

International Marine Contractors Association

Improving performance in the marine contracting industry

Asia Pacific and Middle East & India Regional Webinar

Date: 17 March 2021 starting at 0800hrs GMT

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 Panelists are online to address any questions
- A recording of today's webinar will be shared with you
- Short survey at the end of the webinar
- Competition Law



IMCA Events & News



- Industry Events – visit www.imca-int.com/events
 - OSJ, **European DP Conference 23 March** – 2 DP Speakers
 - Series of virtual events OSJ, Subsea, Wind Journal
 - **MCEDD – 21/22 April**
 - Two-day virtual conference with IMCA speakers on Environmental Sustainability and Autonomous and Uncrewed Vessels
- Safety Statistics data collection – closes 9 April
- IMCA Website – individual access



Your moderators today



Nick Hough

**IMCA
Technical
Adviser**

Nick Hough

- Nick supports the work of IMCA's Health, Safety, Security & Environment (HSSE) Committee and the Offshore Survey Committee.
- Nick is IMCA's Secretariat Lead for Asia Pacific



Ali Macleod

**IMCA
Technical
Adviser**

Ali Macleod

Ali supports all aspects of IMCA's Diving work.

- Ali is involved in auditing Diving Schools, supporting diving training and the recently introduced CPD scheme.
- Ali is involved with the Middle East & India Committee

Today's speakers



Allen Leatt

IMCA

Update



Nina Su

**Siemens
Gamesa**

G+ APAC



Margaret
Fitzgerald

IMCA

COVID-19



Mike Liddell

Fugro

USBL

**Q&A
Session**



॥ श्रद्धांजली ॥

**Tribute to
Shri Ravindra Pratap Singh
06-01-1950 – 23-01-2021**









The late RP Singh

- Videos on You Tube (link available after this webinar)
<https://www.youtube.com/watch?v=SaYYkQj71UI>





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.

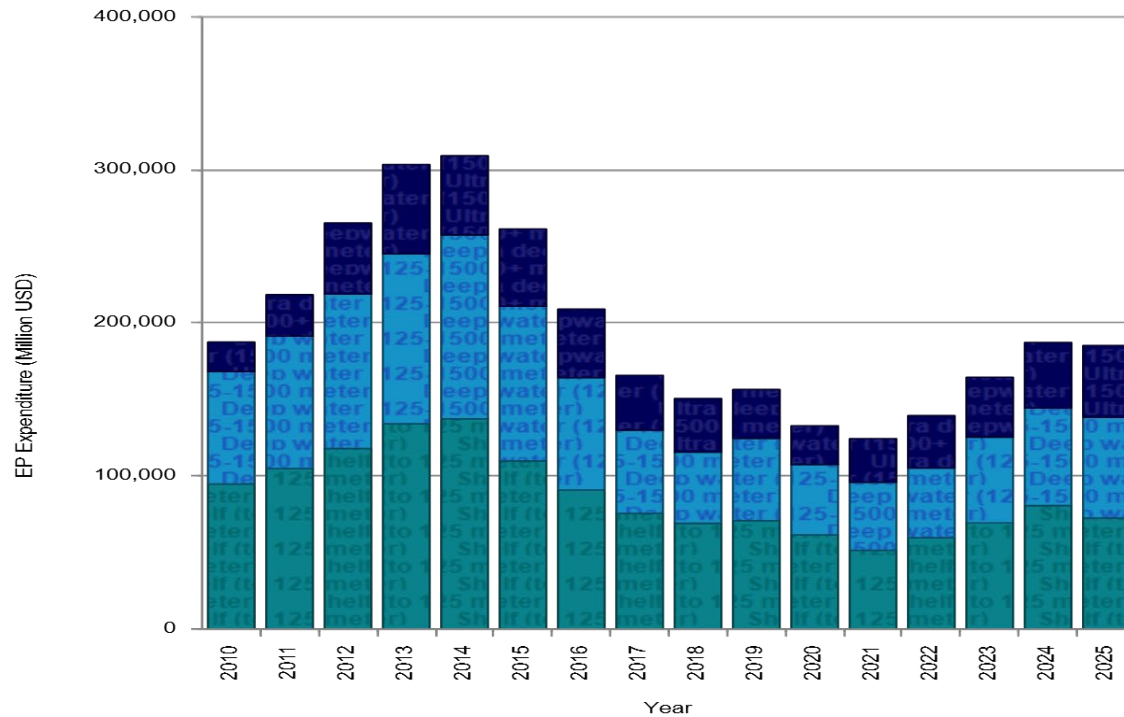
International Marine Contractors Association

Improving performance in the marine contracting industry

IMCA Update - 2021 Strategic Review

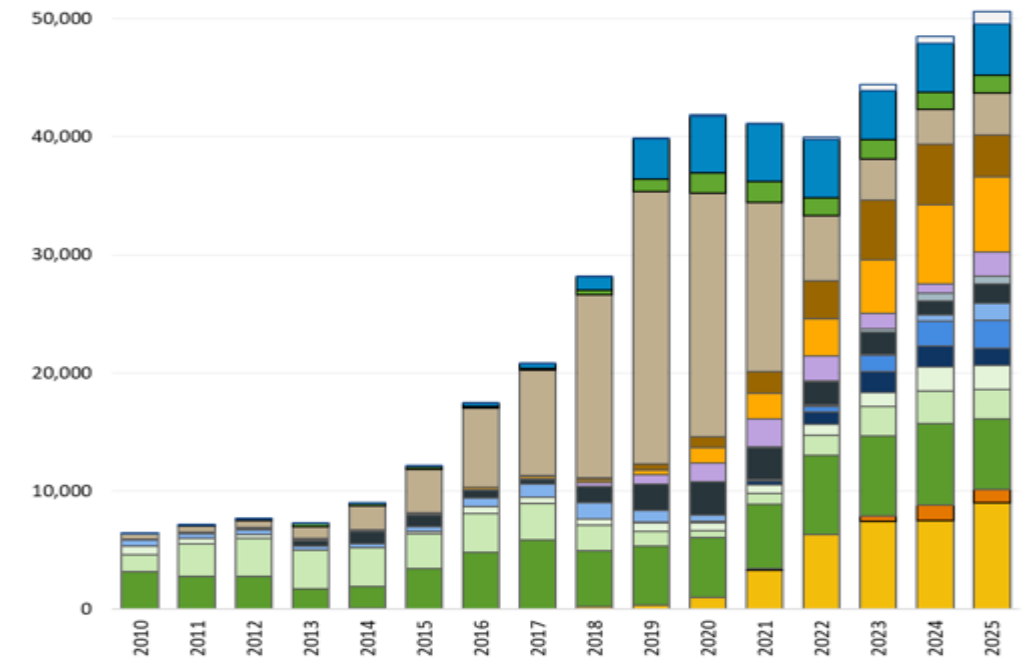
Allen Leatt

Offshore E&P CAPEX \$'Million



Source: Rystad Energy ServiceDemandCube, version 2020-10-14

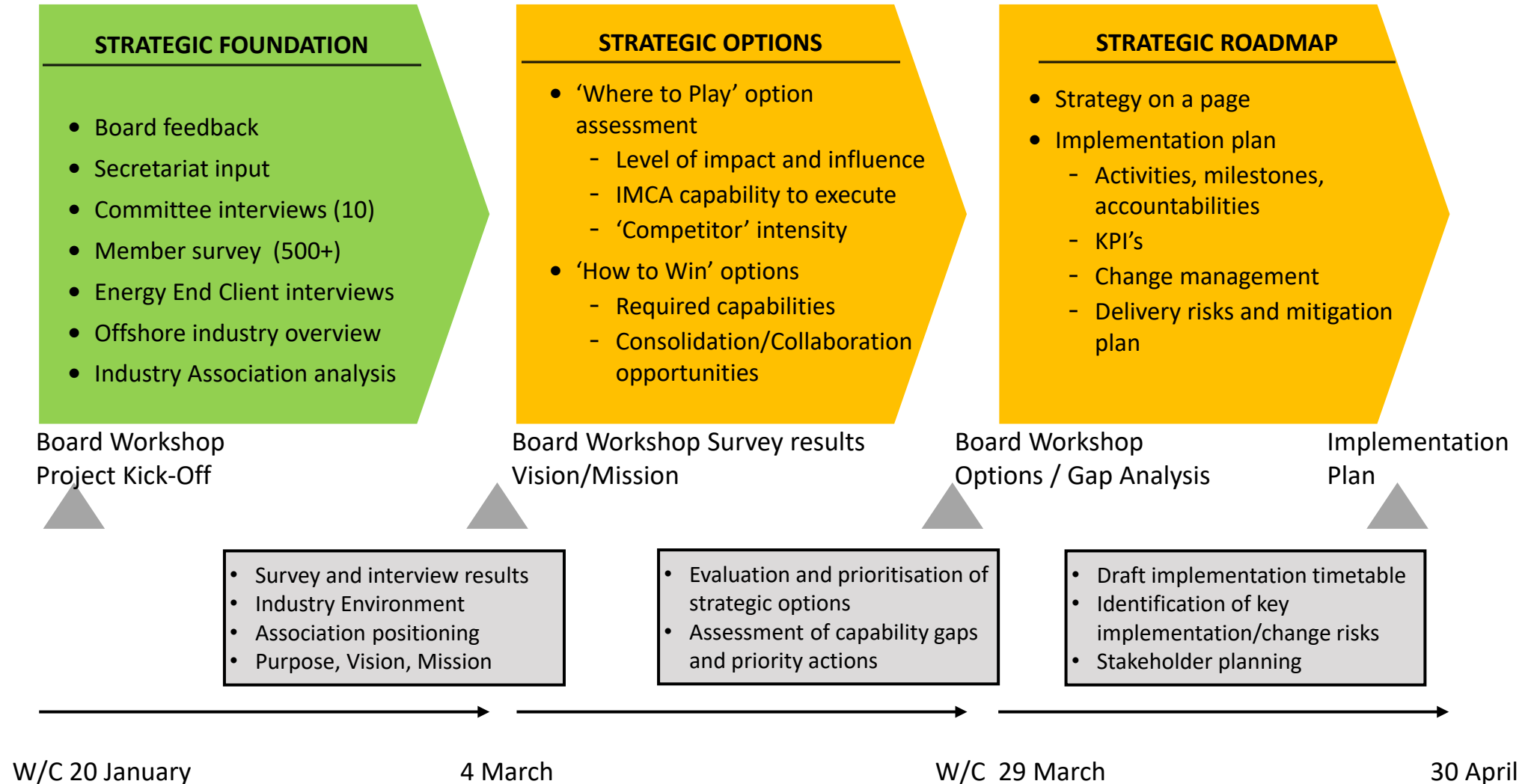
Offshore Wind CAPEX \$'Million



Source 4C Offshore, September 2020



Strategic Review Progress



Strategic Themes 2017



AMBITION/PURPOSE

High profile influencer and shaper of the Marine energy sector

STRATEGIC THEMES/OBJECTIVES

1

IMCA to be the voice of Environmental Sustainability in our industry

2

IMCA to be the 'convener' of the Digital agenda in our industry

3

Develop our client engagement network to build consensus around our guidance and standards

4

Improve communications to increase IMCA's brand and visibility

5

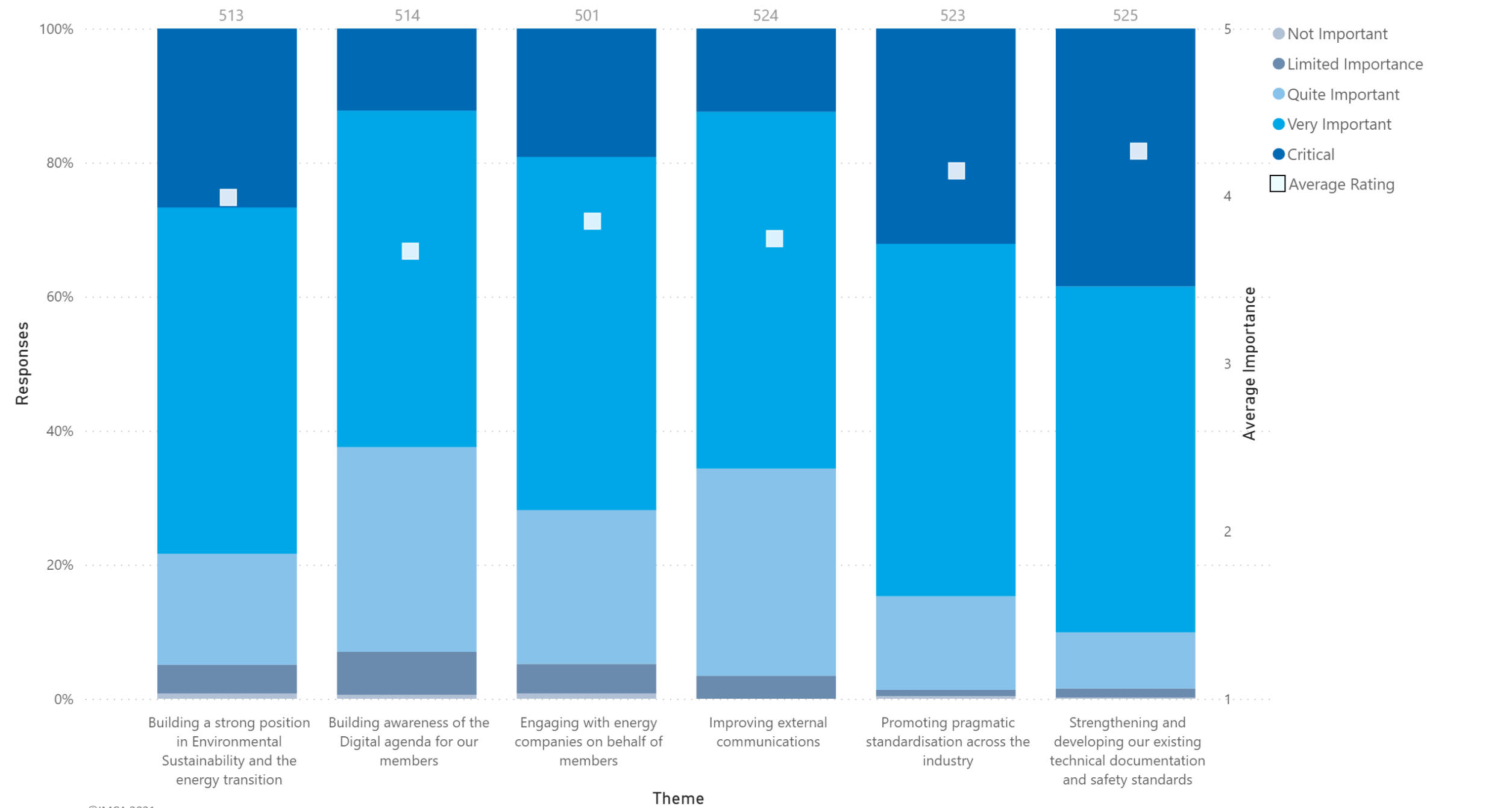
IMCA to be the advocate of pragmatic Standardisation solutions to reduce costs

6

Continue the upgrade and stewardship of guidance and safer standards



IMCA's strategy is following six main themes. Please rate the IMPORTANCE of each theme



Membership survey - Focus Areas

What is the one major issue IMCA should focus on?



Key Themes

ESG/Carbon/Transition

Renewables

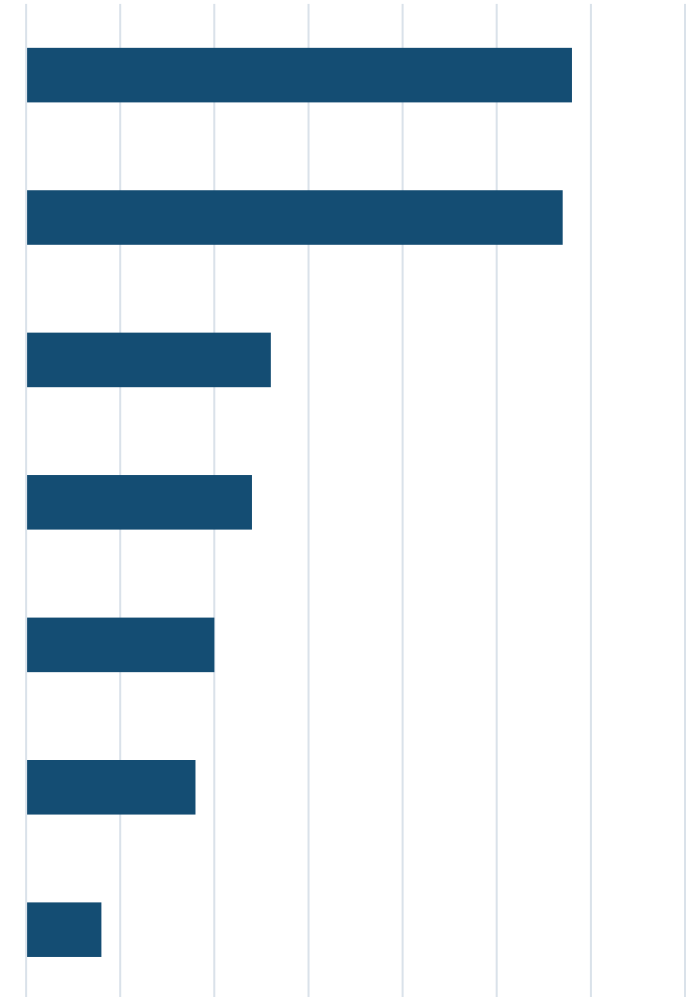
Competence & Training

Digital/Automation

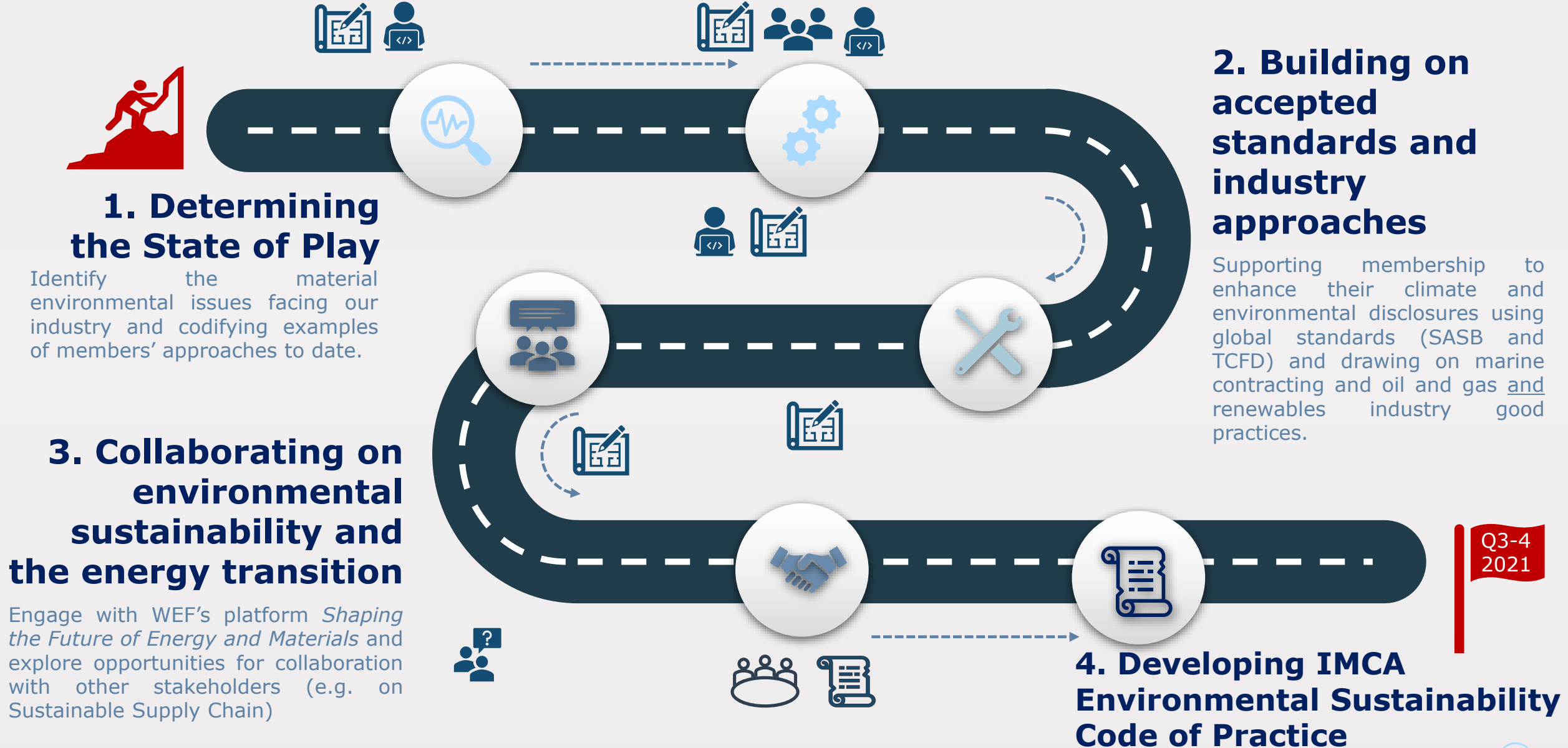
Covid 19

Standardisation

Internationalisation



IMCA's Environmental Sustainability Roadmap



Improving performance in the
marine contracting industry



Our guest speakers



Nina Su

Siemens Gamesa

Offshore Renewables
G+

Nina Su

HSE Manager

- Nina Su has a B.E. in Civil Engineering and started working in offshore wind industry in 2016 performing HSE & Quality management in the Formosa I project, the first offshore wind farm in Taiwan.
- She joined Siemens Gamesa in March 2019 and has held the role of HSE Professional and as well as being the Country HSE Officer role for Taiwan covering offshore and service areas.
- She is now also the chairperson of G+ APAC Focal Group.
- Prior to stepping into the offshore wind industry, Nina performed various roles in HSE, quality management, project management, tendering and estimation at VSL, the specialist in the construction of post-tensioned structures, foundations & ground engineering for more than 14 years.

G+ Global Offshore Wind Health and Safety Organisation



An update on offshore renewables from the G+ APAC Focal Group

17/03/2021

Nina Su – HSE Manager, Siemens Gamesa
Chairperson, G+ APAC Focal Group



www.gplusoffshorewind.com

In partnership with the
 **energy**
institute

About the G+



- G+ is the **global** health and safety organisation bringing together the **offshore wind industry** to pursue **shared goals and outcomes**.
- The G+ has **four** main work areas:
 - Incident data reporting
 - Good practice guidance
 - Safe by Design workshops
 - Learning from incidents
- The members of the G+ are lead operators and owners of offshore wind farms. Senior executives of the member companies meet quarterly, as the G+ Board. The Focal Group consists of members' health and safety experts to deliver the work programme of the G+. There are **European, APAC and North American Focal Groups**.



Incident data reports



Good practice guidelines



Safe by Design workshops / reports



Sharing incident learnings

Introduction & Works Done - Key Facts

November

2019 established and based in Taiwan where several projects located and being hotspot of the region beside Mainland China.



2019-2020

offshore wind industry incidents data reports translation and presentation to local authorities. Quality assurance and monitoring for any use of the statistics in the region.

6

Good practice guidelines had been translated into Chinese and Japanese.

January

2020 launched toolbox lesson learn platform in Chinese. Further benefits local stakeholders.

10

members in the region including developers & OEM suppliers till Jan. 2021

June

2019 accompanied delegation of Taiwan authorities to offshore windfarm visit in UK. First MOU signing between UK HSE & Taiwan OSHA on offshore wind health & safety.



August

2020 symposium co-organized with Taiwan Health & Safety authority (OSHA) with experiences sharing across developers, OEM suppliers, maritime construction subcontractors as well as local governmental stakeholders.



September

2020 representing offshore wind industry at the 1st Taiwan-UK Occupational Safety and Health Summit hosted by Taiwan Health & Safety authority (OSHA) . MOU signing between UK HSE & Taiwan OSHA



July

2020 appoint lead consultant of APAC group in order to further strengthen the dialog and collaboration with OSHA

Update of G+ APAC Focal Group

- Explore development of **incident statistics** (annual incident report) and **case studies** (toolbox web-based platform) from offshore wind farm. Especially local content in Taiwan.
- G + Taiwan entity application is ongoing (June-July 2021).
- Increasing members in Taiwan (Northland Power; HaiLong Offshore Wind).
- Ramping up in northeast Asia (Japan, Korea) and southeast Asia (Vietnam).
- Collaboration with relevant stakeholders. E.g. International Marine Contractors Association (IMCA) .



High potential incidents

In 2019 there were 252 high potential incidents, continuing a decreasing trend since 2016 (346). Improved reporting has allowed the G+ to focus its efforts on areas where high potential incidents are more likely to occur, such as working at height, transfer by vessel and access/egress. However, there are a number of different variables that have also contributed to this improvement.

High potential incidents are defined, by the G+, as incidents that had the potential to cause a fatality or a life-changing injury. Lifting operations and working at height are the two main work processes where most high potential incidents occur. Both work processes have seen a decline in comparison with 2018, 2 % and 6 % respectively. The main areas where these incidents occurred were Wind Turbine Generators (WTG) and vessels, mostly crew transfer vessels (CTVs).

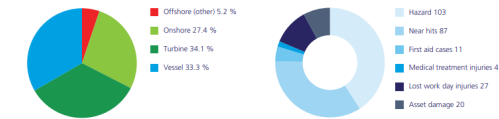


Figure 3: High potential - incident area summary

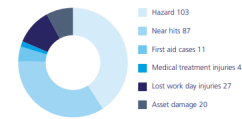


Figure 4: High potential - actual incident consequence

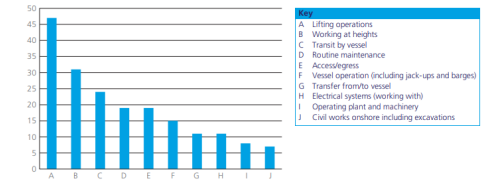


Figure 5: High potential - Top 10 work process breakdown

Summary of IMCA member safety statistics

Latest reporting period: 2019 (comparison with 2018)

Total statistics

LTIFR	TRIR	SOFR
0.33 (0.39)	1.11 (1.67)	339.00 (346.94)

Offshore statistics

LTIFR	TRIR	SOFR
0.53 (0.48)	1.69 (2.08)	456.00 (467.03)

Contributing companies: 141

Total man hours: 741,925,417

Line of fire/caught between/struck against
(Line of fire/caught between/struck against)

+ Comparison with other industry trade bodies

+ Lost time injuries

+ Total recordable injuries

How does G+ collaborate with stakeholders?



- Bridging European experience with Asia knowledge by sharing and collaboration;
- Proactively engages with all stakeholders in this region by inviting to FG meetings and inviting for feedback and consultation.
- Provides tailored analysis of incident data.
- Attend cross-ministries/council platform meetings and dialog with other government stakeholders through the introduction of OSHA.





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





Margaret
Fitzgerald

IMCA

Margaret Fitzgerald

Head of Marine Policy & Regulatory Affairs

- Margaret leads IMCA's work with the International Maritime Organization (IMO).
- She works extensively leveraging IMCA's influence on the IMO and with other industry COVID-19 groups to assist with the challenges of crew changes and travel to and from worksites during the current restrictions.
- 20 years' experience in shipping and worked in the IMO Secretariat.
- Qualified maritime lawyer and chemical scientist who holds Chartered status with the Royal Society of Chemistry (CChem) and Chartered status with the Institute of Occupational Safety and Health (CMIOSH).

International Marine Contractors Association

Improving performance in the marine contracting industry

Challenges of Seafarer Vaccinations

Margaret Fitzgerald

Key issues preventing crew changes

High-quality health protocols adopted internationally

BARRIERS:

- Inconsistently implemented in practice
- Seafarers perceived by authorities as a COVID-19 risk limiting crew changes
- Disruption of international air travel has reduced flights, connectivity issues between major crew change hubs and major seafaring nations, which has complicated crew changeovers

How can the crew change crisis be overcome?

- IMCA is one of 500 companies to have signed The Neptune Declaration on Seafarer Wellbeing and Crew Change

The Neptune Declaration on Seafarer Wellbeing and Crew Change



Recognise seafarers as keyworkers and give them priority access to COVID-19 vaccines

- Seafarers should be recognized as key workers by all governments in line with the UN General Assembly resolution adopted on 1 December 2020 and the transition of seafarers across borders should be facilitated

Establish and implement gold standard health protocols based on existing best practice

Increase collaboration between ship operators and charterers to facilitate crew changes

Ensure air connectivity between key maritime hubs for seafarers



The Neptune Declaration on Seafarer Wellbeing and Crew Change



These IMO Member States have designated seafarers as keyworkers



Source - IMO

AZERBAIJAN	EGYPT	JAMAICA	NIGERIA	THAILAND
BAHAMAS	FINLAND	JAPAN	NORWAY	TURKEY
BANGLADESH	FRANCE	KENYA	PANAMA	UAE
BARBADOS	GABON	KIRIBATI	PHILIPPINES	UNITED KINGDOM
BELGIUM	GEORGIA	LEBANON	POLAND	UNITED STATES
BRAZIL	GERMANY	LIBERIA	REPUBLIC OF KOREA	YEMEN
CANADA	GREECE	MARSHALL ISLANDS	ROMANIA	
CHILE	INDIA	MOLDOVA	SAUDI ARABIA	<i>Associate Members</i>
CROATIA	INDONESIA	MONTENEGRO	SINGAPORE	FAROEES
CYPRUS	IRAN	MYANMAR	SOUTH AFRICA	HONG KONG CHINA
DENMARK	IRELAND	NETHERLANDS	SPAIN	
DOMINICA	ITALY	NEW ZEALAND	SWEDEN	



International calls for seafarers to be vaccinated

- **The Nautilus Federation of 22 unions**
 - Wants a worldwide vaccination programme for seafarers and inland waterways transport crew, to help resolve the crew change crisis and ensure seafarers do not miss out on vaccines while travelling for work
 - Calling for seafarers to receive their required doses within the World Health Organization's (WHO) recommended timescales
- **The International Maritime Employers' Council (IMEC)**
 - Lobbying governments not to impose mandatory vaccination as a condition for entry
 - Claiming seafarers from poor countries are unlikely to be vaccinated as fast as those in richer ones, and imposing rules too soon would worsen the crew change crisis

Vaccination Task Force



IMCA is part of an Industry-led Vaccination Task Force

AIM

- Find a pragmatic and unified approach regarding seafarer inoculations
- Develop a roadmap for Governments setting out all the steps necessary to implement a vaccination programme for seafarers
- The Vaccination Task Force is monitoring the situation within member states regarding priority being given to seafarers for vaccines

NEWS

- Singapore one of the first countries to prioritise vaccinations for frontline maritime personnel under the Sea – Air Vaccination Exercise (SAVE)
- The Russian Federation vaccinating seafarers - Sputnik vaccine
- Italy vaccinating Italian seafarers working on ferries
- The Port of Long Beach is vaccinating port workers and seafarers but there is no coordinated approach between US ports

Approach to seafarer vaccinations

- Preference for seafarers be vaccinated in their home country
- Recognition that not always possible especially if:
 - Seafarers working away from home for a long period of time;
 - Travel hampered by crew change restrictions; or
 - From a country which doesn't yet have a vaccination roll-out programme

In these circumstances, the Industry approach is to establish key vaccination hubs where vaccinations can take place

Aiming to establish vaccination hubs in major crew changing ports for international seafarers

Requires collaboration with Government authorities and multi-disciplinary stakeholders

Only World Health Organization (WHO)-approved vaccines to be administered

Over ordering of coronavirus vaccines

Canada

338m doses have been ordered - enough to vaccinate the **population** **5 times** over



UK

457m doses ordered **3.6x** population



European Union

1.8bn doses ordered **2.7x** population



Australia

124m doses ordered **2.5x** population



US

1.2bn doses ordered **2x** population



Brazil

232m doses ordered **55%** of population



The COVAX Scheme

- The COVAX scheme was set up by the WHO, the Gavi vaccines alliance and the Coalition for Epidemic Preparedness Innovations (CEPI) [COVAX \(who.int\)](https://www.who.int/covax)
 - **AIM:** Try to prevent poorer countries being pushed to the back of the queue

The programme is designed so that richer countries buying vaccines agree to help finance access for poorer nations

- The programme hopes to deliver more than two billion doses to people in 190 countries in less than a year.
- Aims to ensure that 92 poorer countries will receive access to vaccines at the same time as 98 wealthier countries
- Aims to reach up to 20% of the populations of poorer countries, at no cost to their governments

LATEST

- WHO approved the single shot J&J vaccine
- Authorisation paves the way for the jabs to be used as part of the COVAX initiative
- 500 million doses of the J&J shots have been promised to the scheme, and the WHO hopes they can be rolled out from July, if not earlier

Key questions?

Where will seafarers get vaccinated?

- Onboard
- At a hub port centre
- At a seafarer centre
- **If onboard**, will the entire crew be vaccinated together?

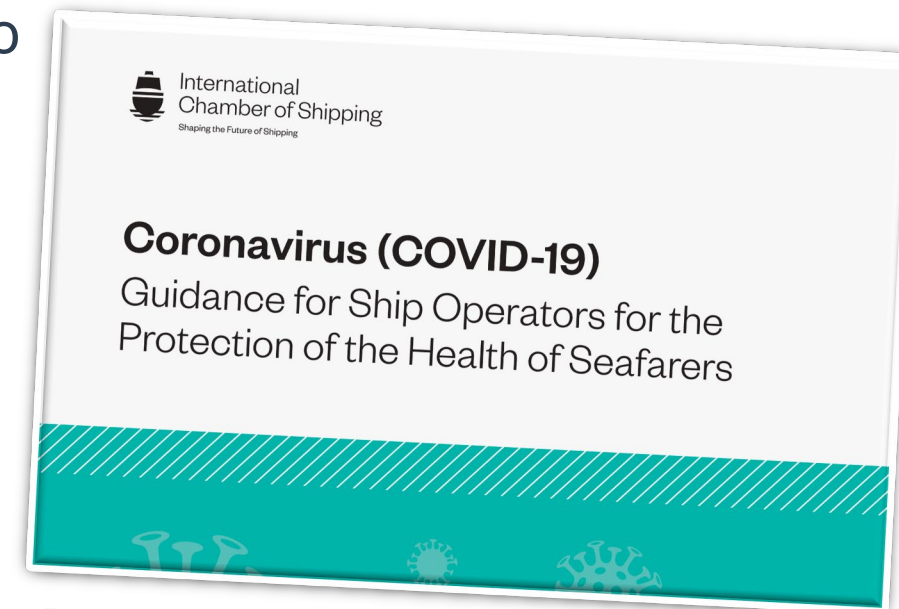
Who will carry out the vaccination?

- A doctor
- A qualified medic under a doctor's supervision

Industry Guidance being developed

- Legal guidance document being finalised and will be launched later this month
- Leaflet is being produced which will be finalized within the next week and which provides a guide to vaccinations
- 2-minute film being made to promote the vaccine leaflet via social media
- Updated copy of the International Chamber of Shipping Medical Guide is being finalized

IMCA will provide copies of these documents and a link to the film to Members via website and social media



Legal & Insurance issues

- Employers' Duty of Care and Obligation to reduce risks in the Workplace
- Informed and Voluntary Consent to the Vaccination
- Data protection and privacy

Recurring questions

- Can a seafarer be mandated to get a Covid-19 vaccine?
- Can a shipowner amend/vary existing contracts of employment to require the seafarer to get a vaccine as a condition of employment?
- Does a shipowner's P&I Insurance provide cover if a seafarer becomes ill as a result of a vaccination?
- Will vaccination passports be issued to seafarers who have had the Covid vaccine in the same way that seafarers receive proof of yellow fever vaccination?

Improving performance in the
marine contracting industry

Our guest speakers



Mike Liddell

Fugro

The Benefit of an
Industry Specification
on USBL system
Calibration

Mike Liddell

Director – Remote Construction Support & Positioning

- Mike is a Survey graduate of Otago University, New Zealand. He started working offshore in 1997 as a Hydrographic Surveyor.
- In 2003 he joined Fugro where he is currently Solution Director for Remote Construction Support & Positioning
- In 2014 he became a Fellow of the Royal Institute of Chartered Surveyors.
- Since 2015 he has been Chairman of the IMCA Survey Division Management Committee a role he is about to step down from. He now also sits on the IMCA Digitalisation committee.

International Marine Contractors Association

Improving performance in the marine contracting industry

The Benefit of an Industry Specification on USBL system Calibration

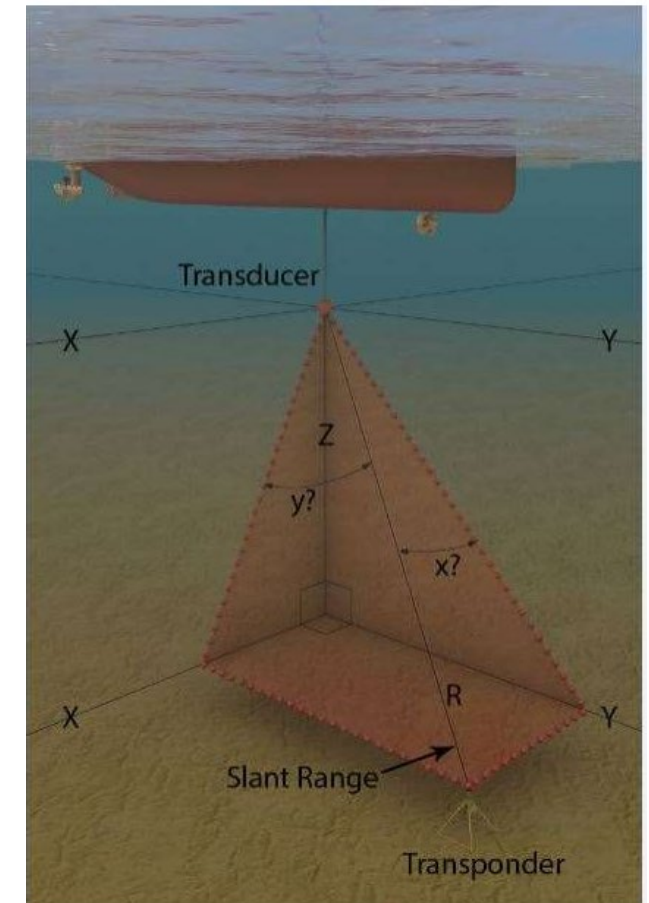
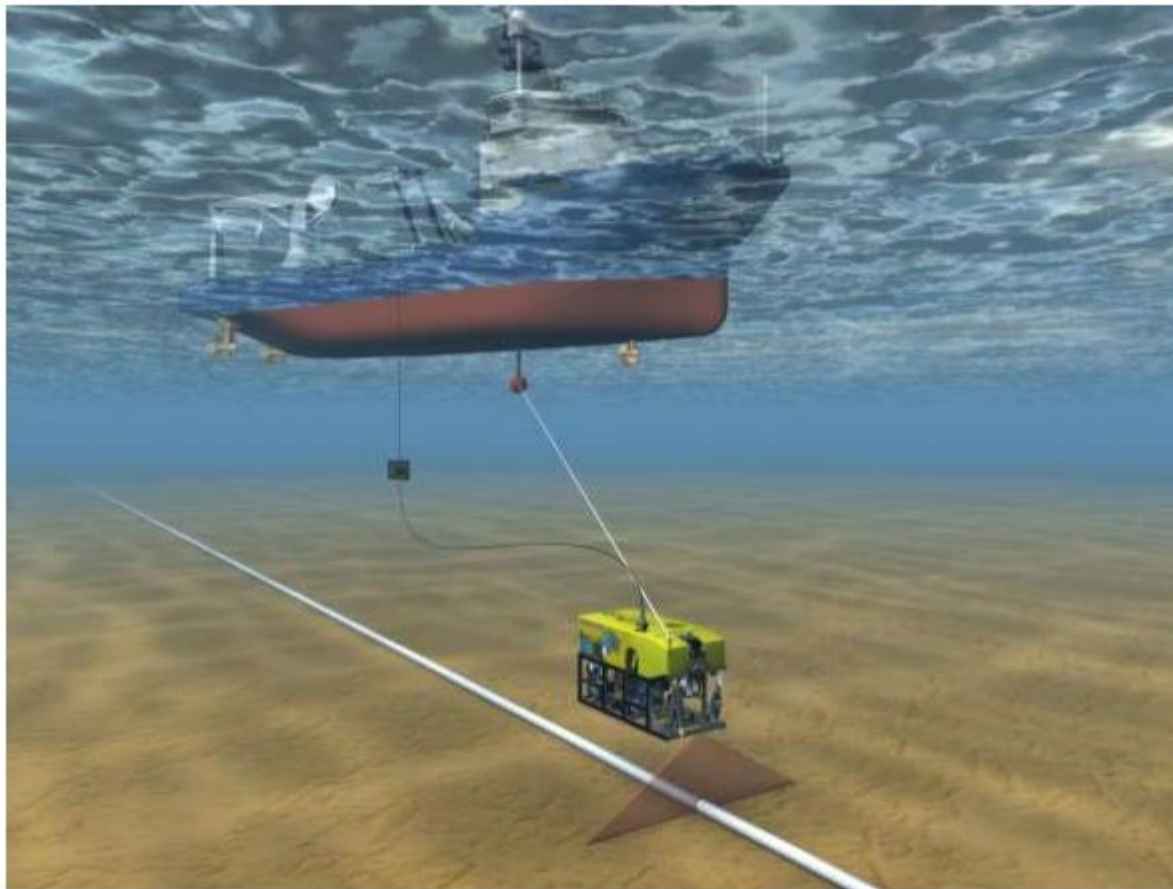
Presenter Mike Liddell

Venue APAC/MEI Webinar

Date 17th March 2021

What is USBL

- Ultra Short Baseline Acoustic Positioning
- Standard tool for general positioning in shallow to deep water





How can Offshore Survey generate efficiency improvement to the wider Marine Contracting Industry?

Reduce the requirement for USBL Calibrations

If a pipelay vessel moves between multiple clients over a season and each requires the vessel to undertake a calibration this can easily account for multiple lost days in a season.

Background – improving efficiency



- USBL Calibration – key focus area
- The Offshore Survey committee and the IOGP Geomatics Committee work together closely
- The Geomatics committee approached IMCA on USBL calibration:
 - “...there is merit in creating an common industry specification for the calibration and verification of USBL positioning systems, which would should result in industry efficiency gains (cost reduction, potentially increased quality, reliability, consistency and repeatability of result)...” (Sept 2017)

This screenshot shows the IMCA website's 'Offshore Survey' page. At the top, the IMCA logo is on the left, and 'COVID-19' and 'My Account' links are on the right. Below the logo is a breadcrumb trail: 'Home » Committees » Offshore Survey'. The main heading is 'Offshore Survey' in blue. Underneath, 'Our aim' is followed by a paragraph about the committee's role in setting standards for offshore positioning and hydrographic surveying. 'Our activities' are listed below, mentioning the development of guidance documentation and qualification of personnel.

This screenshot shows the IOGP website's 'Geomatics Committee' page. The top header includes the IOGP logo (International Association of Oil & Gas Producers) and a 'COVID-19 UPDATES' banner with the text 'INDUSTRY RESPONSE AND IMPACT'. A navigation bar below the header contains links: Home, About oil and gas, About us, Our initiatives, Technical expertise, Policy and issues, Publications Library, Newsroom, and Members area. The main content area features a large image of an offshore oil rig. Below the image, the heading 'Geomatics Committee' is followed by a paragraph explaining the importance of accurate positioning and mapping for O&G operations. At the bottom, a link is provided for the most recent update about the committee's work.



Process

- A **joint working group** was established
 - Technical representatives from both IMCA and IOGP
 - Coordinated by IOGP and Damian Ling @ Chevron
 - Chevron, BP, Total, Petrobras, PETRONAS, Woodside, ExxonMobil
 - TechnipFMC, Subsea7, DOF Subsea, Fugro
- *Common Industry Specification for the Calibration and Verification of USBL positioning systems*
- Scope Definition
 - USBL is always part of a wider survey system including GNSS and motion/heading reference systems.



DECISION to exclude specifications on peripheral system (more later)

Scope

- A global common industry technical specification accepted by both Operators and Contractors for the calibration and verification of Ultra Short Baseline (USBL) acoustic positioning systems.
- A specification in Tenders and Contracts for Offshore Survey
 - Seabed Surveys, Inspections and Construction.
 - Not Applicable for USBL solely for DP
- References to existing IMCA Guidelines on USBL, Deep water acoustics and GNSS

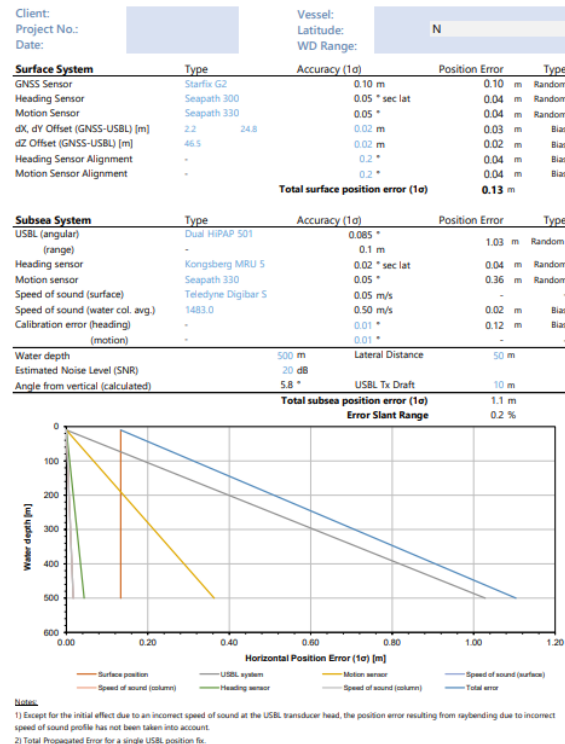
Common Industry Technical Specification for the Calibration and Verification of Ultra Short Baseline (USBL) Positioning Systems



Fit for Purpose

- Error Budget

- Expectation of achievable accuracy to meet project accuracy requirements



- Fit for Purpose

- For example, the acoustic positioning requirements for a dive operation may not be the same as a subsea structure installation.

Table 1: Three groups of common USBL system accuracy requirements associated with subsea positioning applications.

USBL acoustic positioning accuracy requirements			
Description	Towed tracking accuracy - position requirement	Lower accuracy - position requirement	Standard accuracy - position requirement
Position Uncertainty (1)	Better than 0.3% slant range [2] and increased by +0.1% of slant range for every 10° off-nadir elevation. [3]	Better than 2.75% slant range [2]	Better than 0.3% slant range [2]
Typical applications	Tow fish tracking for hydrographic surveying operations, ROTV tracking for pipeline inspection	Diver positioning, micro-ROV tracking, general subsea navigation	ROV/AUV tracking for As-built surveys, Out-Of-Straightness pipeline survey

NOTES:

1. Accuracy values listed above are quoted at 2DRMS
2. Plus, the absolute positioning accuracy of supporting sensors within the USBL positioning system at 2DRMS, 95% confidence interval (e.g., GNSS, HRS, MRU)
3. For USBL systems that utilise a spherical transducer array, only the lower and standard accuracy position requirement applies to towed applications

Calibration and Verification

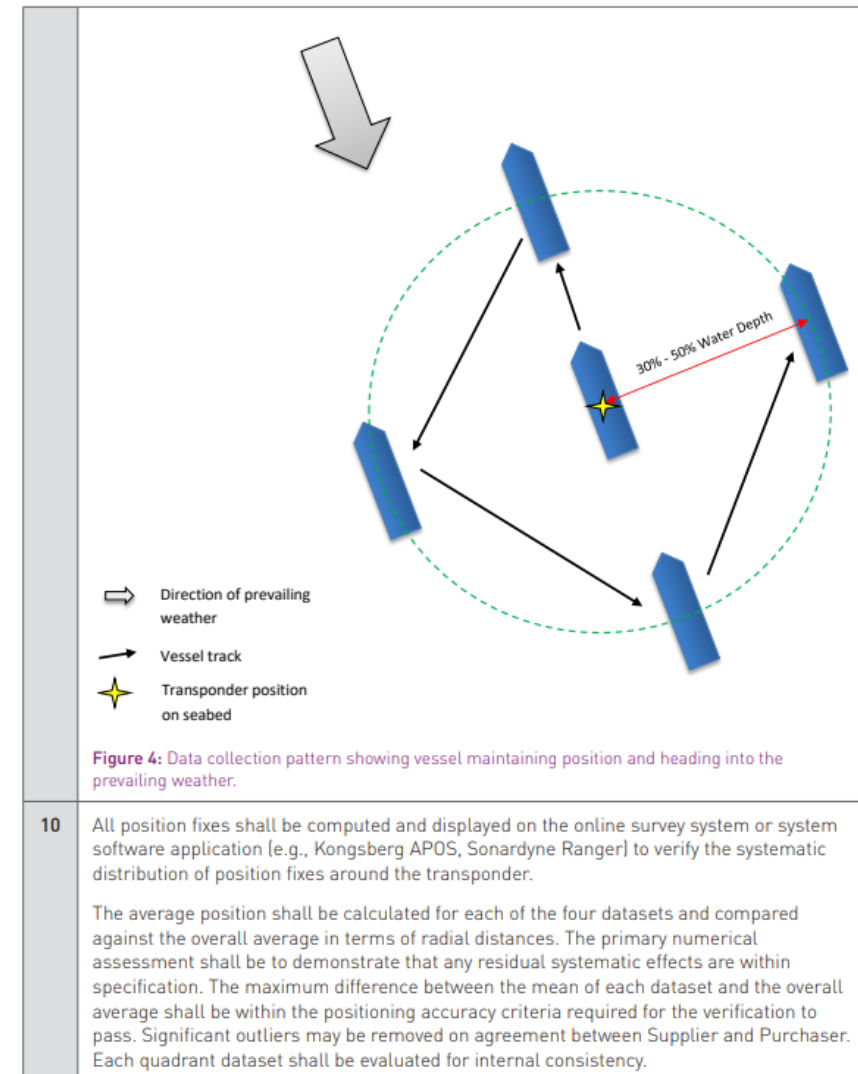
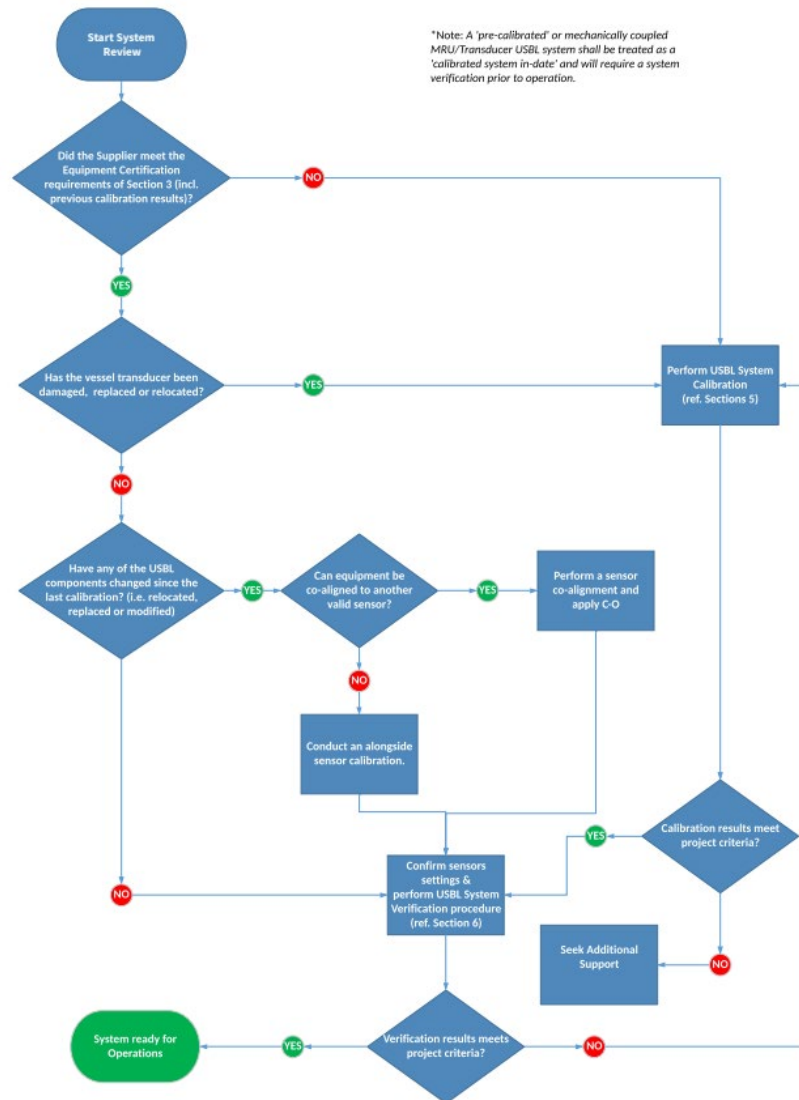
Calibration

- The USBL acoustic positioning system shall be **calibrated to determine the following system offsets**:
 - Transducer heading misalignment to Vessel North within the vessel ref. frame
 - Transducer pitch and roll misalignments
 - (Scale factor)
- Supplier shall maintain current and legacy documentation (in tabular and graphical formats) demonstrating that the current performance of the vessel's USBL system meets the contractual requirements

Verification

- The objective of a system verification is to **prove the accuracy and performance of the integrated USBL** system to determine overall positioning quality.
- This operation shall be conducted **immediately after a system calibration.**
- If the Operator is satisfied with the historical trend of previous USBL calibrations, **only a system verification is required prior to operations, rather than a full calibration.**

Calibration and Verification Guidance





Industry Specification on **WHEN** and **HOW** USBL Calibrations should be undertaken.



Acceptance that **good record keeping** and understanding of historical trends and status of USBL and peripheral sensors **can remove the requirement for a calibration.**



Documented Specification on **methods to employ** for calibrations and verification.



Single industry wide specification, reducing requirement for compliance with multiple operator variants.



Opportunity to **reduce vessel time** spent **on USBL calibrations.**

What next?

- Encourage widespread usage of this Technical Specification
- Provide awareness to Operators where they are still using internal Technical Specifications
- Feedback on usage – how's it going?

Next IOGP / IMCA Collaboration:

Technical Specification on Peripheral Sensor Installation and Calibration

Common Industry Technical
Specification for the Calibration and
Verification of Ultra Short Baseline
(USBL) Positioning Systems



Improving performance in the
marine contracting industry



Question and Answer Session



Today's panelists



Allen Leatt



Nina Su
G+



Margaret
Fitzgerald



Mike Liddell
Fugro

Representatives from IMCA's Regional Committees:

- Asia Pacific
- Middle East & India

**Opportunities to become
involved so please contact us**

Moderators



Nick Hough



Ali Macleod

Regional Engagement Contacts

Asia Pacific	Middle East & India
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Darren Brunton



Chris Rodricks



Thank You

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

