



**OCIMF**



A Voice for Safety



**North America  
Regional Marine Forum – Tampa**

July 2017



# Safety Brief and Arrangements



# Welcome and Introduction

Jan Ziobro – Regional Champion (Shell)



# Safety Moment



## Shipyard Safety

- **This past year in South Korean shipyards**
  - One major shipyard has had a fatality each month
  - Another had a serious crane accident with six fatalities
  - Others also had serious incidents
- **Due to recent hard times the Korean shipbuilding industry has,**
  - Made redundant senior experienced workers
  - Reduced their experienced work force
  - Relied more on subcontracted labour
- **It can happen in any industry**

## **Regional Marine Forum Objective**



- **Engage with OCIMF and non OCIMF members**
- **Encourage industry to utilize and be aware of the work of OCIMF**
- **Learn from one another**
- **Review regional challenges**



## Critical Success Factors

- Actively participate
- Make sure your voice is heard and your points communicated
- Ask Questions
- Network

**Attendee Introductions**

# Industry Engagement

- SIGTTO
- INTERTANKO (International Association of Independent Tanker Owners)
- IACS (International Association of Classification Societies)
- ICS (International Chamber of Shipping)
- IMCA (International Marine Contractors Association)
- ILG (Industry Lifeboat Group)
- CDI (Chemical Distribution Institute)

The logo for SIGTTO, featuring the letters "SIGTTO" in a white serif font on a dark blue background, with two thin yellow horizontal lines above and below the text.

**INTERTANKO**



**IACS**

INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES LTD.

The logo for CDI, consisting of the letters "CDI" in a blue serif font inside a light blue oval with a dark blue border.

# Anti-Trust

Joe Megeed – OCIMF Engineering Adviser



# Anti-Trust/Competition Law Guidance - DO NOT

**Anti-Trust/Competition  
Law Guidance  
For OCIMF Meetings**

**DO NOT** 

This checklist is intended to provide guidance to participants in OCIMF meetings. It is not exhaustive.

**DO NOT DISCUSS** the following topics:

- Prices/Freight rates
- Production
- Capacity or inventories
- Sales/purchases
- Costs
- Future business plans
- Matters relating to individual customers/suppliers
- Employee compensation, benefits, remuneration etc.

**DO NOT MAKE ANY AGREEMENT ON, OR TAKE A DECISION TO** conduct the following activities:

- All of the above
- Fix sale or purchase prices
- Fix other terms of sale or purchase
- Restrict capacity or output
- Refrain from supplying a product or service
- Limit quality competition or research
- Divide markets or customers
- Exclude competing companies from a market
- Blacklist or boycott customers or suppliers

If you have any questions, please contact  
OCIMF  
27 Queen Anne's Gate  
London SW1H 9BU  
United Kingdom  
Tel: +44 (0)20 7654 1200  
E-mail: [enquiries@ocimf.com](mailto:enquiries@ocimf.com)



Discuss the following topics:

- Prices/Freight Rates, Production, Capacity or inventions
- Sales/purchases, Costs, Future business plans
- Matters relating to individual customers/suppliers
- Employee compensation, benefits, remuneration etc.

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# Anti-Trust/Competition Law Guidance – DO



## Anti-Trust/Competition Law Guidance For OCIMF Meetings

**DO** ✓

This checklist is intended to provide guidance to participants in OCIMF meetings. It is not exhaustive.

**DO ENSURE** agendas and minutes of meetings are produced and circulated to all attendees, and accurately reflect the discussions that occur.

**DO SEEK ADVICE** from OCIMF General Counsel and OCIMF Legal Committee before participating in the following potentially sensitive activities:

- Gathering and exchanging statistical information
- Benchmarking
- Creating industry standards
- Self-policing regulations
- OCIMF sponsored research

**DO CONSULT** with OCIMF General Counsel and/or OCIMF Legal Committee on all questions which might be related to anti-trust/competition law.

**DO LIMIT** meeting discussions to agenda topics. Items for any other business should be discussed with the meeting Chairman beforehand.

**DO OBJECT** if an improper or questionable subject is raised and ensure your objection is recorded in the minutes.

If you have any questions, please contact  
OCIMF  
27 Queen Anne's Gate  
London SW1H 9BU  
United Kingdom  
Tel: +44 (0)20 7654 1300  
E-mail: [enquiries@ocimf.com](mailto:enquiries@ocimf.com)



Limit meeting discussions to agenda topics, Items for any other business should be discussed with the meeting Chairman beforehand.

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Seek Advice from OCIMF General Counsel and OCIMF Legal Committee before participating in the following potentially sensitive activities:

- Gathering and exchanging statistical information
- Benchmarking
- Creating Industry Standards
- Self-policing regulations
- OCIMF sponsored research
- Consult with OCIMF General Counsel and OCIMF Legal Committee on all questions which might be related to anti-trust/competition law

# Formalities & Agenda

Joe Megeed – Technical Advisor (Engineering)





**Wi Fi**



# Meeting Practicalities

## Business Cards



## Cell Phones - *Respectful*



## Sign Attendance Sheet

*Chris S. Churchill*

## Group Photo



# Morning Agenda



Time	Activity
0815-0900	Delegate Registration and Coffee
0900-0930	Welcome, Safety, Overview of Forum – Jan Ziobro, Shell
0930-1000	What is OCIMF? Structure and Organisation – Joe Megeed, OCIMF
1000-1130	TMSA 3, OCIMF – Tony Wynne, OCIMF
<b>1130-1200</b>	<b>Coffee Break</b>
1200-1300	MEG 4 Update – Joe Megeed, OCIMF
<b>1300-1400</b>	<b>Networking Lunch</b>

## Afternoon Agenda



Time	Activity
1400-1500	Update on OCIMF Publication & Programmes (SIRE & OVID) – Tony Wynne, OCIMF
<i>1500-1530</i>	<i>Coffee Break</i>
1530-1600	Question and Answer
1600-1630	Meeting Wrap-Up – Jan Ziobro, Shell
<i>1630-1900</i>	<i>Evening Reception</i>

# Tomorrow's Agenda



Time	Activity
0900-1300	<p data-bbox="894 529 1406 575"><b>OCIMF Members Only</b></p> <ul data-bbox="421 586 1843 801" style="list-style-type: none"><li data-bbox="421 586 1843 632">• Incident Sharing &amp; Lessons Learned (Chatham House Rule)</li><li data-bbox="421 644 774 689">• Q&amp;A Session</li><li data-bbox="421 701 1843 746">• Pending items to share or discuss with primary committees</li><li data-bbox="421 758 1126 801">• Additional items of concern</li></ul>

# Director's Welcome

Andrew Cassels, Director OCIMF





**OCCIMF**



A Voice for Safety

# OCIMF & Structure

Joe Megeed – Technical Adviser (Engineering)



# What is OCIMF ?

## Mission:

**To be the foremost authority on the safe and environmentally responsible operation of oil tankers, terminals and offshore support vessels, promoting continuous improvement in standards, design, and operation.**



# OCIMF Members



# OCIMF Members



TOTAL



## NESTE OIL



إحدى شركات مؤسسة البترول الكويتية  
A Subsidiary of Kuwait Petroleum Corporation



# OCIMF Milestones



1956/57 and  
1967/75:  
Suez Canal  
Closed



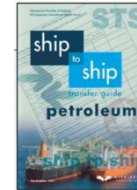
1967:  
Grounding of  
Torrey Canyon



1970:  
OCIMF was  
formed



1971:  
Consultative  
status at IMO



1975:  
First OCIMF  
guideline  
published



1977:  
London branch  
office  
established



1978:  
ISGOTT  
published



1993:  
SIRE  
Programme  
Launched



1998:  
50<sup>TH</sup> Publication  
reached and  
website launched



2000:  
SIRE Inspector  
Training and  
Accreditation



2004:  
TMSA  
Programme  
Launched



2010:  
OVID  
Programme  
Launched



2013:  
MTIS  
Programme  
Launched

## Key Events in the history of OCIMF



# Objectives

In fulfilling its mission, OCIMF will:

## **Engage**

Identify and seek to resolve safety, security and environmental issues affecting the industry through engagement with OCIMF members and external stakeholders.

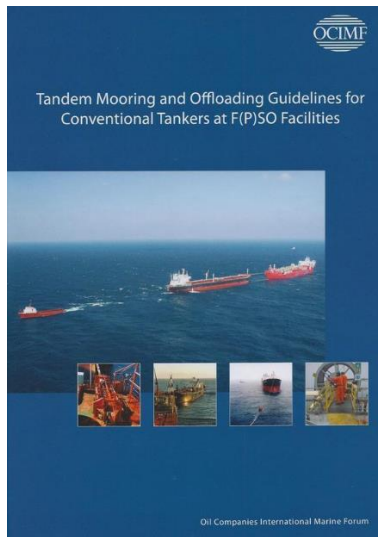
## **Promote**

Develop and publish guidance, recommendations and best practice by harnessing the skills and experience of OCIMF members and the wider industry. Provide tools and facilitate exchange of information, to promote continuous improvement in safe and environmentally sustainable operations

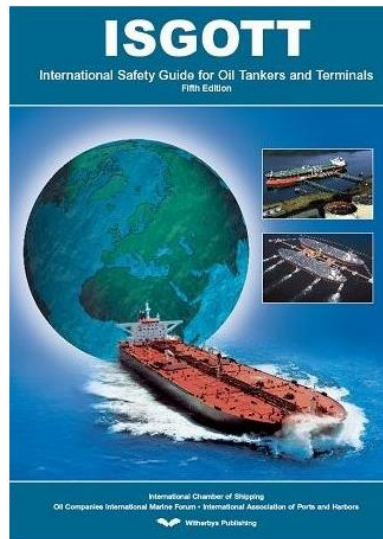
## **Advocate**

Contribute to the development and encourage the ratification and implementation of international conventions and regulations. Influence industry adoption of OCIMF guidance, recommendations and best practice.

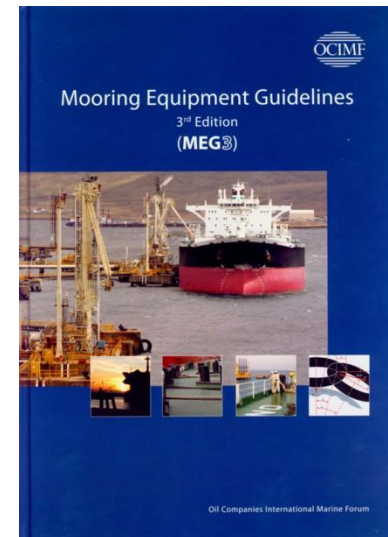
# Practical Terms



1<sup>st</sup> Edition 2009



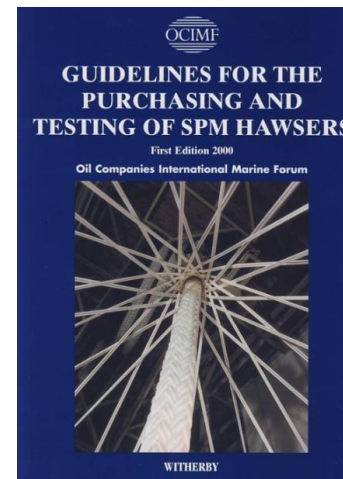
5<sup>th</sup> Edition 2006



3<sup>rd</sup> Edition 2008



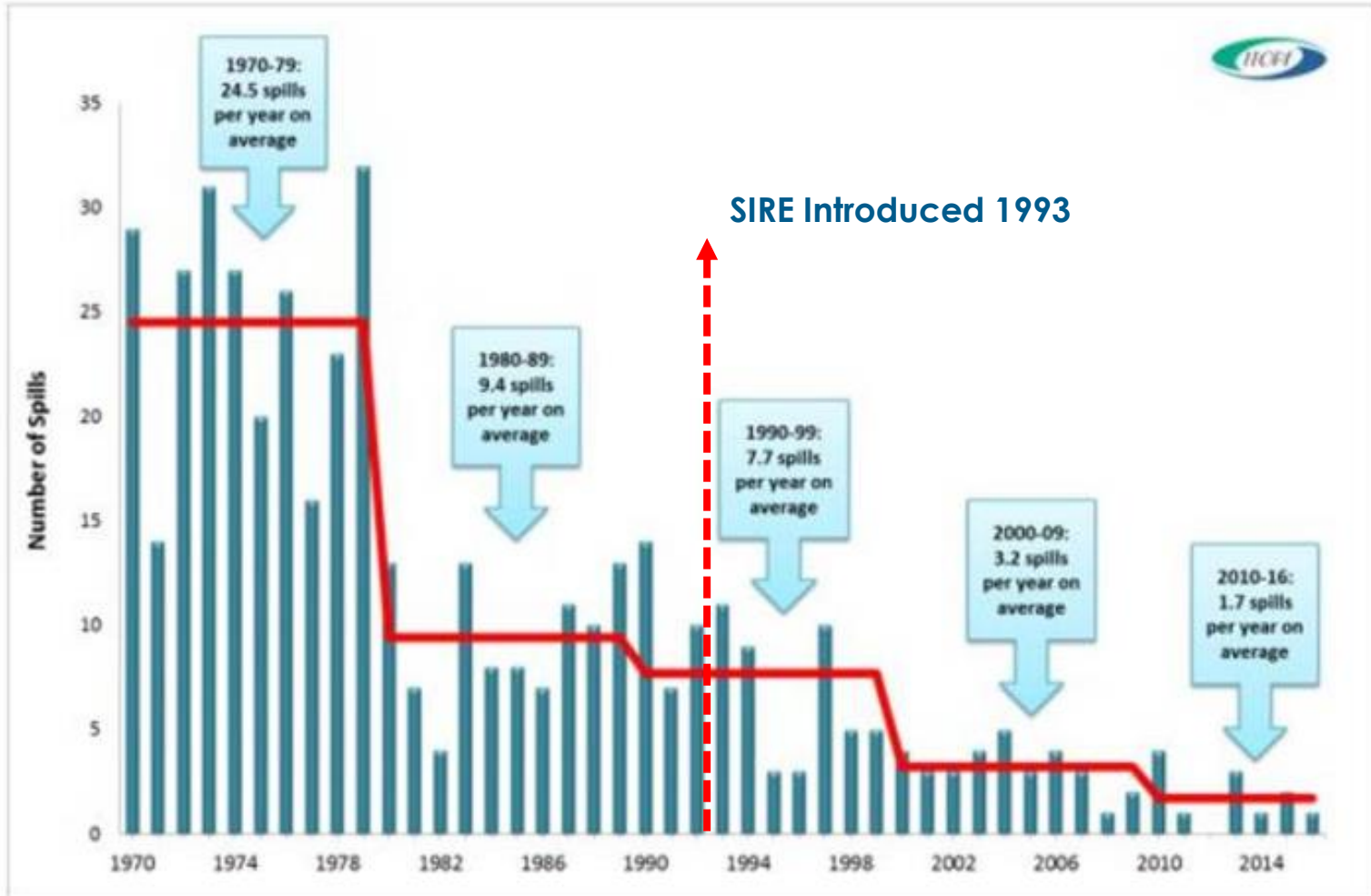
1<sup>st</sup> Edition 2013



1<sup>st</sup> Edition 2000

# Is the impact positive?

More Visible Results of Improved Standards and Tanker Spills



# Office



# Office



# Office

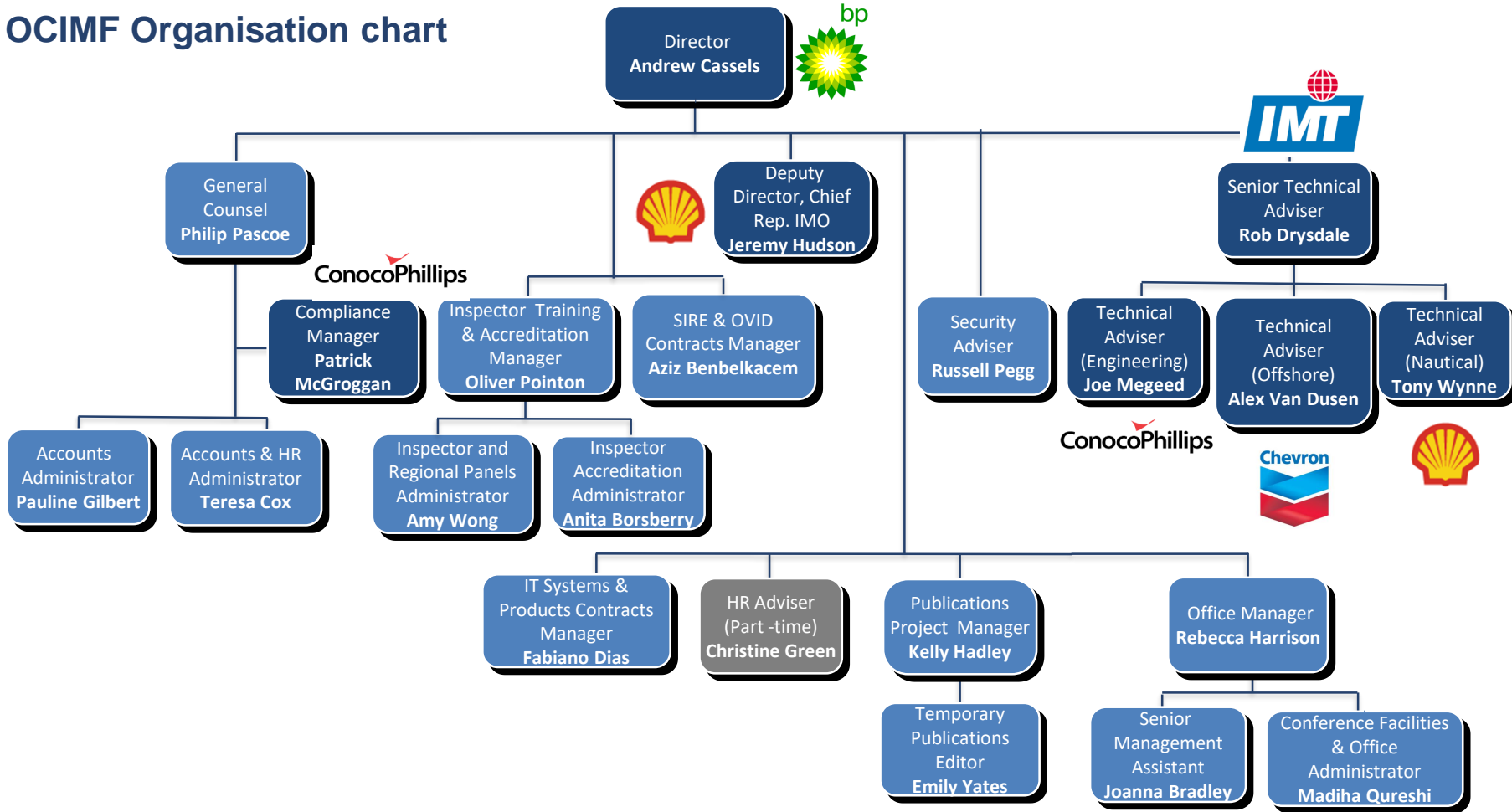


# Office

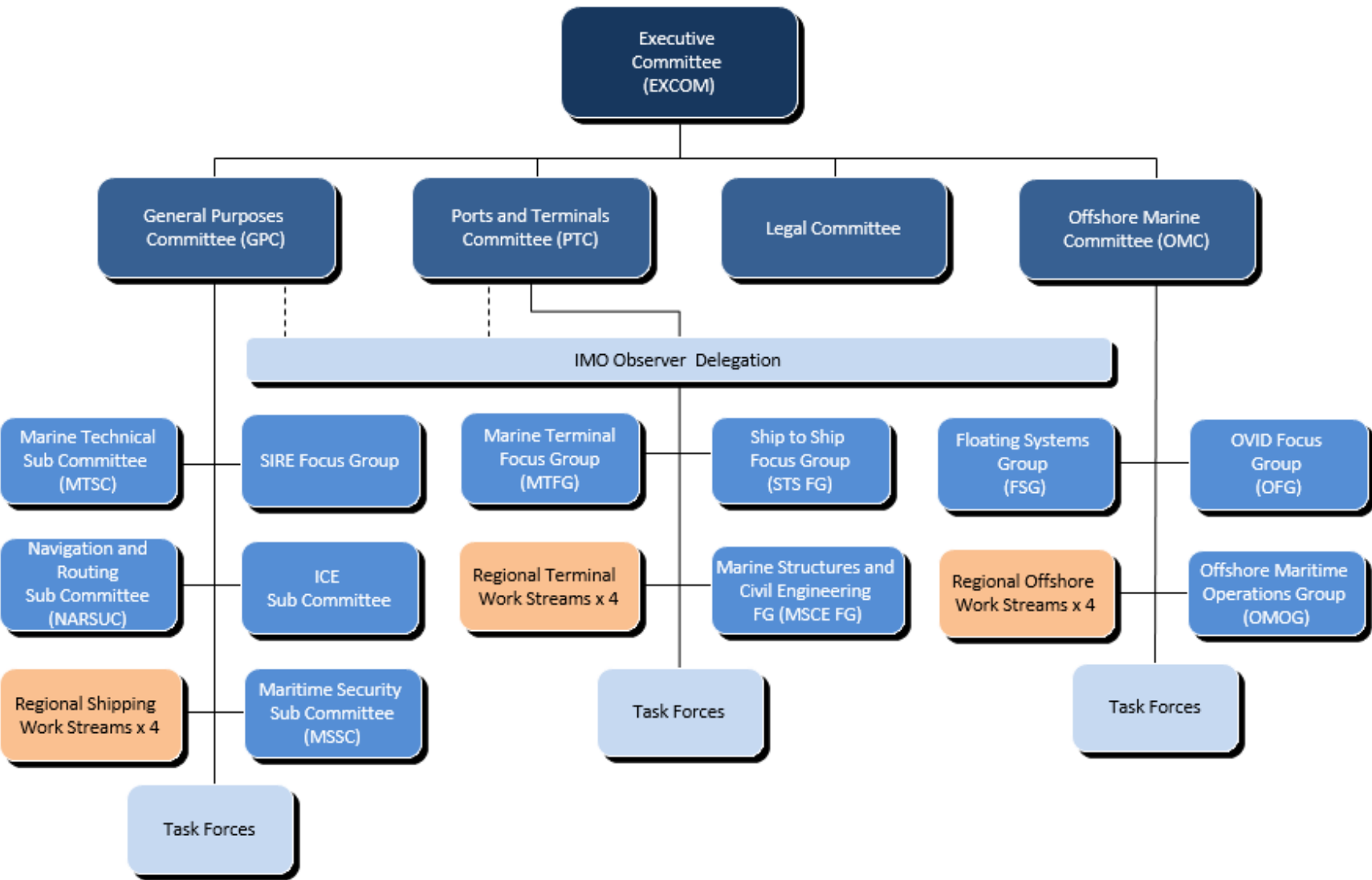


# Secretariat

## OCIMF Organisation chart



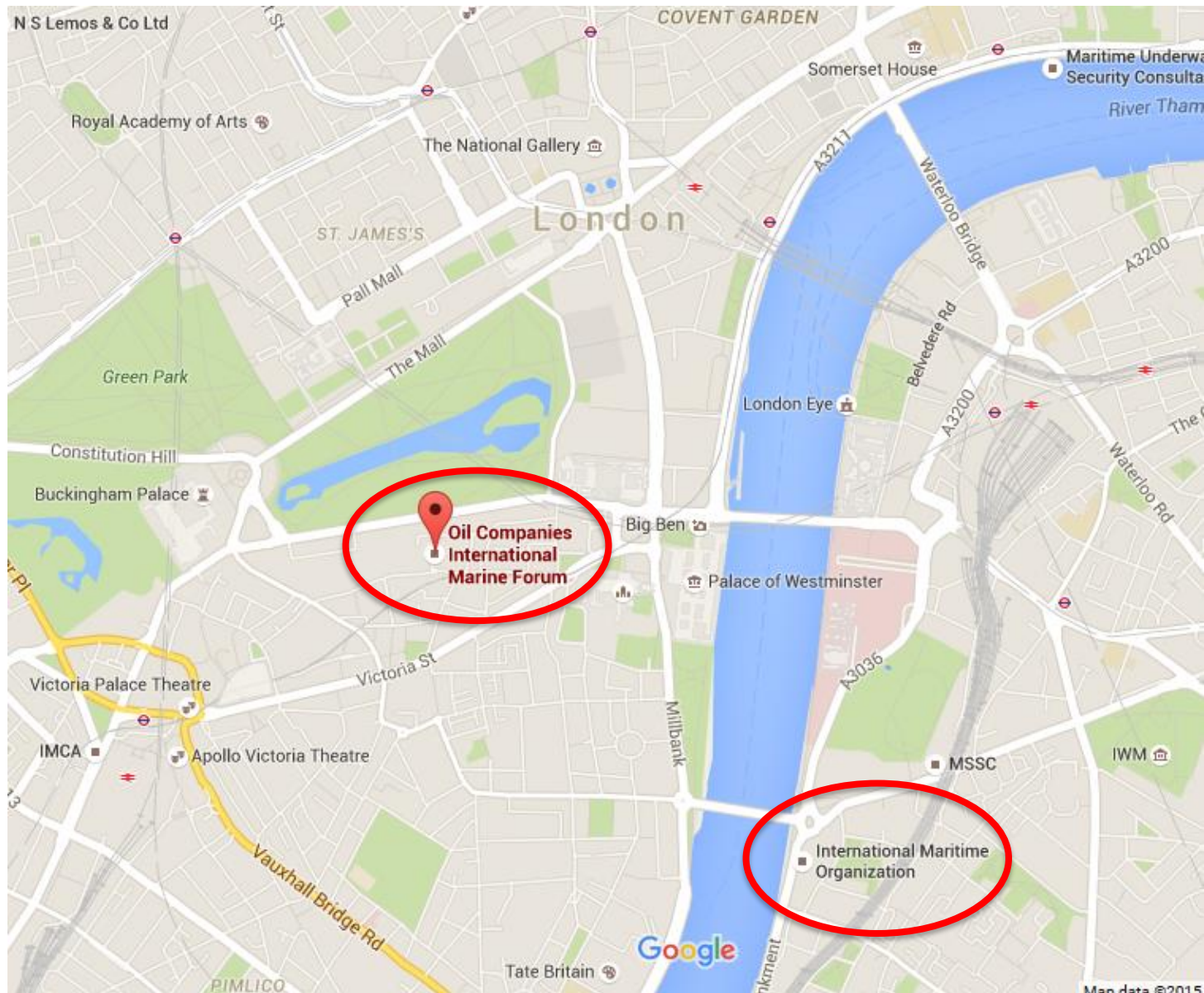
# Structure



# Regulatory Engagements

The graphic consists of several overlapping, flowing, curved lines that sweep across the bottom right portion of the slide. The colors include a light teal, a bright yellow, and a dark blue. The lines have a sense of motion and depth, with some appearing to be in front of others, creating a layered effect.

# Office



# Regulatory

## International Maritime Organisation



- **Maintain the foremost authority on the safe and environmentally responsible operation of oil tankers, terminals, & OSVs**
- **Attendance and participation within committees and working groups:**
  - MEPC, MSC, PPR...
  - Fuel Oil Quality, Lifting Appliances, Safe Mooring...

## European Commission European Sustainable Shipping Forum (ESSF)



- **MRV Directive**
  - CO2 Emissions

IMO



IMO





**OCIMF**



A Voice for Safety



# Tanker Management and Self Assessment

Tony Wynne – Technical Adviser (Nautical)



# Tanker Management and Self Assessment (TMSA3)

A Best Practice Guide

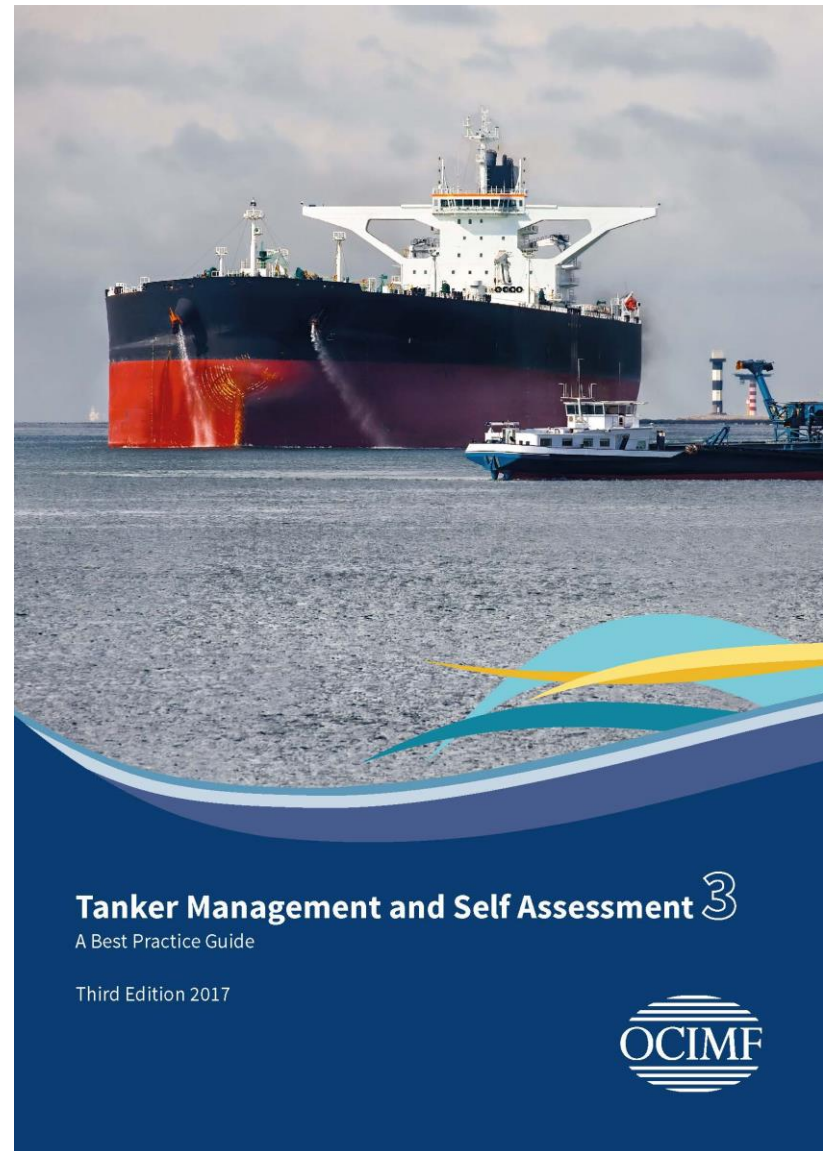
TMSA3 available to purchase and to use now.

Log in to

[www.ocimf-sire.org/default.aspx](http://www.ocimf-sire.org/default.aspx)

or buy the book from

[www.witherbyseamanship.com](http://www.witherbyseamanship.com).



# History of the Document

## •TMSA – First edition published 2004

- To help v/l operators assess, measure and improve their management systems.

## •TMSA2 – Published 2008

- To update and build on operators experience and feedback from the industry – expanded to include tank barge operators coastal and inland barges (included N/A clause).

## •TMSA3

- GPC 71 October 10 – Development of security element approved.
- GPC 72 April 2011 - Initial discussions on the need for revision of TMSA - not approved review required.
- GPC 75 September 2012 – members reported that most TMSA 2 reviews resulted in assessment of level 3 plus and thus the best practice guidance was in need of a refresh. Not supported but review at GPC76.
- **GPC 76 April 2013** – Agreed to form TMSA3 WG and develop TOR
- **TMSA 3 WG** – Jan 2014 Gap Analysis conducted
- GPC 78 March 2014 – approved the formation of the TMSA 3 WG – Target publication date Q1/2016 light touch required
- **TMSA 3 WG** convened August 2014
  - Gap analysis, Collation of members findings / comments, Inclusion of Security and Energy Efficiency (stand alone elements)
  - Q2/2016 more realistic
- GPC 79 September 14 – Include Barges in TMSA 3
- December 2016 – TMSA 3 approved for publication.
- 10<sup>th</sup> April 2017 – Published

# Why revise TMSA?



TMSA has been updated to provide clarity, improve consistency, make conducting the self assessment easier and to promote continuous improvement.

## Update

- To reflect **changes in legislation and best practice** – TMSA2 was published July 2008.

## Clarify

- To encourage a more **unified interpretation** of the KPIs and best practice guidance.

## Improve universality to all vessel and company types

- TMSA is now used right across the industry from small barge companies to the largest fleets. **One document to suit all.**

## Continuous improvement

- ..... **an integral requirement of TMSA.**

## Key Changes in TMSA3

- Expanded best practice guidance to complement the KPIs.
- Revised best practice guidance to remove ambiguity and duplication.
- Streamlined and merged elements to improve consistency and make conducting the self assessment easier.
- Removed the option to mark KPIs as not applicable.
- Introduced updated industry legislative requirements, including the Manila Amendments to the Maritime Labour Convention 2006, the Polar Code and the Ballast Water Management Convention.
- Revised Element 6 and 6A – Cargo, Ballast, Tank Cleaning, Bunkering, Mooring and Anchoring Operations, with additional KPIs and best practice guidance.
- Revised Element 10 – Environmental and Energy Management (previously Environmental Management) incorporates the OCIMF *Energy Efficiency and Fuel Management* information paper which was a supplement to TMSA2.
- Added a new element: Element 13 – Maritime Security.
- Promoted continuous improvement – 25 KPIs have been moved from a higher to a lower level (4 to 3, 3 to 2 etc.) and 85 New KPIs have been introduced. There are 19 more KPIs than TMSA2. There are 266 KPIs in TMSA3

The TMSA programme will continue to evolve with time. New KPIs may be added and best practice guidance updated in future editions.

## Status of TMSA3

- On 10 April 2017 TMSA3 went live and until 31 December users will have the option to choose whether to continue using TMSA2 or to start using TMSA3.
- When using TMSA3 for the first-time users have the option to start a new TMSA, or they can transfer the data from TMSA2 to the relevant TMSA3 questions and complete the missing Key Performance Indicators (KPIs).
- For assistance on how to do this please see section 10 of the SIRE Operators Quick Start Guide or contact [sire@ocimf.org](mailto:sire@ocimf.org).

### Remember please be aware

- From 1 January 2018 all remaining TMSA2 reports will be frozen and will need to be transferred into TMSA3 in order to be updated.

## How the TMSA Works



The TMSA offers a standard framework for assessment of a company's Safety Management System (SMS). It sets out 13 elements of management practice that are essential for the effective management and operation of vessels.

Companies can measure their SMS against the KPIs in each element and decide whether they have achieved a particular level in that element and, therefore, provide a clear, objective picture of performance. Importantly, the levels in the TMSA help the company identify gaps in current performance and areas where performance can be enhanced.

# Elements in the TMSA3

## **Element 1 Leadership and the Safety Management System**

Through visible and effective leadership, management promotes HSSE excellence at all levels in the company.

## **Element 2 Recruitment and Management of Shore-Based Personnel**

To ensure that suitably qualified, competent and motivated shore-based personnel are recruited, trained and retained to meet current and future needs of the company.

## **Element 3 Recruitment, Management and Wellbeing of Vessel Personnel**

To ensure that suitably qualified, competent and motivated vessel personnel are recruited, trained and retained to deliver safe and reliable operations onboard company vessels.

## **Element 4 Vessel Reliability and Maintenance including Critical Equipment**

The company effectively manages onboard maintenance to ensure reliability of the vessel.

## **Element 5 Navigational Safety**

To establish and ensure compliance with safe navigational procedures and practices in line with regulatory and company requirements.

## **Element 6 Cargo, Ballast, Tank Cleaning, Bunkering, Mooring and Anchoring Operations**

To establish planning and operational procedures for cargo, ballast, tank cleaning and bunkering operations and ensure that they are safely and effectively implemented.

# Elements in the TMSA3



## **Element 7 Management of Change**

To establish procedures for evaluating and managing changes to operations, procedures, equipment or personnel to ensure that all risks are identified and mitigated prior to implementing change.

## **Element 8 Incident Reporting, Investigation and Analysis**

To use effective incident reporting, investigation and analysis methods to learn from incidents and near misses, in order to prevent recurrence.

## **Element 9 Safety Management**

To establish an active fleet wide safety culture through the awareness and involvement of personnel and through effective risk assessment and permit to work programmes.

## **Element 10 Environmental and Energy Management**

To establish an environmental management plan that identifies sources of marine/atmospheric emissions, includes procedures to optimise energy efficiency and reduce emissions and which sets targets for continual improvement in environmental performance.

## **Element 11 Emergency Preparedness and Contingency Planning**

To prepare for and regularly test the ability of the company to respond to and effectively manage incidents

## **Element 12 Measurement, Analysis and Improvement**

To establish a structured process for conducting vessel inspections to monitor, analyse and improve the condition of vessels in the fleet.

## **Element 13 Maritime Security**

To establish and maintain policies and procedures in order to respond to and mitigate identified security threats covering all company activities including cyber security.

# Structure of Elements in the TMSA3

Each element is structured as shown.

**Title states the area of management practice covered**

**Main objective defines the goal**

Supporting paragraphs: outlining the scope of the element.

**Aim:** the high-level statement of what the element is assessing.

	<b>Key Performance Indicators</b>	<b>Best Practice Guidance</b>
<b>1 KPIs are grouped into levels from 1 (lowest) to 4 (highest).</b>	A KPI in the form of a statement, for example 'vessel and shore-based management teams promote HSSE excellence'. It provides an objective measurement of the standards currently delivered by the company's management system.	Guidance, based on current industry best practice, to help companies achieve the standard outlined in the KPI.

## Not Applicable KPIs

The option to mark KPIs not applicable is no longer available in TMSA3.

The TMSA is designed to be used worldwide for companies who manage tankers and barges (international, coastal and inland). Not every KPI will be applicable in all cases and this will depend on:

- Company size or structure.
- Specific trade.
- Local regulations, customs or conditions.

If a company decides that a KPI is not applicable, they should enter 'yes' when completing the assessment online. The company will need to have a reason for considering the KPI as not applicable stated and justified, and backed up with documentary evidence. Entering 'no' will lead the TMSA software to record the element as incomplete.

# Example: Continuous Improvement

KPI moved from level 4 to 3 and new KPI created in higher level 4

**Black:** Original TMSA2 text    **Red:** Revised TMSA3 text    **Blue:** New KPI text

<p><b>11.3</b></p>	<p>11.3.2</p>	<p>The company has in place necessary arrangements to use external resources in an emergency.</p> <p>Arrangements are in place to use external resources in an emergency.</p>	<p>Contact details for salvage, towing, media consultants and technical departments of classification societies, flag states and local authorities are readily available.</p> <p>Contact details are readily available for;</p> <ul style="list-style-type: none"> <li>• salvage and towage contractors,</li> <li>• Emergency Response Services</li> <li>• Flag states and local authorities</li> <li>• Charterers and cargo owners</li> <li>• Hull and machinery Insurers, and P&amp;I</li> <li>• media consultants</li> <li>• legal resources</li> <li>• manning agents where appropriate</li> <li>• logistic resources, including travel and procurement</li> </ul>
<p><b>11.4</b></p>	<p>11.4.1</p>	<p>The company has in place necessary arrangements to use external resources in an emergency. <b>(Moved to 11.3.2)</b></p> <p>There is a formal business continuity plan identifying and addressing events that may result in serious disruption to the business.</p>	<p>Contact details for salvage, towing, media consultants and technical departments of classification societies, flag states and local authorities are readily available. <b>(Moved to 11.3.2)</b></p> <p>The plan should be based upon a risk based assessment of identified credible scenarios</p> <p>Procedures to enable the company to maintain shore based operations may include;</p> <ul style="list-style-type: none"> <li>• staff and fleet notification procedures</li> <li>• the ability for staff to work remotely and/or alternative premises</li> <li>• remotely located IT facilities including back up servers</li> <li>• testing the plan at regular intervals</li> </ul>

# Example: Continuous Improvement



## New or Revised KPI, Expanded Best Practice Guidance

**Black:** Original TMSA2 text    **Red:** Revised TMSA3 text    **Blue:** New KPI text

<b>4A.1</b>	4A.1.1	<p><del>Critical equipment and systems are defined and identified within the safety management system.</del></p> <p>Critical equipment and systems are identified and listed within the SMS and the vessel's planned maintenance system.</p>	<p><del>Management provides clear instructions on the identification of on-board critical systems, alarms and equipment. Risk assessment or hazard identification methods are documented to help the identification of such equipment and systems.</del></p> <p>Equipment and systems, the sudden operational failure of which may result in harm to personnel, the environment or assets, are identified. Documented risk assessment or hazard identification methods are used to identify these critical equipment and systems.</p> <p>Equipment and systems to be considered may include:</p> <ul style="list-style-type: none"> <li>• Primary and auxiliary power systems.</li> <li>• Main engine, including control and monitoring systems.</li> <li>• Steering gear.</li> <li>• Navigation systems.</li> <li>• Principal life-saving and fire-fighting equipment.</li> <li>• Alarms and sensors.</li> </ul>
	4A.1.2	<p><del>Critical equipment and systems are identified in the vessel's planned maintenance system.</del></p> <p>Moved to 4A.1.1</p>	<p><del>Critical equipment lists are available in an easy-to-understand format. All items listed are identified in the planned maintenance system.</del></p>
	4A.1.2	<p>A procedure is in place to manage the planned maintenance of critical equipment and systems.</p>	<p>The company is informed when critical equipment or systems are taken out of service for planned maintenance and when they are returned to service.</p> <p>When, under exceptional circumstances, it is not possible to complete planned maintenance on critical equipment or systems as scheduled, a risk assessment is conducted and senior management approval obtained and documented before deferral. The maintenance is carried out as soon as practicable.</p>

# Updating existing TMSA documents

Once your TMSA account has been transferred, the combined SIRE/TMSA platform offers a single-click migration process from an existing draft or published TMSA2 report into the new TMSA3 version.

Once migrated to the TMSA3 version, the new assessment **must** be reviewed before it can be published. The level of attainment may have altered due to the continuous improvement changes. It is essential that comments and notes are checked for applicability to KPIs and best practice guidance prior to publication.

Alternatively companies may start a new TMSA from a blank template.

As with TMSA2, only a single published document (TMSA2 or TMSA3) can be created at any one time.

SIRE Vessels Incidents TMSA Data Mining Downloads Contact Support Resources Mr Technical Vessel Operator

TMSA / Upgrade Document to TMSA3

## Upgrade Report to TMSA3

You have chosen to upgrade the report **VNXQ-0945-6408-8310** to TMSA3.  
This report will be created In Definition.

If you currently have a document In Definition, this document will be **Archived** during the upgrade process.

**Please Note** only questions where a defined upgrade from TMSA2 to TMSA3 will be upgraded and any conflicting responses will be ignored.

**Creation Notes (for internal use only)**

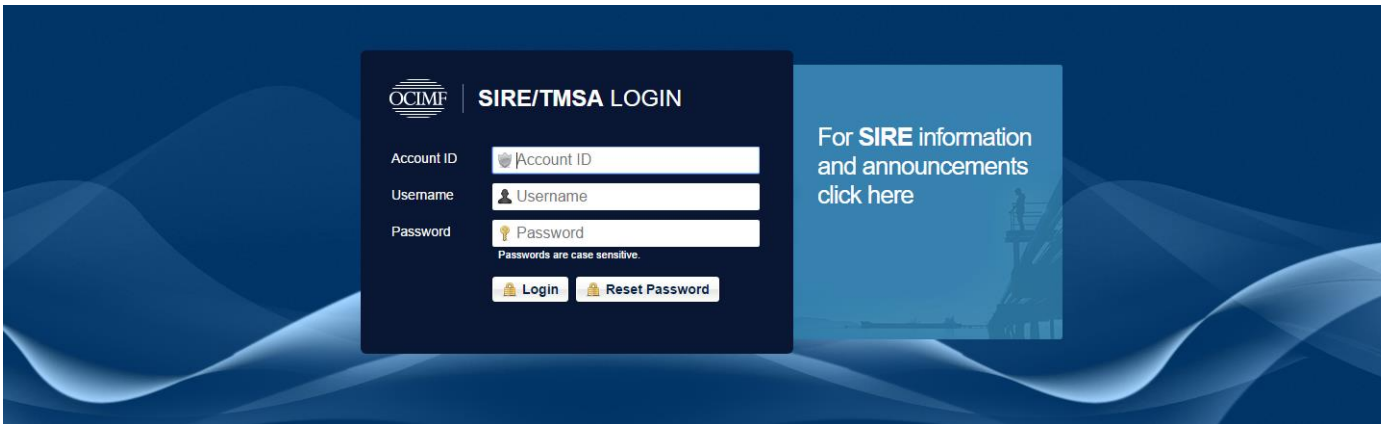
Back Upgrade Document

© 2017 Oil Companies International Marine Forum Development by Marine Information Solutions

# SIRE TMSA Integration

Further development now sees the TMSA document fully integrated within OCIMF's Ship Inspection Report Programme (SIRE), providing a single area to maintain all data related to a vessel's technical operator, including; Ship Inspections, Vessel Particulars Questionnaire (VPQ), Crew Reports and Incidents.

The integration takes advantage of the latest technology and security practices resulting in an improved user experience.



OCIMF | SIRE/TMSA LOGIN

Account ID

Username

Password

Passwords are case sensitive.

For SIRE information and announcements click here

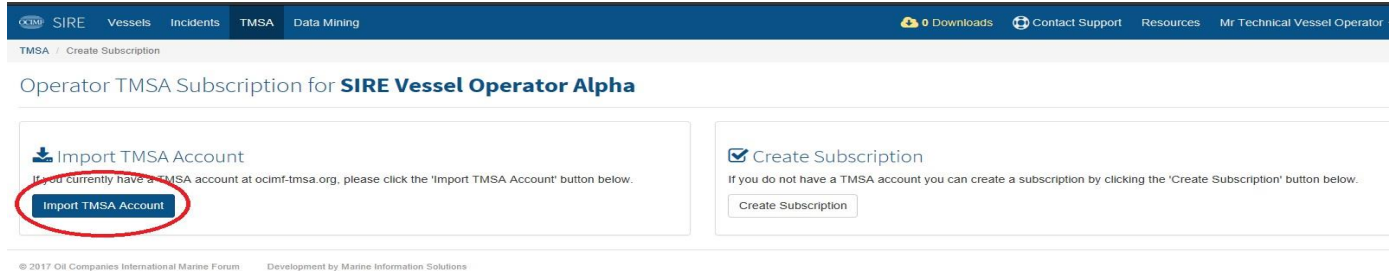
## Closure of previous TMSA programme

From 1 February 2017, the previous standalone TMSA programme can no longer be used to manage TMSA documents. All members are now able to transfer their TMSA accounts to the new SIRE/TMSA programme, which provides an improved, single area to maintain all data related to a vessel's technical operator.

# SIRE TMSA Integration cont'd

## Transferring TMSA2 Accounts

Login to the SIRE/TMSA programme at: [www.ocimf.org/sire/](http://www.ocimf.org/sire/), for details on how to transfer an existing TMSA account to the new platform.



The screenshot shows the SIRE TMSA interface. The top navigation bar includes 'SIRE', 'Vessels', 'Incidents', 'TMSA', and 'Data Mining'. The main content area is titled 'Operator TMSA Subscription for SIRE Vessel Operator Alpha'. It features two panels: 'Import TMSA Account' and 'Create Subscription'. The 'Import TMSA Account' panel has a red circle around the 'Import TMSA Account' button. The 'Create Subscription' panel has a 'Create Subscription' button. The footer contains copyright information: '© 2017 Oil Companies International Marine Forum. Development by Marine Information Solutions'.

Once transferred, all current and historic TMSA2 reports will be available within the new platform. All future TMSA management will then be carried out through SIRE rather than the TMSA programme.

## Full Archive History

The transfer into SIRE will retain a full history of archived TMSA reports.

These will be viewable in the TMSA2 format and will not be converted to TMSA3 reports.



## **Full Report Permissions Control**

Vessel technical operators will continue to have the same control over their published TMSA report permissions; having the choice over whether to make the report available to all registered OCIMF member companies or to only allow selected companies to view their report.

As with previous versions, an OCIMF member can request permission to access an operator's TMSA report. This functionality is now built directly into SIRE and the improved approvals handling process provides a full audit of requests.

## **Open to All SIRE Vessel Technical Operators**

As with the TMSA2, TMSA3 is open for use by all registered vessel technical operators in SIRE. To start writing TMSA3 reports for the first time, follow the instructions within the SIRE programme.

## **No Change to Annual Subscription Cost**

The continued annual subscription charge of GBP 50 per year will be payable to OCIMF for a vessel technical operator to use the TMSA programme within SIRE.

# What's next

## Other MSA docs

- OVMSA – currently under review target Q2 2018
- STS SPA – currently under review
- MTSA – Work being considered

## Things to remember



TMSA3 available in the SIRE programme and the book will be available to purchase from 10 April 2017.

Vessel technical operators can transfer their TMSA2 account into SIRE prior to this date and continue to write and publish TMSA2 documents.

The TMSA2 document will be available for use by vessel technical operators until 31 December 2017, after which, only TMSA3 reports can be created.

For assistance please see section 10 of the SIRE Operators Quick Start Guide or contact [siresupport@ocimf.org](mailto:siresupport@ocimf.org)

Send feedback and/or suggestions for improvement to [enquiries@ocimf.org](mailto:enquiries@ocimf.org)



**OCIMF**



A Voice for Safety



# Mooring Equipment Guidelines (MEG)

Joe Megeed – Technical Adviser (Engineering)



# OCIMF IN NUMBERS

IN 2016

46 years of OCIMF



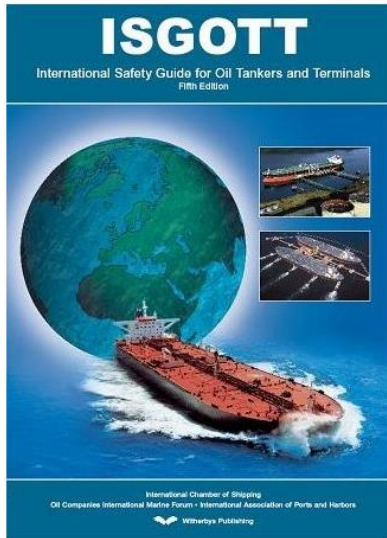
**39**  
books

**51**

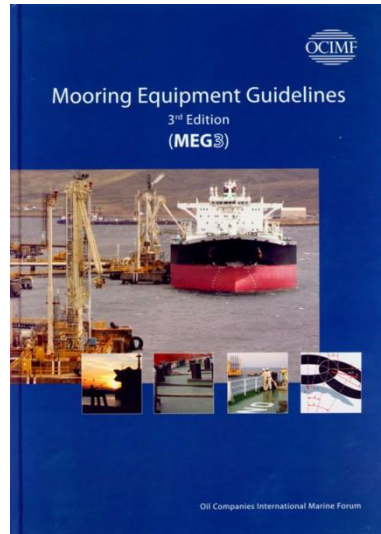
information  
papers



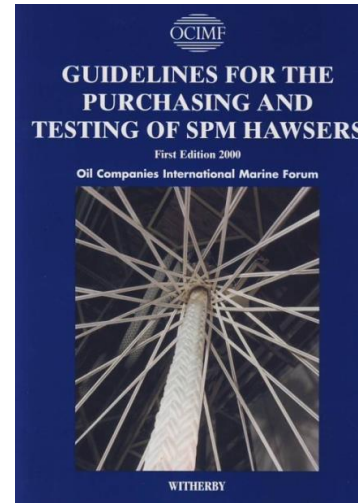
# Books & Information Papers



**5<sup>th</sup> Edition 2006**



**3<sup>rd</sup> Edition 2008**



**1<sup>st</sup> Edition 2000**



**1<sup>st</sup> Edition 2013**



OIL COMPANIES INTERNATIONAL MARINE FORUM

**POTENTIAL HAZARDS ASSOCIATED  
WITH REQUESTS FOR ADDITIONAL  
MOORING LINES BY TERMINAL  
OPERATORS**

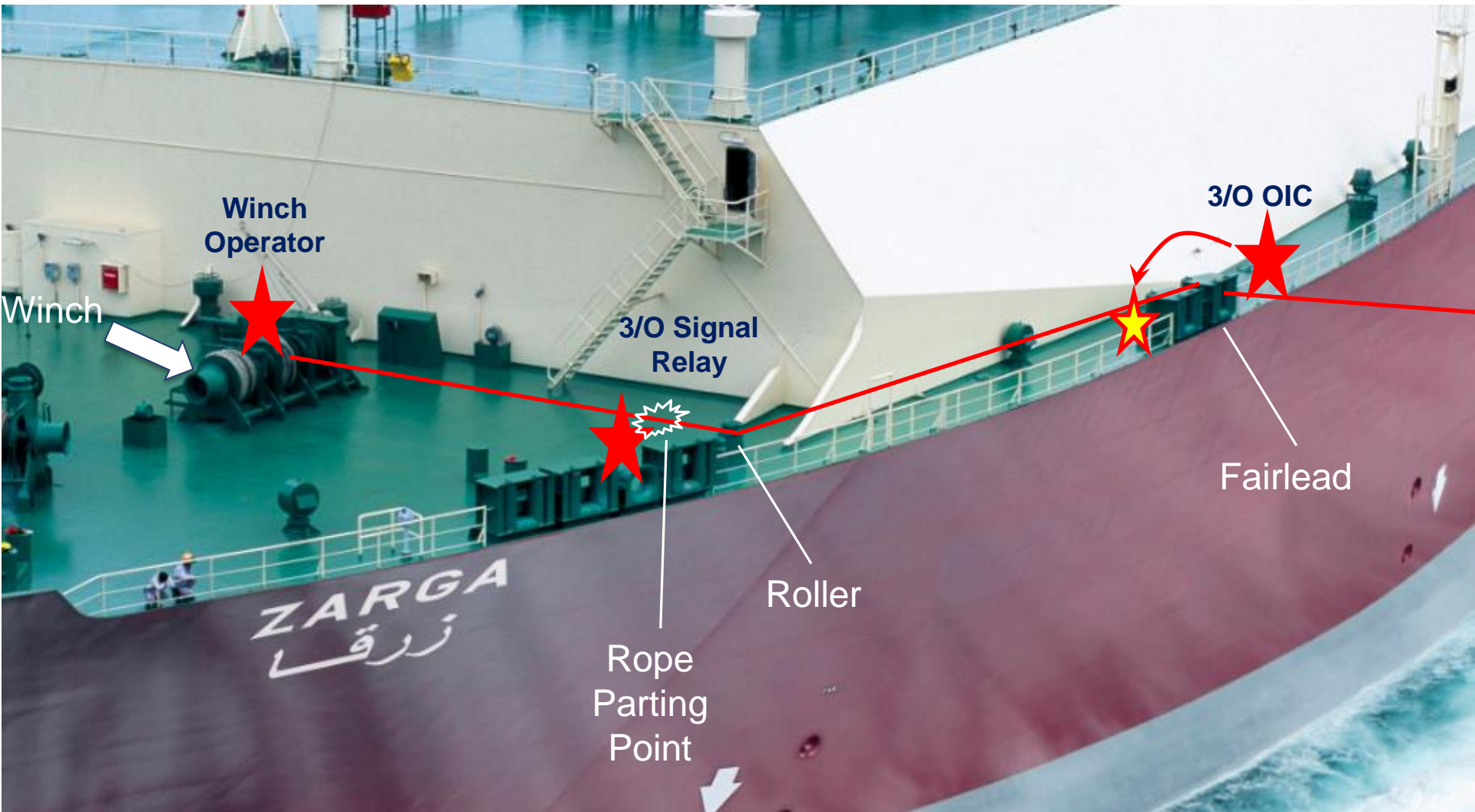
**1997**

**Summary of the Results of the  
MARIN Study  
to Validate the Adequacy of  
SPM Mooring Equipment  
Recommendations**

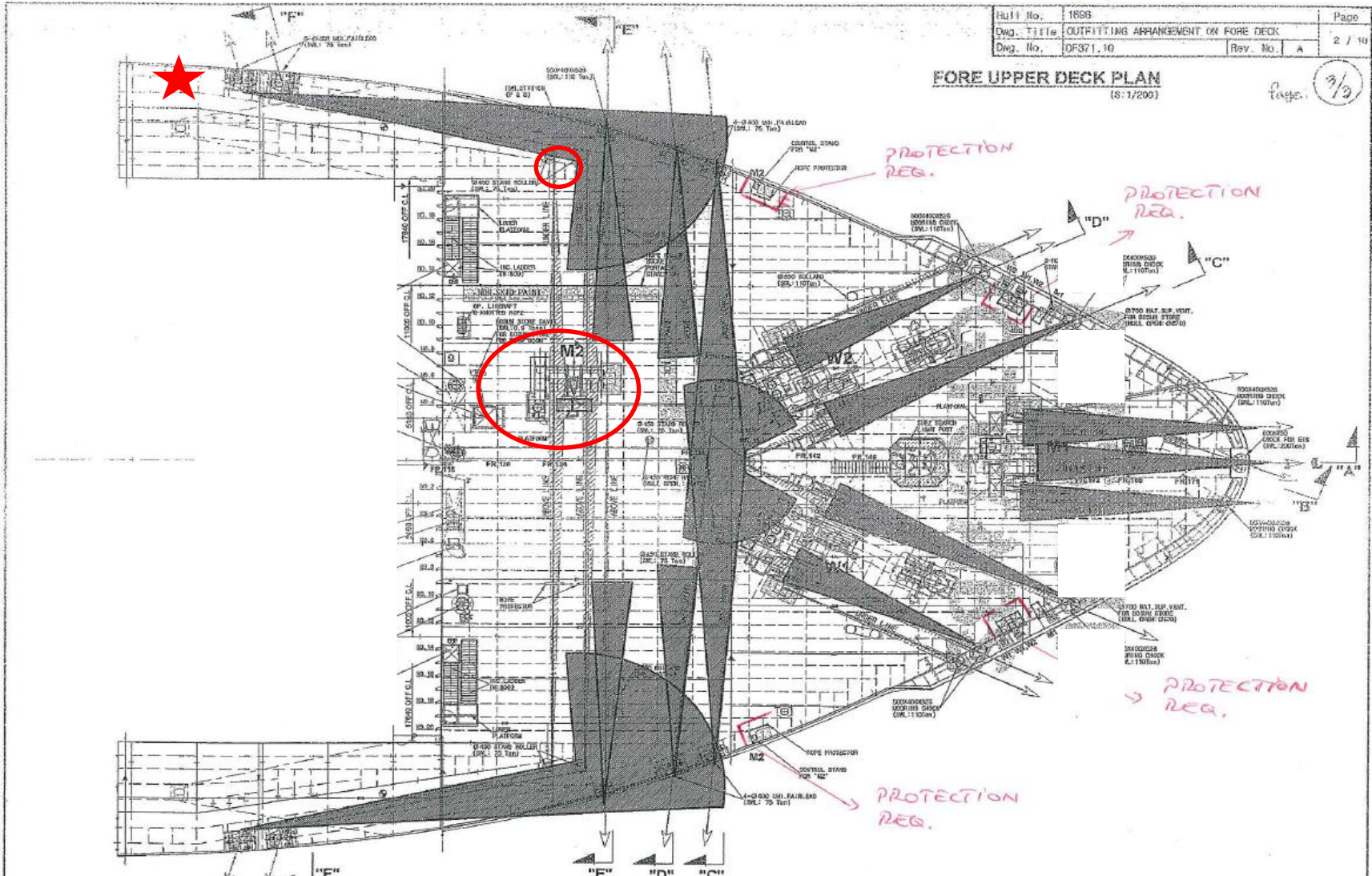
**Tandem Single Point Mooring Study 2005**

**2005**

# Incident Outline

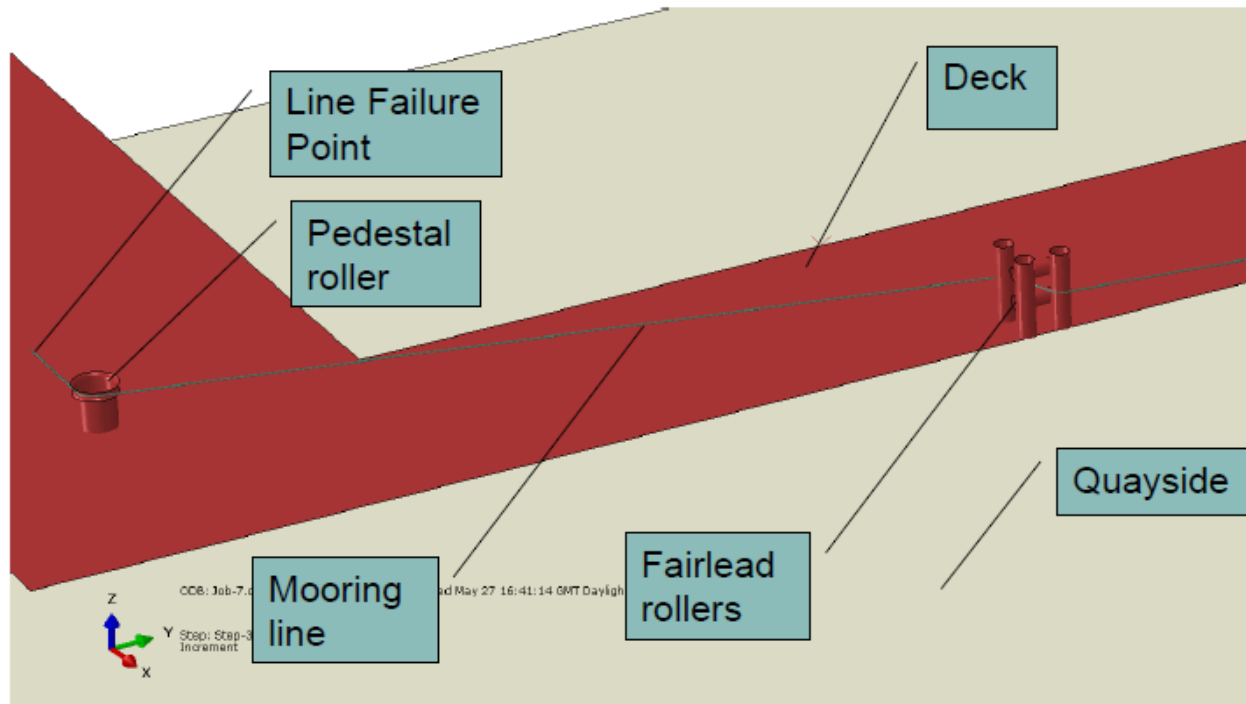


# Snapback Zone





# Computer Modelling



## Vessel Geometry

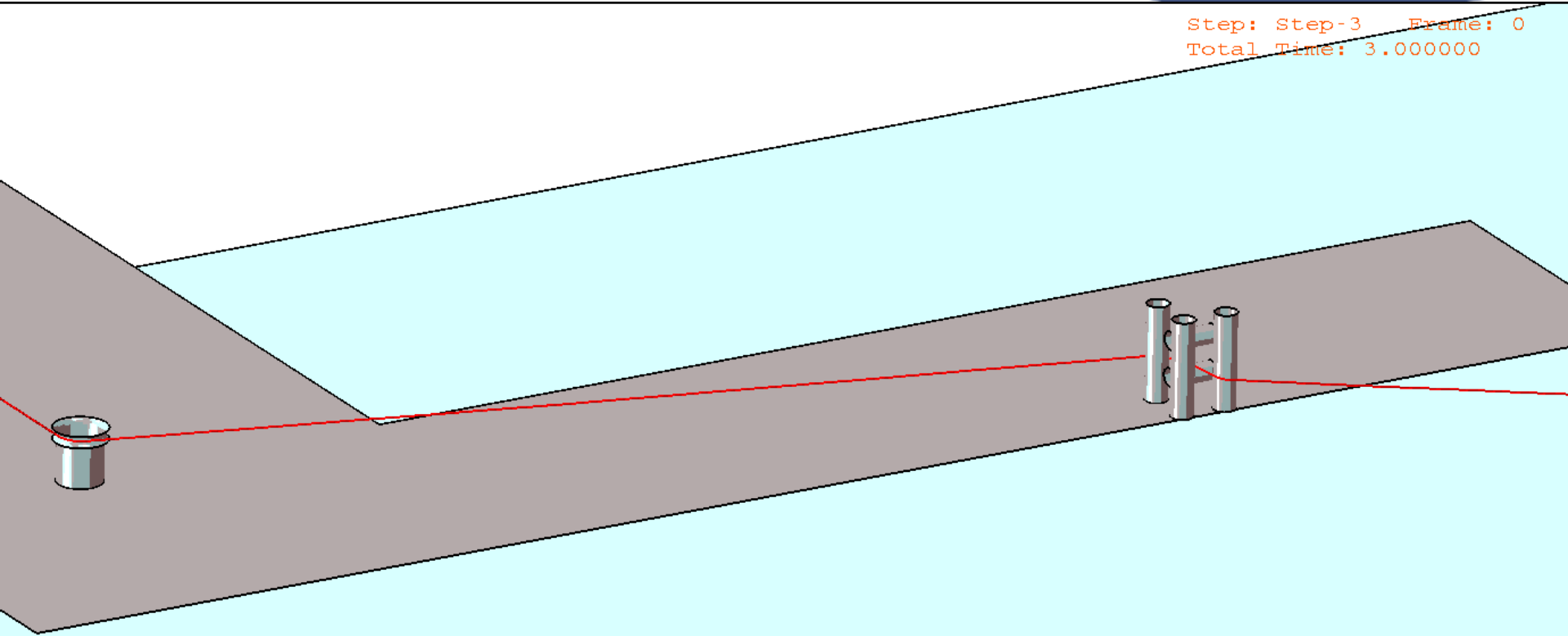


A finite element model of the vessel geometry and quayside was built to assess the dynamic trajectory of the parted rope

# Rope Trajectory



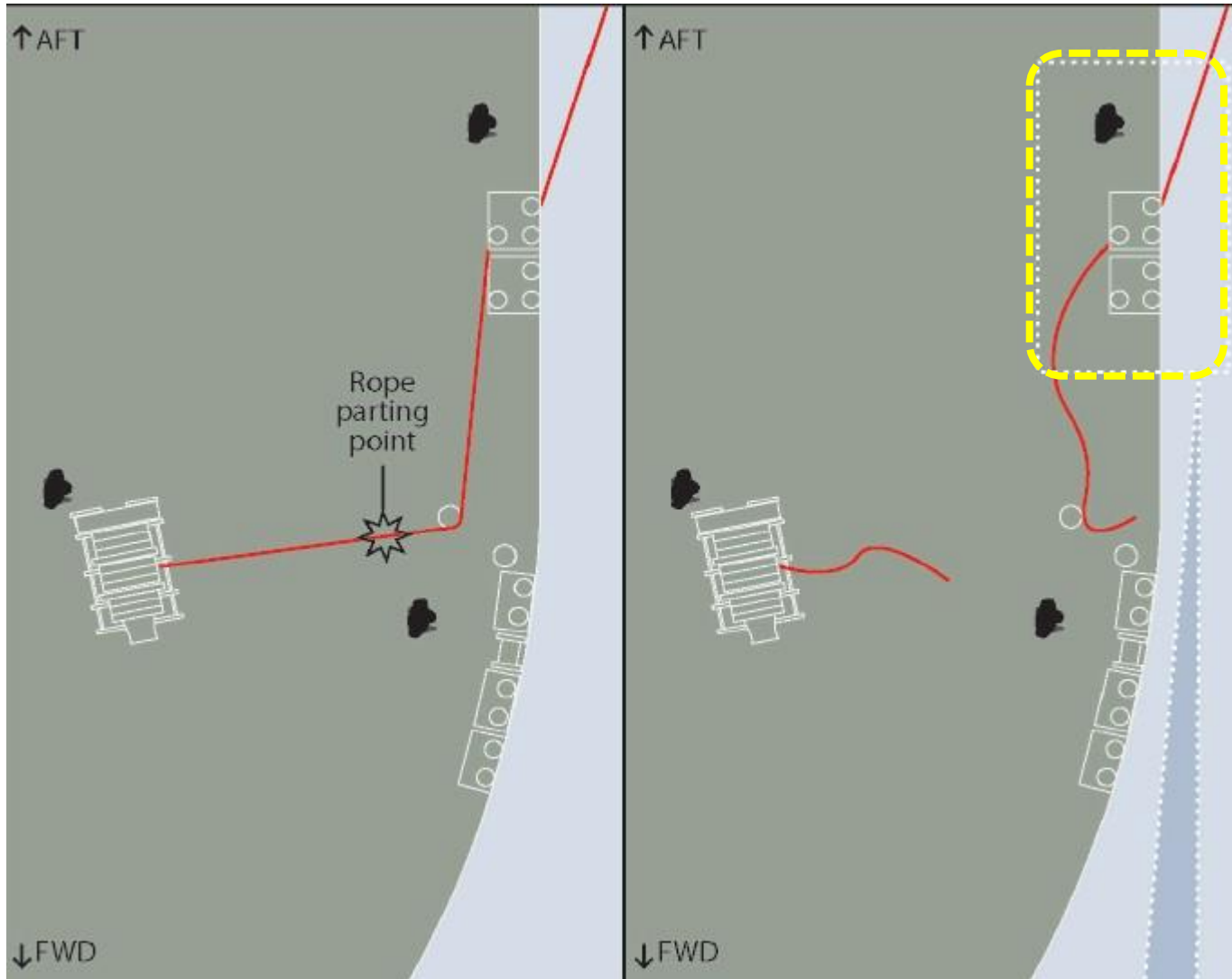
Step: Step-3    Frame: 0  
Total Time: 3.000000



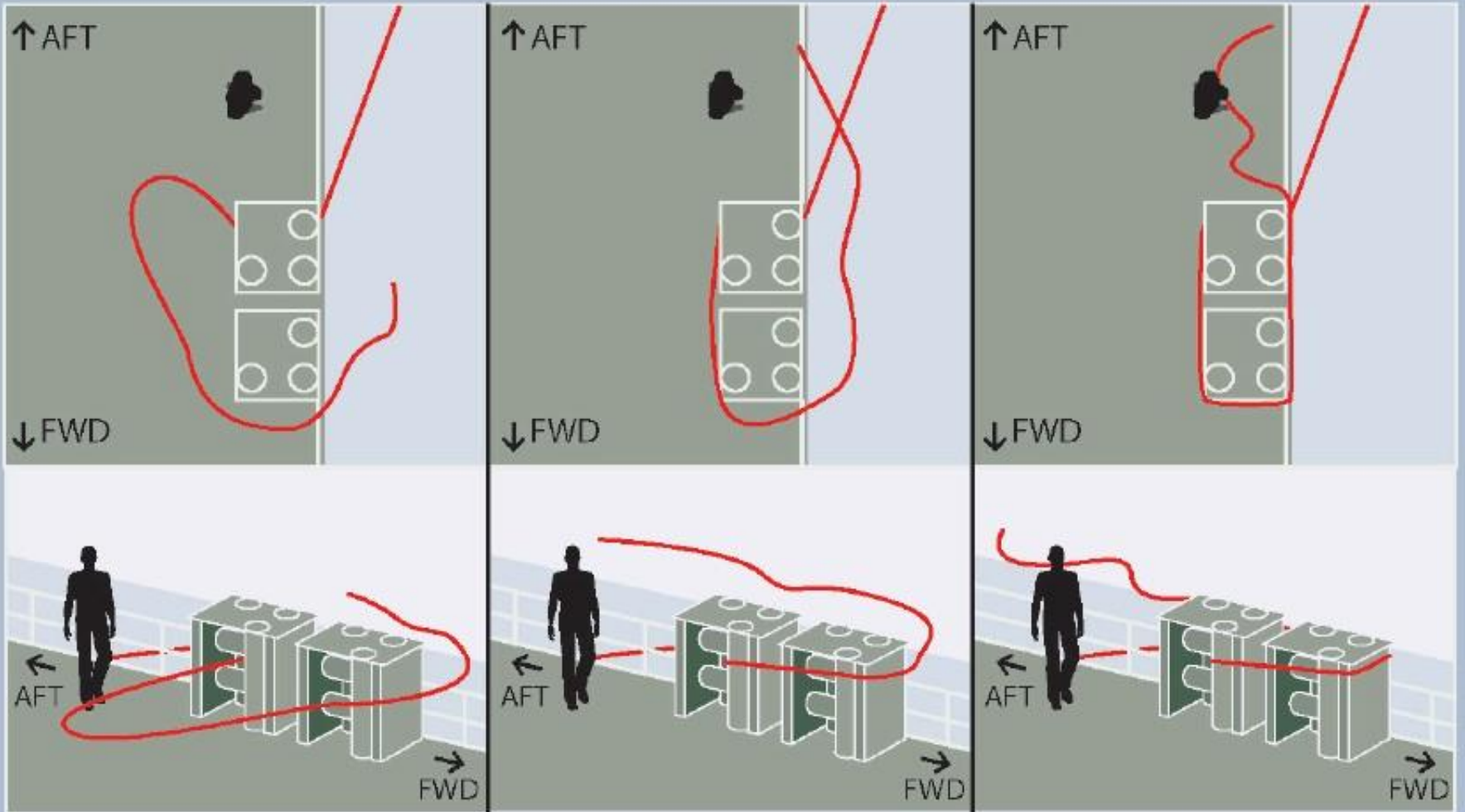
ODB: baseline.odb    Abaqus/Explicit 6.14-1    Tue Jun 02 17:09:22 GMT Daylight Time 2015

Z  
Y Step: Step-3, release winch load  
Increment    0: Step Time = 0.0  
X    Deformed Var: U    Deformation Scale Factor: +1.000e+00

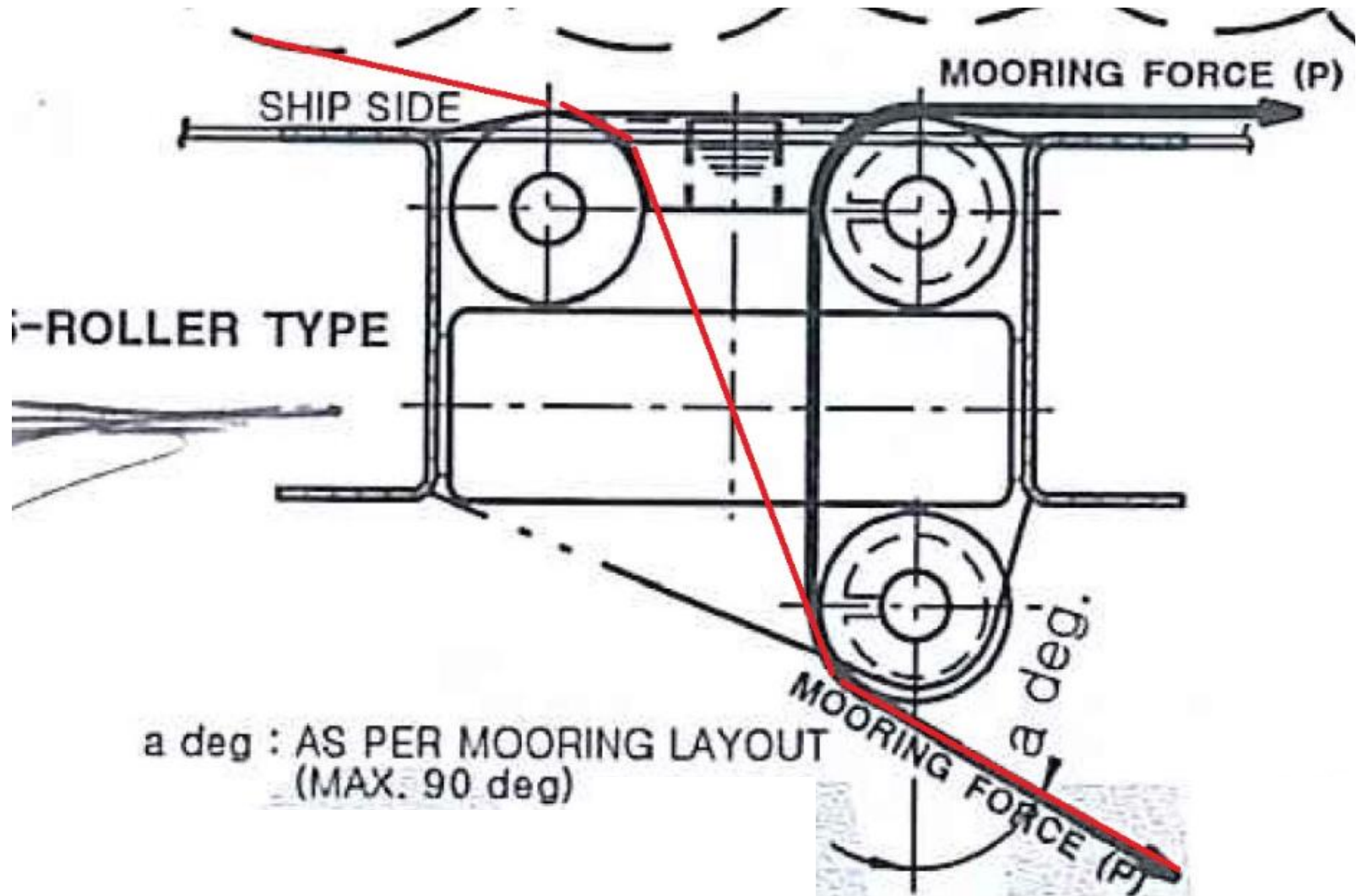
# Rope Trajectory



# Rope Trajectory

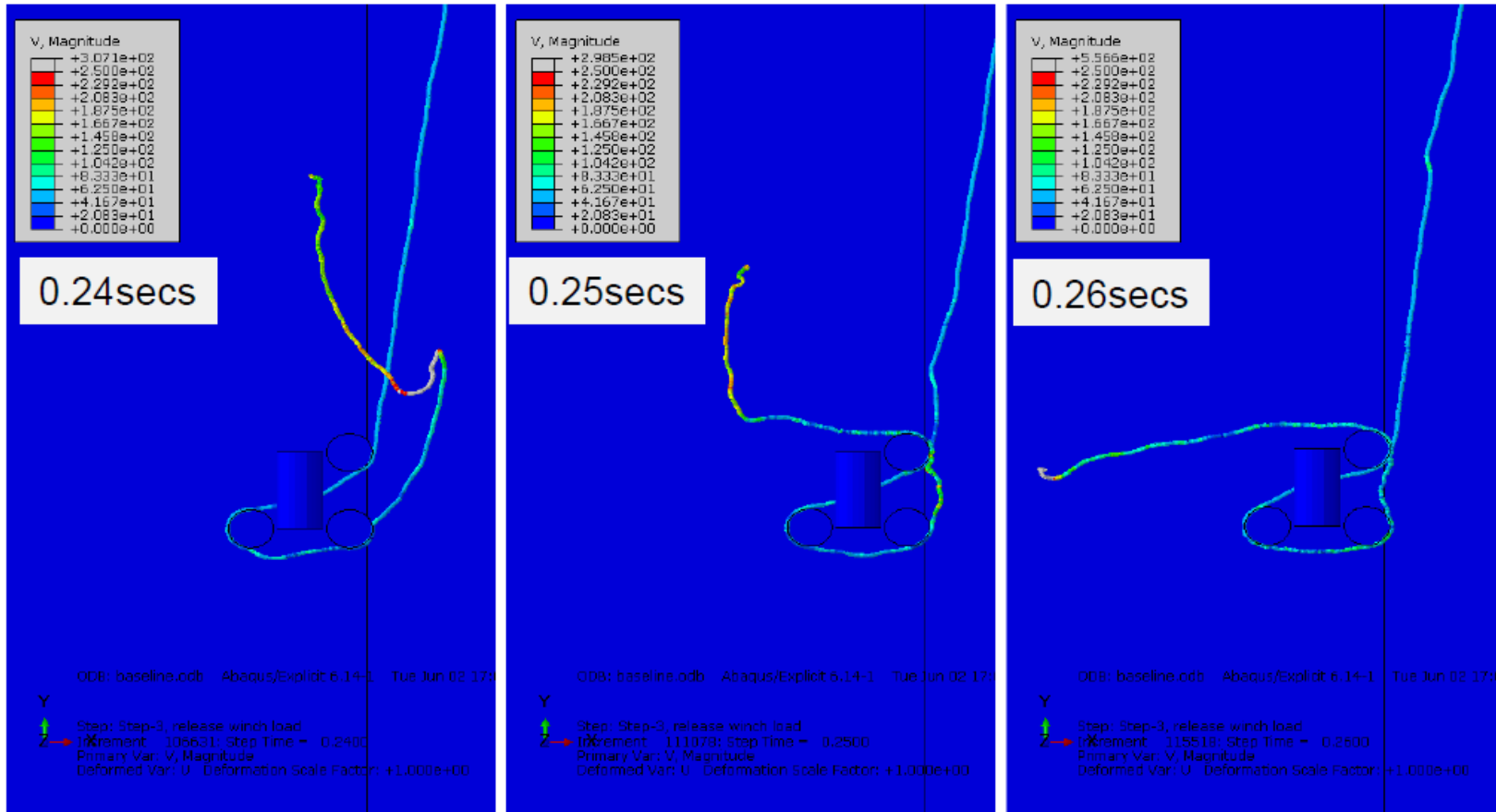


# Multiple Roller Fairlead



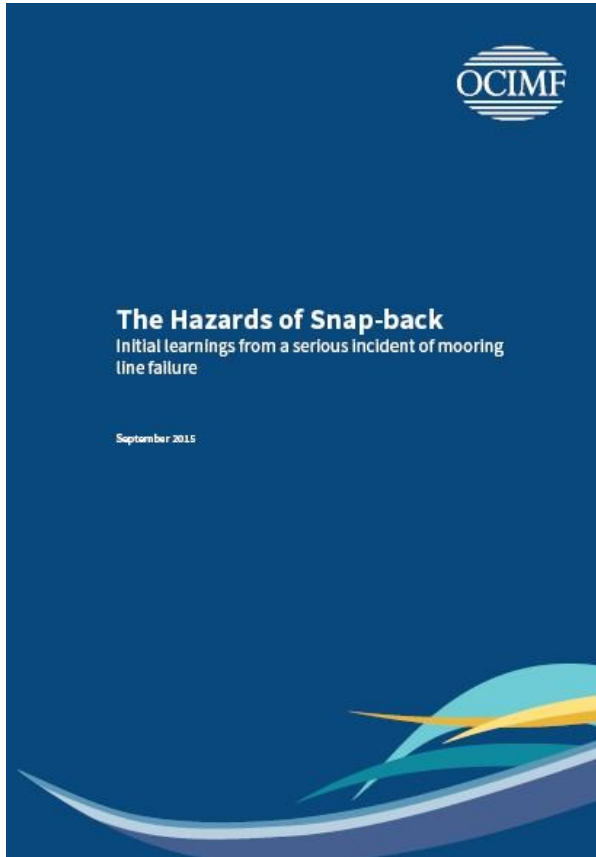
# Rope Trajectory

Baseline Results - view from above – Velocity 0.24secs to 0.26secs



Approximate velocity of line whipping round fairlead rollers is ~200m/s  
Mass of line is 1.133kg/m. Kinetic energy of line is approximately 23kJ/m

# Hazards of Snapback



When connecting synthetic tails to HMSF and wire mooring lines, the elasticity of the tails introduces energy that can significantly increase the snap-back hazard.

Elongation is proportional to the length of the tail. The fitting of longer synthetic tails, e.g. 22m tails from 11m tails, proportionally increases the stored energy and the amount of snap-back that can be expected.

Mooring lines led around roller pedestals and fairleads have the potential to create complex snap-back zones.

# What do we know from MAIB?

## Mooring Line:

HMSF

44mm

Jacketed

275m length

MBL = 137 tonnes

Life expectancy = 8 years

## Source:

[https://assets.digital.cabinet-office.gov.uk/media/56b8c217e5274a0369000013/MAIBSafetyBulletin\\_1-2016.pdf](https://assets.digital.cabinet-office.gov.uk/media/56b8c217e5274a0369000013/MAIBSafetyBulletin_1-2016.pdf)

**MAIB**  
MARINE ACCIDENT INVESTIGATION BRANCH

**SAFETY BULLETIN**

SB1/2016

February 2016

Extracts from  
The United Kingdom  
Merchant Shipping  
(Accident Reporting and  
Investigation) Regulations  
2012

**Regulation 5:**  
"The sole objective of a safety investigation into an accident under these Regulations shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the purpose of such an investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame."

**Regulation 16(1):**  
"The Chief Inspector may at any time make recommendations as to how future accidents may be prevented."

### Press Enquiries:

020 7944 3021

### Out of hours:

020 7944 4292

### Public Enquiries:

0300 330 3000

### NOTE

This bulletin is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

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See <http://www.nationalarchives.gov.uk/doc/open-government-licence> for details.

All bulletins can be found on our website:  
<https://www.gov.uk/maib>

For all enquiries:  
Email: [maib@trg.gov.uk](mailto:maib@trg.gov.uk)  
Tel: 023 8038 5500  
Fax: 023 8023 2459

## Mooring line failure resulting in serious injury to a deck officer on board

*Zarga*

alongside South Hook LNG terminal,

Milford Haven

on 2 March 2015

Photograph courtesy of Fotoflite.co.uk



Zarga

# What do we know now?

## Mooring Line:

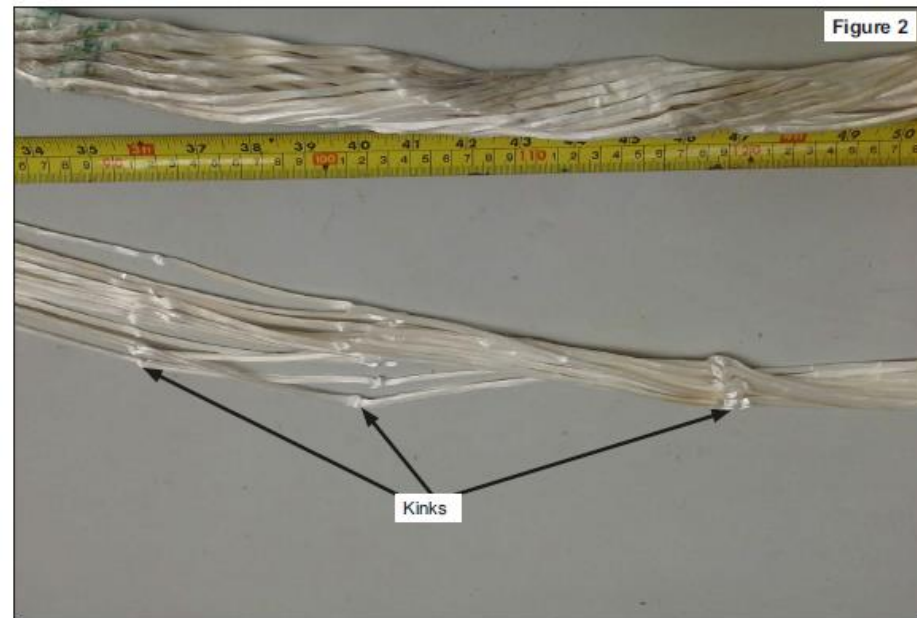
MBL = 137 tonnes **failed at 24 tonnes**

Life expectancy = 8 years **failed at 5 years**



## Source:

[https://assets.digital.cabinet-office.gov.uk/media/56b8c217e5274a036900013/MAIBSafetyBulletin\\_1-2016.pdf](https://assets.digital.cabinet-office.gov.uk/media/56b8c217e5274a036900013/MAIBSafetyBulletin_1-2016.pdf)



# Final MAIB Report

Details on the  
incident including  
conclusions and  
recommendations

## Source:

[https://assets.publishing.service.gov.uk/media/59400114e5274a5e4e000239/MAIBInvReport13\\_2017.pdf](https://assets.publishing.service.gov.uk/media/59400114e5274a5e4e000239/MAIBInvReport13_2017.pdf)

ACCIDENT REPORT

MAIB  
MARINE ACCIDENT INVESTIGATION BRANCH

Report on the investigation of  
the failure of a mooring line  
on board the LNG carrier

### ***Zarga***

while alongside the South Hook Liquefied  
Natural Gas terminal, Milford Haven  
resulting in serious injury to an officer  
on 2 March 2015



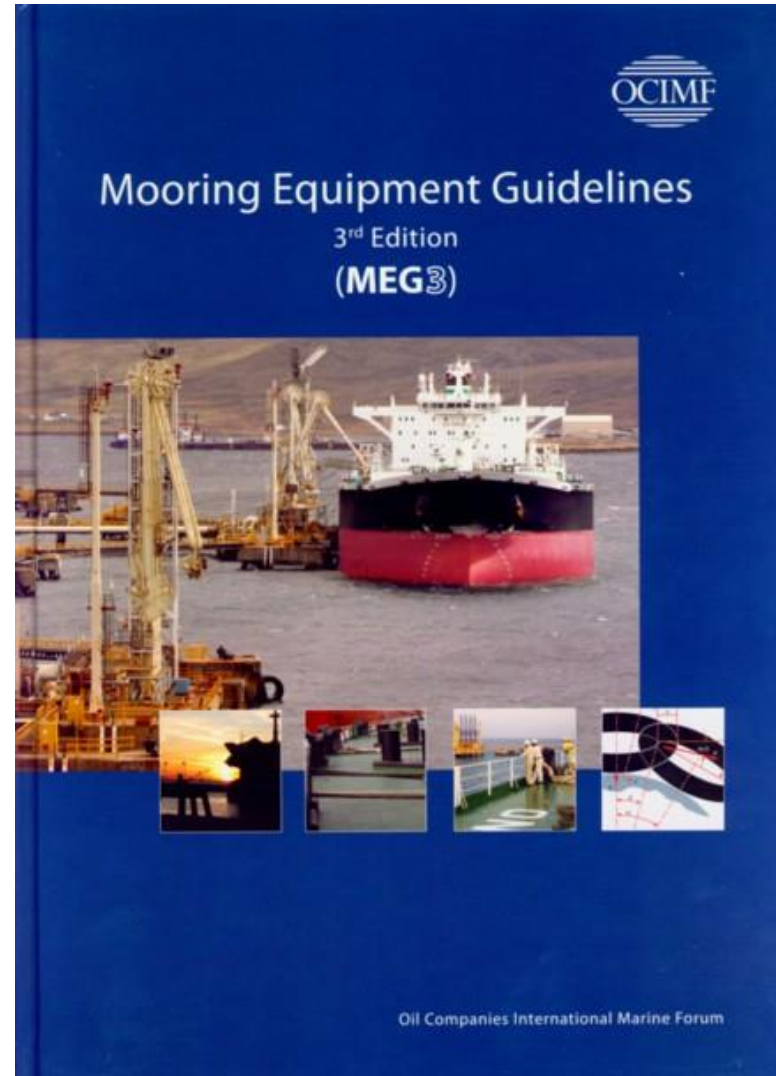
SERIOUS MARINE CASUALTY

REPORT NO 13/2017

JUNE 2017

# What are our next steps?





```
graph TD; A[Ports and Terminals Committee] --> B[MEG Steering Group]; B --> C[WCDC (Existing WG)]; B --> D[MEG 4 WG]; B --> E[HMSF WG]; B --> F[Human Factors Mooring Design]; D --> G[Bow Mooring Arrangement]; D --> H[Emerging Technologies]; F --> I[Effective Mooring];
```

Ports and Terminals Committee

MEG Steering Group

WCDC  
(Existing WG)

MEG 4 WG

HMSF WG

Human Factors  
Mooring Design

Bow Mooring  
Arrangement

Emerging  
Technologies

Effective  
Mooring

# MEG 4 WG



**Chairman: Iain Chadwick (Chevron) / Vice Chair: Jeff Bayham (ExxonMobil)**

# HMSF WG



**Chair: Kris Volpenhein (Samson) / Vice Chair: Jac Spijkers (Dyneema®)**  
**Iain Chadwick (Chevron) Tim Hunter (EUROCORD)**

# What's the Challenge?



Figure D1: New Rope

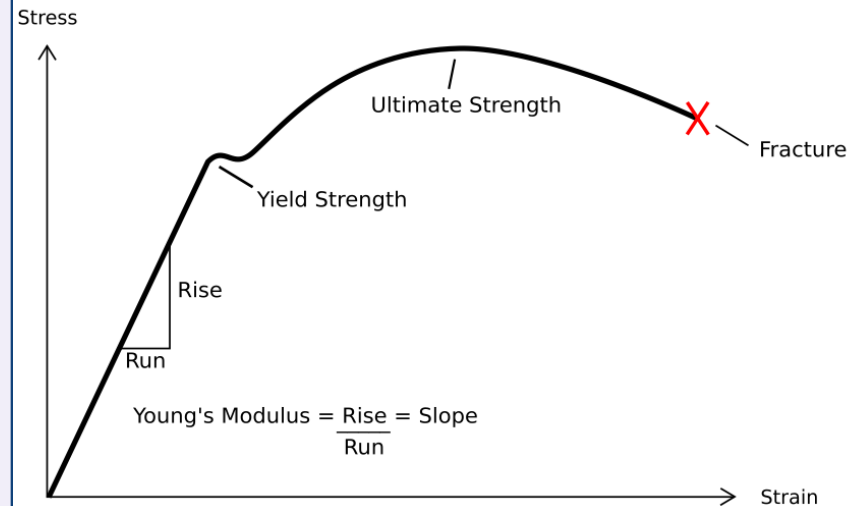
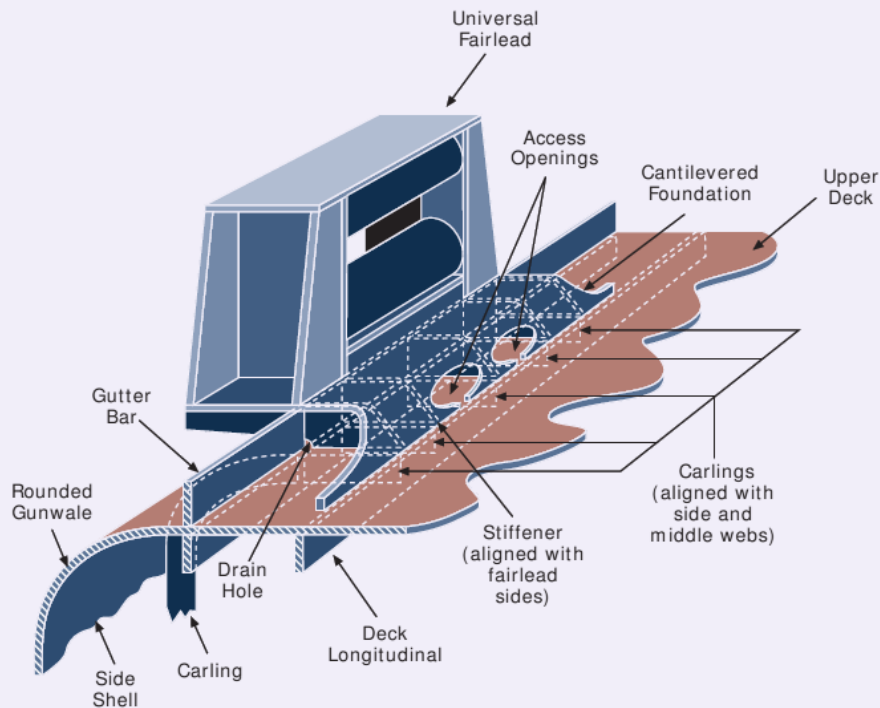
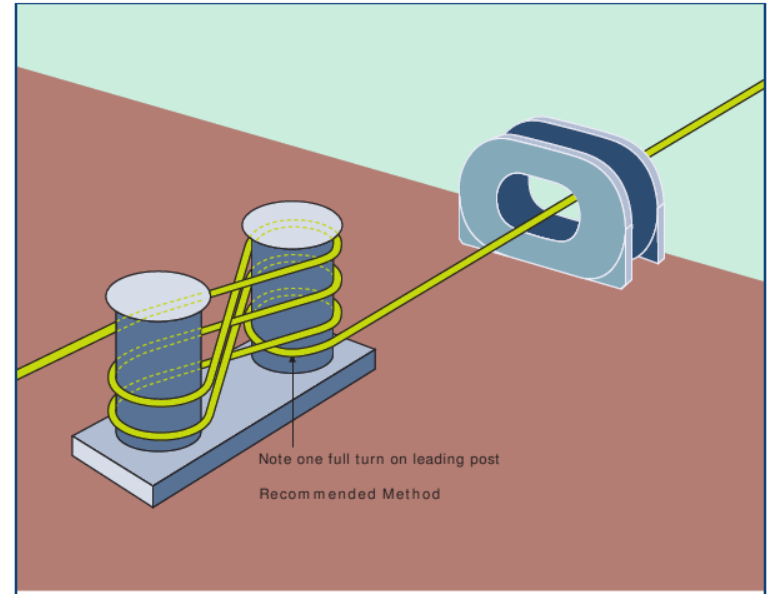


Figure D2: Used Rope



Figure D3: Damaged Rope

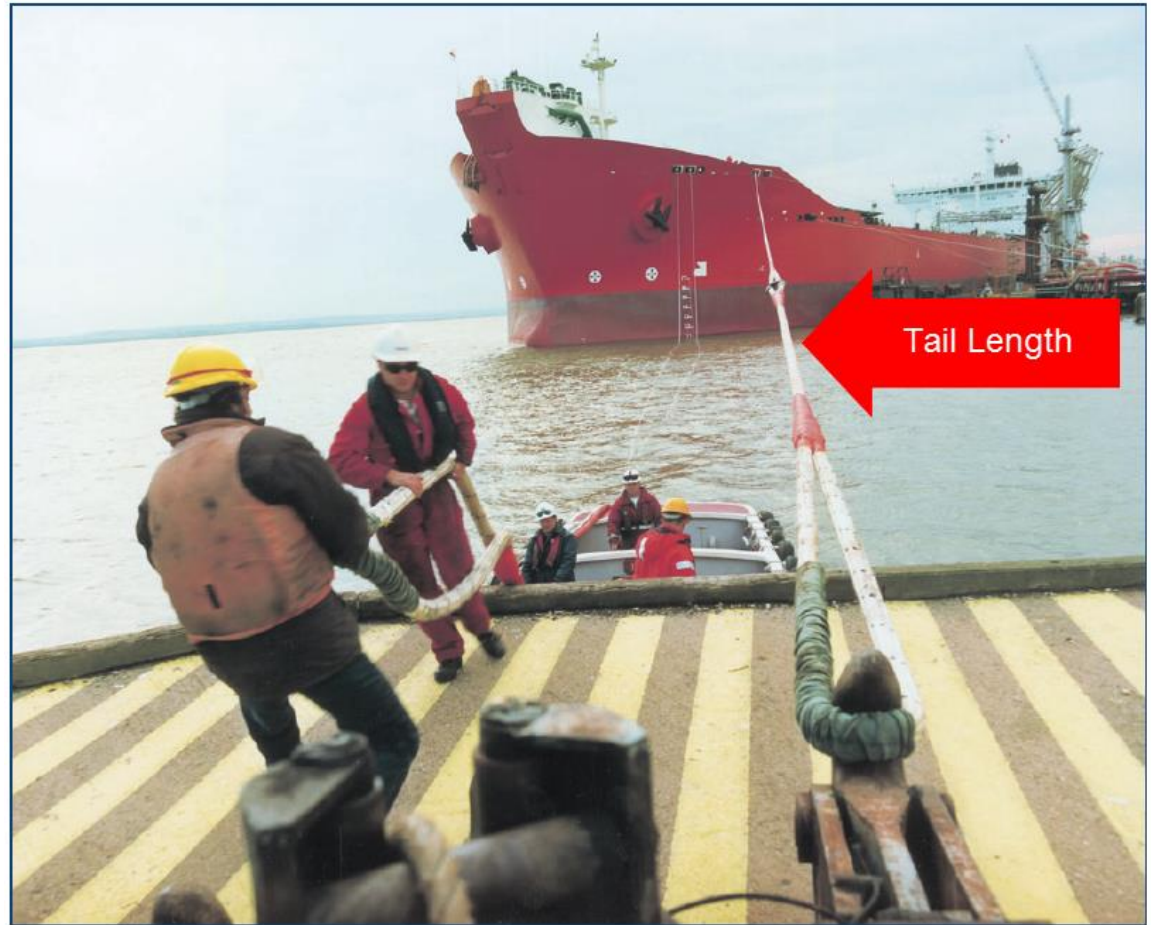
# What's the Challenge?



# What's the Challenge?



# What's the Challenge?

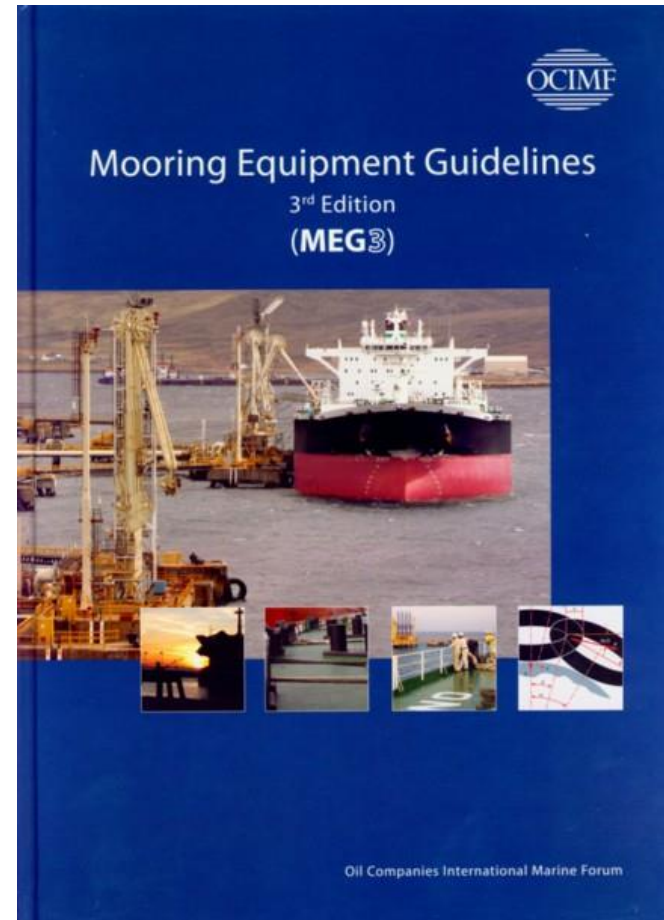


# What's the Challenge? The Mooring System!

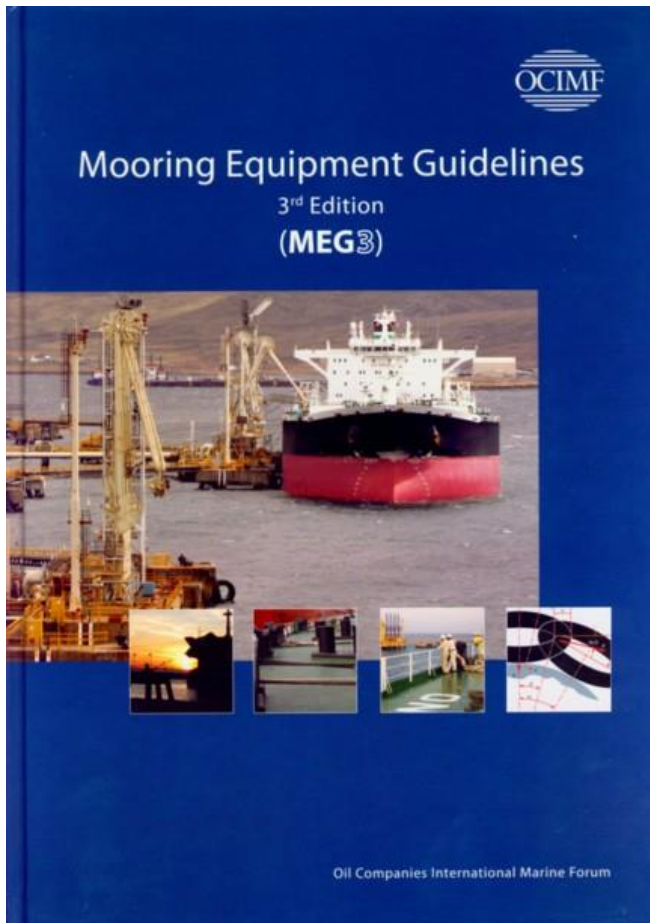


# MEG – Desired Outcomes

- Incorporate lessons learned from the Zarga incident and update section on mooring lines
- Improved guidance – Mooring line management & retirement, clarity in terminology, encourage communication with line manufactures
- Robust mooring line and tail procurement process
- [www.ocimf.org/MEG4](http://www.ocimf.org/MEG4)



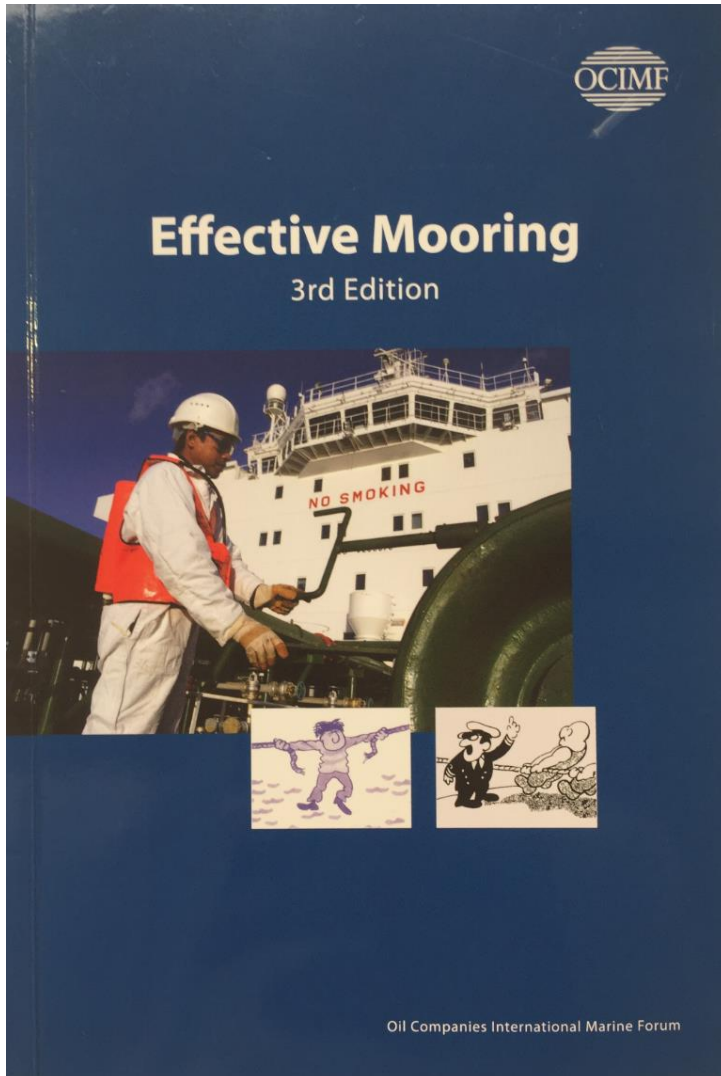
# MEG – Desired Outcomes



- **Keep target audience in mind**
  - **Ship Designers, Operators, Ship Staff, SIRE Inspectors, Line Manufacturers**
- **Provide Clarity**
  - **Safety Factors, Terminology, Tail Length, Snapback Zones**
- **New Chapters**
  - **Alternative Mooring Technology, Human Factors in Mooring Design, Jetty Design**

*Human Factors*

# MEG – Desired Outcomes



- Keep target audience in mind
  - Ship Staff
- Provide Clarity
  - Safety Factors, Terminology, Tail Length, Snapback Zones
- MOC Process
  - Alternate Mooring Technology, Changing Ropes, Record Keeping

# MEG – Desired Outcomes

**Protect our people**





**OCCIMF**



A Voice for Safety



# SIRE & OVID

Tony Wynne – Technical Adviser (Nautical)



## VIQ 7

- **New VIQ being developed**
- **Structure will remain the same with 13 chapters.**
- **Reduction in the number of questions, net approx. 70 decrease.**
- **New questions relating to new developments, BWM, Cyber Security etc.**
- **Chapter 9 being changed to comply with new guidance coming from MEG review.**
- **Officer's Matrix will also be reviewed**

## **VIQ 7**

- **Direct link between VIQ and TMSA being developed.**
- **Proposed to have text finalised by end of 2017.**
- **3 month integration required.**
- **Proposed 'go live' date is early 2Q 2018.**



## **Audited Inspections**

- **In September 2016, audit process changed.**
- **Every audited inspection will result in a report being produced.**
- **In the event of an inspector failing the audit, the auditor will complete and submit the report.**
- **It is hoped that this will encourage ship operators to allow audited inspections on their vessels.**



## Data Mining and Webservices

- **Data mining of the SIRE data has been available to OCIMF members for about 4 years.**
- **Datamining recently extended to Ship operators to allow them to compare their performance against the entire SIRE database.**
- **Ability to compare ship owner association if members of one and the ship owner association has registered. (Currently only one – INTERTANKO)**
- **Webservices extended to ship operators to allow them to take their reports in data format rather than a PDF document.**

# SIRE Performance



# SIRE Programme Participants

The table below shows the numbers and types of the participants registered in SIRE in 2016:

Type of Participants	Number of new organisations registered in SIRE in 2016		Total number of registered organisations as at 31/12/16
Submitting Members	5		91
Recipient Members	13		225
Port State Controls	6		61
Vessel Operators	246		2013
Inspectors	Cat 1	37	501
	Cat 2	0	2
	Cat 3	35	124
Third Party Vetting Contractors	0		13

# Sire Stats for 2016/17



2017 SIRE Key Statistics			2016 SIRE Key Statistics		
Name	Tanker	Barge	Name	Tanker	Barge
Inspection reports requested	82011	16579	Inspection reports requested	142884	24136
Inspection reports submitted	11119	4293	Inspection reports submitted	21108	8244
Inspection reports requested by PSC	578	4	Inspection reports requested by PSC	968	2
Total vessels registered	20870		Total vessels registered	20227	
Vessels registered less than 12 months old	1430		Vessels registered less than 12 months old	1453	
Reports less than 12 months old	21498	8163	Reports less than 12 months old	21103	8244
Reports 12 to 24 months old	20575	8138	Reports 12 to 24 months old	20002	7735
Distinct vessels inspected in 12 months	8738	6675	Distinct vessels inspected in 12 months	8595	6722
Ratio of reports to vessels	2.46	1.22	Ratio of reports to vessels	2.46	1.23
Number of Particulars	10747	6199	Number of Particulars	10385	5832
Number of particulars submitters	1203	262	Number of particulars submitters	1174	231
Number of particulars less than 12 months old	9555	5591	Number of particulars less than 12 months old	9335	5226

## Extrapolating forward

Tanker reports requested for 2017 – 164,022 ( 14% increase on 2016)

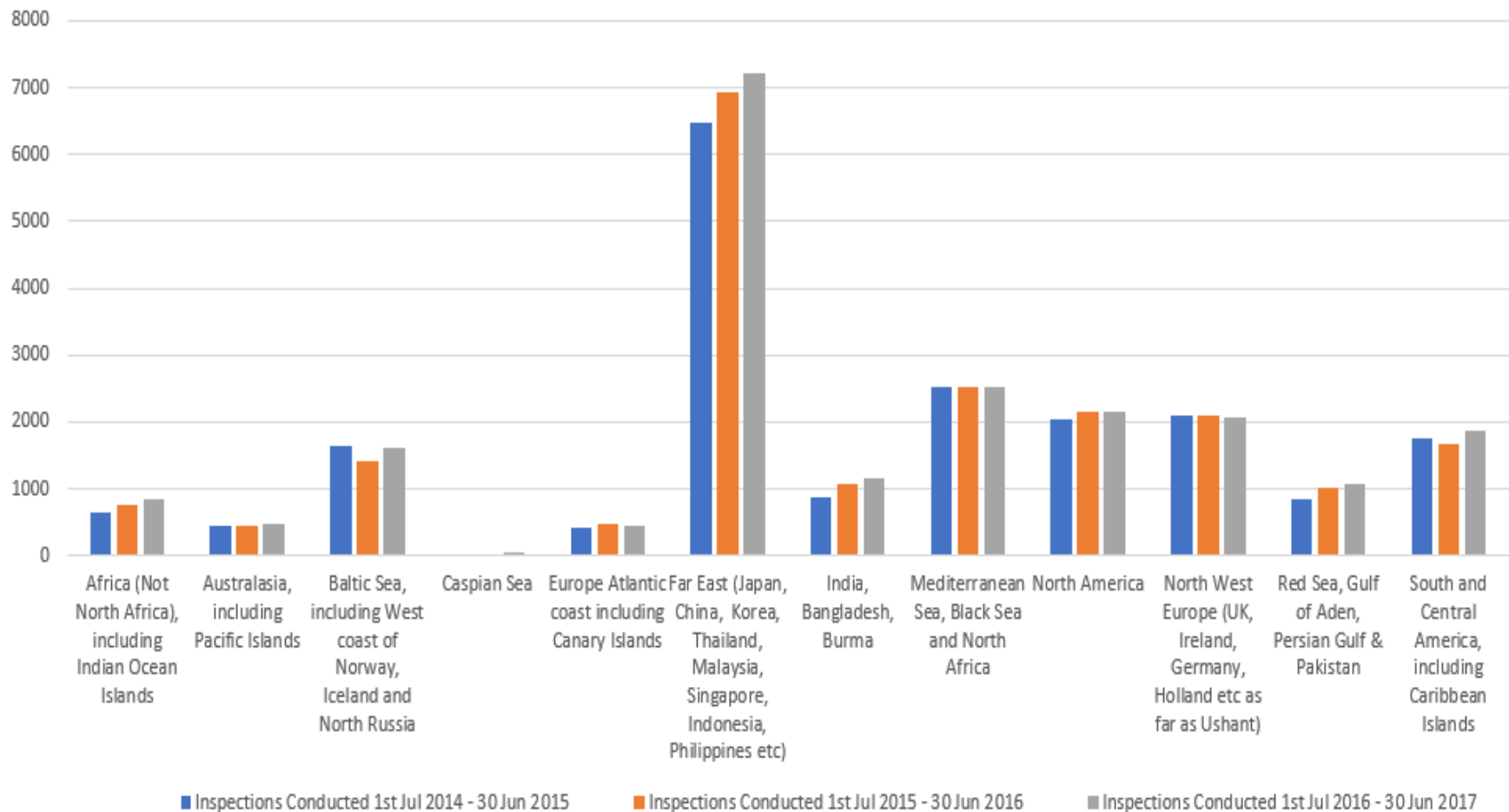
Barge reports requested for 2017 – 33,158 ( 37% increase on 2016)

Tanker reports submitted for 2017 - 22,238 ( 5.4 % increase on 2016)

Barge reports submitted for 2017 - 8,586 ( 4.2 % increase on 2016)

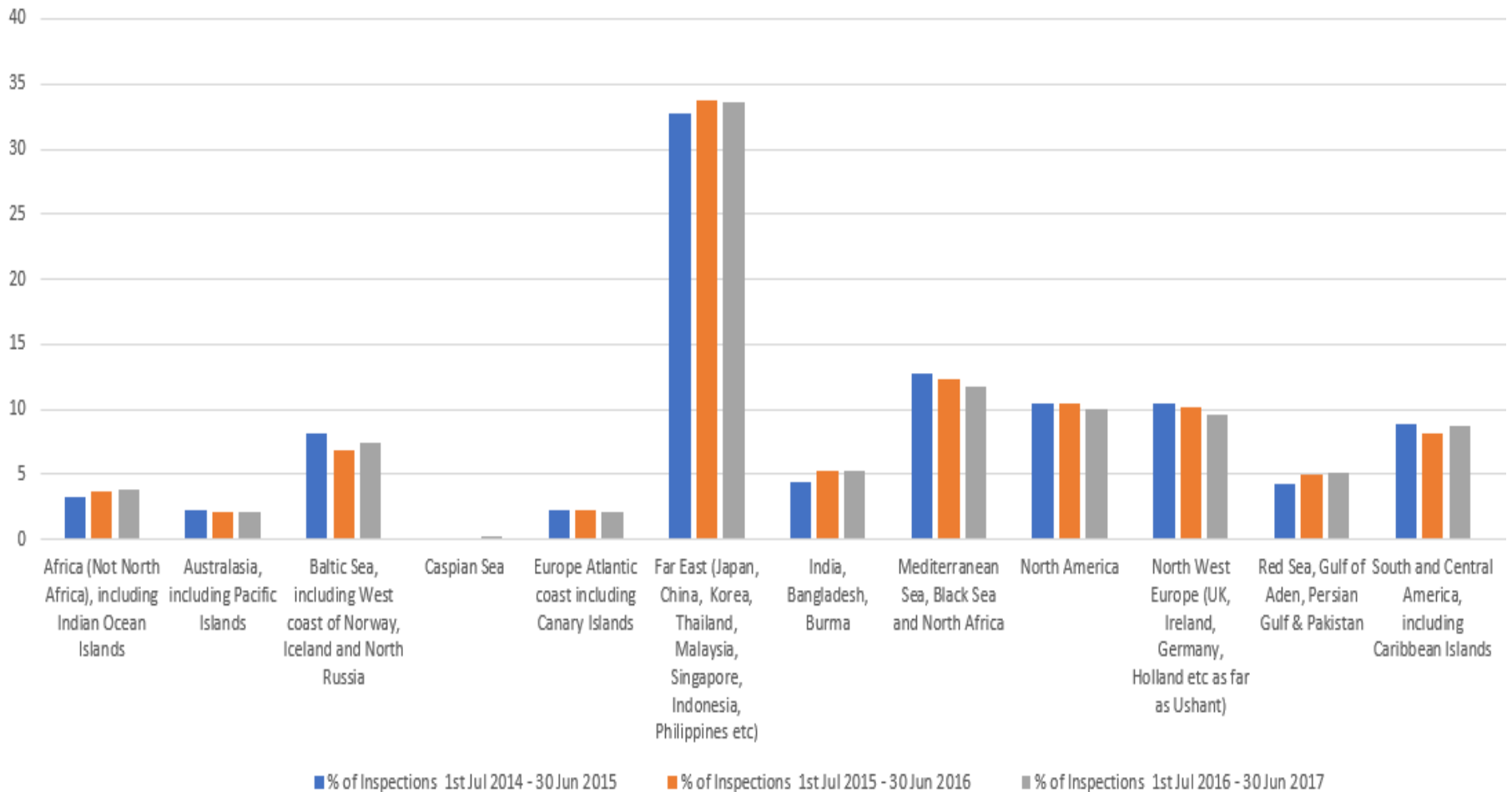
# Number of inspections carried out by region 2014 – 2017 (Actual Numbers)

Inspections Conducted By Region 1st Jul 2014 - 30th Jun 2017

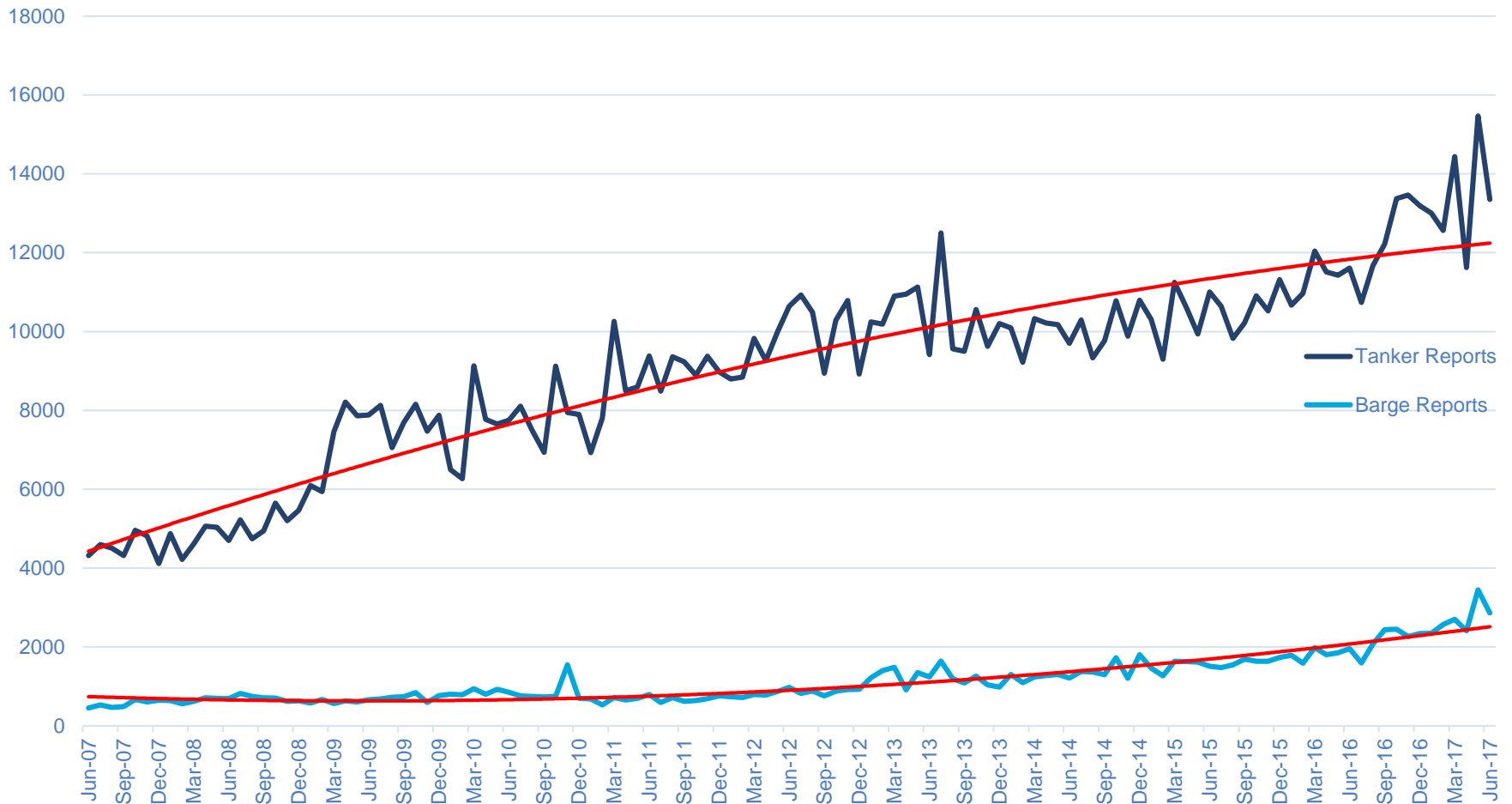


# Number of inspections carried out by region 2014 – 2017 (Percentages)

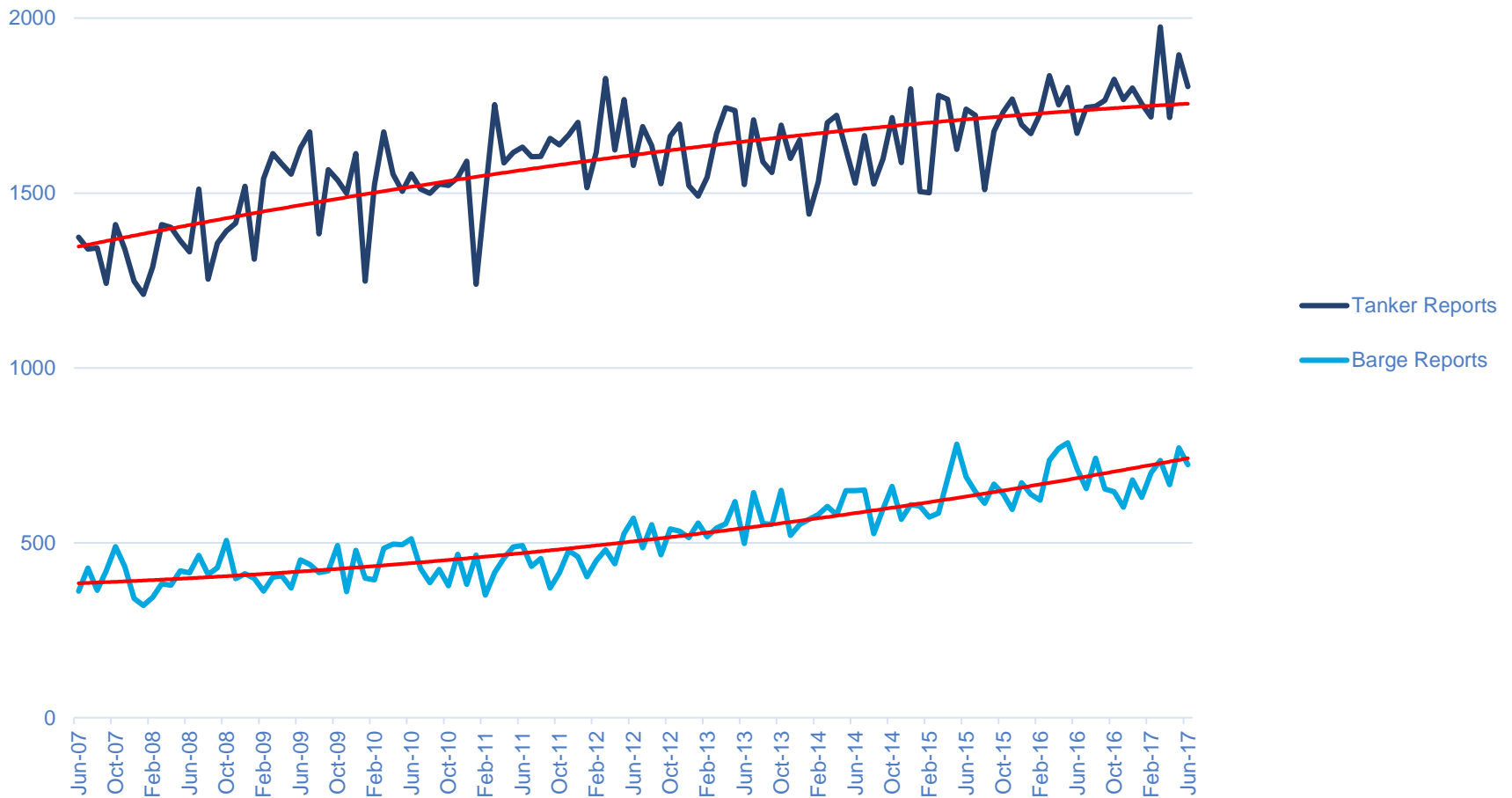
Percentage of Inspections Conducted By Region 1st Jul 2014 - 30th Jun 2017



# Number of SIRE Tanker and Barge Reports Downloaded Per Month June 2007 to June 2017



# Number of SIRE Tanker and Barge Reports Submitted Per Month June 2007 to June 2017



**Barges**



## **Global Inland and Coastal Barging Focus Group**

- **Greater emphasis on barge safety by OCIMF members.**
- **Current TOR of the regional workgroups are narrow and only cover the SIRE system as it applies to barges.**
- **New global group identified to look at overall barge safety issues.**
- **Regional groups TOR's will be expanded to cover safety issues.**

# Regional Barge Groups



- **Currently there are three regional barge groups:-**
  - **North America**
  - **South and central America**
  - **Europe**
- **Barge strategy being developed for area East of the Arabian Gulf. May entail more than one regional group being established.**
- **There are currently 4 different BIQs and BPQs**
  - **The three listed above plus an International variant.**
  - **Further variants may be developed.**



**OVID**



# OVID Programme Performance

The graphic features several overlapping, flowing lines that sweep across the bottom right of the slide. The colors include a light teal, a bright yellow, and a dark blue, creating a sense of movement and energy.

# OVID Stats

## YTD Numbers (as of 22Jun2017)

- OCIMF Members using OVID – 53
- OVID Programme Recipients – 14 (20+ currently in applications in progress)
- Port State Control – 3
- Inspectors – 455
- Vessels registered – 10292
- Vessel Operators – 1754

## In a 12 month period

- Inspections purchased – 1413
- Inspections completed – 2772

## OVMSA

- Operators using – 962
- Operators Published - 703

# OVID Programme development updates

The background features a series of overlapping, curved, ribbon-like shapes in various shades of blue, teal, and yellow, creating a sense of motion and depth. The shapes are layered, with some appearing to be in front of others, and they curve upwards from the bottom left towards the right side of the frame.

# OVID Programme Recipients



- **Launched Jan 2017 in effort to streamline offshore industry with regards to vessel inspection**
- **Companies that share OCIMF's concerns for marine safety and pollution prevention and charter offshore vessels in support of their operations or have offshore vessels operating at their facilities**
- **May not be involved in the hydrocarbon industry and may or may not be a DoC holder of an offshore vessel**
- **Have a need for marine assurance but are currently unable to utilize the OVID programme**
- **Required to obtain approval, through the OVID system, from the Technical Vessel Operator of the vessel prior to receiving the vessel's OVIQ**

# OVID Programme Recipients



## Eligible

- Oil companies that are not currently OCIMF members.
- Offshore project management, engineering and construction companies.
- Wind farm operators.
- Offshore terminal/ installation operators.
- Logistics/supply base operators.
- Marine drilling contractors.
- Marine geophysical contractors.
- Owners of vessels who also provide wider technical services to the offshore industry and charter vessel/ units in to provide services to OCIMF members.
- Government agencies.



## **OVID Vessel Inspection Request**

- **Launch Jan 2017**
- **Efficient way for vessel operator and OVID Programme Recipient, with vessel operator approval, to request an OVID inspection**
- **Hope is that vessel operators will begin to track and request annual OVIQ renewals.**
- **In turn reducing the time spent conducting on-hire processes by the OCIMF OVID Members and OVID Programme Recipients.**

# OVPQ Revision



- **Review begin last year with goal to update and remove questions that serve no benefit. E.g. fax number**
- **Goal is to develop an OVPQ that meets OCIMF Members needs taking into account industry comments/suggestions**
- **Expected result will be a fit for purpose OVPQ with ability to upload vessel spec sheets**
- **To be release late Q3 2017**

# Review of OVIQ2/MODU

- **Collection of suggestions from MSF, OCIMF Members, Vessel Operators, and OVID Inspectors.**
  - **Over 300 suggested changes to OVIQ2 e.g. add N/A, new question, updated guidance**
  - **70+ for MODU Jackup and 80+ for MODU Drillship/Semi Sub**
- **Workgroup review all suggestions and developed OVIQ3 and MODU2**
  - **Small Vessel (<100grt) – still under development**
  - **MODU combined in one question set with 2 operation sections**
    - **Jackup**
    - **Drillship/Semi**
- **Proposed additions to OVIQ3**
  - **New Variant – lift boat**
  - **Towing operations expanded to include ship assist**
- **To be release late Q1 2018**

# Review of OVMSA

- **OVID Focus Group has begun review and update of OVMSA**
- **Align as much as possible with TMSA3 (i.e. 13 Elements)**
- **To be release late Q2 2018**



**OCIMF**

A Voice for Safety