	Yes	No
Operation site	Boatlanding	Transfer by vessel	No	Hazards	Yes	No
Project site	Boatlanding	Transfer by vessel	No	Hazards	Yes	No
Project site	Boatlanding	Transfer by vessel	No	Hazards	Yes	No
Project site	Boatlanding	Transfer by vessel	No	Lost Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No

Table A18: Incident data reported – Transfer by vessel (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	Yes	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Restricted Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Restricted Work Day	Yes	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Lost Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Restricted Work Day	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	First Aid	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation Site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	Yes	Yes
Project site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Medical Treatment Injuries	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transfer by vessel	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Transfer by vessel	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Transfer by vessel	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Transfer by vessel	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Transfer by vessel	No	Near Hits	No	No
Project site	Substation work and cable areas	Transfer by vessel	No	Hazards	Yes	No

Table A18: Incident data reported – Transfer by vessel (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Substation work and cable areas	Transfer by vessel	No	Hazards	Yes	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	Yes	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	Yes	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Operation site	Transition piece area	Transfer by vessel	No	Near Hits	No	No
Operation site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Project site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Project site	Transition piece area	Transfer by vessel	No	Hazards	No	No
Project site	Tug	Transfer by vessel	No	Hazards	Yes	No
Operation site	Turbine tower	Transfer by vessel	No	Hazards	Yes	No
Operation site	Vessel – other	Transfer by vessel	No	Near Hits	Yes	No
Operation site	Warehouse	Transfer by vessel	No	Hazards	Yes	No

Table A19: Incident data reported – Transit (vessel)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Lost Work Day	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	First Aid	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Near Hits	Yes	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No

Table A19: Incident data reported – Transit (vessel)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Transit (vessel)	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Transit (vessel)	No	Medical Treatment Injuries	No	No
Operation site	Harbour, quay and pontoons	Transit (vessel)	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Transit (vessel)	No	Hazards	No	No
Operation site	Tug	Transit (vessel)	No	Hazards	No	No
Project site	Vessel – other	Transit (vessel)	No	Hazards	No	No

Table A20: Incident data reported – Vessel mobilization

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	CTV (Crew transfer vessel)	Vessel mobilization	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Vessel mobilization	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Vessel mobilization	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Vessel mobilization	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Vessel mobilization	No	Near Hits	No	No
Operation site	CTV (Crew transfer vessel)	Vessel mobilization	No	Near Hits	Yes	No
Operation site	Harbour, quay and pontoons	Vessel mobilization	No	Hazards	Yes	No
Project site	Harbour, quay and pontoons	Vessel mobilization	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Vessel mobilization	No	Hazards	No	No
Operation site	Nacelle	Vessel mobilization	No	Hazards	Yes	No
Operation site	Transition piece area	Vessel mobilization	Yes	Near Hits	No	No
Operation site	Vessel – other	Vessel mobilization	No	Medical Treatment Injuries	No	No

Table A21: Incident data reported – Vessel operation (including jack-ups and barges)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	CTV (Crew transfer vessel)	Vessel operation	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Vessel operation	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Vessel operation	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Vessel operation	No	Near Hits	Yes	No
Project site	Installation vessel – cables (array, export)	Vessel operation)	No	Near Hits	No	No
Project site	Installation vessel – cables (array, export)	Vessel operation	No	Medical Treatment Injuries	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Vessel operation	No	Hazards	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Vessel operation	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Vessel operation	No	Near Hits	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Vessel operation	No	Medical Treatment Injuries	No	No
Operation site	Survey vessel	Vessel operation	No	Restricted Work Day	Yes	No
Survey phase	Survey vessel	Vessel operation	No	Near Hits	No	No
Operation site	Transition piece area	Vessel operation	No	Hazards	No	No
Operation site	Transition piece area	Vessel operation	No	Hazards	No	No

Table A22: Incident data reported – Working at heights

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Access ladders	Working at heights	No	Hazards	Yes	No
Operation Site	Access ladders	Working at heights	No	Lost Work Day	No	No
Operation site	Access ladders	Working at heights	Yes	Near Hits	No	No
Operation site	Access ladders	Working at heights	No	First Aid	No	No
Operation site	Access ladders	Working at heights	No	Hazards	No	No
Operation site	Access ladders	Working at heights	No	Hazards	No	No
Operation site	Access ladders	Working at heights	No	Hazards	No	No
Operation site	Access ladders	Working at heights	No	Hazards	No	No
Operation site	Access ladders	Working at heights	No	Lost Work Day	No	No
Project site	Barge	Working at heights	No	Hazards	Yes	No
Operation site	Boatlanding	Working at heights	No	Hazards	Yes	No
Project site	Boatlanding	Working at heights	No	Hazards	Yes	No
Operation site	Car park	Working at heights	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Working at heights	Yes	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Working at heights	No	Hazards	Yes	No
Project site	CTV (Crew transfer vessel)	Working at heights	No	Hazards	Yes	No
Operation site	CTV (Crew transfer vessel)	Working at heights	No	Hazards	No	No
Project site	Excavations & civil works	Working at heights	No	Hazards	Yes	No
Project site	Excavations & civil works	Working at heights	No	Hazards	Yes	No
Project site	Excavations & civil works	Working at heights	No	Hazards	Yes	No
Project site	Excavations & civil works	Working at heights	No	Hazards	No	No
Operation site	Foundation external (excluding boatlanding and TP)	Working at heights	Yes	Near Hits	No	No
Operation site	Foundation external (excluding boatlanding and TP)	Working at heights	No	Hazards	Yes	No
Project site	Foundation external (excluding boatlanding and TP)	Working at heights	No	Hazards	Yes	No
Project site	Foundation internal	Working at heights	No	Near Hits	Yes	No
Operation site	Foundation internal	Working at heights	No	Hazards	Yes	No
Project site	Foundation internal	Working at heights	No	Hazards	No	No
Operation site	Harbour, quay and pontoons	Working at heights	No	Near Hits	No	No
Project site	Harbour, quay and pontoons	Working at heights	No	Hazards	Yes	No
Operation site	Helicopter hoisting and landing area	Working at heights	No	Hazards	Yes	No
Operation site	Hub and blades	Working at heights	No	Hazards	Yes	No
Operation site	Hub and blades	Working at heights	No	Hazards	Yes	No
Operation site	Hub and blades	Working at heights	No	Hazards	Yes	No
Operation site	Hub and blades	Working at heights	Yes	Near Hits	Yes	No
Operation Site	Hub and blades	Working at heights	No	Near Hits	No	No
Operation site	Hub and blades	Working at heights	No	First Aid	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Near Hits	No	No
Operation site	Nacelle	Working at heights	Yes	Near Hits	No	No
Operation site	Nacelle	Working at heights	Yes	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Project site	Nacelle	Working at heights	Yes	Near Hits	Yes	No
Operation site	Nacelle	Working at heights	Yes	Near Hits	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Project site	Nacelle	Working at heights	No	Hazards	Yes	No

Table A22: Incident data reported – Working at heights (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Nacelle	Working at heights	No	Hazards	Yes	No
Project site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Restricted Work Day	No	No
Project site	Nacelle	Working at heights	No	Hazards	Yes	No
Project site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	Yes	No
Operation Site	Nacelle	Working at heights	No	First Aid	No	No
Operation Site	Nacelle	Working at heights	No	First Aid	Yes	No
Operation site	Nacelle	Working at heights	No	Hazards	No	No
Operation site	Nacelle	Working at heights	No	Lost Work Day	Yes	Yes
Operation site	Nacelle	Working at heights	No	Hazards	No	No
Operation site	Office	Working at heights	No	Near Hits	No	No
Operation site	Office	Working at heights	No	Hazards	No	No
Project site	Other	Working at heights	No	Hazards	Yes	No
Operation site	Other	Working at heights	No	Hazards	Yes	No
Operation site	Public road/area	Working at heights	No	Near Hits	No	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	Yes	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working at heights	No	Hazards	Yes	No
Operation site	Transition piece area	Working at heights	No	First Aid	No	No
Operation site	Transition piece area	Working at heights	No	First Aid	No	No
Operation site	Transition piece area	Working at heights	No	Lost Work Day	No	No
Project site	Transition piece area	Working at heights	No	Hazards	Yes	No
Operation site	Transition piece area	Working at heights	No	Restricted Work Day	No	Yes
Operation site	Transition piece area	Working at heights	No	Medical Treatment Injuries	No	No
Project site	Transition piece area	Working at heights	No	Near Hits	No	No
Operation site	Transition piece area	Working at heights	No	First Aid	No	No
Operation site	Transition piece area	Working at heights	No	Hazards	No	No
Operation site	Transition piece area	Working at heights	No	Hazards	No	No
Project site	Tug	Working at heights	No	Hazards	Yes	No
Project site	Tug	Working at heights	No	Hazards	Yes	No
Operation site	Turbine Tower	Working at heights	No	Near Hits	No	No
Operation site	Turbine Tower	Working at heights	No	Near Hits	No	No
Operation site	Turbine tower	Working at heights	No	First Aid	No	No
Operation site	Turbine tower	Working at heights	No	Near Hits	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Project site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Project site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Hazards	Yes	No
Project site	Turbine tower	Working at heights	No	Hazards	Yes	No
Operation site	Turbine tower	Working at heights	No	Near Hits	Yes	No
Operation site	Turbine tower	Working at heights	No	First Aid	No	No
Operation Site	Turbine tower	Working at heights	No	Near Hits	No	No

Table A22: Incident data reported – Working at heights (continued)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation Site	Turbine tower	Working at heights	No	First Aid	No	No
Operation Site	Turbine tower	Working at heights	Yes	Near Hits	Yes	No
Operation Site	Turbine tower	Working at heights	No	Medical Treatment Injuries	No	No
Operation Site	Turbine tower	Working at heights	No	Near Hits	No	No
Operation Site	Turbine tower	Working at heights	No	Near Hits	No	No
Operation Site	Turbine tower	Working at heights	Yes	Near Hits	No	No
Operation site	Turbine tower	Working at heights	No	Restricted Work Day	No	No
Project site	Turbine tower	Working at heights	No	Near Hits	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Medical Treatment Injuries	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Near Hits	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine tower	Working at heights	No	Hazards	No	No
Operation site	Turbine Tower	Working at heights	No	Hazards	No	No
Project site	Turbine/substation outside (not dedicated work areas)	Working at heights	No	Hazards	Yes	No
Operation site	Turbine/substation outside (not dedicated work areas)	Working at heights	No	Hazards	No	No
Project site	Vessel – other	Working at heights	No	Hazards	Yes	No
Project site	Vessel – other	Working at heights	No	Near Hits	No	No
Project site	Vessel – other	Working at heights	Yes	Near Hits	No	No
Operation site	Warehouse	Working at heights	No	Hazards	No	No
Operation site	Yaw gear space	Working at heights	No	Hazards	Yes	No
Operation site	Yaw gear space	Working at heights	No	Hazards	Yes	No
Operation site	Yaw gear space	Working at heights	No	Restricted Work Day	No	No
Operation site	Yaw gear space	Working at heights	No	Hazards	Yes	No
Project site	Yaw gear space	Working at heights	No	Hazards	Yes	No
Operation site	Yaw gear space	Working at heights	No	Hazards	No	No
Operation site	Yaw gear space	Working at heights	No	Hazards	No	No

Table A23: Incident data reported – Working in confined spaces

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Administration	Working in confined spaces	No	Hazards	Yes	No
Project site	Foundation internal	Working in confined spaces	No	Hazards	Yes	No
Operation site	Hub and blades	Working in confined spaces	No	Near Hits	Yes	No
Operation site	Nacelle	Working in confined spaces	No	Lost Work Day	No	No
Operation site	Nacelle	Working in confined spaces	No	Restricted Work Day	No	No
Project site	Turbine tower	Working in confined spaces	No	Hazards	Yes	No
Operation site	Turbine tower	Working in confined spaces	No	Hazards	Yes	No
Operation site	Turbine tower	Working in confined spaces	No	Hazards	Yes	No
Project site	Yaw gear space	Working in confined spaces	No	Hazards	Yes	No
Operation site	Yaw gear space	Working in confined spaces	No	Hazards	No	No

Table A24: Incident data reported – Working on energized systems (electrical, hydraulic, pneumatic)

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Boatlanding	Working on energized systems	No	Hazards	No	No
Operation site	CTV (Crew transfer vessel)	Working on energized systems	No	Hazards	No	No
Project site	Excavations & civil works	Working on energized systems	No	Hazards	Yes	No
Project site	Harbour, quay and pontoons	Working on energized systems	No	Hazards	Yes	No
Operation site	Harbour, quay and pontoons	Working on energized systems	No	Hazards	No	No
Operation site	Hub and blades	Working on energized systems	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working on energized systems	No	Hazards	Yes	No
Operation site	Nacelle	Working on energized systems	No	Hazards	Yes	No
Operation site	Nacelle	Working on energized systems	No	Near Hits	Yes	No
Project site	Nacelle	Working on energized systems	No	Near Hits	Yes	No
Operation site	Nacelle	Working on energized systems	No	Near Hits	Yes	No
Operation Site	Nacelle	Working on energized systems	No	Near Hits	No	No
Operation site	Nacelle	Working on energized systems	No	Near Hits	Yes	No
Operation site	Nacelle	Working on energized systems	No	Hazards	No	No
Operation site	Nacelle	Working on energized systems	No	Hazards	No	No
Operation site	Nacelle	Working on energized systems	No	Hazards	No	No
Operation site	Nacelle	Working on energized systems	No	Near Hits	No	No
Operation site	Nacelle	Working on energized systems	No	Hazards	No	No
Project site	Office	Working on energized systems	No	Near Hits	Yes	No
Other	Office	Working on energized systems	No	Hazards	Yes	No
Project site	Other	Working on energized systems	No	Hazards	Yes	No
Project site	SOV (Service operation vessel)	Working on energized systems	No	Hazards	No	No
Project site	Storage	Working on energized systems	No	Hazards	No	No
Project site	Substation HV areas (>1000 V)	Working on energized systems	No	Medical Treatment Injuries	Yes	No
Project site	Substation HV areas (>1000 V)	Working on energized systems	No	Hazards	Yes	No
Project site	Substation work and cable areas	Working on energized systems	No	Near Hits	Yes	No
Project site	Substation work and cable areas	Working on energized systems	No	Near Hits	Yes	No
Operation site	Substation work and cable areas	Working on energized systems	No	Hazards	No	No
Operation site	Transition piece area	Working on energized systems	No	Near Hits	No	No
Operation site	Transition piece area	Working on energized systems	No	Hazards	No	No
Operation site	Transition piece area	Working on energized systems	No	Hazards	No	No
Operation site	Transition piece area	Working on energized systems	No	Hazards	No	No
Project site	Turbine tower	Working on energized systems	No	Hazards	Yes	No
Operation site	Turbine tower	Working on energized systems	No	Near Hits	Yes	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	Yes	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	Yes	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	Yes	No
Operation Site	Turbine tower	Working on energized systems	No	Near Hits	No	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	No	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	No	No
Operation site	Turbine tower	Working on energized systems	No	Hazards	No	No
Operation site	Turbine Tower	Working on energized systems	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Working on energized systems	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Working on energized systems	No	Near Hits	No	No
Operation site	Warehouse	Working on energized systems	No	Hazards	No	No
Operation site	Yaw gear space	Working on energized systems	No	Hazards	No	No

Table A25: Incident data reported – Working with chemicals and hazardous substances

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Project site	Installation vessel – cables (array, export)	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Nacelle	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Nacelle	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Nacelle	Working with chemicals and hazardous substances	No	Hazards	No	No
Project site	Substation HV areas (>1000 V)	Working with chemicals and hazardous substances	No	Near Hits	No	Yes
Project site	Substation HV areas (>1000 V)	Working with chemicals and hazardous substances	No	Near Hits	No	Yes
Project site	Substation HV areas (>1000 V)	Working with chemicals and hazardous substances	No	Near Hits	No	Yes
Operation site	Turbine tower	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Turbine/substation outside (not dedicated work areas)	Working with chemicals and hazardous substances	No	Near Hits	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	First Aid	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Warehouse	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Yaw gear space	Working with chemicals and hazardous substances	No	Hazards	No	No
Operation site	Yaw gear space	Working with chemicals and hazardous substances	No	Hazards	No	No

Table A26: Incident data reported – Working with hand tools/power tools

Site type	Incident area	Work process	Dropped object incident?	Actual consequence	High potential incident?	ERME incident?
Operation site	Administration	Working with hand tools/power tools	No	Hazards	Yes	No
Project site	Excavations & civil works	Working with hand tools/power tools	No	Hazards	Yes	No
Project site	Foundation internal	Working with hand tools/power tools	No	Near Hits	Yes	No
Operation site	Harbour, quay and pontoons	Working with hand tools/power tools	No	Near Hits	No	No
Project site	Harbour, quay and pontoons	Working with hand tools/power tools	No	Lost Work Day	No	No
Project site	Hub and blades	Working with hand tools/power tools	No	Restricted Work Day	No	No
Operation site	Hub and blades	Working with hand tools/power tools	No	Lost Work Day	No	No
Operation site	Hub and blades	Working with hand tools/power tools	Yes	Near Hits	No	No
Operation site	Hub and blades	Working with hand tools/power tools	Yes	First Aid	No	No
Operation site	Hub and blades	Working with hand tools/power tools	No	Hazards	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working with hand tools/power tools	No	Lost Work Day	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working with hand tools/power tools	No	Near Hits	Yes	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working with hand tools/power tools	No	Restricted Work Day	No	No
Project site	Installation vessel – heavy installations (WTG, foundations, offshore substation)	Working with hand tools/power tools	No	Near Hits	Yes	No
Operation site	Nacelle	Working with hand tools/power tools	Yes	Hazards	Yes	No
Operation site	Nacelle	Working with hand tools/power tools	No	Near Hits	Yes	No
Operation site	Nacelle	Working with hand tools/power tools	No	Near Hits	Yes	No
Operation site	Nacelle	Working with hand tools/power tools	No	Restricted Work Day	No	No
Operation site	Office	Working with hand tools/power tools	No	Hazards	No	No
Project site	Substation HV areas (>1000 V)	Working with hand tools/power tools	No	Medical Treatment Injuries	No	No
Project site	Substation work and cable areas	Working with hand tools/power tools	No	Near Hits	Yes	No
Project site	Substation work and cable areas	Working with hand tools/power tools	No	Lost Work Day	No	No
Operation site	Transition piece area	Working with hand tools/power tools	No	Medical Treatment Injuries	No	No
Project site	Transition piece area	Working with hand tools/power tools	No	Near Hits	No	No
Operation site	Transition piece area	Working with hand tools/power tools	No	First Aid	No	No
Operation site	Transition piece area	Working with hand tools/power tools	No	First Aid	No	No
Operation site	Turbine tower	Working with hand tools/power tools	No	First Aid	No	No
Project site	Turbine tower	Working with hand tools/power tools	No	Medical Treatment Injuries	No	No
Operation site	Turbine tower	Working with hand tools/power tools	No	Medical Treatment Injuries	No	Yes
Operation site	Turbine tower	Working with hand tools/power tools	Yes	Near Hits	Yes	No
Operation site	Turbine tower	Working with hand tools/power tools	No	Hazards	No	No
Operation site	Warehouse	Working with hand tools/power tools	No	Hazards	No	No
Project site	Workshop	Working with hand tools/power tools	No	Lost Work Day	No	No
Operation site	Yaw gear space	Working with hand tools/power tools	Yes	Near Hits	Yes	No

Annex B

The following incident consequence definitions have been used in the G+ dataset:

Fatality	Incidents that involve one or more people who died as a result of a work-related incident or occupational illness. 'Delayed' deaths that occur after the incident are to be included if the deaths were a direct result of the incident.
Lost work day	Non-fatal incidents that involve a person being unfit to perform any work on any day after the occurrence of the occupational injury. 'Any day' includes rest days, weekend days, leave days, public holidays or days after ceasing employment.
Restricted work day	Incidents that do not result in a fatality or a lost work day but do result in a person being unfit for the full performance of the regular job on any work on any day after the occurrence of the occupational injury.
Medical treatment injury	Those incidents not severe enough to be reported as fatalities, lost work day incidents or restricted work day incidents but are more severe than requiring simple first aid treatment.
First aid	An injury which requires simple medical treatment that is self-administered or by a first aider, doctor or nurse but does not result in lost time or long term medical care.
Near hit	A near hit is any incident which could have resulted in a work-related accident but did not either by chance or timely intervention.
Hazard	A hazard is a condition or a situation where there is a potential to cause an incident. It is important to remember that "nothing has happened and no impact / harm has occurred".

The following statistical definitions have been used in the G+ incident data analysis:

Total recordable injury rate (TRIR)	The number of fatalities, lost work day incidents, restricted work day incidents and other medical treatment injuries requiring treatment by a medical professional per million hours worked.
Restricted work injury frequency (RWIF)	The number of recordable injuries (restricted work day incidents) per million hours worked.
Lost time injury frequency (LTIF)	The number of fatalities and lost work day incidents per million hours worked.

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