

## Contracting in the new era

IMCA's concerns,  
and ways forward

### NEWS PAGE 7

New ballast water  
rules: seven key points

### WORLD-WIDE PAGE 14

Asia-Pacific: troubled  
times, positive future?

### DIVING PAGE 15

Backup life support  
packages

### SPOTLIGHT ON PAGE 18

Alan MacLeay talks  
offshore renewables





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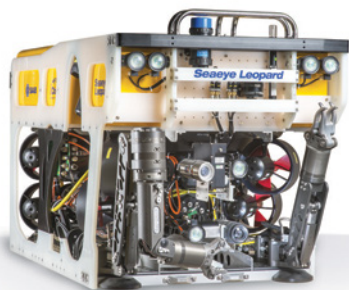
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Allen Leatt  
Chief Executive

## Welcome

to our June edition of Making Waves. We have plenty to cover in this issue, including our annual Contracts & Insurance seminar. Our Contracts & Insurance Workgroup is probably the most active group in IMCA at this point in time, and I would like to thank its members for delivering such a successful seminar. The event was hosted at the Royal Aeronautical Society in London, where over 100 industry professionals from the world of contracts and insurance came together to listen and share views with truly world-class speakers and opinion makers on these complex subjects.

We have news on the renewables market, with Alan MacLeay providing a comprehensive round-up, together with plenty of updates from around the IMCA sphere of operations, including developments in industry policy and regulations, diving, and governance.

## In this issue

### IMCA NEWS 4-5

- IMCA adapting its strategies to improve efficiency

### CORE NEWS 6-7

- New ballast water rules: seven key points

### FEATURE 9-11

- Contracting in the new era

### EVENTS 12-13

- IMCA connects with US event with digital DP update

### WORLD-WIDE 14

- Asia-Pacific troubled times, but a positive future?

### DIVING 15

- Backup life support package clarification

### MARINE 16

- IMCA takes joint lead on offshore renewable safety developments

### ROV & SURVEY 17

- Shared sensors progress at OI 2016

### SPOTLIGHT ON 18-19

- Alan MacLeay

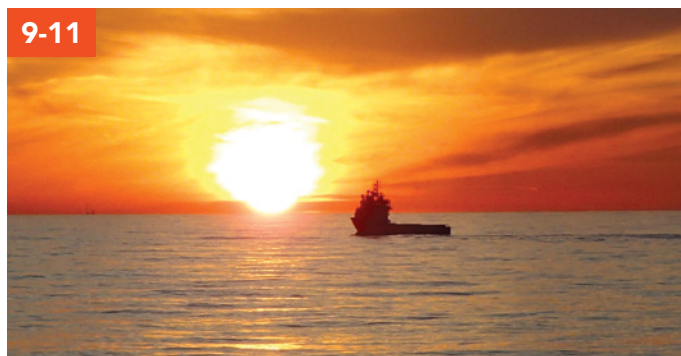
4



7



9-11



12



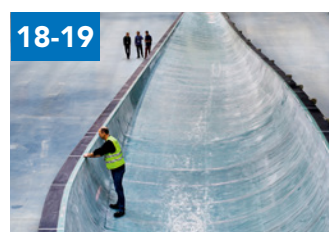
14



15



18-19



## Meet the team

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Asia-Pacific

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Making Waves is published quarterly to promote knowledge of matters affecting the offshore, marine and underwater engineering industry. Ideas for articles of potential interest to our membership are welcome.

The views expressed on these pages are those of their respective authors and do not necessarily reflect the policies or positions of IMCA itself. Send your contributions and ideas to [makingwaves@imca-int.com](mailto:makingwaves@imca-int.com)

## Documents update

The following documents have been published since the previous issue of *Making Waves*. We've also highlighted a few of the recent safety flashes and information notes issued. The full listing is available on our website [www.imca-int.com](http://www.imca-int.com) by navigating to the relevant divisional page or by using the search function.



### PUBLICATIONS

**DMAC 04** – *Oxygen content in open circuit bail-out bottles for heliox saturation diving*

**IMCA M 103** – *The design and operation of dynamically positioned vessels*

**IMCA M 166** – *Failure modes and effects analysis (FMEA)*

**IMCA D 033** – *Limitations in the use of SCUBA offshore*

**IMCA D 036** – *Notes accompanying the IMCA DVD - neurological assessment of a diver*

**IMCA R 004** – *Safe and efficient operation of remotely operated vehicles*

**IMCA R 007** – *IMCA ROV services contracting principles*

**IMCA SEL 039** – *Video: Technip DROPS*

**IMCA C 003** – *Competence assurance & assessment - diving division*

**Offshore Mariner's Logbook**



### SAFETY FLASHES

IMCA has distributed 12 safety flashes in 2016 so far, covering 43 incidents. Recent flashes have covered mooring, cargo handling, stored energy and equipment failure.



### INFO NOTES

**IMCA D 04/16** – *Life support packages*

**IMCA M 04/16** – *CMID & MISW software update*

**IMCA R 01/16** – *Guidance on ROV crew size*

All the latest documents from IMCA are available at [www.imca-int.com](http://www.imca-int.com)

# IMCA adapting its strategies to improve efficiency



There is no doubt that there is plenty going on in our industry today. Our members are not only chasing business in a declining market, but also reassessing their strategies and plans in response to the new business environment. The same is the case for IMCA; we have a number of initiatives and plans emerging as a direct result of the changing market. An important one of these is our governance programme, an outline of which follows.

Corporate governance, as a boardroom topic, has been with us in the commercial world for many years; today it is a newsworthy subject within the association world, and now very topical within IMCA. For the past year a governance review has been ongoing to assess the structure and internal protocols of the association, in order to be up-to-date with the latest governance thinking. The review has benefited from an oversight steering committee, comprising members from the OMC, and the work is now close to completion. The changes to be implemented are all very straightforward and will focus on increasing efficiency, reducing bureaucracy, and keeping our members properly informed of their association.

In summary, we will adjust our legal structure and replace the current Council arrangement with a Board. This is a common move for associations today, and representative of modern practice. Our committee arrangements will be streamlined and we will have fewer elections. We will continue the

election format but the technical committees will elect their own Chairs and Vice Chairs. The term of office will be increased from 2 to 3 years, and we will establish regional committees that will nominate representatives for the technical committees. These simple moves will reduce the number of elections by around three-quarters. Committee members will also be given more detailed induction and clearer expectation of the roles they will undertake. These and other changes will be put before an EGM in November to enable the membership to vote on adopting the programme.

Compass Partnership, a consultant specialised in association governance, has been supporting us with the review. We will be assisted in the formal changes by our lawyers and accountants. The Constitution will be modified accordingly and IMCA's Chief Executive, Allen Leatt, will be kindly helped in this endeavour by Johan Rasmussen, former IMCA President and former General Council of Acergy and Stolt Offshore.



# New members' update email goes live

After feedback from IMCA members that they feel they receive too many emails from us, we have introduced a new monthly summary, combining many of our separate communications into one user-friendly email.

The new monthly update rounds up all of the previous month's: new and revised publications; safety flashes and DP event bulletins (see page 12); information notes and regulatory updates; and minutes. It also contains quick links to the web pages for forthcoming IMCA and industry events.

Safety flashes will continue to be emailed out to all IMCA representatives. It was felt essential to continue to share this information with the industry as soon as we could.

The first monthly update was sent in February and initial feedback to it has been good. We can only offer developments like this, and refine them, based on your feedback, so if you have an opinion, please let us know it.

If you work for an IMCA member company and you'd like to receive the monthly update, or have any questions about it, email us at: [info@imca-int.com](mailto:info@imca-int.com)



## Membership team gains experience on field visit



As part of the IMCA team's professional development, IMCA Membership Co-ordinator, Michelle Killington (right in picture), took the opportunity to visit Vertech, a new contractor member, during a recent membership audit in Aberdeen.

On the visit Michelle was given a tour of Vertech's facilities and their new daughter craft, *Vaila*, by Alan Melia (left in picture),

Vertech's Offshore Diving Manager.

Whilst Michelle has worked for IMCA for a number of years, this was the first opportunity she has had to visit one of our members in the field. She learnt a lot about the industry first hand, found the experience enjoyable and would like to thank everyone involved for taking the time to explain things.

## Welcome to our new members

IMCA is pleased to welcome the following new members (from 19 January – 9 May 2016)

- Aimselect Projects Limited
- Andra Offshore Services Pte Ltd
- Auspoint Limited
- Bisso Marine, LLC
- Brookes Bell LLP
- China Yantai Salvage
- COSL Shipping
- Dynamic Marine Solutions Limited
- Gaylin International Singapore
- Glomar Diving BV
- Guangzhou Salvage
- Hansa Heavy Lift GmbH
- Hyperbaric Health Asia Sdn Bhd
- Lavaretus Risk Engineering
- Level Power & Automation AS
- Marine Gate Limited
- MHI Vestas Offshore Wind A/S
- Pressafe SRL
- PT Cakrawala Amarta Jaya
- PT Cakrawala Logistik Jaya
- PT Explora Prima
- Seatech Subsea Services
- Shanghai Maritime University
- Shanghai Salvage Bureau Wuhu Diving Equipment Plant
- Shanghai Zhenhua Heavy Industries CO. Ltd
- Sigma Offshore
- Tecnoambiente, S.L
- TenneT Offshore
- Umbilicals International (Seanamic Group)
- Vertech Integrity Services Ltd
- VideoRay LLC

You can find out more about our members, old and new, at: [www.imca-int.com/membership/membership-directory](http://www.imca-int.com/membership/membership-directory)

# IMCA to release 2015 safety and environment statistics



Each year IMCA produces an authoritative set of statistics, supplied by its contractor members, covering health, safety and environmental indicators. The report for 2015 is currently being finalised and will be available for IMCA members to view on our website from mid-June.

The statistics, which IMCA has published annually since 1997, provide a useful insight into the performance of a company and industry sector in the areas of health, safety and environment. Their purpose is to record and benchmark the safety and environmental performance of IMCA contractor members each year. Many members rightly consider it important to take part in this exercise, and this year we have received data from around half of the IMCA contractor membership.

In addition to the usual full report, IMCA will publish a short, eye-catching and user friendly executive summary of the statistics, which will soon be available to read and

download from the IMCA website.

This is the third year IMCA has collected environmental data, and in this area of sustainability, some companies may find the opportunity to differentiate themselves from others, demonstrating that strong environmental performance, as well as safety performance, remains the right choice in challenging times.

Members will be able to view the 2015 safety and environment statistics at: [imca-int.com/safety-environment-and-legislation/information-notes/2015-present](http://imca-int.com/safety-environment-and-legislation/information-notes/2015-present)

## New drugs and alcohol guidance

IMCA is working on a new guidance document on drug and alcohol policies and testing (IMCA SEL 040). It is a thorough revision and merger of two earlier IMCA documents covering these important areas. The guidance sets out some points for consideration in establishing effective policies and procedures for testing for the use of drugs or alcohol such as:

- Cultural and legal considerations;
- The importance of prevention, education, appropriate training and procedures;
- The need for a multi-disciplinary approach, with the involvement of different departments, including occupational health, human resources, and legal as well as operations.

IMCA expects to make the new guidance available to members by Q3 2016.



## Change management document under way



The SEL Core Committee is working on revised guidance on Management of Change.

The root cause of many incidents is found in inadequate management of change. Acceptance and implementation of change requires a thorough understanding of the potential impacts, primarily with respect to safety, but additionally in terms of the environment and the commercial standing of a project.

The new guidance is being developed to

assist IMCA members in limiting risks related to operational changes, such as changes to:

- Equipment;
- Operational procedures, approved methods or agreed practices;
- Organisational team structures, competence and staffing.

IMCA expects to make the updated guidance available to members by Q3 2016.

# IMO Update



Image: Flickr – Chris Bentley

## New ballast water rules: seven key points

After years of controversy and delays, the 2004 IMO Ballast Water Management Convention is finally heading towards entry into force. We look at some of the key issues vessel owners need to consider.

In order to prevent the transfer of invasive species (like the zebra mussels pictured), all new and existing ships will need to meet new ballast water treatment standards. Deep water ballast exchange will no longer be permitted. There are different compliance options but, for most ships, the only practical way to comply is going to be to fit ballast water treatment equipment, which will require to be IMO type approved. Here are the most important things IMCA members need to know:

### 1 Your ships may have to comply by 2017

The Convention will enter into force 12 months after it reaches its ratification threshold, which is widely expected to happen this year. Ships will have to meet the required ballast water treatment standards by the date of the renewal survey for their International Oil Pollution Prevention (IOPP) Certificate, required under MARPOL Annex I, following the date that the Ballast Water Convention enters into force. Therefore, depending on the date of the IOPPC renewal survey, some ships may have to comply as soon as 2017.

### 2 Equipment will need to be retrofitted on existing ships

Space will be an issue, as will integrating the new treatment system into the ship's existing control system.

### 3 Fitting equipment could cost around \$1 million per ship

Additionally, there will be long running operating costs, especially in terms of energy consumption.

### 4 Not all type approved equipment is effective for all operating conditions

The type approvals process is being improved, but some earlier treatment systems have had to be withdrawn from the market. It is important to check that equipment has been tested for all the conditions under which the ship is expected to operate.

### 5 There may not be enough approved equipment to go around

With potentially tens of thousands of ships needing to fit equipment over a period of five years, there are doubts about whether sufficient equipment will be available in time.

### 6 There are likely to be major delays for equipment fitment

Shipyard capacity and the availability of piping experts for fitting the equipment, as well as securing Class approval, are likely to cause bottlenecks. There could be long delays for getting equipment fitted.

## Regulatory round up

Members are reminded of three regulatory changes that will take effect internationally on 1 January 2017.



Image: Viking Supply Ships

### Polar Code

The IMO Polar Code enters into force, for all ships intending to operate in Arctic and Antarctic waters. Depending on the ice coverage and temperatures the ship is expected to encounter, extra design and construction requirements will apply.

### MLC insurance cover

As a result of changes to the Maritime Labour Convention (MLC, 2006), shipowners will need additional insurance cover in place for crew claims and cases of seafarer abandonment.

### STCW Convention update

The updated requirements for seafarers' training and certification, introduced for new seafarers in 2012, will take full effect for existing seafarers. The changes include new requirements for refresher training and new competence standards for electro-technical personnel. Details were provided in information note IMCA SEL 20/10.

### 7 A separate regime applies in the United States

The US Coast Guard has still not approved any treatment equipment for use in US waters. An exemptions process is in place, but there is the risk that ships will have to replace equipment that has already been fitted, or face being banned from operating in US waters.

Information is widely available, including that from the Class societies, and the IMCA team is developing additional guidance for members which will be available by the end of Q2 2016.





# ANNUAL SEMINAR 2016

9-10 NOVEMBER  
MILLENNIUM GLOUCESTER HOTEL  
LONDON • UK



**Richard Benzie**  
IMCA Technical Director

“ For this year’s seminar, an even greater emphasis will be placed on the quality and value of the plenary and technical sessions. In a change to previous seminars, specialist speakers are being approached to deliver engaging insights to our business.

This change in strategy, being piloted in 2016 by IMCA’s new management team, will result in there being no call for papers ahead of the seminar. Our thanks go to previous speakers and contributors who have helped build IMCA’s seminar into a key event in members’ calendars.

Building on the success of the session in 2015, there will be two Quick Fire sessions in 2016. IMCA members’ specialist interests; be that in Marine, Diving, ROV or Survey; will once again be catered for in the parallel technical sessions.

To complete the line-up, there will be an interesting range of exhibits from IMCA supplier members and the opportunity to network with old friends and make new connections.

We very much hope you can join us in November. ”

Registration will be available online soon. Once again we will offer an early bird discount, **saving members 20%**. We advise early booking as we are likely to reach full capacity at this year’s venue.

To find out about the sponsorship and exhibition opportunities at this year’s event please email us at: [events@imca-int.com](mailto:events@imca-int.com)

For more information please visit: [www.imca-int.com/events/imca-annual-seminar-2016](http://www.imca-int.com/events/imca-annual-seminar-2016)

Image: Flickr – Tim Benedict Pou



# CONTRACTING IN THE NEW ERA

## IMCA's concerns, and ways forward

"We aim to improve the clarity and efficiency of contracts and find innovative solutions to benefit the industry" said Nathalie Louys, General Counsel at Subsea 7 and Chair of the IMCA Contracts & Insurance Workgroup, in the December 2015 issue of *Making Waves*. She mentioned the concern of the workgroup with the deterioration of contracting terms during the current downturn, which, she said: "may lead to an increased risk profile for the contractors' community without any adequate compensation or insurance cover for such risks."

Exploring these concerns and ways forward was the theme of the IMCA Contracts & Insurance Seminar held in London on 25 May, which attracted well over a hundred delegates including many legal and insurance specialists in the energy sector, and a highly impressive list of speakers.

The afternoon-long event considered the potential risks of unlimited liability – for pollution, damage to work and consequential losses, and their impact on marine contractors. Altogether a major concern for IMCA who represents the vast majority of offshore marine contractors around the world.

### New barriers to contracts

In introducing the seminar, IMCA's Chief Executive Allen Leatt explained that the Contracts & Insurance Workgroup had, since he joined IMCA in October 2015, met at least once a month – making it one of the most active

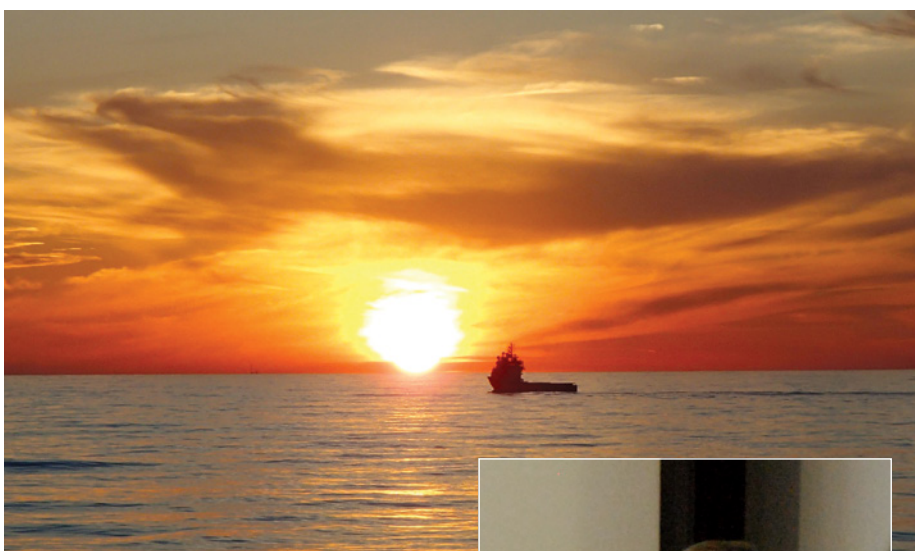


Image: Solstad Offshore

*"The deterioration in contracting terms post-Macondo is totally understandable. However, the tools that are in play today are in effect too crude a weapon; there's a big sledgehammer poised over our heads which is a potential company killer should things go wrong."*

**ALLEN LEATT**

Chief Executive, IMCA



workgroups within IMCA, and paid tribute to their important work on behalf of members and the industry as a whole.

"We are experiencing fundamentally new market and business conditions post-Macondo and post-\$100 oil," he explained. "This is a completely different oilfield world now. Many contractors are simply looking for survival in today's market. One thing is certain; our industry will adjust its cost base. It will have to; costs have to be reduced and efficiency improved in order to rebuild a sustainable and profitable industry."

"I think we will move to a variety of new contracting models in the future. Some contractors will become much bigger and offer far more integrated services, and some will become smaller niche players. It is a great

time to be innovative both technically and commercially. Today however is unlike past crises – the CRINE era of 20-25 years ago was very different; then we saw oil companies and contractors working together to find new ways of working to take the adversarial approach out of the equation, and bring projects to the market that would otherwise have been left on the drawing board.

"Now we have a legal barrier to the free collaboration of the past, and it has come at totally the wrong time. Today, with a \$50 oil at best, it is a time for our industry to dissolve those barriers and make business seamless in terms of facilitating technical and commercial discussions, sensible contracts, and thereby bringing projects back to the market."

*Continued on page 10*

# CONTRACTING IN THE NEW ERA

*Continued*

“The deterioration in contracting terms post-Macondo is totally understandable. However, the tools that are in play today are in effect too crude a weapon; there’s a big sledgehammer poised over our heads which is a potential company killer should things go wrong.”

That ‘sledgehammer’ was considered and discussed in a series of presentations. First by Nathalie Louys – who touched on the widely considered view that it would be best if the long established and well respected ‘knock for knock’ allocation of risk principle remained unchanged. However, she explained, discussions between contractors and their clients have resulted in recognition that oil companies want those in their supply chain to have ‘more skin in the game’. Therefore there was a need to amend the IMCA contracting principles and provide guidance on the carve out of ‘Gross Negligence’ and ‘Wilful Misconduct’ from the indemnity provisions, and be limited to contractor’s Senior Supervisory Personnel onshore. Clear definitions on these terms were subsequently launched together with IMCA’s qualified move in this regard (see box below).

## Setting the insurance scene

Next came presentations providing the invaluable insurance background. The first, by Fabien Lerede of Standard P&I Club, looked at ‘The insurance landscape: the extent of the contractor’s marine insurance P&I cover’. This clearly set out the vessel, crew and cargo cover but did not extend to the construction works. Then Jeremy Jiggins and Ray Spreadbury from

Marsh considered ‘The insurance landscape: the extent of the oil company’s portfolio of cover’. Of note was the hypothesis that the level of cover put in place by oil companies would be unlikely to change going forward. However, the cost of that cover may well increase if contractors needed access to such products, or in a worst case scenario may not even be available.

Some of the interesting points that came out during these presentations were:

- “We are all in the same boat, all eager to provide certainty”;
- “Insurance follows contracts, it doesn’t drive them”;
- Taking out additional insurance may not actually be feasible; indeed there might not be enough insurance capacity available in the market.

They were followed by Allen Leatt looking at some real life examples of incidents offshore. He explained that despite elaborate management systems offshore; including risk management systems, management of change, safety management and highly engineered solutions, with generally excellent equipment these days; incidents do happen from time to time. This can be due to various reasons such as poor judgement, wrong engineering, human error, poor competence or mechanical failure. “Things can change quickly in an offshore environment,” he explained. “Judgements often have to be made quickly in stressful situations. Some decisions will be imperfect, but will most likely be better than the outcome if the decision hadn’t been made.

## IMCA’S NEW RECOMMENDED GUIDING PRINCIPLES

### POLLUTION

- Contractor shall be protected from any pollution liability, other than pollution emanating from Contractor’s spread
- Acceptable compromise: capped liability for any carve out on Pollution whether for Gross Negligence or Wilful Misconduct (IMCA will investigate possible pollution insurance cover)

### CONSEQUENTIAL LOSSES

- Company to indemnify for consequential losses
- No acceptable compromise

### DAMAGE TO WORK

- Company to indemnify for damage to the Work or provide insurance coverage by way of a CAR policy
- No acceptable compromise



*“We aim to improve the clarity and efficiency of contracts and find innovative solutions to benefit the industry.”*

**NATHALIE LOUYS**

General Counsel, Subsea 7  
Chair of the IMCA Contracts & Insurance Workgroup

“We need to let the Master and Offshore Manager do their job and not handcuff them to their desk or get buried into the detail of contractual indemnity risks – that is not and should not be their job.”

David Blackmon, General Counsel at Heerema Marine Contractors then took the audience back to the fundamental issues in his presentation ‘Contractors taking responsibility but indemnifying responsibly’. He set the scene by explaining that Heerema is privately owned with a single shareholder who does indeed ask “will signing this contract lose me my company?”

David reiterated IMCA’s new guiding principles on pollution, consequential losses and damage to work; and provided an update on the IMCA Contracting Principles:

- Fair (not equal) and realistic distribution of risk in relation to relative rewards;
  - Allocation of Risk – to the party best placed to assume;
  - Insure – sufficient scope of cover;
  - Reasonable – avoid “duplicate” assumptions of risk and minimise potential for dispute.
- “Recognising the need for more clarity and transparency in the allocation of liability, IMCA now introduces additional wording as guidance





to its members on best practices to properly define Gross Negligence and Wilful Misconduct of Senior Supervisory Personnel,” he explained; and went on to provide clear definitions for the benefit of all concerned.

### Stimulating panel discussion

“Mention of FAIR brings me to our panel discussion ‘A qualified move – keeping it FAIR’,” explains Allen Leatt. “We are grateful to David Brinley of Shell for joining Adam Constable of Keating Chambers (who, with Clare Kempkens of Ince & Co, presented on ‘The legal landscape’), Jeremy Jiggins, and David Blackmon. We posed four demanding questions with real-time voting by the audience, which helped guide discussion.

“A number of interesting ideas were discussed including the fact that both client and contractor could benefit by having their respective insurance specialists on each side of the ‘fence’ to talk with one another on specialist matters. “It’s not all good or all bad,” said David Brinley who also stressed that “generally clarity is better than a lack of clarity”, and reminded delegates that there were very few cases of Gross Negligence or Wilful Misconduct.

“Our afternoon then switched to an update on other matters being considered by the Contracts & Insurance Workgroup including compliance, FPSO contracting principles and BIMCO Supplytime review, before speakers, delegates and other guests enjoyed a reception



(From left to right) Jeremy Jiggins, David Brinley, David Blackmon and Adam Constable joined Nathalie Louys for the panel session. It featured real-time voting, which certainly stimulated some interesting discussion.



“Recognising the need for more clarity and transparency in the allocation of liability, IMCA now introduces additional wording as guidance to its members on best practices to properly define Gross Negligence and Wilful Misconduct of Senior Supervisory Personnel.”

### DAVID BLACKMON

General Counsel, Heerema Marine Contractors

and networking event overlooking Hyde Park in central London.

“Discussion certainly carried on apace. Working together like this I am confident that we can indeed find that much needed clarity. We will be keeping members thoroughly in the picture over the coming months.”



Content from the seminar is available at: [imca-int.com/events/ci16](http://imca-int.com/events/ci16)

# IMCA connects with US event with digital DP update

At a time when its members are having to restrict individuals' travel, IMCA is following suit; but thanks to new video conferencing equipment, it is doing so without having to miss out on contributing to important industry technical events. Delegates at a DP conference in Houston were some of the first to benefit from the new system.

The Informa Offshore Vessel Connect North America event was held in Houston on 16 March and the organisers were keen that IMCA should be represented. Using IMCA's new video conferencing equipment, IMCA Technical Adviser, Andy Goldsmith, added value to the DP conference by providing his presentation from London, without the added expense of travel. Andy summarises the message he gave to the delegates in Houston.

## DP reporting challenges

The focus of my presentation was IMCA's DP station keeping event reporting scheme. I started by explaining the main reasons that we have a scheme, which are:

- To gather statistics for data analysis;
- To share a bank of knowledge with others.

Unfortunately, we miss out on receiving a great deal of potential DP event reports, and this is for a number of reasons. Partly, it is because people are unsure of what qualifies as a 'DP event'; there is not a black and white list of situations which should be reported and those which shouldn't. I believe that another big factor is that people worry about the possibility of personal



Andy also gave his presentation for the April CNA Section Meeting using IMCA's new AV equipment

or commercial penalties, as they perceive a reporting scheme to be a method of collecting information to apportion blame – the IMCA scheme is certainly not that.

I'd like to reiterate to those thinking of sharing information: the IMCA DP reporting scheme has always been secure and provides anonymity for participants. The scheme is designed to gather information which can be shared with members, ensuring lessons are learnt and avoidable incidents are not repeated.

Due to the factors outlined above, the variance with which DP event data has been submitted to us has meant that, while useful for sharing lessons learnt, the current data is not suitable for reliable data analysis and trending.

## Revision to the scheme

The IMCA DP focused workgroup's revision to the scheme – which is underway, and will be complete later this year – has two main goals:

- To encourage greater participation;
- To provide the DP industry with more recent and relevant feedback on events.

## DP STATION KEEPING EVENT REPORTING SCHEME DEVELOPMENTS

- The word 'incident' in the scheme title has been replaced by 'event' to encourage the reporting of all DP events worthy of sharing with the industry;
- The reporting scheme will remain secure and maintain participants' anonymity;
- The IMCA DP focused workgroup will issue 'DP station keeping event bulletins' to the industry 3 to 4 times a year;
- A gap analysis spreadsheet will be incorporated with the annual review of DP station keeping events, as a user-friendly overview of the information in the report;
- All IMCA DP related guidance and DP event data will be made freely available to the industry.

To view the first of the new DP station keeping event bulletins visit: [www.imca-int.com/dpbulletins](http://www.imca-int.com/dpbulletins)

## Members can attend 'travel-free' events

As well as allowing IMCA to present at industry events digitally (as outlined above), IMCA's new AV setup also gives its members a cost-effective option for attending IMCA's own events, without the need to travel.

Many of the committee and workgroup meetings we host in our London office are already available to attend using the Zoom video conferencing application, which is free and easy to use.

In February, we also trialled webinar software, at the Europe & Africa Section meeting Paris. Feedback was good, with more than 20 delegates joining the meeting online, to see the presentations in real time. Participants were also able to post questions online to the speakers.

The next webinar is scheduled for the Europe & Africa section meeting in Copenhagen on 14 June.



For information about the Europe & Africa webinar, using Zoom or our events, email: [events@imca-int.com](mailto:events@imca-int.com)



## Safe lifting: get the basics right

In his presentation at the International Offshore Crane and Lifting Conference, IMCA Technical Adviser, John Bradshaw, spoke about safe lifting operations.

John's message was that to perform safe operations it is essential to get the basics right. He explains, "Thankfully, offshore lifting incidents are rare, and the sector has an excellent safety record. However incidents do sometimes happen. As often as not, when there is an incident the causal factors, far from being unforeseeable, are well known and understood by the lifting industry."



"To improve safety and prevent incidents, our industry does not need more regulation or a revolution in safety management, but rather an ongoing commitment to safety and sound application of existing regulations and procedures. Put simply, the industry needs to continue to pay attention to the basics of safe lifting."

## WORLD-WIDE EVENTS

The full listing of the events we are running and supporting can be seen at [www.imca-int.com/events](http://www.imca-int.com/events)

● **IMCA events are highlighted below**

### JUNE

- 14:** **Europe & Africa Section Meeting with Offshore Renewables Focus**  
Copenhagen – Denmark ●  
(also available by webinar)
- 16:** **CMID/MISW Workshop (at Seawork International)**  
Southampton – UK ●
- 21-22:** **RUK Global Offshore Wind**  
Manchester – UK
- 22:** **IMCA Rope Workshop: Validity of rope discard criteria**  
Amsterdam – the Netherlands ●

### JULY

- 13-14:** **Central & North America Section & Sub-group Meetings**  
Houston – USA ●
- TBC:** **South America Section Meeting**  
TBC ●

### AUGUST

- 17:** **Asia-Pacific Section Meeting**  
Bangkok, Thailand ●
- 29-1:** **ONS (Offshore Northern Seas)**  
Stavanger – Norway

### SEPTEMBER

- 21:** **Asian DP**  
Singapore

### OCTOBER

- 10:** **MTS DP Conference**  
Houston – USA
- 12:** **RUK Annual Conference**  
Liverpool – UK
- 24-27:** **Rio Oil & Gas**  
Rio de Janeiro – Brazil

### NOVEMBER

- 9-10:** **IMCA Annual Seminar**  
London – UK ●

## IMCA member behind successful OSV Vivo event



An initiative by the Offshore Services Committee of the Singapore Ship Owners Association saw two OSVs moored alongside Vivocity, one of Singapore's major shopping malls, for an event in April.

Chairman of the committee, and CEO of IMCA member company M3 Marine, Mike Meade, explains, "The purpose of the event was to create awareness of the offshore marine industry to the general public and students, and promote careers in our industry."

## IMCA duo at joint industry events

IMCA Technical Advisers, Andy Goldsmith (left) and Nick Hough (right) have both provided expertise on behalf of IMCA at joint, industry technical events recently.

In March, Andy attended a summit to assess the tools, processes, and value of sharing and learning from offshore exploration and production safety-related data. The summit was arranged by the Society of Petroleum Engineers (SPE) and the Bureau of Safety, Environment and Energy (BSEE) in Montgomery, Texas.

The event was attended by leading organisations from the industry including the International Association of Oil & Gas Producers (IOGP) and the Centre for Offshore Safety. IMCA is working with these organisations to ensure effort is not duplicated when collecting and using information gained



from DP and safety and environmental reporting schemes.

On 20 April, Nick gave a short overview of the work of the IMCA Offshore Survey Management Committee at a geomatics industry day in Aberdeen. The event was held by the IOGP Geomatics Committee, IMCA Offshore Survey committee and the Hydrographic Society in Scotland.

The theme of the event was 'Competitive geomatics expertise and support – innovation, efficiency and standardisation initiatives'.

# WORLD-WIDE

## Asia-Pacific: troubled times, but a positive future?

In this edition's world-wide feature IMCA's Regional Director Asia-Pacific, Denis Welch, discusses how the offshore construction industry is faring in the region, IMCA's role in these troubled times, and why he is 'cautiously optimistic' about the future.

IMCA's Asia-Pacific Section is home to almost 25% of our members and when I was asked to contribute to this edition of *Making Waves*, I think the editor felt that the message might be more upbeat than in IMCA's other regional sections. In reality, the current situation here is as difficult as elsewhere in our market, however, there is a more optimistic future scenario.

### Challenges in the region

Since 1985 Asia has accounted for some 70% of the world's total oil production. However, like a Hong Kong tailor, Asia's offshore contractors are having to cut their cloth to suit the scaling back of exploration and production investment, by both international and national oil companies. The impact of sustained low oil prices, a sustained drop in demand and an oversupply in marine tonnage is being felt across the region. These challenges are in addition to the added cost burdens associated with moving from shallow water, traditionally the province of shelf jack-ups and smaller vessels, to deepwater developments.

The fallout is increasingly evident in my home city, Singapore, the region's long established global trading hub, and now officially the most expensive city in the world. Singapore is traditionally the safe haven for the Asian operations of international offshore fleets and increasingly influential local players. 70% of the world's jack-ups have been built here, but in the current climate rig builders, and many established contractors, have laid off staff and announced that they are moving operations, to locations like Kuala Lumpur, in an effort to reduce costs.

### Vital to add value

Arguably, IMCA's role becomes more vital in these troubled times. We must continue to share good practices, to help our members maximise the effectiveness of their operations and maintain



Image: Flickr – Anshu

*“The 10 ASEAN countries are beginning to make progress in creating an economic zone in which it is easier to do business.”*

**DENIS WELCH**  
IMCA Regional Director Asia-Pacific



appropriate safety standards, as well as be the industry voice in dialogue with maritime bodies and oil majors. This has been the mantra of Allen Leatt and Richard Benzie since their appointments as Chief Executive and Technical Director last year. Their focus is not on enrolling new members but on ensuring that the service IMCA provides adds value to our existing members' operations. Richard reiterated this at our section meeting in Singapore in January, as did Allen at the following meeting in Hong Kong in April.

### Causes for optimism

Despite the current situation, I believe there are reasons for optimism about the future. Asia's population continues to grow, with India expected to overtake China to become the world's most populous nation by 2022. This growing population has a significant disposable income and increasing demands for energy. The region's focus on intellectual capital, training, education, R&D and getting its people future ready is also very encouraging.

Energy sufficiency is a major political agenda item for all of the countries in the region. For example, last year Coal India Limited planned investment of at least \$20-25 billion over five years, striving to make India self-sufficient in thermal coal. The adoption of

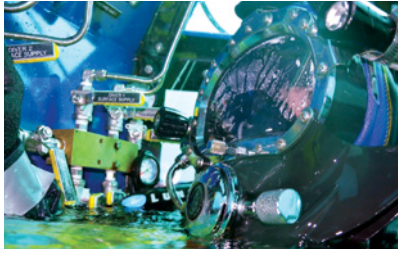
clean fuels in the form of renewable energy and increased use of LNG will inevitably reduce the dependency on coal. It will also, in my opinion, be the catalyst which sparks the investment decisions necessary to kick start the exploitation of deepwater reserves and, as a result, provide work for our members.

### Confidence in the future

Asia should not be considered a homogenous region: cultural differences, national interest policies and business protocols are diverse and complex. Local rules of the game frequently change at short notice, which anyone who has worked in Indonesia can bear testament to. Although there are certainly unique challenges in the region, the 10 ASEAN countries (the Association of South East Asia Nations) are beginning to make progress in creating an economic zone in which it is easier to do business – a place where investors can have more confidence in the future.

In conclusion, according to Ernst and Young, Asia is forecast to be the largest single market in our sector over the next 5 years. This largely relates to shallow water inspection, repair and maintenance work, but hopefully we will see this trend upwards as the inevitable investment in deepwater reserves is unlocked.





## Update to nitrox frameworks

As a result of a recent request by industry, IMCA has introduced optional nitrox competencies within its current diving competence assurance scheme. IMCA's frameworks for air (surface supplied) diving supervisors (D 03) and surface supplied divers (D 05) have both been updated.

The new competencies encompass; nitrox related safety, nitrox diving operations and nitrox related diving emergencies. Whilst it is accepted that some national diver training programmes already include the theory of diving breathing gases other than air, this change will help contractors to demonstrate that all of their offshore diving personnel, using nitrox as a breathing mixture, are competent to do so.

## Hoist wire rope guidance simplified

Members should note that IMCA's guidance on monitoring the deterioration in breaking force of diving bell/basket hoist wire ropes has been simplified. The updated information appears in the document on wire rope integrity management for vessels in the offshore industry (M 194 Rev. 2).

Details of the changes are explained in information note IMCA D 09/16. IMCA's DESIGN documents will soon be altered to reflect this change. In the meantime, the correct way to proceed is to follow IMCA M 194 Rev. 2.

# Backup life support package clarification

After queries from members about IMCA's guidance on life support packages (LSPs), IMCA Technical Adviser Peter Sieniewicz, clarifies what is needed to ensure adequate redundancy, or backup, when using these systems.



Image: Lexmar

A complete dual system life support package (LSP). In this example, the LSP houses the two required heating and cooling systems. Other configurations may be acceptable.

LSPs are the systems that support self propelled hyperbaric lifeboats (SPHLs) and hyperbaric rescue chambers (HRCs), in part by providing sufficient heating and cooling to the occupants of these vessels. IMCA offers guidance on these systems in Section 16 of *DESIGN for saturation (bell) diving systems* (IMCA D 024) and Section 5.4 of *Guidance on hyperbaric evacuation systems* (IMCA D 052). These documents state that it is essential to have an adequate level of redundancy, in the life support arrangements, to ensure the safety of divers in an SPHL or HRC. The basic requirement outlined in the guidance is that two complete heating and cooling systems should be available to meet this level of redundancy.

## Acceptable examples

Some members have understood this guidance to mean that the two heating and cooling systems must be housed within the same LSP; they do not.

For example, one system may be located in the SPHL. This system will remain functional as

long as the SPHL is in the water or can access an appropriate cooling water supply. The other may be housed in an LSP, which only contains a single heating and cooling system.

Another option, to meet the requirement, would be to provide two single unit LSPs. It would also be perfectly acceptable to use an SPHL's heating and cooling system at the reception site as one system, with a single unit LSP providing the second (redundant system).

The precise arrangements for each diving project should be subject to risk assessment and made part of the Hyperbaric Evacuation Plan (HEP) for the project. In all cases it is essential that there is an adequate level of redundancy in the life support arrangements to ensure the safety of the divers in the SPHL or HRC. Any system failing to meet these provisions will fall short of meeting IMCA's guidance.

For further detail on the topic, IMCA members should read information note IMCA D 04/16, which is available on the IMCA website.

## Bail-out bottle recommendations revised

Following a recent review, the Diving Medical Advisory Committee (DMAC) decided that its guidance on the oxygen content of open circuit bail-out bottles for heliox saturation diving, which was first published in 1981, should be changed to reflect modern opinion on the subject. A fully revised version of DMAC 04 has now been prepared and issued.

DMAC 04 Rev. 2 advises that optimal oxygen content for secondary (bail-out)

breathing systems depends upon a balance between the risks associated with the adverse effects of a high oxygen level and the potential positive benefits of a high partial pressure of oxygen ( $pO_2$ ). The guidance presents recommendations that seek to avoid oxygen induced convulsions in saturation divers, while preserving any beneficial effects – now thought to be small – that a relatively high  $pO_2$  may have in a bail-out situation.

In view of this, the guidance recommends:

- The maximum  $pO_2$  supplied to the diver from the bail-out bottle should be 1.4 bar;
- The minimum should be the same as the  $pO_2$  in the diver's primary breathing gas mixture, with an absolute minimum of 0.4 bar.

View DMAC 04 at: [imca-int.com/media/72827/dmac04.pdf](http://imca-int.com/media/72827/dmac04.pdf)

# IMCA takes joint lead on offshore renewable safety developments

*“IMCA’s new walk to work (W2W) workgroup will provide the offshore renewable sector with tools to facilitate informed decision making and promote good risk management on operations of this kind.”*

**JOHN BRADSHAW**  
IMCA Technical Adviser

IMCA’s Renewable Energy Workgroup has been busy this year, collaborating with other bodies to tackle industry issues, hosting a joint safety event and setting up a new workgroup to consider walk to work operations issues. IMCA Technical Adviser, John Bradshaw, gives this progress update.

In February, IMCA joined with HSE and the G9 in hosting an offshore wind safety event in Liverpool where senior stakeholders from the offshore wind sector discussed how the industry can improve safe systems of work. The main message from the event was that the industry needs the different stakeholders to work together to develop shared solutions for shared problems.

Following the event, there has been further discussion between IMCA and the G9, Global Wind Organisation (GWO) and RenewableUK about collaboration going forward. The consensus was that sharing knowledge and expertise while avoiding duplication of effort would be essential. Although no formal agreements have been made, we have agreed that IMCA will lead on health and safety matters which are primarily marine based (including offshore lifting).

## IMCA focus on W2W

One such area which IMCA’s Renewable Energy Workgroup will be addressing is a topic of interest to many IMCA members: walk to work (W2W) personnel transfers. To tackle the issues, the workgroup has formed a new W2W sub-workgroup, which held its inaugural meeting in March. The new group is not intended to promote W2W over other personnel transfer options, nor reinvent any wheels in terms of guidance. What the group will do is fill gaps in existing documents and provide the offshore renewable sector with tools to facilitate informed decision making and promote good risk management on operations of this kind.

The group will consider what can be learnt from the oil and gas sector because, although the two sectors do face different challenges and

operational requirements, it is recognised that W2W is not unique to the world of offshore wind. The group includes representatives from a range of industry stakeholders including HSE. It will be developing a W2W decision tree as well as considering guidance for safe W2W personnel transfers and W2W educational material.

See page 18-19 for an interview with IMCA’s Renewable Energy Workgroup Chairman, Alan MacLeay

IMCA’s next Europe & Africa Section Meeting, in Copenhagen on 14 June, has an offshore renewable focus. For details visit: [imca-int.com/events](http://imca-int.com/events)



## Farewell Jack Simpson

Jack Simpson of Technip, the Chairman of IMCA’s Crane & Winch Operations Workgroup (CWOW), has decided to retire. Jack has been instrumental in guiding the group, since becoming its Chairman in 2011. With the group, he has produced some outstanding, industry recognised guidance. Sadly, he will miss the completion of the work in progress to promote CWOW to an IMCA core activity, the Lifting & Rigging Management Committee. The members of CWOW and the team at IMCA wish Jack all the very best in his well-deserved retirement.

*“Thanks for bringing focus, direction and an ICo perspective to the group.”*

**ALEXANDER STEVEN**  
Subsea 7





## GNSS update

Satellite technology continues to evolve, offering ever-greater positioning accuracy. John Vint, Starfix Brand Manager for IMCA member company Fugro Survey, provides this update for *Making Waves* readers about the latest developments.

In recent years there have been a number of developments within Global Navigation Satellite Systems (GNSS) related to the offshore positioning industry. Perhaps the largest development is in the availability of satellites; as in addition to the GPS and GLONASS systems, new GNSS constellations have been commissioned and launched.

The Chinese GNSS, BeiDou, gained regional coverage over Asia during 2015 with 18 fully operational satellites (out of the 24 which have been launched). This system is predicted to have full global coverage by 2020. Deployment of the European Union's GNSS, Galileo, is also continuing and its pace is expected to increase in the coming years. At the end of 2015, 12 satellites were operational, and a planned launch schedule of 6 satellites in 2016 (2 in May, 4 later in the year), 4 in 2017 and 4 in 2018 will bring the system to full operational capability. In addition to the new BeiDou and Galileo systems, both GPS and GLONASS are undergoing a modernisation programme too.

While new satellite constellations are being deployed, the techniques related to the position computation from GNSS data have also evolved. In today's offshore community, the most common positioning method is Precise Point Positioning (PPP), which uses GNSS raw data, in combination with global orbit and clock corrections, to produce positioning accuracies of 100mm or less. Additionally in the last year, global Integer Ambiguity Resolution (IAR) techniques have become available producing positioning accuracies of millimetres.

You can find more information on:  
BeiDou at: [en.beidou.gov.cn](http://en.beidou.gov.cn)  
Galileo at: [www.gsa.europa.eu](http://www.gsa.europa.eu)

# Shared sensors progress at OI 2016

ROV contractors, offshore surveyors and sensor manufacturers came together at an IMCA workshop at Oceanology International 2016 to discuss the topic of the shared use of sensors for ROV and offshore survey. The session, designed to identify how areas of the industry could work together to maximise efficiency, was productive and had a positive conclusion.

The workshop was kicked off by Tim Rhodes, of Fugro Subsea, who gave an ROV operator's view of the topic. He described how the operator's perception is that 'accuracy means expense'. He explained that the levels of accuracy and calibration needed for survey purposes were not required for the vast majority of ROV operational needs. He added that there had to be a trade-off between cost and performance.

Robin Longstaff, of Bibby Offshore, delivered an offshore surveyor's point of view. He said that, for the surveyor, the key deliverable is to meet the customer demand. He suggested, however, that surveyors need to specify what is fit for purpose, rather than going for gold plating. He stressed that, although new technology is providing accuracy in sensor packages that are much more reasonably priced, companies should choose appropriate hardware, based on the degree of precision actually required for specific tasks.

The final presentation was from Malik Chibah, of Sonardyne, who provided a sensor manufacturer's view. His message was that the sensor technology, to share data for ROV and offshore survey purposes, is already available and the perceived cost barrier to enabling this functionality is actually not that high.

## Questions and themes

Following the presentations, the workshop attendees debated the issues. Key questions and themes raised in the discussion were:

- IMCA has produced telemetry protocols before, would it be possible to develop sensor protocols?



*“Surveyors need to specify what is fit for purpose, rather than going for gold plating.”*

**ROBIN LONGSTAFF**

Bibby Offshore

- Similarly, IMCA has produced guidance for above water sensor system standardisation, could the lessons learnt from the topside aspects be brought to this field?
- Getting agreement for the complete range of sensors used might be difficult, but there are some individual elements such as Doppler Velocity Log, which might have an agreed industry standard applied to them more easily;
- The handling of raw sensor data is the key: there are ways of getting this to the relevant ROV or survey user before it has been through a control unit;
- Technology can now enable in field calibration with levels of verification that could meet the higher precision requirements of the surveyor.

## Further investigation

The workshop discussions generated a positive action: it was decided that the IMCA Offshore Survey and Remote Systems & ROV Divisions' management committees will form a combined sub-workgroup to investigate the options, for the benefit of both disciplines. The sub-workgroup will include manufacturers and be provided with clear direction and terms of reference from the parent committees.

## SPOTLIGHT ON ALAN MACLEAY

Alan MacLeay is Engineering Director for Renewable Energy at Seaway Heavy Lifting, a Subsea 7 joint venture company. He has chaired IMCA's Renewable Energy Workgroup since its inception. In this interview he talks about projects he has helped deliver, the big challenges facing the offshore renewable sector, and the work of IMCA's workgroup.

### Cutting-edge projects

I graduated from the University of Aberdeen with a degree in civil engineering in 1989. My initial training was with Arup as a structural engineer working on the design of novel offshore structures around the world. This included exposure to some early offshore renewables projects. One of these was the European Marine Energy Centre, a test site for wave and tidal devices in Orkney. I was the project manager for the development of the site which, although a comparatively small project, was very much cutting-edge at the time.

In 2003 I left Arup to join Subsea 7, as project manager on the front end design of the Beatrice demonstrator project. These turbines are in 44 metres of water, about twice that of anything else which was being built in offshore wind at that time. Although there are now projects in Germany and the UK which are of similar depth, these are still the deepest bottom-founded offshore wind turbines in the world. It was an interesting project, not least because we were utilising technology 10 years ahead of its time.

I held various engineering management and project management positions with Subsea 7 before becoming UK Engineering Director in 2008. Following the Acergy combination in 2011, I helped establish a new unit looking to develop a business in offshore renewables. In 2013 Subsea 7 consolidated its renewables team in Seaway Heavy Lifting, where I was initially seconded as

Engineering Director for Renewables. That role has recently been expanded to include the role of EPCI Tendering Director.

### Growing sector, big technology

The wind industry developed onshore and has been slowly moving offshore over the last 20 years. Every year the projects get a little bigger, they are further offshore, in deeper water, with bigger turbines, structures and associated infrastructure.

The rapid growth of technology presents quite a lot of challenges. For instance, if you've seen turbine components being transported on the back of a truck on a motorway, they look enormous: well, we are now at the point where the largest equipment being installed offshore is actually too big to be transported by road. It is being built at quayside facilities and sent straight offshore. When I was first involved, in the 1990s, I thought a 2MW turbine was big. Now the industry is installing 8MW turbines! While the components are bigger, the method of building them hasn't evolved very much. Someone still needs to get up there and bolt the blades to turbines.

Even bigger turbines are already being conceived which, currently, no construction vessel in the world could lift. The 'dreamers' of the next generation of turbines are thinking a step ahead of the installation contractors on the basis of, 'if we make bigger turbines, someone will build the vessel to install them.'

### Repetition, efficiency & safety

The construction challenges of offshore wind are similar to other forms of offshore construction. However, if you are installing 100 structures you need to approach it in a different way to installing just one.

In terms of efficiency, a greater up-front spend on developing installation aids, tooling, procedures, processes and all the little things which save you time can really add up. Just think: if you knock an hour off the programme for each structure, and you install 100 structures, then that's 100 hours off the project – that's big money.

The repetition involved in offshore wind

*“We are now at the point where the largest equipment being installed offshore is actually too big to be transported by road. It is being built at a quayside facility and being sent straight offshore.”*

projects also presents a challenge in terms of safety. Most accidents in offshore construction tend to happen on fairly routine activities. Doing a 'one off' oil & gas job, you'll have a toolbox talk and discuss the operations you are about perform, highlighting the unique risks of the task. It's a bit different in renewables when you come to do something for the 30th or 100th time. Keeping safety fresh and maintaining people's awareness of the risks is the challenge, because the 100th installation is just as hazardous as the first one.

### Sharing solutions

One of the reasons we established the IMCA Renewable Energy Workgroup was that we were aware that people weren't sharing information. We felt that safety in offshore wind construction needed to improve and that developers needed input from experienced marine contractors. The workgroup is now one of the largest and most active in IMCA. It regularly meets with the main offshore developers, regulatory bodies, other trade associations and main equipment suppliers to find collaborative solutions to the industry's challenges.

Most developers are onshore electrical utility companies with relatively limited experience of offshore construction techniques and technology. So our aim has been to make developers aware of the guidelines which already exist and produce new ones to fill gaps in knowledge. For instance, after recent discussions with the G9 – the main body of developers of offshore wind – they withdrew proposed new lifting guidelines they were working on, as we were able to point them towards existing documentation which is already available, such as the IMCA lifting guidelines.

### Walk to work guidance

A particular area of interest for the workgroup at present is walk to work operations. A number of companies have developed service operation



The Beatrice turbines are still the deepest bottom-founded offshore wind turbines in the world.





Image: Siemens AG

vessels (SOVs) which are now being used on some of the further offshore windfarms. Unlike the traditional crew transfer vessels, used for inshore installations – which press up against a fender, allowing the crew to step over to the ladder on the foundation – SOVs are usually small construction vessels with walk to work systems onboard. These dynamically positioned vessels move around the site of the windfarm, pull up alongside a foundation, deploy the walk to work system (while the vessel is on DP) and allow the crew to walk across the gangway. They may make up to 50 of these connections a day: moving around the windfarm structures, which can be quite a confined area. This raises a number of issues.

Key questions people will ask about these operations are: What are the limiting sea states

*“Keeping safety fresh and maintaining people’s awareness of the risks is the challenge, because the 100th installation is just as hazardous as the first one.”*

for performing them? What are the limits on the DP system? How do the costs and safety compare with other methods of access? It’s a hot topic, and one we want to tackle: defining guidelines, understanding where there may be issues that nobody has thought of and trying to get ahead of the industry.

### Standardised boat landings

Another area of IMCA guidance I’ve been working on is researching a more standardised approach to boat landings for transfer operations. My initial findings have flagged up some fundamental areas of research that need to be done. Looking at where the design codes came from, a lot of the tests were based on 2,500 tonne displacement vessels used for oil & gas platforms some 30 years ago. These will need updating to be appropriate for the 100 tonne vessels which are performing completely different operations today.

### Divers & ROVs in renewables

Quite a lot of developers are talking about wanting ‘no diver intervention’ during the construction of offshore windfarms. One of the things that the workgroup is working on – in

### ABOUT SEAWAY HEAVY LIFTING

Seaway Heavy Lifting is a contractor in the global oil & gas and offshore renewables industries. It has been operating in the North Sea and other regions for 25 years. There are three main elements to the business; transportation and installation of oil & gas platforms and subsea structures, decommissioning and offshore renewables. In offshore renewables the company has an enviable reputation for the transportation and installation of offshore substations and wind turbine foundations.

conjunction with other specialist groups at IMCA – is developing ROV guidance to meet this need. This guidance will complement the documents we already have, which highlight what divers are good at and how they can be used on renewables projects. Put simply, divers tend to be very good at ‘unplanned’ interventions, whereas ROVs are very good for ‘planned’ ones. If you can prepare all your tooling and procedures, an ROV can be very efficient: but you need to know what you are doing in advance.

The new guidelines will help developers understand what they would need if they want a ‘diverless installation’. For example, they would need to think about where the ROV can grab onto; how to make the tooling suit ROVs; and substantial operation planning.

For developers new to IMCA guidance, I’d recommend, as a starting point, to look at what is already available in terms of ROV, diving and lifting guidance. IMCA is also in the process of updating its offshore transfer guidelines to make them more user friendly for renewables clients.

### Adding value in the future

There is no doubt that our future energy supply needs to be more sustainable. Offshore wind developments could contribute significantly towards this. With good industry participation and leadership, offshore wind will also be safer and more cost-effective. Renewables is a big growth area for IMCA and if we can point to key guidelines then we can certainly add some value for our members.

IMCA’s next Europe & Africa Section Meeting, in Copenhagen on 14 June, has an offshore renewable focus. For details visit: [imca-int.com/events](http://imca-int.com/events)



A service operation vessel (SOV) on DP alongside a turbine, with its walk to work gangway deployed.

Image: Siemens AG





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- SPS Code Compliance Gap Analysis
- Ballasting & Stability Calculations
- Statutory Plans, Technical Manuals
- Structural & Strength Analysis
- Feasibility studies

#### Dynamic Positioning Services

- FMEA, FME(C)A
- Proving, Annual Trials
- Gap Analysis & Upgrades
- Assurance audits
- Incident Investigation
- Documentation (DP Ops Manual, Checklists)
- FATs

#### Transportation & Installation Engineering Services

- Bollard Pull Calculations
- Towing Equipment Design
- Mooring & Motion Analysis
- Lifting, Load-out & Sea-fastening Analysis
- Jacket Floatation, Upending & On Bottom Stability Analysis
- Pile Drivability Analysis.

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