

International Marine Contractors Association

Improving performance in the marine contracting industry

Health & Safety Our industry's priority

Date: 17 November 2020 starting at 1400hrs

There will be an opportunity for Q&A at the end of the presentations

Please submit questions at any time under the Q&A section on your screen



Welcome

- This is a webinar
- The sound works one way only
—from presenters to you
- Written questions are encouraged
— Q&A box is monitored
- Today's Speakers and Members of the Marine Renewable Energy Committee are online to address your questions
- A recording of today's webinar will be shared with you
- Competition Law



Upcoming webinars



25 November South America Committee

- Guest speakers from Fugro and ex Petrobras industry expert and IMCA

26 November Middle East & India Committee

- Training without borders, COVID impact, Environmental Sustainability and Safety Updates

1 December Europe & Africa Committee

- Vessel compliance in a post-COVID world

3 December North America Committee

- American Wind Energy Association, Hughes Subsea

8 December Europe & Africa Committee

- Alternative fuels for the energy transition

9 December Asia Pacific Committee

- Seabed 2030, Diving DESIGN, CPD

**Full details visit
events section at
imca-int.com**

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[events@
imca-int.com](mailto:events@imca-int.com)**



Today's speakers and panelists



Alan MacLeay

Chair

*IMCA Marine
Renewable
Energy
Committee*



Steve Myers

Vice Chair

*IMCA Marine
Renewable
Energy
Committee*



Andy Goldsmith

IMCA

*IMCA Marine
Renewable
Energy
Committee*



Allen Leatt

IMCA

*IMCA's Safety
Agenda*

- Committee Members - Moderators & Q&A Session

- 10 minutes



Today's speakers and panelists



Trevor Johnson

**HM Principal
Inspector of
Health & Safety**

*UK Health &
Safety Executive*

- 10 minutes



Christy Lan

**Snr Technical
Advisor
Renewable
Energy**

*US Health &
Safety Regulator
BSEE*

- 10 minutes



Kate Harvey

**General
Manager**

G+

- 10 minutes



Nick Hough

IMCA

*IMCA Safety
reporting*

- 10 minutes



Your moderators today



Alan MacLeay

Chair

IMCA Marine
Renewable Energy
Committee

Alan MacLeay

Engineering Director, Seaway 7

- Seaway 7 is the renewables division of Subsea 7
- Alan is a Fellow of the Institution of Civil Engineers
- He has more than 30 years experience of offshore engineering and construction
- Alan has chaired the IMCA Marine Renewable Energy Committee since 2011



Allen Leatt

IMCA

Allen Leatt

Chief Executive, IMCA

- Allen is a civil engineer by professional training. His entire career has been in the marine construction industry with leading contractors in technical, managerial, and executive roles.
- Executive VP for the SURF Product Line at Technip.
- CTO at Acergy
- SVP Engineering & Project Management at Subsea 7
- Allen is a Fellow of the Royal Academy of Engineering, a Fellow of the Institution of Civil Engineers, a first-class engineer member of the Smeatonian Society, and a chartered engineer in the UK. He holds a Bachelor of Science degree in Civil Engineering, a Master's in Business Administration, and a Doctorate of Science in engineering.

International Marine Contractors Association

Improving performance in the marine contracting industry

IMCA's Safety Agenda

Allen Leatt, Chief Executive

Date: 17 November 2020

IMCA's Safety Agenda

- The foundation of our work.
- Our focus is technical and operational safety rather than lobbying.
- Safety and efficiency are the main drivers with 200+ technical standards.
- Over 40 committees and workgroups engaging >400 members.
- Governance is extremely rigorous and fully up to date.
- Always looking to provide clarity for industry, e.g. W2W and Safety Training Matrix.



2019 Key Data

Industry Safety Statistics



802
MILLION MAN HOURS*
TOTAL
(2018: 728)



376
MILLION MAN HOURS*
OFFSHORE
(2018: 417)



339
SAFETY OBSERVATION
FREQUENCY RATE
(2018: 347)



Line of Fire
MOST COMMON
CAUSE OF LTIs
(2018: SAME)



18
FATALITIES REPORTED
(2018: 5)

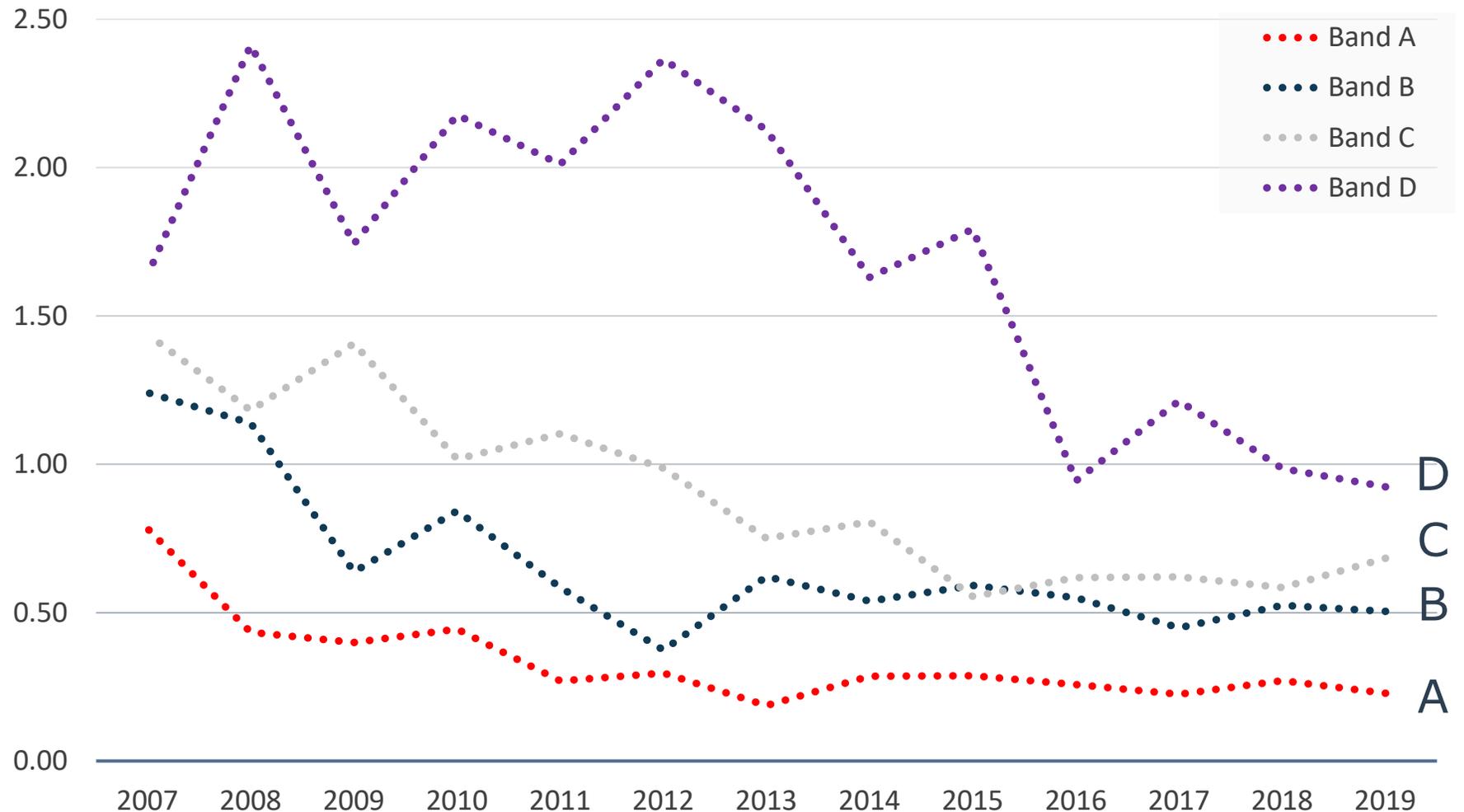


0.33
TOTAL LTIFR
(2018: 0.39)



2.24
TOTAL FAR
(2018: 0.63)

LTIFR by Company Size Banding 2007-19



Safety Flash System


SAFETY FLASH 

October 2020

IMCA Safety Flash 30/20

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links. Additional links should be submitted to info@imca-int.com.

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

1 Windfarm Support Vessel *Njord Forseti* hit wind turbine tower – Jersey Maritime Administration

What happened?

The Jersey Maritime Administration has published a report into its investigation of the causes of an allision between a windfarm support vessel and a windfarm tower in the Southern North Sea on 23 April 2020. The report can be found on the web [here](#).

What went wrong?

Shortly after 1800 local time, the vessel was released from duties on a windfarm and at 1811 departed for the return passage to port. Aboard the vessel were three crew members, and one wind farm technician who was being transferred ashore. Sea conditions were calm with light winds and low swell. Weather was fair with good visibility.

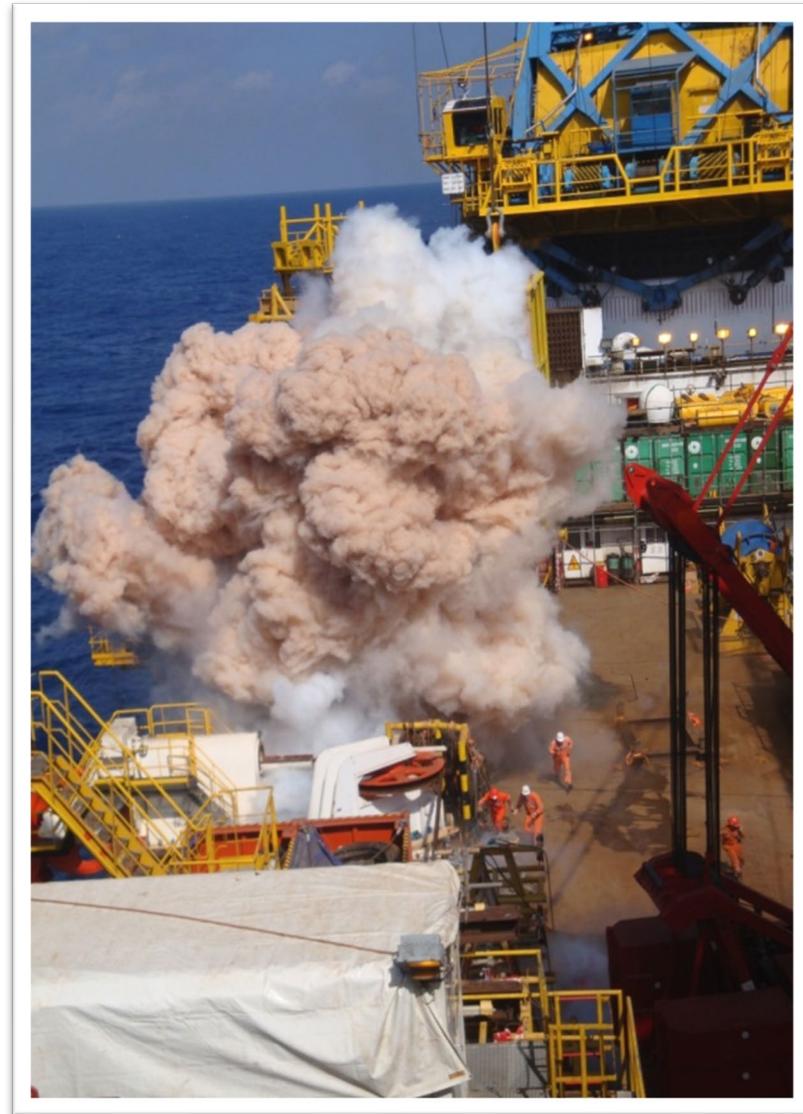


Whilst transiting between windfarms at approximately 20 knots, *Njord Forseti* hit a turbine tower. The impact resulted in serious damage to the vessel. Two crew members were evacuated by air to hospital, and the third was required to have a subsequent medical examination. Immediate assistance was provided by a nearby offshore construction vessel. The *Njord Forseti* returned to port under her own power with temporary crew members provided by a sister vessel.

Findings

The Jersey Maritime Administration report drew the following conclusions:

- For an indeterminate period between departure from the windfarm until the incident occurred, the vessel crew were not keeping a proper lookout as required by Rule 5 of the International Regulations for Preventing Collisions at Sea (COLREGS);
- The primary reason why a proper lookout was not being kept was because the Master was distracted from his primary role;
- It is possible that the Master was distracted from his primary role as he may have been adjusting of settings on the VHF radio which is mounted immediately to starboard of his seat. However, this has not been positively determined and distractions caused by other means cannot be ruled out;



LIFE-SAVING RULES

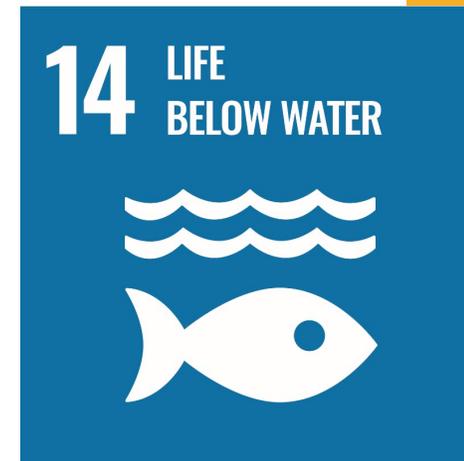
 Bypassing Safety Controls	 Confined Space
 Driving	 Energy Isolation
 Hot Work	 Line of Fire
 Safe Mechanical Lifting	 Work Authorisation
 Working at Height	

Energy Transition - Environment

- IMCA is well advanced in our strategy on the environment agenda.
- Our Environmental Sustainability Committee was formed 4 years ago with a remit of raising awareness and promoting certain programmes to our Members.
- For example: GHG emissions via our work with the IMO.
- For example: Waste and eliminating single use plastics offshore.
- Today we are developing our Member Code of Practice for Environmental Sustainability, including climate and environmental disclosures.



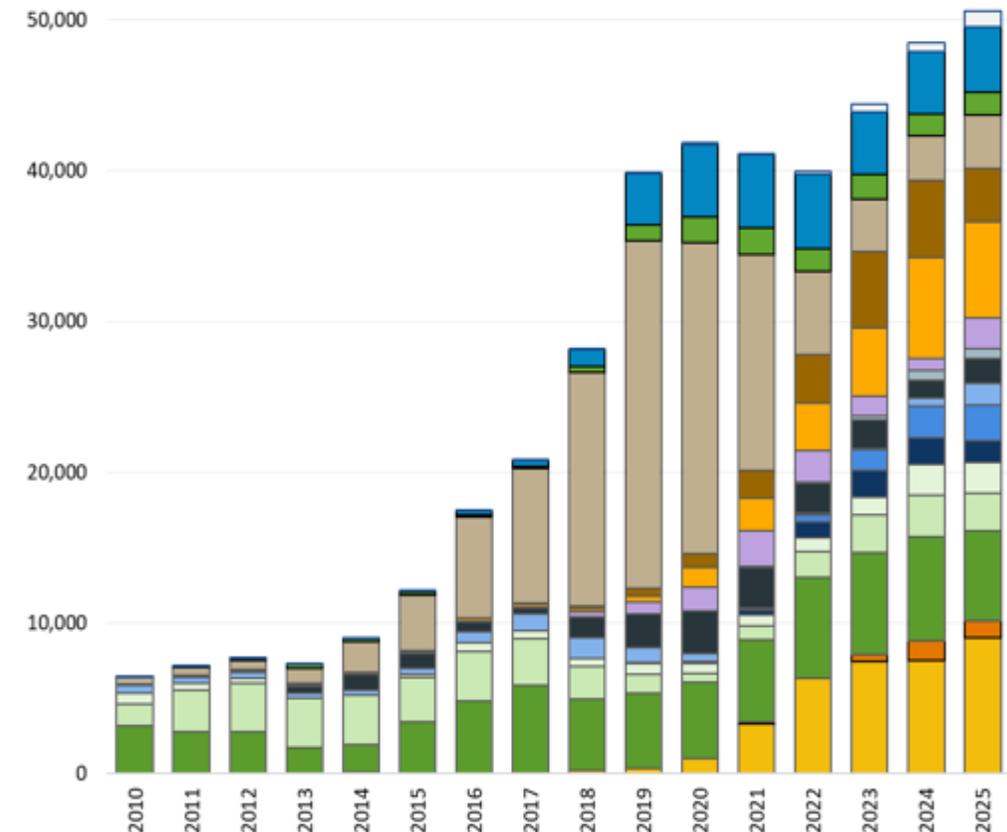
AFFORDABLE AND
CLEAN ENERGY



Energy Transition - Market

- Offshore wind market doubled in last 3 years to \$40 billion in CAPEX in 2020.
- Large marine contractors are now very evident in this space.
- Offshore construction in oil & gas and wind - similar challenges of offshore operations, DP, lifting, diving, ROV, survey, cable laying/trenching, Engineering, Project Management etc.
- Similar risks to be managed and safe processes to be followed.
- IMCA is well placed to assist in this market.

Offshore Wind CAPEX \$'Million



Source 4C Offshore, September 2020



Improving performance in the
marine contracting industry





Trevor Johnson

UK HSE

Trevor Johnson

HM Principal Inspector of Health and Safety at the UK Health & Safety Executive

- Trevor was appointed HM Inspector of Health and Safety in 1989
- Promoted to HM Principal Inspector in 1999
- He has been involved in the regulation of a wide range of industries including Utilities and Construction
- In January 2012 he transferred to a new team in HSE's Energy Division to regulate the Offshore Renewable Energy Sector
- In 2017 the scope of this team was increased to include onshore wind
- Trevor sits on IMCA's Marine Renewable Energy Committee

“Health & Safety
Our industry's priority”

IMCA Webinar
17th November 2020

Trevor Johnson
Health and Safety Executive



Why the concern?

Three wind farm workers have been injured, including one seriously, after their crew transfer vessel struck a turbine....April 2020

High-speed offshore supply shipin collision with cargo ship...All 15 aboard the supply ship comprising 11 wind turbine technicianswere injured, 10 of them severely...Feb 2019

.... can confirm that five people have been injured following an incident..... offshore windfarm..... All five were transferred to hospital.... Three of the injured were discharged onwith two persons recovering in hospital... May 2020

One of the two people hospitalised after Saturday's crane collapse on board the.... vessel has been allowed home was due to install jackets at wind farm... May 2020



HSE's Letter dated 10 July

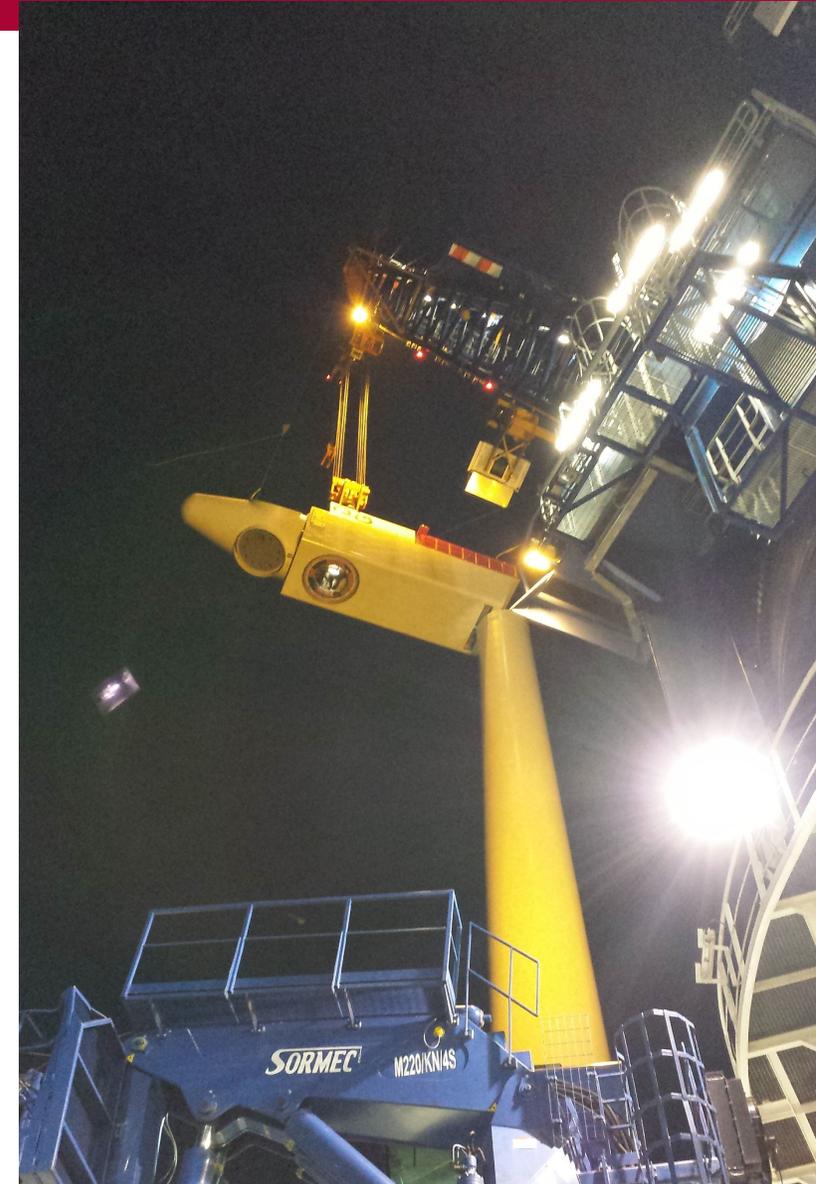
Key Points



.... some sectors of the wind energy industry, improvements in health and safety performance has at best stalled if not reversed.... any reversal may continue. This would be unacceptable

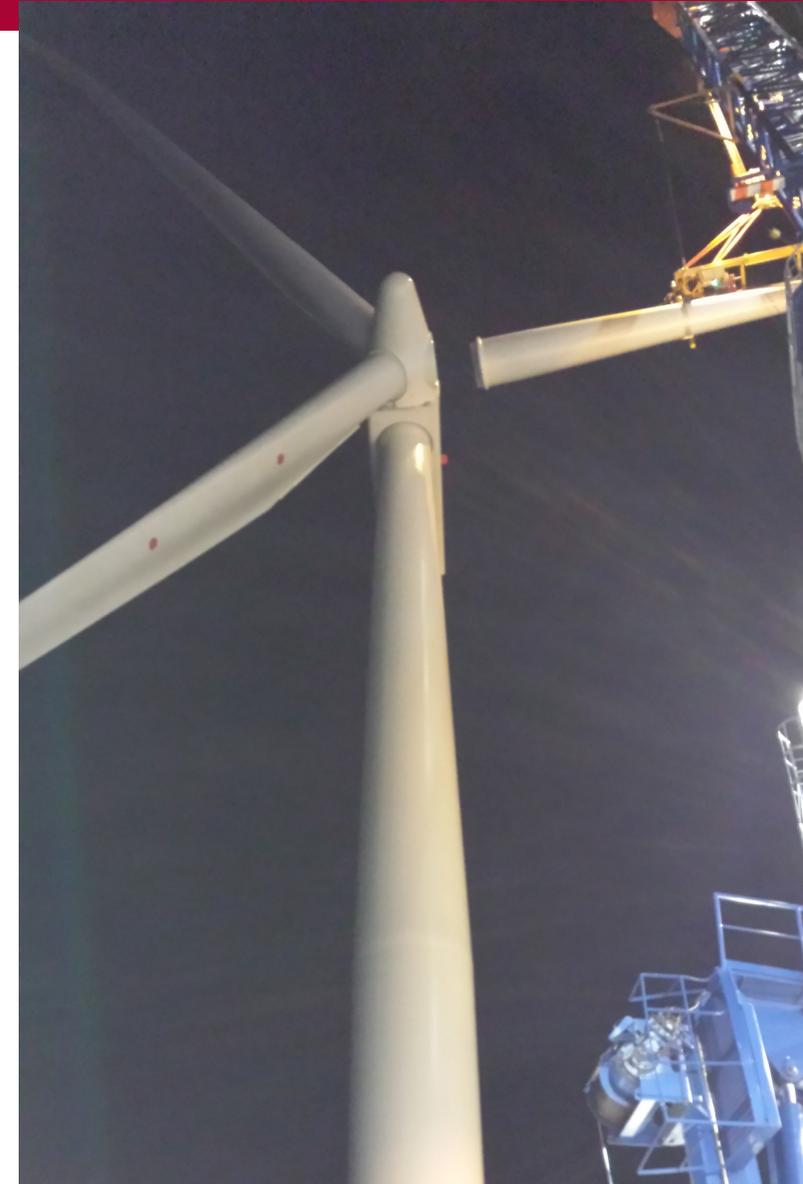
.... I know that your organisation and your members state your commitment to improve health and safety, however there is a renewed need to ensure that all organisations and individuals provide the necessary leadership to ensure health and safety remains an industry priority.....

Well publicised cost-reductions or other pressures do not lead to compromises in health and safety.



What do we need to do next?

- The response from the industry has been positive and demonstrate that desire to improve, particularly pleased with
 - IMCA Making Waves Article
 - Today's event – “Our Industry Priorities”
- My view of the priorities:
 - Health and Safety at the centre of all major decision making;
 - Change the narrative – Health and Safety is an investment in people not a cost;
 - Improve engagement for:
 - The workforce;
 - All managers/supervisors involved in organisations and projects;
 - Throughout the supply chain
 - Improve collaboration, cooperation and the sharing of information



“Health & Safety
Our industry's priority”

IMCA Webinar
17th November 2020



Christy Lan

BSEE

Christy Lan

Senior Technical Advisor – Renewable Energy

- Christy has been involved in the renewable energy program for 4 years as a technical SME and has participated in the development of several policy documents and plan reviews.
- During her 15 years at MMS/BOEMRE/BSEE Christy has worked in the GOM Regional Office for the Technical Assessment Section and for OORP in the Houston office as the Standards Section Chief, subsea production specialist for the Engineering Technology and Assessment Center, and as the Acting Best Available and Safest Technology (BAST) Section Chief.
- Prior to working for the government, Christy worked for General Electric in the materials and microwave groups and for Marathon Oil as a process engineer



Bureau of Safety and Environmental Enforcement

IMCA Marine Renewable Energy Webinar

“Health & Safety – our industry’s priority”

Christy Lan – Senior Technical Adviser for Renewable Energy
November 17, 2020

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

DOI Responsibilities for Offshore Renewable Energy

- **Statutory Authority:** Outer Continental Shelf Lands Act, as amended by the Energy Policy Act of 2005
- **DOI Regulations:** 30 CFR Part 585 – *Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf*
 - Subpart H—Environmental and Safety Management, Inspections, and Facility Assessments for Activities Conducted Under SAPs, COPs and GAPs.
- **Bureau Roles:**
 - Authority for the entirety of the offshore renewable energy program is currently assigned to the Bureau of Ocean Energy Management (BOEM), but there is expectation of a forthcoming transfer of safety and compliance responsibilities to BSEE
 - BSEE consults and collaborates with and provides recommendations to BOEM on functions expected to be transferred to BSEE (safety, environmental compliance, and enforcement).
- **With BOEM support, BSEE is leading the development of:**
 - Offshore wind health, safety, and environmental (HSE) recommendations,
 - Safety management system requirements,
 - Oil spill preparedness requirements.
 - Incident report processes and investigation procedures,
 - Inspection procedures and industry self-inspection plans.

DOI – Principal Federal Agency for Regulation and Enforcement of Safety and Health

- BSEE is building out programs to promote and ensure safety on offshore wind facilities
- DOI is the sole regulator for workplace safety on renewable energy facilities
 - Oct. 2019 policy statement (*see right*)
- The bureaus have agreed that the eventual transfer of renewable energy program functions will include authority for BSEE to:
 - Oversee fabrication, installation, operations; analyze inspection reporting
 - Continual monitoring of safety management systems to assure full functionality throughout the life of the project
 - Enforcement actions (including environmental and Incident reporting and investigations)
 - Decommissioning plan review and approval
 - Facility removal inspection / monitoring and site clearance confirmation

Federal Register / Vol. 84, No. 202 / Friday, October 18, 2019 /

Role of DOI

DOI will act as the principal Federal agency for the regulation and enforcement of safety and health requirements for OCS renewable energy facilities.⁷ DOI considers its regulatory program, described in part above, to occupy the field of workplace safety and health for personnel and others on OCS renewable energy facilities, and to preempt the applicability of Occupational Safety and Health Administration (OSHA) regulations. *See* 29 U.S.C. 653(b)(1).

In carrying out its responsibilities on the OCS, DOI will collaborate and consult with OSHA on the applicability and appropriateness of workplace safety and health standards for the offshore wind industry and other offshore renewable energy industries.

In addition, DOI will continue to collaborate with the USCG to share relevant safety and training information and promote safety on the OCS.

In implementing this policy statement, DOI may amend its regulations or issue guidance related to the workplace health or safety of employees on renewable energy facilities on the OCS.

DEPARTMENT OF THE INTERIOR

Bureau of Safety and Environmental Enforcement

30 CFR Part 250

Bureau of Ocean Energy Management

30 CFR Part 585

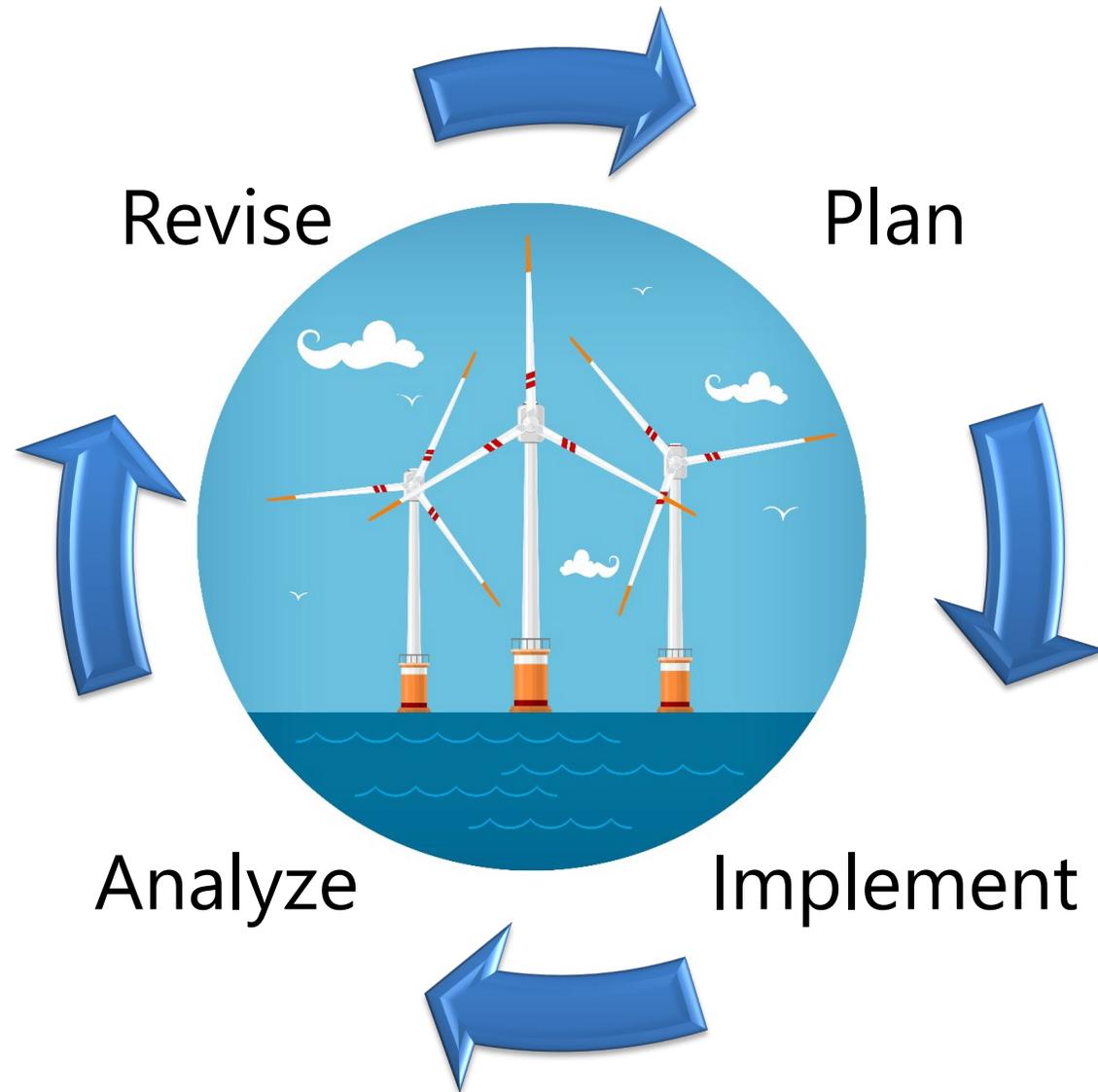
[201E1700D2 ET1SF0000.EAQ000
EEEE500000]

Department of the Interior Policy Statement on Regulating Workplace Safety and Health Conditions on Renewable Energy Facilities on the Outer Continental Shelf

AGENCY: Bureau of Ocean Energy Management, Interior; Bureau of Safety and Environmental Enforcement, Interior.

ACTION: Notification of policy statement.

Key to Regulating Safety and Health ... Safety Management Systems (SMS)



- **DOI will take a performance-based approach to regulating health and safety.**
 - 30 CFR 585 Subpart H comprises the primary safety regulations for renewable energy operations.
 - Operators are required to submit a SMS with their COP.
 - In the SMS, the operator explains how they will ensure and maintain safety and health on their lease.
 - SMS is a cyclical means to continually improve safety performance
 - DOI will review SMS audit and ensure lessees are following their SMS, including developing and implementing a corrective action plan when issues with the SMS are found.

DOI's Expectations

- Lessees not only implement their SMS, but that it becomes foundational to approach to health and safety within their organization.
- Senior management clearly endorses, supports, and incorporates the SMS into all areas of the organization's business.
- The SMS communicated to all employees, and employees are trained to implement the SMS.
- The SMS is continually assessed to identify gaps or areas where improvement is necessary, and then corrective action plans are developed and implemented.
- The effectiveness of SMS revisions are monitored and evaluated.

BSEE Website: www.bsee.gov



@BSEEGov



BSEEGov



Bureau of Safety and
Environmental Enforcement



BSEEGov

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”



Kate Harvey

G+

*How energy
companies are
making H&S a
priority*

Kate Harvey

General Manager, G+ Global Offshore Wind Health and Safety Organisation

- Kate began her career in renewable energy at RWE in 2002.
- Kate then joined SSE in 2008, where she undertook the following roles:
 - Consents Manager for Greater Gabbard,
 - Project Manager for Galloper,
 - SSE Asset Manager for Dogger Bank and
 - Board member of Seagreen
- Kate has been the G+ General Manager since 2016 and sits on IMCA's Renewable Energy Committee

G+ Global Offshore Wind Health and Safety Organisation



Kate Harvey

www.gplusoffshorewind.com

In partnership with the
 **energy**
institute

2019 incident data Highlights

0



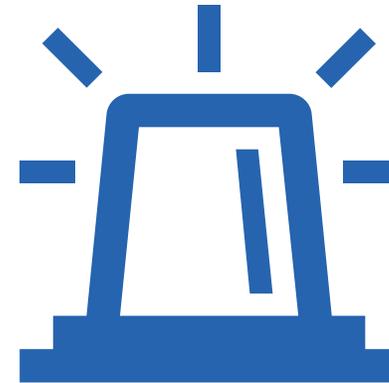
No fatalities!

123



**~1 injured person
every 3 days!**

252



**29% of all incidents
are high potential**

92



**~1 dropped object
every four days**

Who are the members of G+?

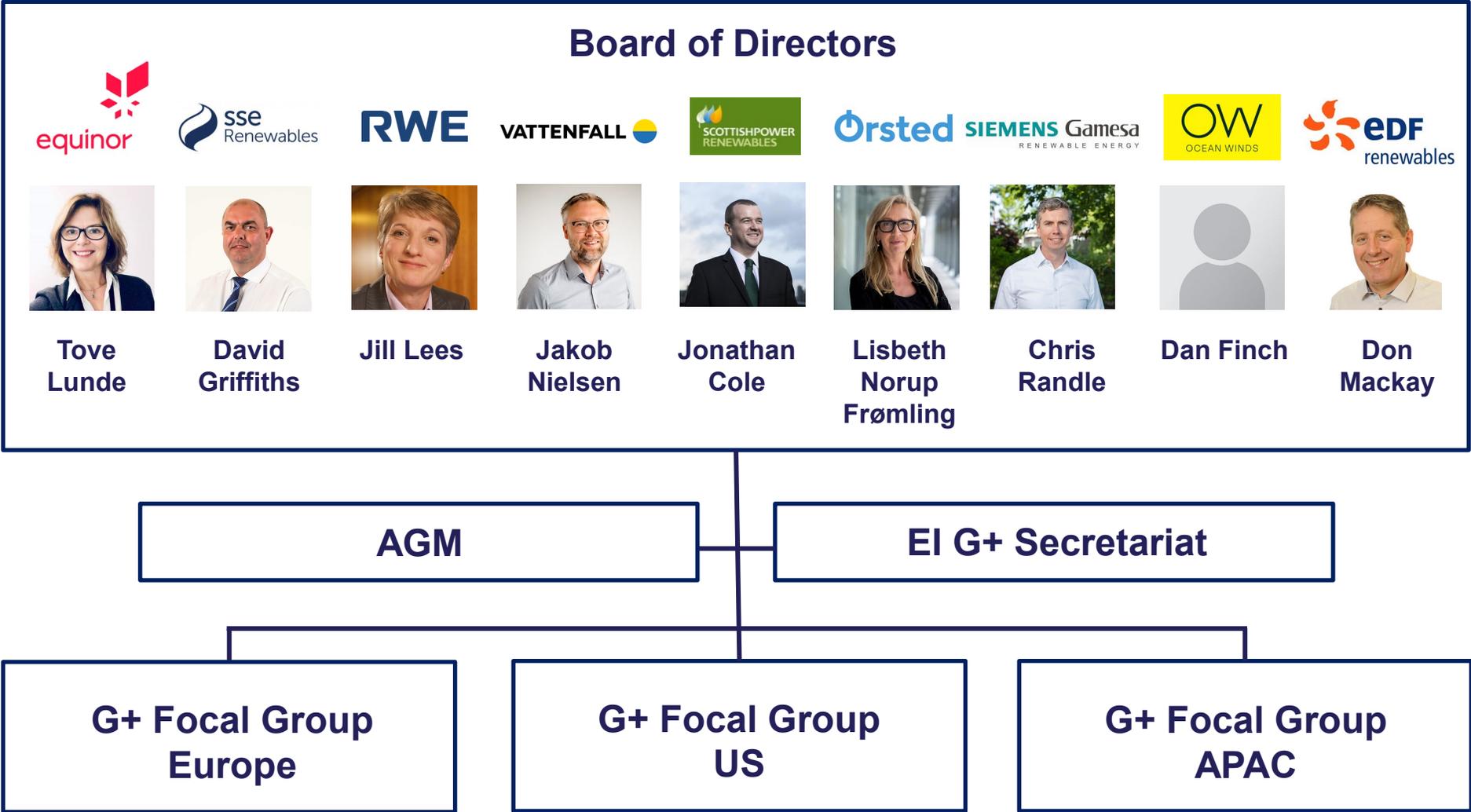


Members



Associate Members







G+ Board

- Primary review & decision making
- Demonstrate visible leadership
- To reach key decisions and agreements
- Decide on strategic direction

G+ Focal Groups

- Actions to improve H&S performance
- Share information and data
- Develop learning's from incidents
- Run work programme to develop industry guidance on safety
- Support the Board to demonstrate leadership

Energy Institute

- Provides the Secretariat
- Undertakes data analysis
- Acts as publisher of G+ guidance

In partnership with



Four pillars



Incident data reports

- Understanding of offshore wind industry risk profile
- Evidence base to inform interventions
- Accurate assessment of industry H&S performance
- Tool for comparison of H&S performance against other comparable industries



Good practice guidelines

- Recommendations for procedures, controls, ways of working at offshore wind farms
- Minimum standard expected for meeting industry H&S expectations
- G+ members self check compliance against content of GPGs
- Referenced in site and company corporate documents



Safe by Design workshops / reports

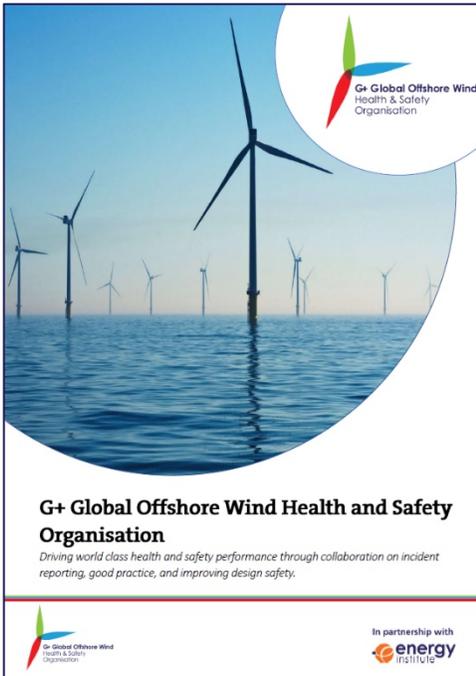
- Examine the current design controls relating to the topic, discuss where current design has potentially failed, and identify potential opportunities for improvement
- Outputs published and used as a reference by the industry
- Act as a catalyst for further discussion and research within the industry



Sharing incident learnings

- Incident learnings to be shared through Toolbox. Toolbox is an EI web-based app. It is accessible to all, anywhere, any place, any time.

- Another channel for promoting G+
- Provides all the information in a compact format and links to further details.
- Free download of the pdf [here](#)



G+ Global Offshore Wind Health and Safety Organisation

Driving world class health and safety performance through collaboration on incident reporting, good practice, and improving design safety.

In partnership with **energy institute**

Introducing the G+

G+ is the global health and safety organisation for the global offshore wind industry. We bring together business leaders, health and safety experts and organisations operating in offshore wind. Our members are committed to promoting and maintaining the highest possible standards of health and safety in the sector.

The members of the G+ are, lead operators, owners of offshore wind farms and wind turbine generator OEMs. Senior executives of the member companies meet quarterly through the G+ Board. The work programme is delivered by the Focal Groups, which operate under the strategic direction of the Board. The Focal Groups consist of health and safety experts from G+ member companies. There are European and APAC Focal Groups and we are in the process of setting up a North American Focal Group.

Members

VATTENFALL EDF renewables sse Orsted RWE
SCOTTISHPOWER OW equinor SIEMENS Gamesa

Associate

TRANSMISSION INVESTMENT Van Oord Marine ingenuity MIV MAPLE POWER
MACQUARIE GE Renewable Energy ESB Energy for operations

Industry collaboration

The G+ is committed to fostering collaboration across the wider industry and is a founding member of the wind industry Collaboration Committee (ICC). We are continually working with the industry to establish clear lines of responsibility and to promote effective and efficient cooperation. This is done by ensuring that work is undertaken by the most suitable organisation, under a collaborative framework supporting the established method of work in the wind industry.

renewableUK GW G+ Global Offshore Wind Health & Safety Organisation IMCA Wind EUROPE
Safety via VGB POWERTECH AWEA AMERICAN WIND ENERGY ASSOCIATION

G+ Work Programme

The overall aim of the G+ is to work together to tackle health and safety issues in the offshore wind industry. The G+ does this through four main work programmes: incident data reporting, good practice guidelines, safe by design and learning from incidents.

Health and safety statistics Good practice guidelines Safe by Design workshops Learning from incidents toolbox

Health and safety statistics

The backbone of our work is the incident data collected from our members. All G+ members provide their health and safety incident data for all their offshore wind farm sites across the world, from development to decommissioning stage. We analyse the data to monitor performance and trends and identify risks.

Since 2013, the G+ has published an annual incident report. Areas of higher risk, identified in the incident data, form the evidence base for the G+ work programme.

All G+ incident data reports are available on www.gplusoffshorewind.com



G+ is run in partnership with the Energy Institute (EI), which provides the secretariat and supports its work. The EI is the chartered professional membership body bringing energy expertise together.

In partnership with **energy institute**

Get in touch!

@gplusglobalofw
@G+ Global Offshore Wind Health and Safety Organisation
gplus@energyinst.org
www.gplusoffshorewind.com
www.publishing.energyinst.org

Sign-up on the G+ website to stay up to date with the latest news from G+!

- Further improving safety of CTVs
- H&S element of floating offshore wind
- Physical and medical requirement for technicians
- Occupational stress risk assessment project with HSE and Uni of Hull
- Continuation of Toolbox
- Safe by Design workshop (Jan) & in North America
- Taiwanese regulator relationship
- Onshore civils work

How to be involved?





Global Offshore Wind Health and Safety Organisation



www.gplusoffshorewind.com

www.publishing.energyinst.org



@gplusglobalofw



@G+ Global Offshore Wind Health and Safety Organisation

In partnership with





Nick Hough

IMCA

*IMCA Safety
reporting*

Nick Hough

Technical Adviser, IMCA

- Nick supports the work of IMCA's Health, Safety, Security & Environment (HSSE) Committee and the Offshore Survey Committee.
- He holds a NEBOSH General Certificate in occupational safety and health, and is responsible for all IMCA Safety Flashes and safety statistics, and for supporting the development of safety promotional material and guidance. As someone from a survey engineering background he is also well qualified to offer significant technical input to IMCA's survey-related publications.
- Before joining IMCA in January 2005, Nick had a career in offshore seismic survey. He studied Physics, Geology and Electronics before starting work with Seismograph Service Ltd (SSL) in 1988, continuing to work offshore all over the world with until 2004.

International Marine Contractors Association

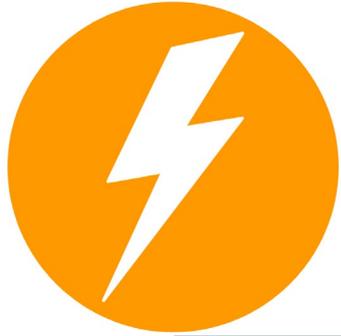
Improving performance in the marine contracting industry

Safety - foundation, centre, pillar, shared

Nick Hough

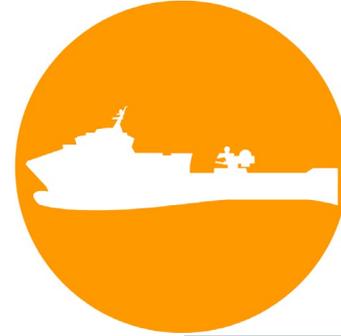
Health & Safety – our industry's priority

17 November 2020



Safety Flashes

- Well respected with world-wide coverage
- Anonymous
- Published as collections and individually online
- Tagged and searchable
- Free to air for all industry

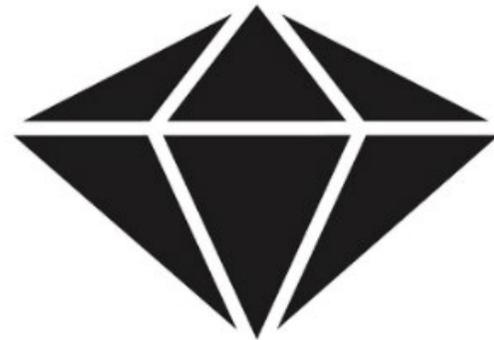


DP bulletins

- Reporting and analysis of dynamic positioning “station keeping” events and incidents
- Ensuring prompt feedback for industry
- Anonymous factual event trees of events
- Published quarterly



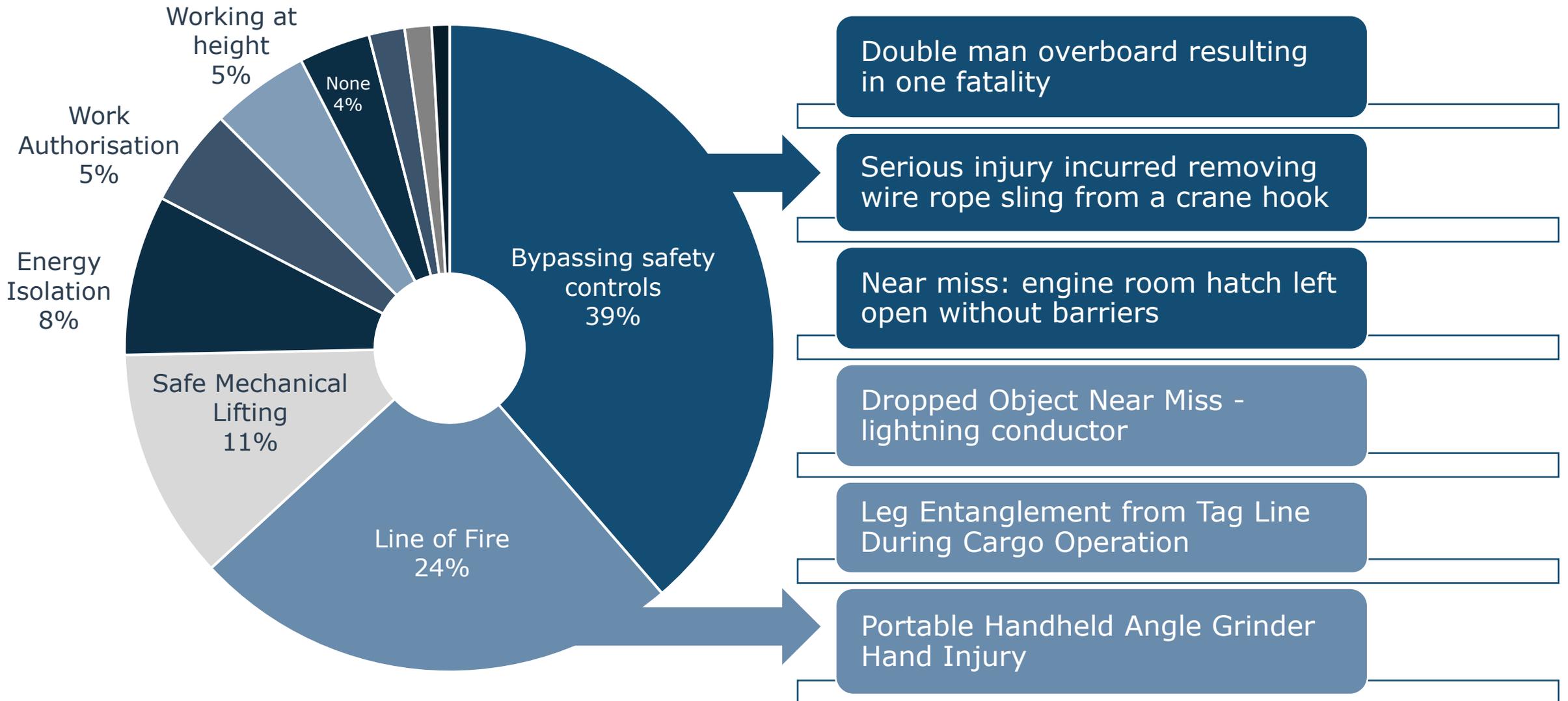
What Safety Flashes are



**Plain
English**

- Plain English, minimum jargon
- Target audience is offshore crew
 - ***What happened?***
 - ***Why did it happen?***
 - ***What were the causes?***
 - ***Clear actions, lessons learned, or recommendations***
- No shifting of blame
- Photographs or diagrams
- Safety Flashes are “free to air” on the IMCA website
- Safety Flashes are anonymous

Safety Flashes examples and categories



Safety Flashes and renewables

IMCA publishes reports from the renewables sector

Renewables bodies are welcome to share IMCA Safety Flash incidents

Welcome discussion towards further raising of awareness

Near miss: potential fall through CTV hatch

High potential near miss: dropped object from turbine tower

Wind farm service vessel in collision with wind turbine foundation

passenger on a CTV narrowly avoided being crushed between vessels

Fire and subsequent foundering of wind farm support workboat

??



Improving performance in the
marine contracting industry



Question and Answer Session



Today's speakers and panelists



Allen Leatt
IMCA



Trevor Johnson
UK HSE



Christy Lan
BSEE



Kate Harvey
G+



Nick Hough
IMCA

Marine Renewable Energy Committee



Alan MacLeay



Steven Myers



Andy Goldsmith

BSEE

- Cheri Hunter
- Mark Kozak



Thank You

- **Thank you** to today's speakers, panellists and Committee
- **Thank you** for your attention
- A recording will be available shortly
- Please complete our short feedback survey



Improving performance in the
marine contracting industry