



Asia Pacific Regional Marine Forum – Tokyo

June 2018



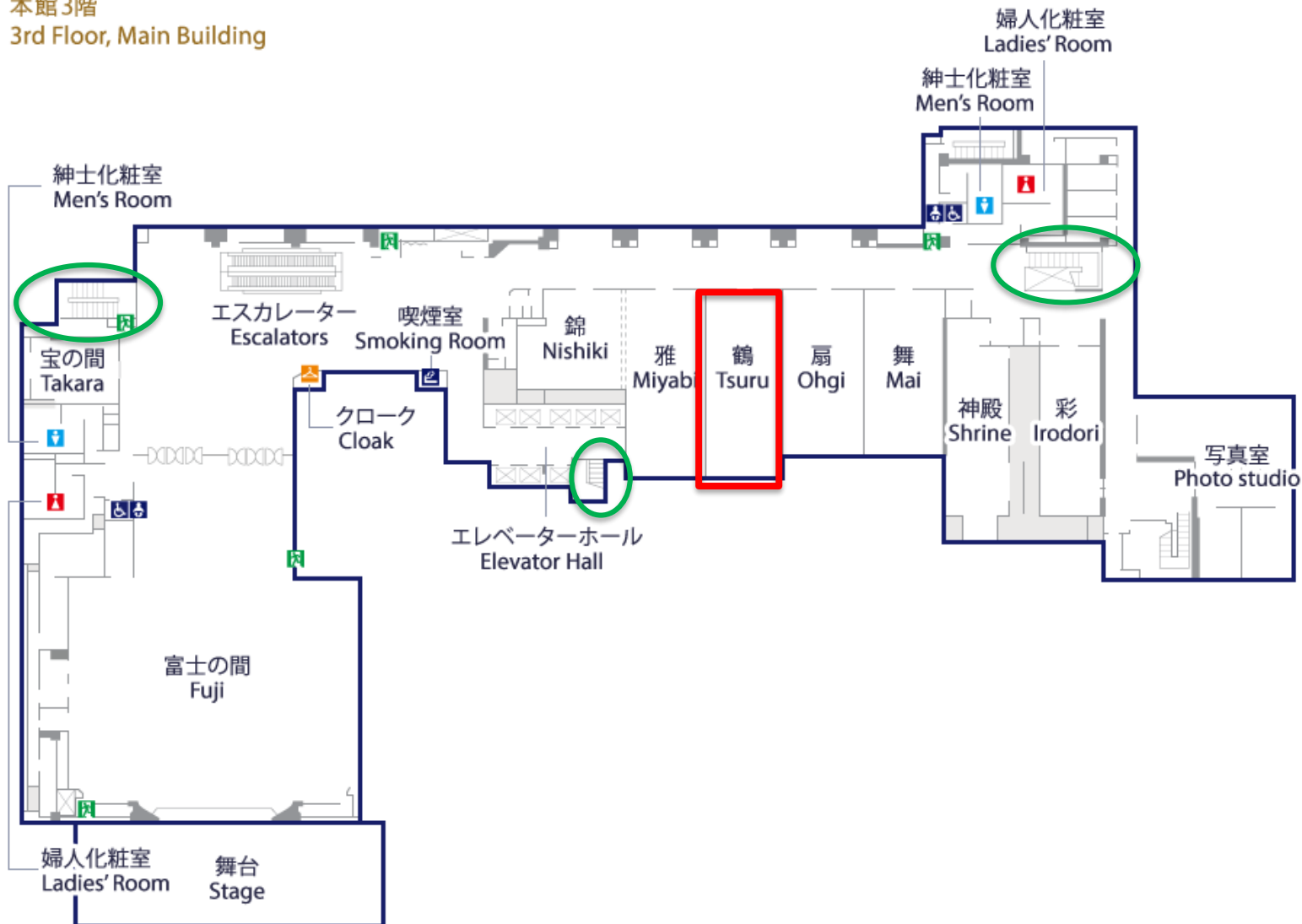
Welcome and Safety Briefing

Fakir Mohammed – IMT – Regional Champion



Safety Brief and Arrangements

本館3階
3rd Floor, Main Building



Safety Moment

<https://www.youtube.com/watch?v=5Gtio4V1L3o>

Welcome and Introduction

Rob Drysdale – Director (OCIMF)



OCIMF Milestones

Key Events in the History of OCIMF



1956/57 and
1967/75:
Suez Canal Closed



1967:
Grounding of
Torrey Canyon



1970:
OCIMF was
formed



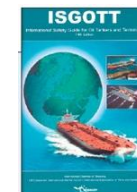
1971:
Consultative status
at IMO



1975:
First OCIMF guideline
published



1977:
London branch
office established



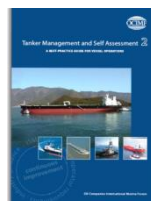
1978:
ISGOTT
published



1993:
SIRE
Programme
Launched



2000:
SIRE Inspector
Training and
Accreditation



2004:
TMSA
Programme
Launched



2010:
OVID
Programme
Launched



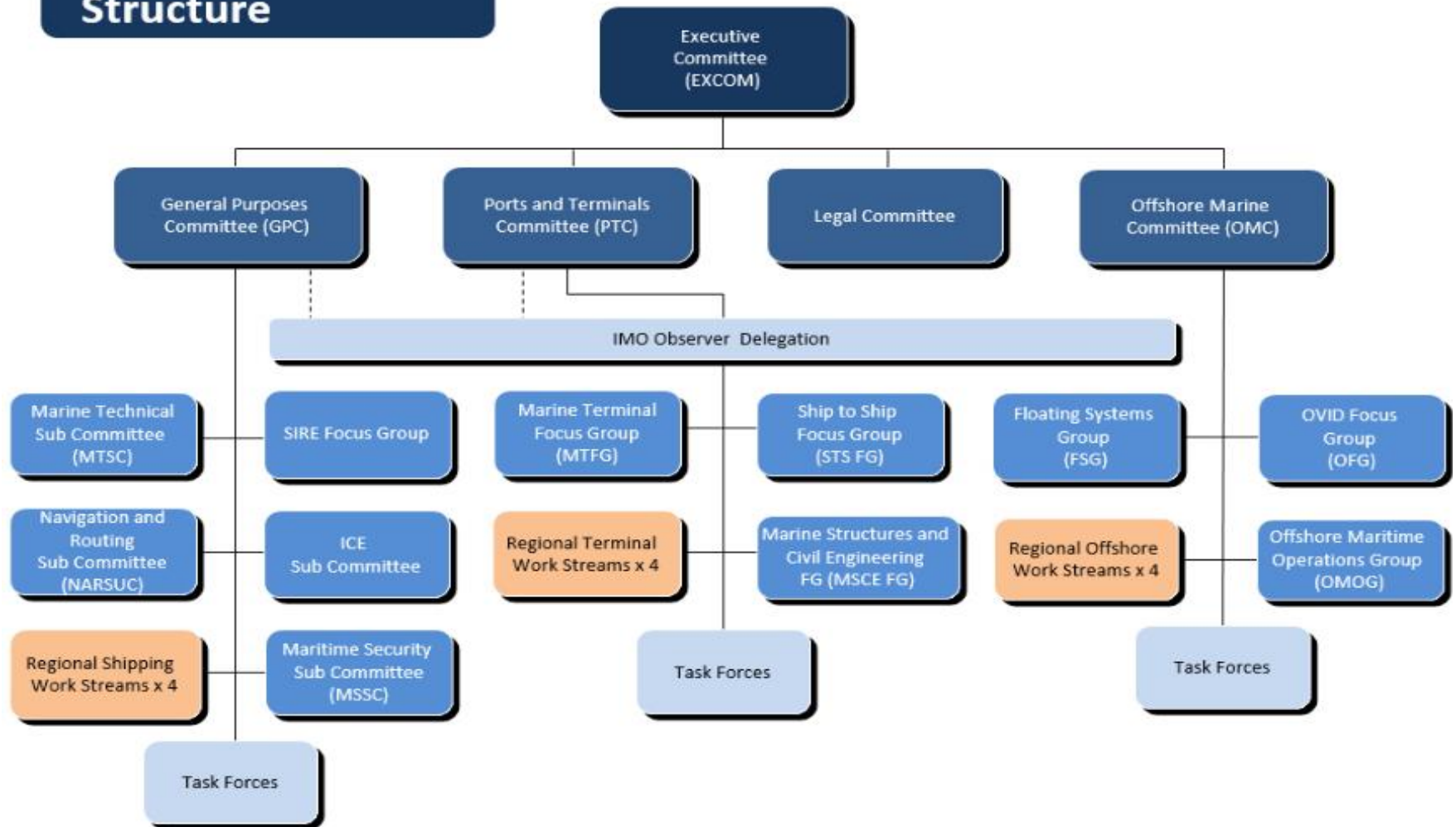
2013:
MTIS
Programme
Launched



2016:
Pilot for Maritime
Trade Information
Sharing Centre –
Gulf of Guinea
(MTISC-GoG) ends

OCIMF Structure

OCIMF Committee Structure



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 members & the wider industry.
- Provide tools and facilitate exchange of information, to promote continuous improvement in safe & 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 & best practice.

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**

Anti-Trust/Competition Law Guidance - DO NOT

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

DO NOT X

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



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



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

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- Benchmarking
- Creating Industry Standards
- Self-policing regulations
- OCIMF sponsored research
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Formalities & Agenda

Rob Drysdale – Director



IMPERIAL HOTEL Wi-Fi NETWORK SERVICE GUIDE

帝国ホテル Wi-Fi ネットワークご利用の手引き

Internet access is complimentary.
インターネット接続は無料でご利用いただけます。

Wi-Fi Name : IMPERIAL HOTEL
Wi-Fi PASSWORD: imperial

LOGIN PASSWORD: ocimf2018jun

STEP1



Select "IMPERIAL HOTEL" in the "Wi-Fi Network".
Wi-Fi ネットワークで「IMPERIAL HOTEL」を選択してください。

STEP2



Enter "imperial" in the blank on the next screen.
次のパスワード入力画面で「imperial」と入力して下さい。

STEP3



Connect to the Internet (Please Open your web browser, i.e. Internet Explorer, Safari or Google Chrome). When you see the screen as shown here, select **Other Guests**.

インターネットブラウザ (Internet Explorer, Safari, Google Chrome 等) を開き、**ご宿泊以外のお客様** を選択して下さい。

STEP4



Enter your Password. By pressing **Connect** you confirm that you have read and agreed to the Term and Conditions. Therefore, please read them carefully before you connect.

ログインパスワードを入力してください。
利用規約をお読みになり、同意した上で **Connect** をクリックしてください。



IMPERIAL HOTEL
TOKYO



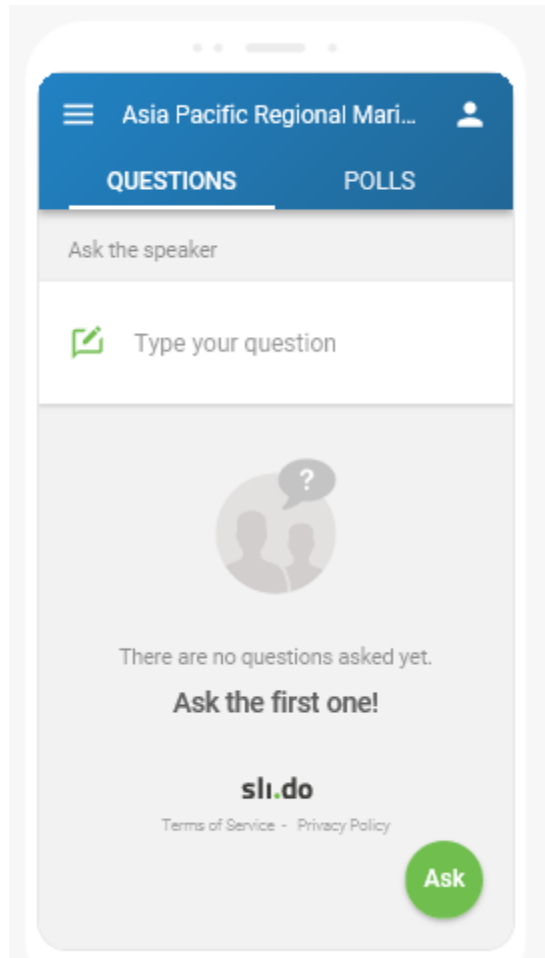
Step 1 – select “Imperial Hotel”

Step 2 – login password – imperial

Step 3 – select – “other guests”

Step 4 – enter password - “ocimf2018jun”
NB check terms and conditions then tick
Enter – “Connect”

Q&A Sessions - Slido



How to join your event

- 1 Open a browser on any laptop, tablet or smartphone
- 2 Go to **slido.com**
- 3 Enter the event code **#APRMF1**

Tip: Try sending a few questions to see how it works in action.

Customize code

 How to introduce Slido

Meeting Practicalities

Business Cards



Sign Attendance Sheet

Chris S. Churchill

Cell Phones - *Respectful*



Group Photo





Agenda

Time	Activity
09:15-10:00	MEG and the IMO
10:00-10:20	Coffee Break
10:20-13:00	OCIMF Programmes – SIRE & OVID
13:00-14:30	Lunch
14:30-16:00	Best Practice & Lessons Learned
16:00-16:20	Coffee Break
16:20-17:00	OCIMF Updates



OCIMF

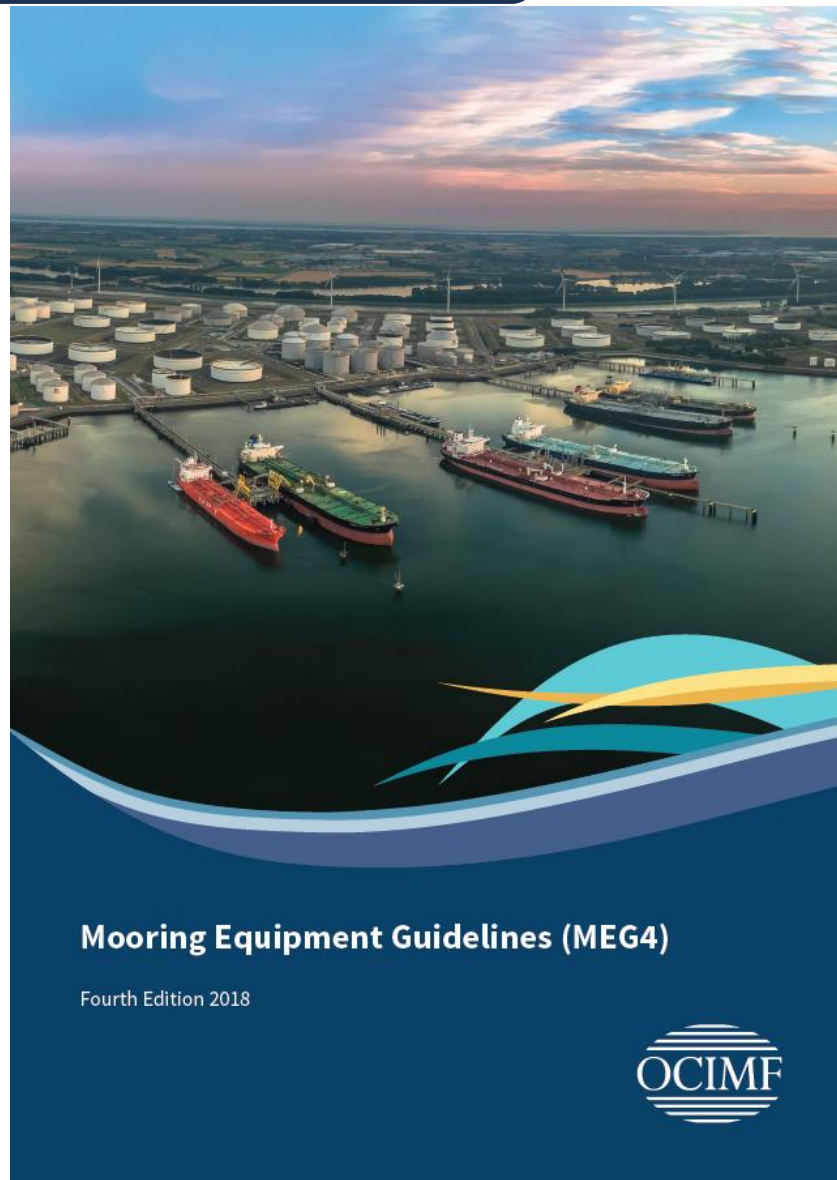
A Voice for Safety

Mooring Equipment Guidelines (MEG) publication update

Tony Wynne – Technical Adviser (Nautical)



MEG 4



Mooring Equipment Guidelines (MEG4)

Fourth Edition 2018



Updating MEG3 - MEG4

Mooring Equipment Guidelines - MEG3 published 2008

01/2015 – commenced initial work for revision of document to MEG 4
(changes in Rope technology - but considered light touch only)

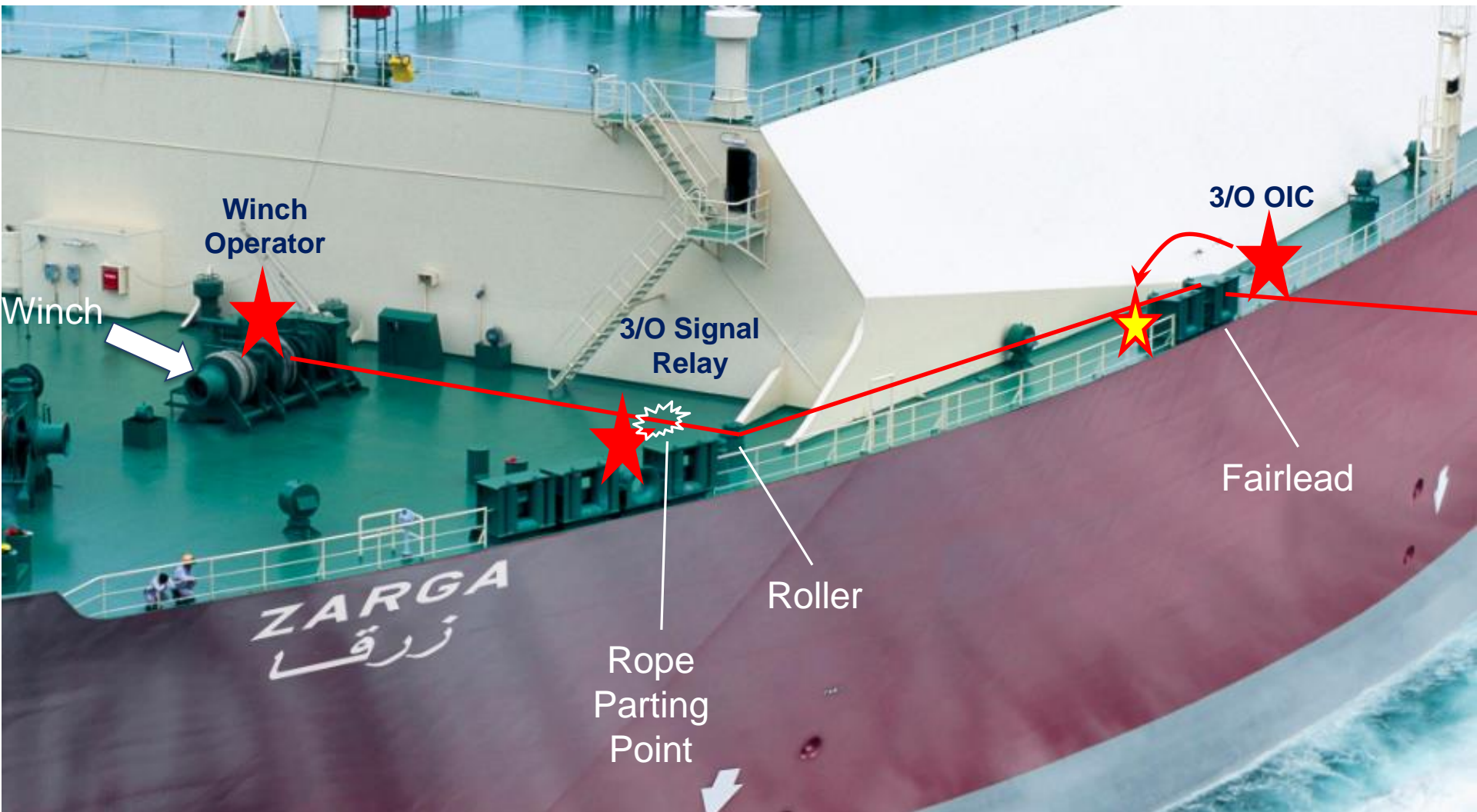
03/2015 – ZARGA incident – HMSF line parted during mooring leading to serious injury.

07/2015 Initial findings ZARGA investigation

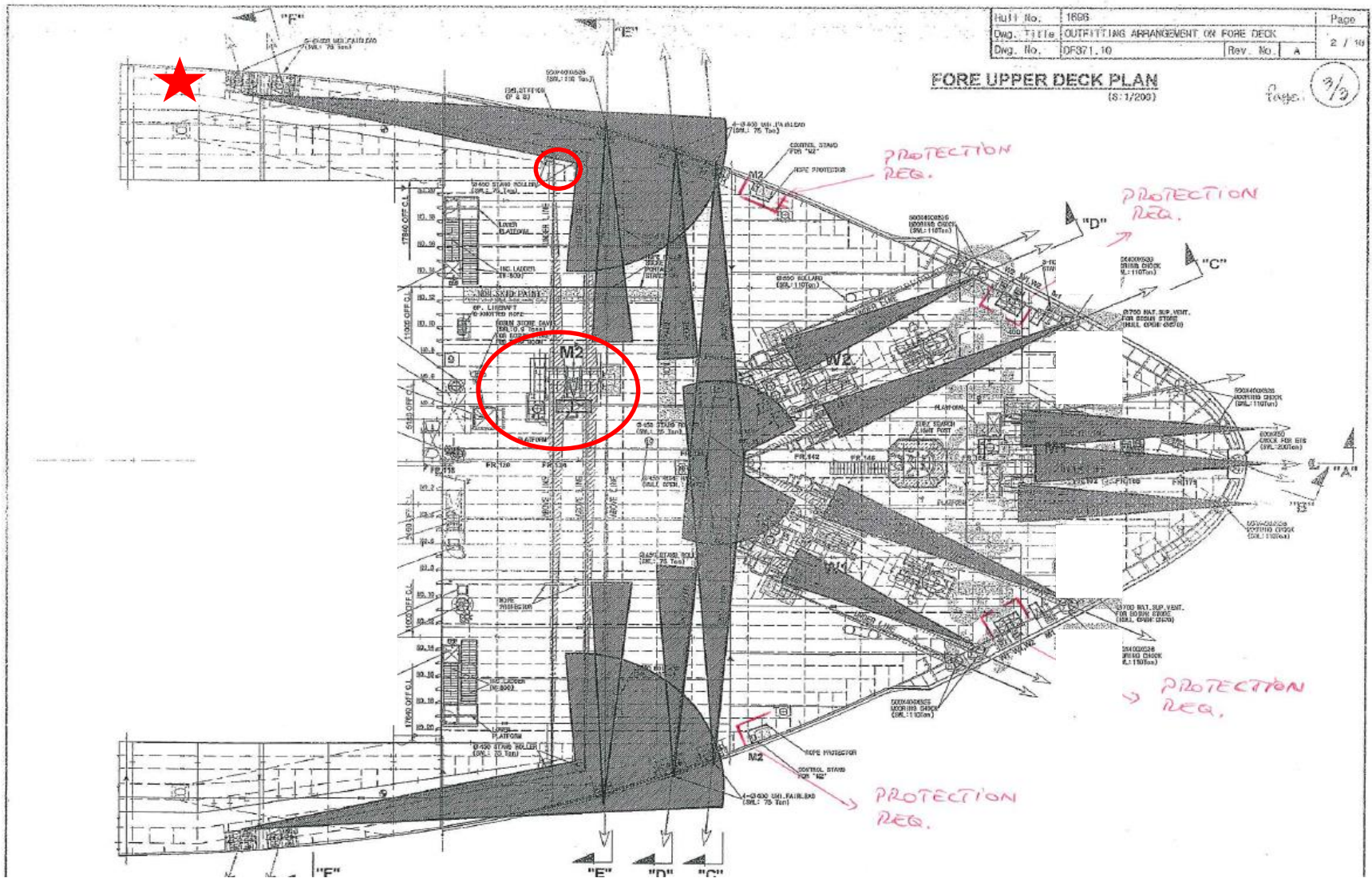
10/2015 MEG4 scope of work change to major revision agreed.

02/2016 Kick off meeting with members and Industry representatives.

Zarga

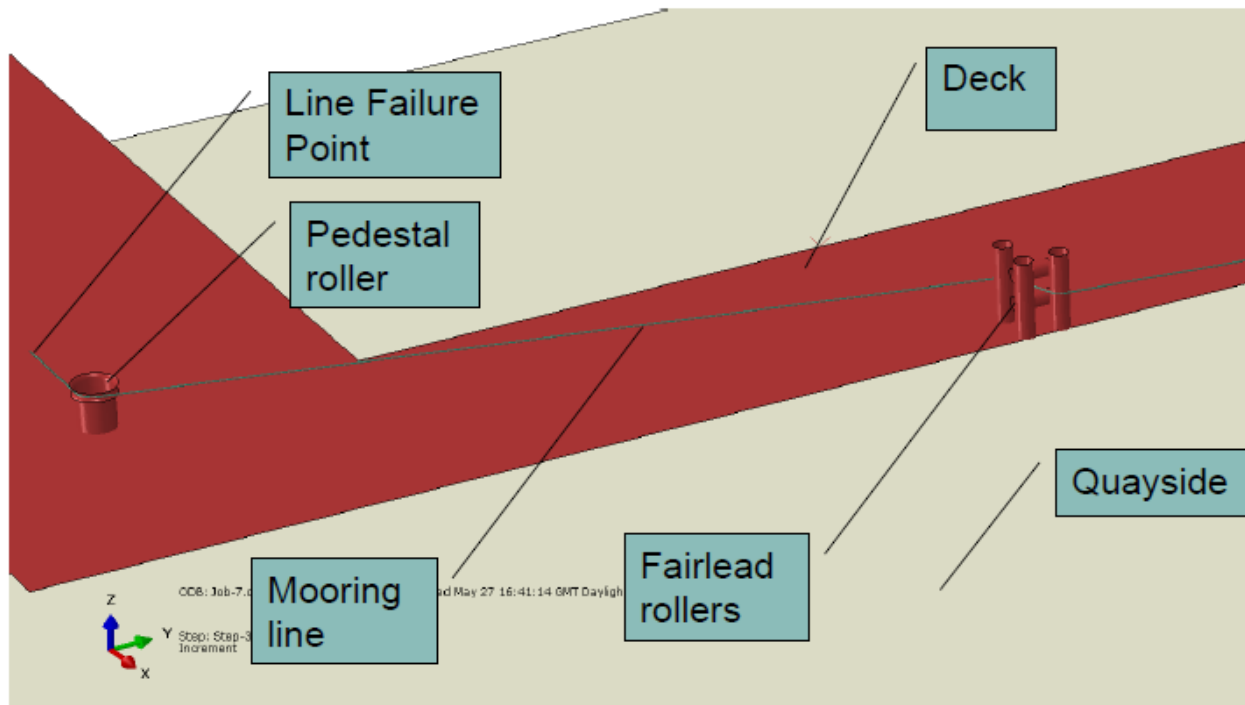


Snapback Zone





Computer Modelling



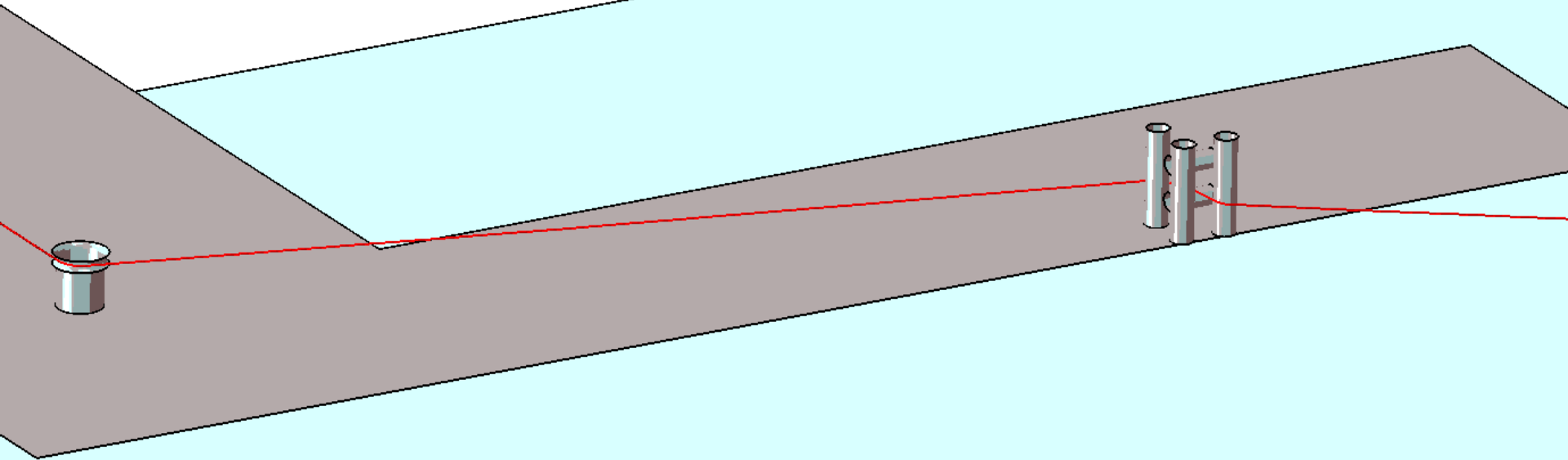
Vessel Geometry



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



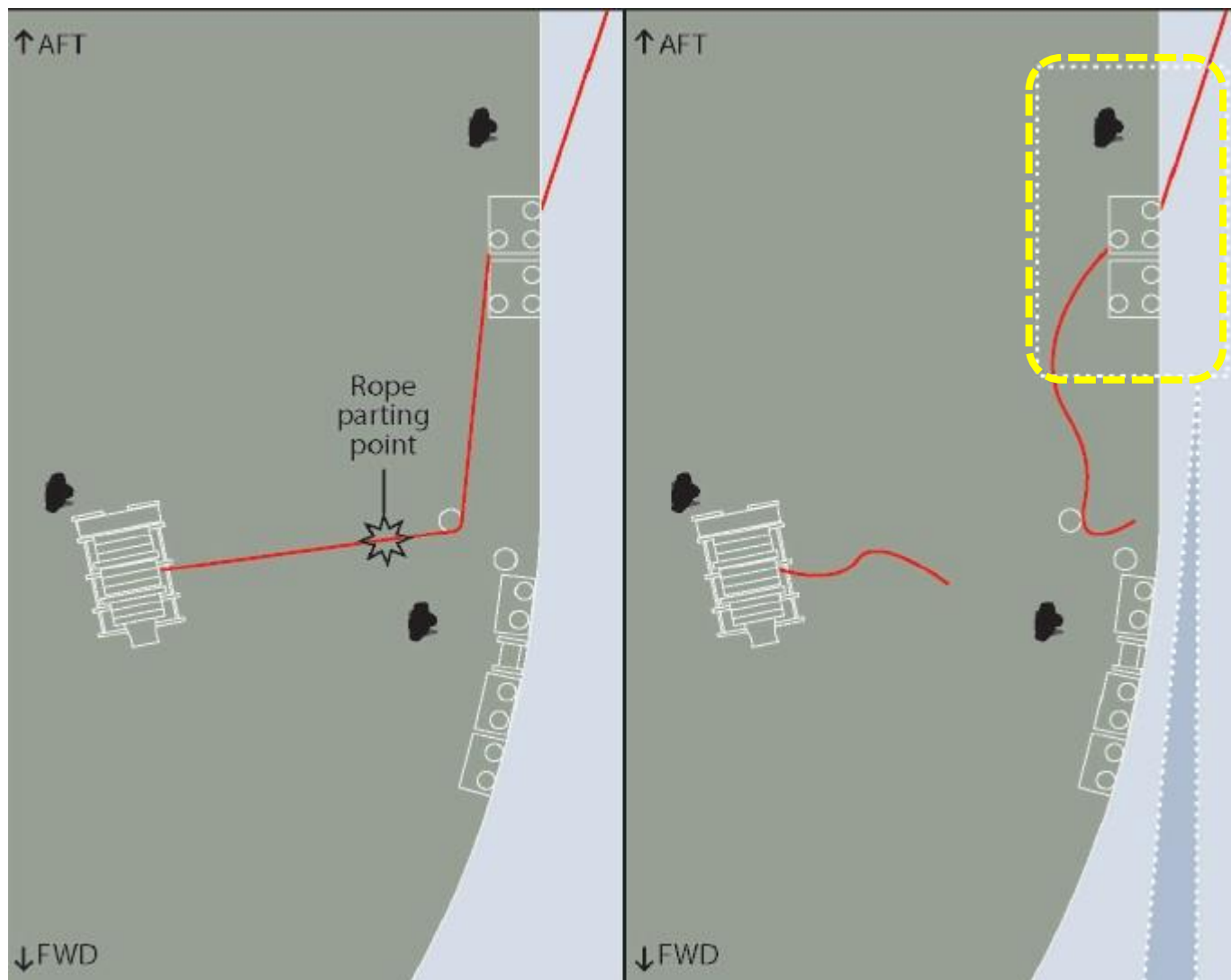
ODB: baseline.odb Abaqus/Explicit 6.14-1 Tue Jun 02 17:09:22 GMT Daylight Time 2015

Z
Y
X

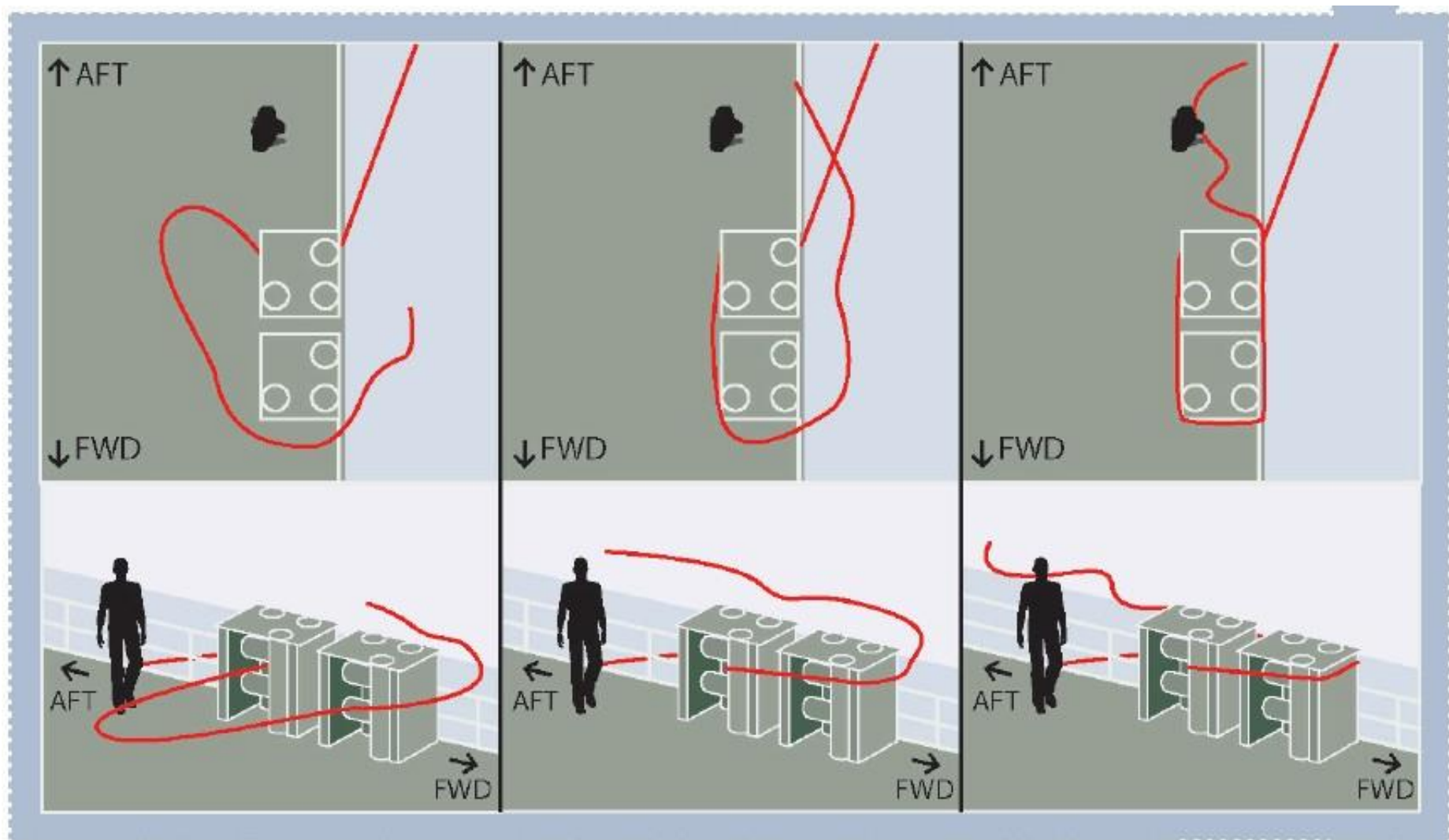
Step: Step-3, release winch load
Increment 0: Step Time = 0.0

Deformed Var: U Deformation Scale Factor: +1.000e+00

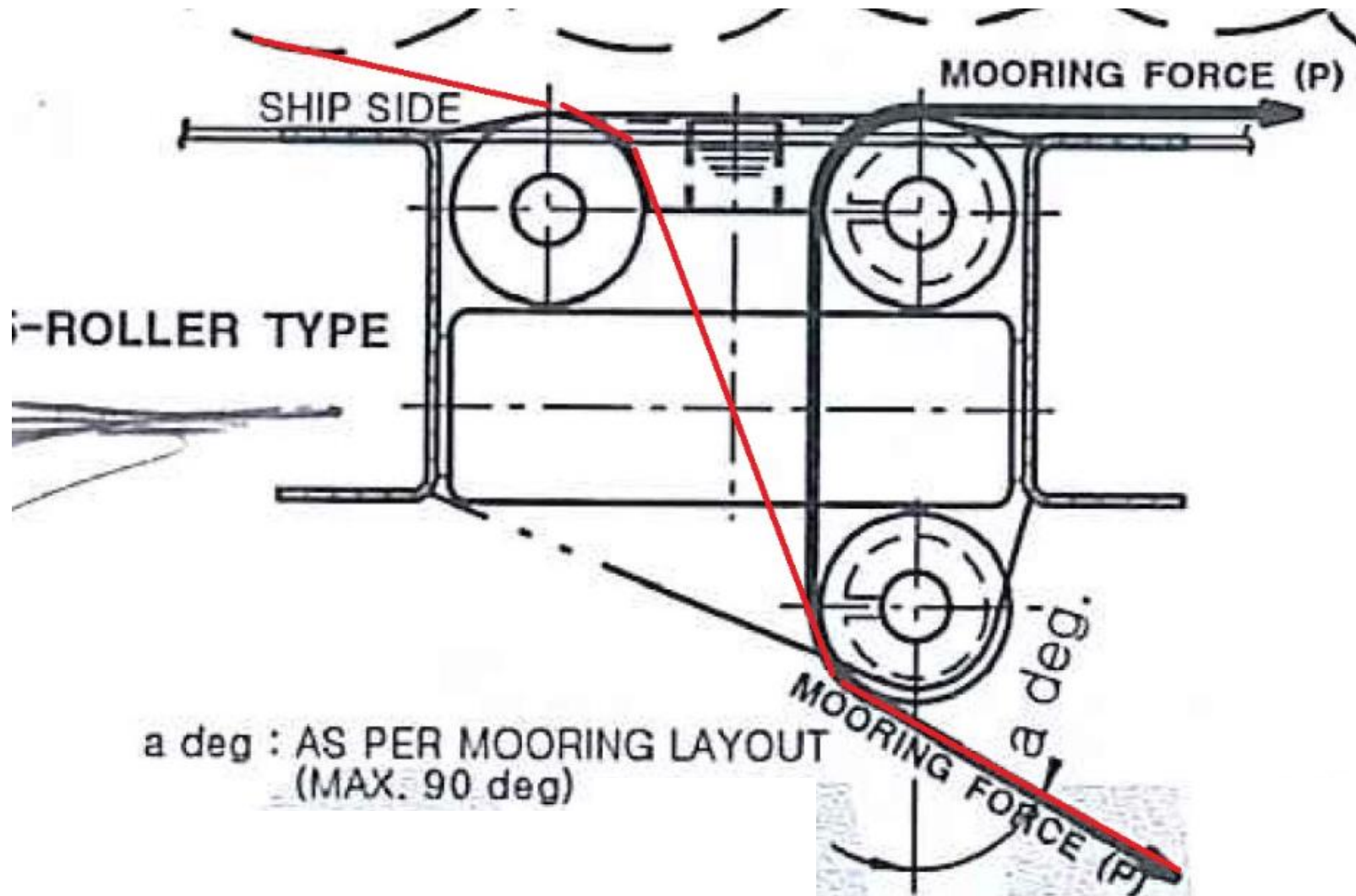
Rope Trajectory



Complex Snap-back

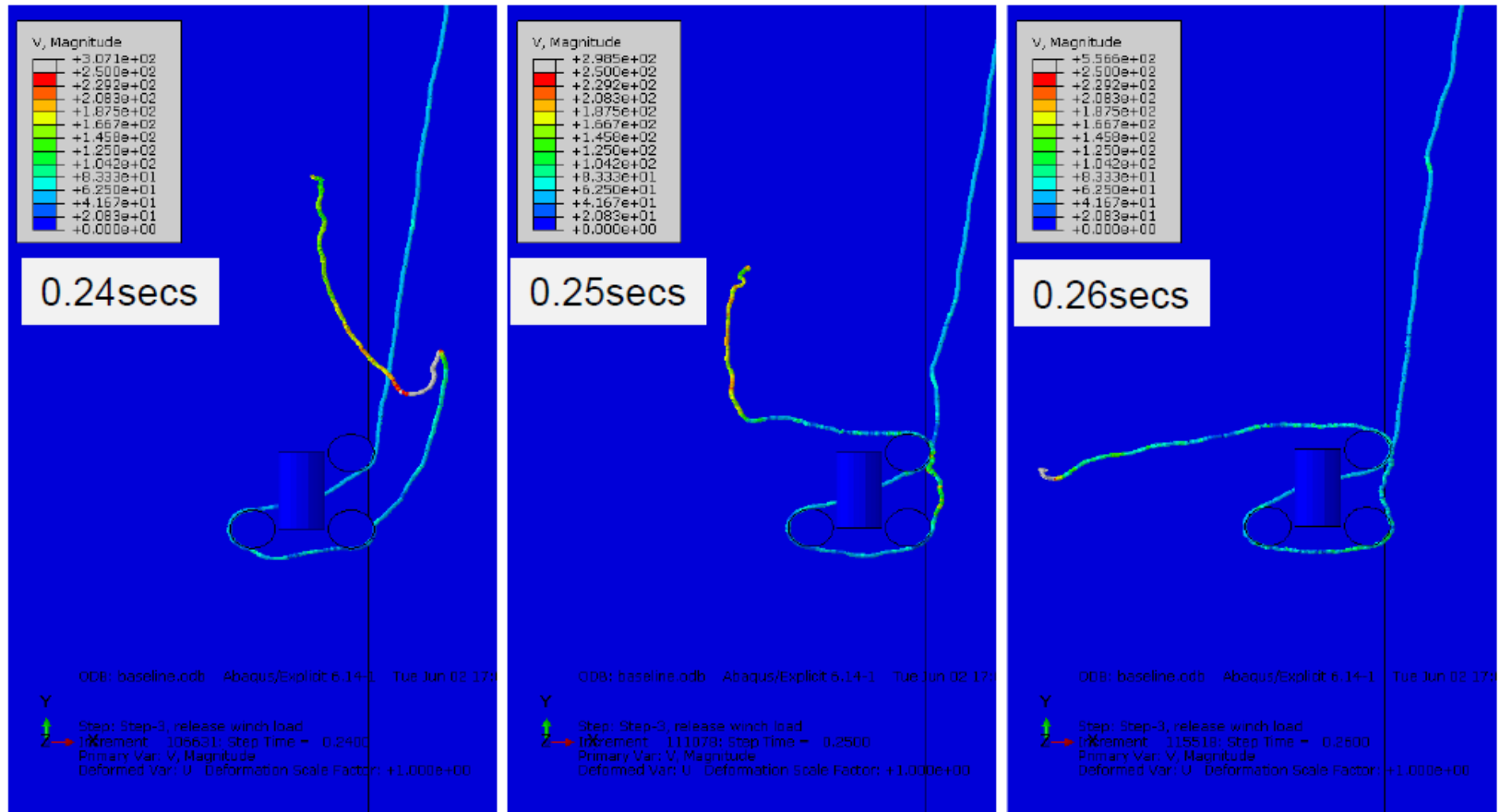


Multiple Roller Fairlead



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

Fit for Purpose Lines

Mooring Line:

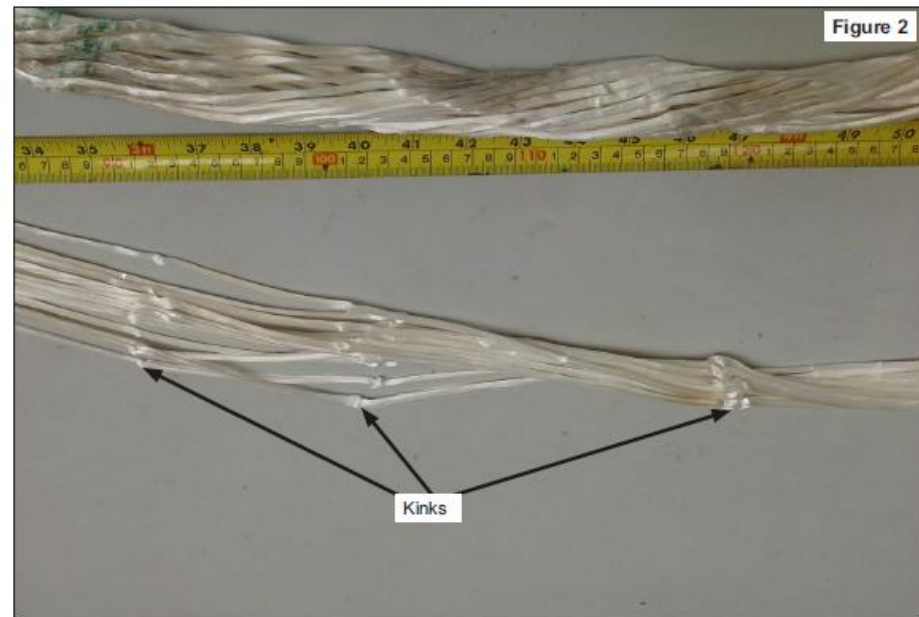
MBL = 137 tonnes **failed at 24 tonnes**

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

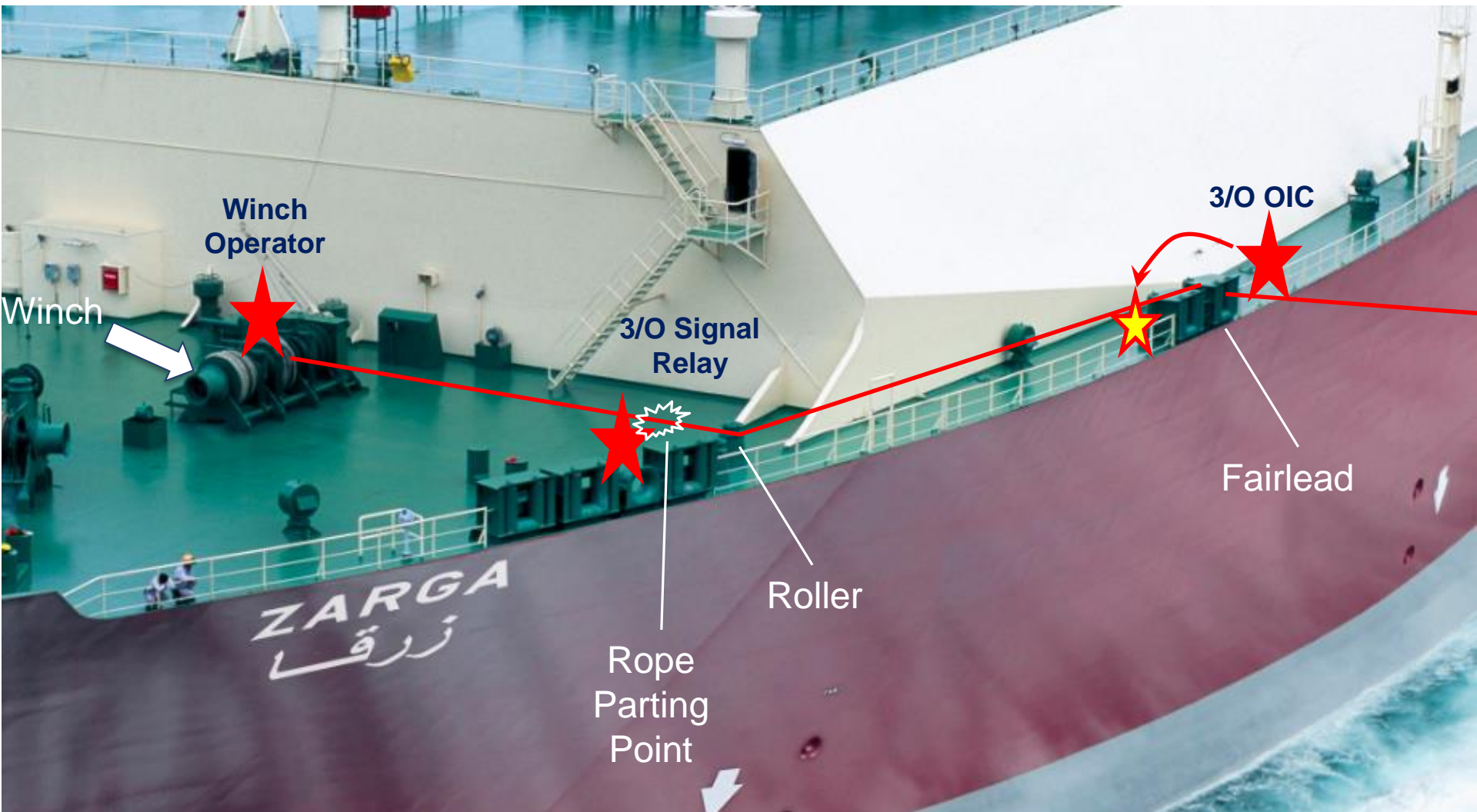


Source:

https://assets.digital.cabinet-office.gov.uk/media/56b8c217e5274a036900013/MAIBSafetyBulletin_1-2016.pdf



Human Factors



Mooring Equipment Guidelines (MEG4) Recognition

- Wide variety of industry bodies and SMEs involved -
- Rope manufacturers associations; Classification societies; Ship operator associations; Ship building associations, Terminal design association; Equipment Manufacturers; Human Factors expertise
- Working Groups – Main WG; HMSF; WCDC; HF



Main WG



HMSF WG

Chapters



1 – Introduction to Mooring

2 – Human Factors

3 – Mooring Forces & Environmental Criteria

4 – Mooring Arrangements and Layouts

5 – Mooring Lines

6 – Mooring Winches

7 – Mooring and Towing Fittings

8 – Structural Reinforcements

9 – Berth Design and Fittings

10 – Ship/Shore Interface

11 – Alternative Mooring Technology

Mooring Equipment Guidelines (MEG4)

Key Messages

1. Snap-back

- Complex
- No safe area

2. Fit-for-purpose ropes

- HMSF vs others
- Purchasing
- Monitor usage

3. Human Factors (HCD)

- Design
- Operations & Maintenance

Equipment, ropes, tails and layout should be designed, operated and maintained as an integrated mooring system



MEG 4 Website



Oil Companies International
Marine Forum

[Organisation](#)[Newsletter](#)[Programmes](#)[Library](#)[IMO, IOPC Funds & EU](#)[Contact Us](#)[Links](#)[Sign In ▾](#)

Mooring Equipment Guidelines

Mooring equipment guidelines is an industry guideline for the safe mooring of tankers and gas carriers at terminals. These guidelines provide extensive guidance for safe mooring from both a ship and terminal perspective. This publication also provides the reader guidance for human centred designs resulting in safer mooring arrangements.

[▶ Purchase Mooring Equipment Guidelines](#)



MEG 4 Website

New Terminology

During the revision of MEG it was clear there is confusion in the shipping industry with the term Minimum Breaking Load (MBL) and other terminology relating to line strength.

Further, there was no industry guidance on condition based monitoring of mooring lines and tails. Since nearly all mooring injuries are a result of mooring line failures, OCIMF has strived to provide guidance and clarity on the condition monitoring of mooring lines. Below is a list of some new terms that will be introduced in MEG4. We also encourage you to visit the [Clarifications section](#) for further information.

Minimum Breaking Load Ship Design – MBL SD

MBL SD is the minimum breaking load of new, dry, mooring lines for which a Ship's mooring system is designed, in order to meet OCIMF Standard Environmental Criteria restraint requirements. The MBL SD is the core parameter against which all the other components of a Ship's mooring system are sized and designed, with defined tolerances.

Line Design Break Force – LDBF

LDBF is the minimum force that a new, dry, spliced, mooring line will break at, when tested according to Appendix D of MEG 4. This is for all cordage (synthetic) materials except Nylon which is tested wet and spliced. When selecting lines, the LDBF of a line shall be 100%-105% of the MBL SD. LDBF replaces the terms "MBL of the line" or "rope MBL", currently used in MEG 3.

Working Load Limit – WLL

WLL is the maximum load that a mooring line should be subjected to in operational service, calculated from the MEG 4 Standard Environmental Restraint criteria. The WLL of mooring lines should be used as user operating limiting values, not to be exceeded.

Line Management Plan – LMP

LMP is used to manage the operation and retirement of mooring lines and tails. The LMP also documents the requirements, assumptions and evaluation methods used in determining the line retirement criteria. The LMP is specific to an operator, Ship type, and trade route; however, MEG4 gives general guidance on establishing a LMP.

MEG 4 Website

Feedback to OCIMF

If you have a query relating to MEG4, please first visit the [Clarifications](#) section where the answers to the many commonly asked questions can be found

 [Leave Feedback](#)

 [Templates](#)

 [Related Publications](#)

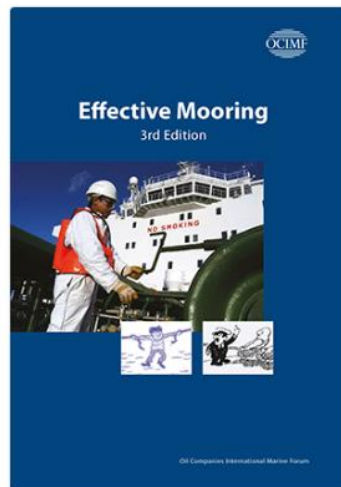
 [Related Links](#)

 [Clarifications](#)

 [Gallery](#)

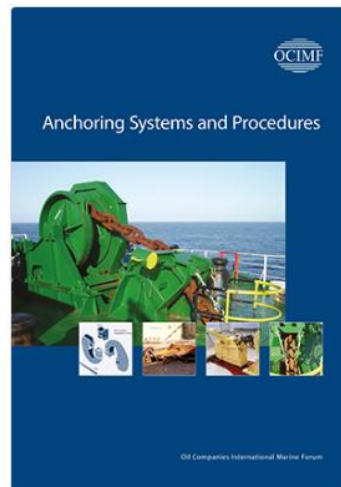
Related Publications

This section provides links to OCIMF and other industry guidance they may be of benefit with respect to mooring design and operations.



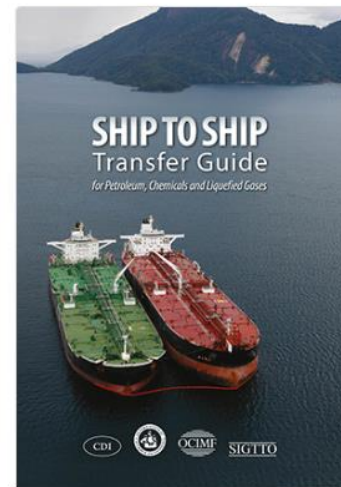
Effective Mooring

This popular title, now in its third edition, provides practical guidance on the basic principles of mooring. This booklet will be



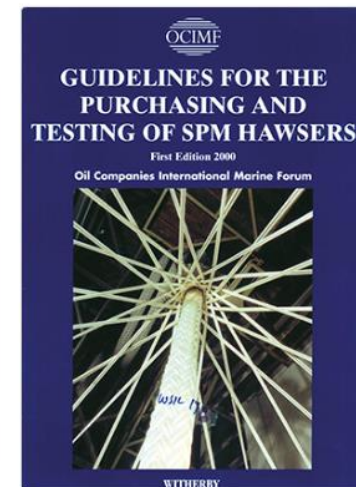
Anchoring Systems and Procedures

This publication highlights the design capabilities and limitations of anchoring systems and



Ship to Ship Transfer Guide for Petroleum, Chemicals and Liquefied Gases

This industry guide provides recommendations on STS



Guidelines for the Purchasing and Testing of SPM Hawfers

Provides detailed specifications and guidelines for specification, purchasing and testing of SPM

MEG 4 Website

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[➔ Leave Feedback](#)

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 [Related Publications](#)

 [Related Links](#)

 [Clarifications](#)

 [Gallery](#)

Related Links



IMO

The International Maritime Organization – is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.



EMSA

The European Maritime Safety Agency was established to ensure a high, uniform and effective level of maritime safety, maritime security, prevention of, and response to, pollution caused by ships as well as response to



MAIB

The MAIB investigates marine accidents involving UK vessels worldwide and all vessels in UK territorial waters.



IACS

Dedicated to safe ships and clean seas, IACS makes a unique contribution to maritime safety and regulation through technical support, compliance verification and research and development.

MEG 4 Website



Oil Companies International
Marine Forum

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MEG Information Videos

Click the link below to view some of the key differences within this revision of MEG and other videos of interest.

[View Videos](#)

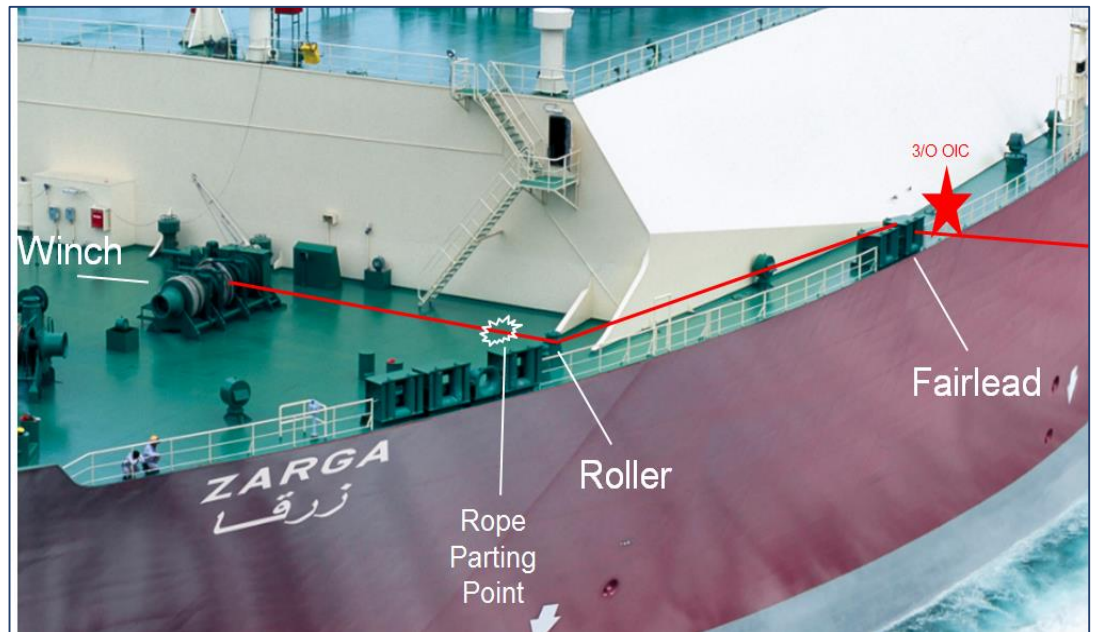
ZARGA Mooring Accident LESSONS LEARNED

Tony Wynne – Technical Adviser (Nautical)



ZARGA – Mooring accident

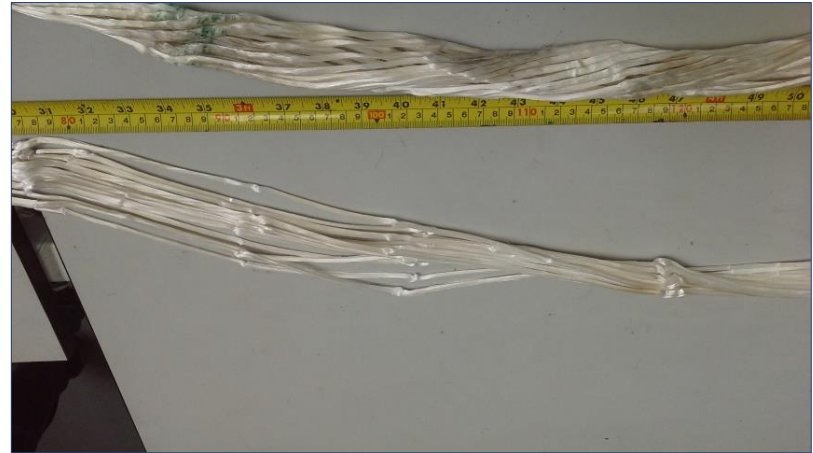
- Occurred on 2 March 2015 at Milford Haven
- An ultra-high modulus polyethylene (HMSF) fiber line fitted to a 22m polyethylene tail failed while being tensioned to warp the vessel along the berth



- The Third Officer was seriously injured when struck by the failed line
- Joint investigation by the United Kingdom (UK) and the Republic of the Marshall Islands (RMI)
- Report available on the Marine Accident Investigation Branch (MAIB) website

Failure of HMSF fibre mooring line

- Loss of strength over time due to kink bands created by axial compression
 - Minimum breaking load of the line was 137 tons, failed at 24 tons
- Service related causes of axial compression include: twisting of the line, bending around improperly sized deck fittings, and cyclic loading.
- Jacketed core prevented detection of damaged fibers
- Snap back underestimated



Incorrect size of deck fittings

- Manufacturer's guidance stated the ratio of the diameter of the deck fittings to the diameter of the mooring line (D/d) was critical
- Minimum recommended D/d of 12:1 for lines on board ZARGA
 - Pedestal roller $D/d = 10.22$
 - Roller fairlead $D/d = 9.1$
- Factors related to mooring lines not taken into account when fittings were selected by the builder

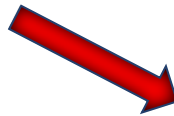


Snap Back – destructive testing

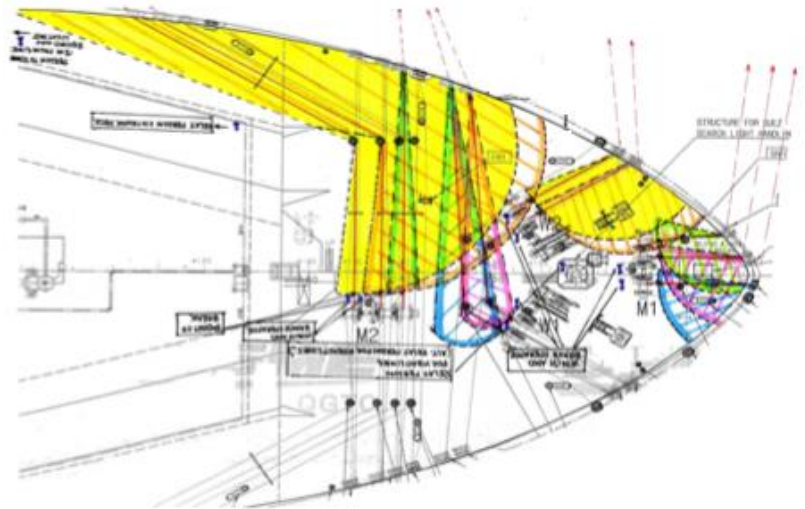


Snap Back Zone diagrams revision

Original



Revised





Some of the lessons learned

- The potential for snap back due to the use of polyethylene tails was underestimated
- The arrangement of the mooring deck meant that the entire foredeck area and portions of the main deck adjacent to the cargo dome were a snap back zone
- The line manufacturer's guidance regarding minimum D/d ratio was not taken into account during the selection of deck fittings during new construction
- The potential for significant reductions in line strength due to axial compression was recognized by the line manufacturer
- The jacketed core construction rendered ship management's line inspection procedures ineffective



Co-ordination with Industry

- Throughout the marine safety investigation, there was good coordination between the investigating States, ship management, the line manufacturer, and the OCIMF
- This coordination has crossed over to participation in the ongoing work being done at the International Maritime Organization (IMO) related to mooring deck issues
- Focus has included:
 - Addressing seafarer safety when designing the layout of mooring decks
 - Ensuring mooring lines are considered, starting with the design phase, as part of a vessel's mooring system

Mooring Equipment Guidelines (MEG) and the International Maritime Organisation (IMO)

Rob Drysdale – Director



Mooring Equipment Guidelines (MEG4)

Key Messages

1. Snap-back

- Complex
- No safe area

2. Fit-for-purpose ropes

- HMSF vs others
- Purchasing
- Monitor usage

3. Human Factors (HCD)

- Design
- Operations & Maintenance

Equipment, ropes, tails and layout should be designed, operated and maintained as an integrated mooring system

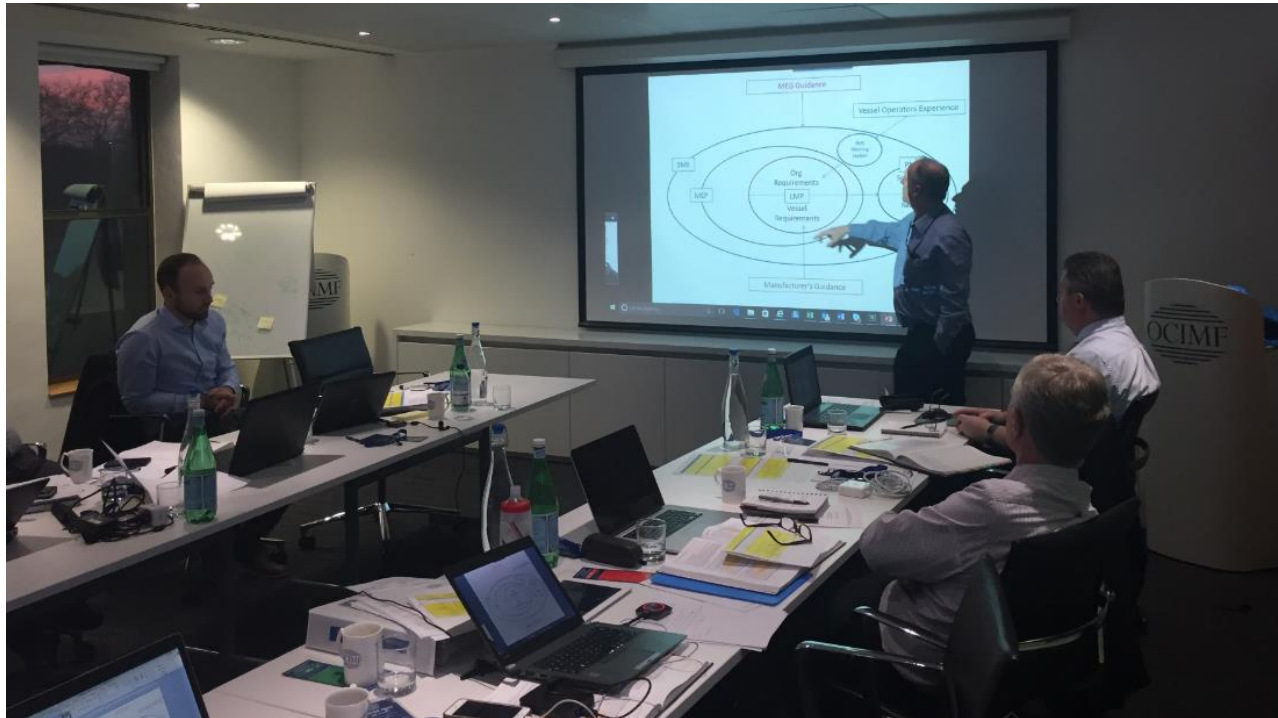


How can MEG aid the IMO?

Industry Team work:

Engagement with MAIB IACS Ship Owners / Operators

Ports and Terminals Mooring Line Manufacturers



Making a Regulation

IMO Goal Based Standards



<http://www.imo.org/en/OurWork/safety/safetytopics/pages/goal-basedstandards.aspx>

Current SOLAS

Regulation 3-8

Towing and mooring equipment

- 1 This regulation applies to ships constructed on or after 1 January 2007, but does not apply to emergency towing arrangements provided in accordance with regulation 3-4.
- 2 Ships shall be provided with arrangements, equipment and fittings of sufficient safe working load to enable the safe conduct of all towing and mooring operations associated with the normal operation of the ship.
- 3 Arrangements, equipment and fittings provided in accordance with paragraph 2 shall meet the appropriate requirements of the Administration or an organization recognized by the Administration under regulation 1/6.[†]
- 4 Each fitting or item of equipment provided under this regulation shall be clearly marked with any restrictions associated with its safe operation, taking into account the strength of its attachment to the ship's structure.

Known Mooring Incidents

IMO:

MSC 95/19/13 – Japan had more than 90 accidents in five years with two fatalities.

SDC 4/INF.3 – ICHCA International Ltd. (ICHCA), 42 incidents, 25 line failures, 20+ loss of life; over 22 years



Known Mooring Incidents



MAIB:

Between 2007 and 2016:

- **37 mooring line failures or snapbacks resulting in three fatalities and 23 injuries.**

EMSA:

Between 2007 and 2016:

- **213 incidents with recorded ship operations that include "berthing". These resulted in 4 fatalities and 96 injuries.**

Source: MAIB January 2018

SDC5 Draft SOLAS

DRAFT AMENDMENTS TO SOLAS REGULATION II-1/3-8

The existing regulation 3-8 is replaced with the following:

"Towing and mooring equipment

7 For ships of 3,000 gross tonnage and above the design of the mooring arrangement and the selection of appropriate mooring equipment including lines shall be based on guidelines developed by the Organization^{**}, applying a human-centred design approach.

8 Ships of less than 3,000 gross tonnage shall comply with the requirement in paragraph 7 above as far as reasonably practicable, or with applicable national standards of the Administration which provide an equivalent level of safety.

9 For all ships, mooring equipment including lines shall be inspected and maintained in suitable condition for their intended purposes^{***}.



Draft IMO Guidelines

I. Guidelines for Mooring Design – *NEW*

***GUIDELINES ON THE DESIGN OF MOORING
ARRANGEMENTS AND THE SELECTION OF APPROPRIATE
MOORING EQUIPMENT AND FITTINGS FOR SAFE MOORING***

II. Guidelines for Selection, Inspection, and Retirement of Lines – *NEW*

***GUIDELINES FOR INSPECTION AND MAINTENANCE OF
MOORING EQUIPMENT INCLUDING LINES***

Draft Mooring Design Guidance

4 Functional objectives

In order to achieve the goals for the correct equipment selection and mooring arrangement design safety objectives set out in paragraph [...], the following functional objectives should be applied. Ships shall be provided with mooring equipment and fittings, according to ship types:

- .1 designed with systems to provide mooring personnel with the loads on the mooring lines during mooring operations and while the ship is moored to verify that the limitations of the lines are not exceeded;
- .2 arranged to minimize obstructed access to and operation of the mooring equipment;
- .3 arranged to minimize obstructed access to working space, and minimize obstructed view of the mooring area;
- .4 arranged to minimize the need for complex mooring line configurations during the normal operation of the ship;
- .5 selected and arranged to minimize the need for manual handling of mooring lines under load; and
- .6 selected and arranged to minimize the exposure of personnel involved in mooring operations to the dynamic loads of mooring lines.

Knowing the Limits



IMO & OCIMF

SDC 6
2019

MSC 101
2019

SOLAS
[2024]?



**Ship Inspection Report (SIRE)
Programme**

It's a Journey...

Safe Mooring

IMO

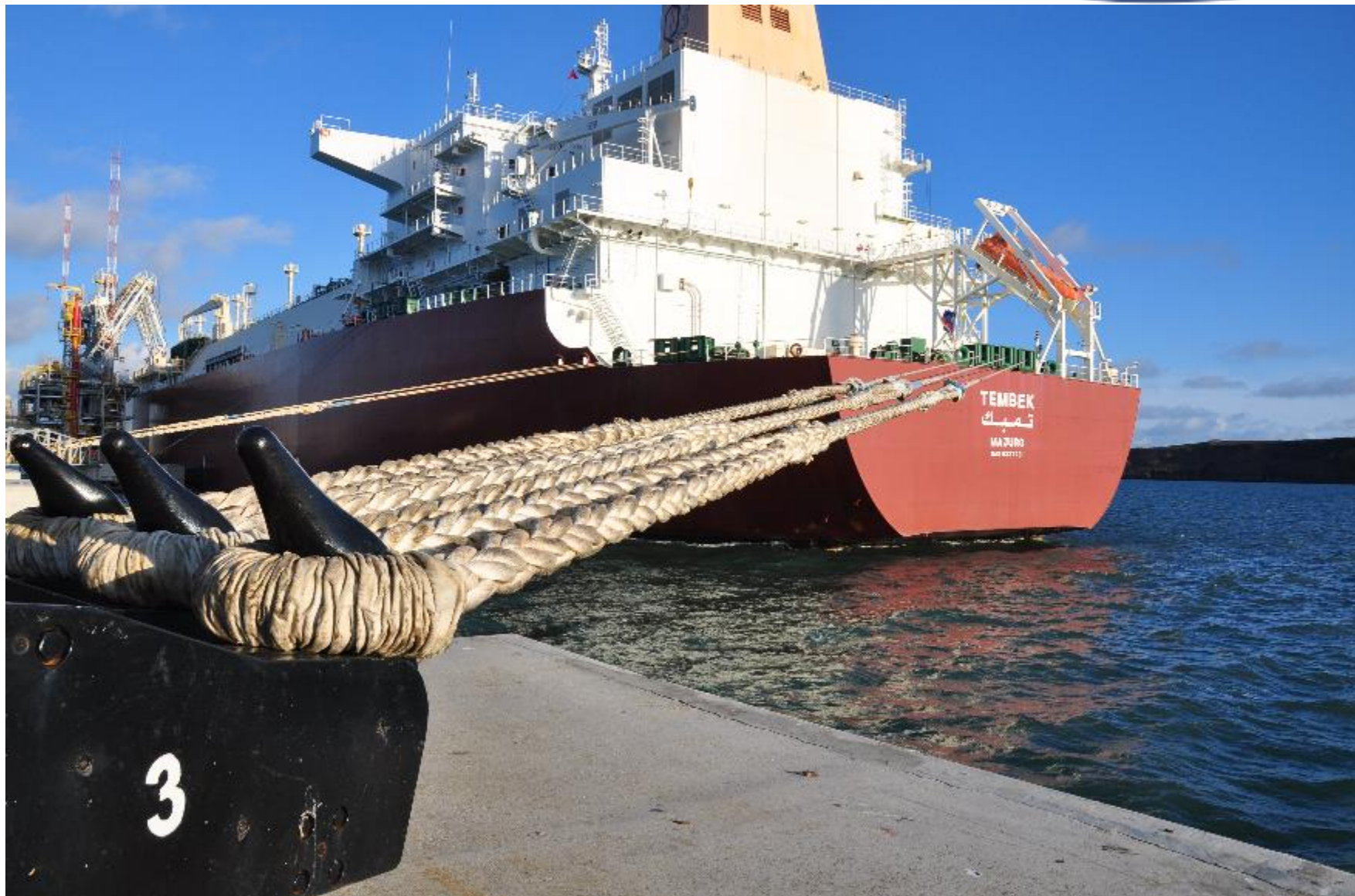
- DRAFT Language**
1. Lines in SOLAS
 2. HCD
 3. Line tension monitoring

MEG

1. Snap-back is complex
2. Fit for purpose lines
3. Human Factors (HCD)

You

- What are key items to send your crew home safely?**
1. Line Tension Monitoring?
 2. HCD Mooring?
 3. Condition Monitor Lines?





Questions ?



Coffee



OCIMF

A Voice for Safety

OCIMF Programmes

Tony Wynne – Technical Adviser (Nautical)



2017 SIRE Programme and Performance



Vessel Inspection Questioner 7

- **A updated VIQ is in development to help focus the inspection programme, expected to be released in Q3 2018**
- **The report structure is expected to change from 13 chapters to 12 chapters.**
 - Old Chapter 10 Communications is now combined with New Chapter 4 Navigations and Communications
 - Old Chapter 7 Structural Condition is renamed Chapter 7 Maritime Security
- **New questions relating to industry developments are to be expected concerning, Ballast Water Management, Cyber Security, LNG bunkering, Mooring, etc.**
- **A reduction of about 75 questions can be anticipated with the removal of some repetitive questions and the addition of more focused questions and guidance principally in chapters:**
 - 5 Safety Management
 - 6 Pollution Prevention
 - 8 Cargo and Ballast Systems
 - Chapter 9 will change to comply with new guidance developed from the re-issue of our MEG publication.
- **The Officer's Matrix is again in the process of being aligned with other industry participants for the sake of good order**



Audited Inspections

- **The Audited Inspection process was changed in September 2016**
- **Every Audited Inspection will result in a SIRE report being produced.**
- **In the event of an inspector failing an Audited Inspection, the Auditing Inspector will take over responsibilities to complete and submit the report on behalf of the OCIMF Member that commissioned the inspection.**
- **OCIMF is hopeful that that this new process will relieve the concerns held by some of the vessel operators and encourage them to facilitate Audited Inspections on their vessels. Thereby expediting the process of inspector performance evaluation and the learning process that it encompasses.**



Data Mining and Webservices

- **OCIMF members have been able to use the Data Mining function within the SIRE database for about 4 years.**
- **This tool has proven useful and in 2017 Datamining was extended to Technical Vessel Operators to allow them to compare their fleet performance against the entire SIRE database.**
- **The function has also been extended to provide the ability to compare vessel owner associations to the SIRE database, if those members and the vessel owner associations have registered.**
 - Currently only INTERTANKO has registered
- **Also in 2017 Webservices have been extended to Technical Vessel Operators allowing them to take their reports in data format rather than as a PDF document.**

SIRE Programme Participants

The table below shows a comparison of the numbers and types of the participants registered in the SIRE Programme in 2017 and 2016:

OCIMF Membership	2016	2017
Member Companies, all programmes	106	109
SIRE Programme Participants	2016	2017
SIRE Submitting Members	90	92
SIRE Recipient Members (including PSC)	279	316
SIRE Technical Vessel Operators	2003	2253
Accredited SIRE Inspectors		
Category 1	504	501
Category 2	2	2
Category 3	124	121

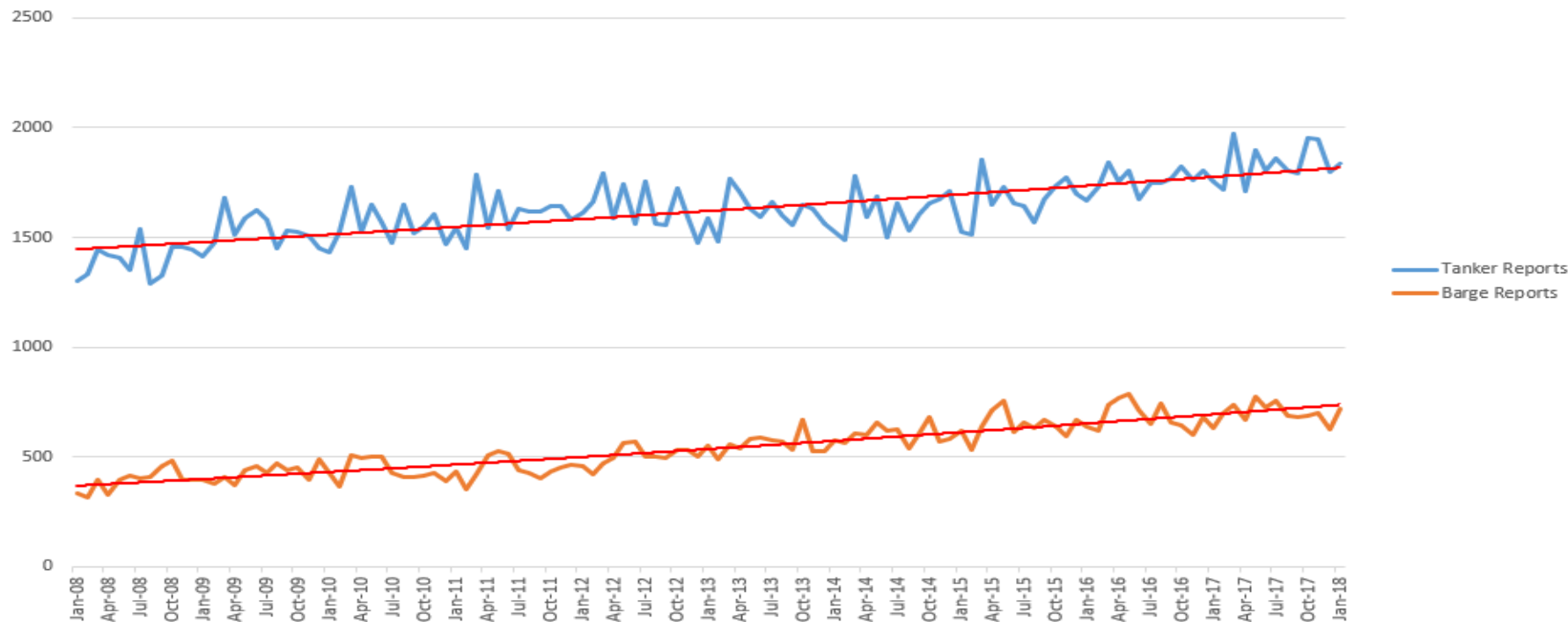
SIRE Programme key Statistics



SIRE Programme Key Statistics	2016		2017	
	Tanker	Barge	Tanker	Barge
Distinct vessels inspected in 12 months	8,604	6,735	8,904	6,792
VPQs/BPQs downloads	125,847	31,131	169,482	64,483
Inspection reports published	21,101	8,215	21,966	8,375
Ratio of inspection reports to vessels	2.45	1.22	2.47	1.23
Inspection report downloads by OCIMF Members	121,249	22,233	135,480	28,841
Inspection report downloads Recipient Members	30,383	1,818	33,165	3,367
PSC Inspection report downloads	1,018	7	798	5
TOTAL Inspection report downloads :	141,441	24,045	158,046	32,119
Combined total of ALL report downloads	165,486		190,165	

SIRE Report Submissions

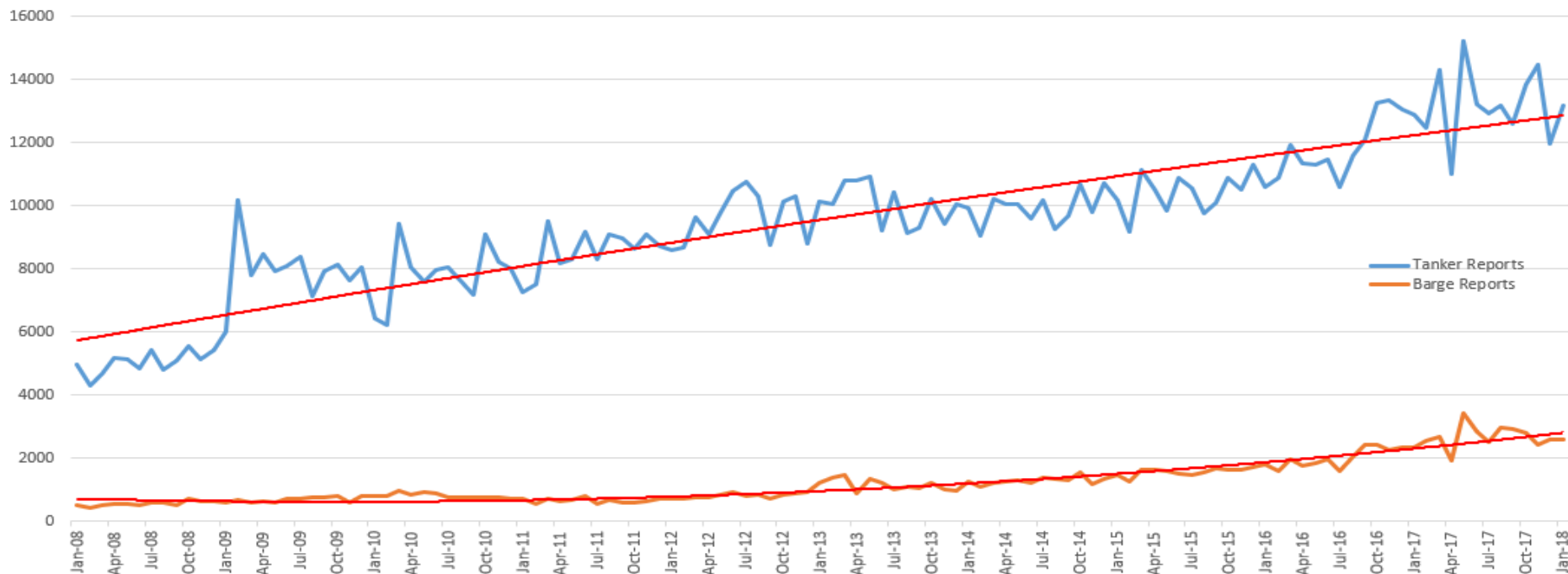
**Number of SIRE Tanker and Barge Reports Submitted Per Month
Jan 2008 to Jan 2018**



	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average Annual Increase
Tanker Reports	18505	18253	19195	19662	19511	19437	20022	21108	22010	+2.38%
Barge Reports	4993	5241	5278	5961	6762	7241	7751	8244	8375	+6.88%

SIRE Reports Downloads

**Number of SIRE Tanker and Barge Reports Downloaded Per Month
Jan 2008 to Jan 2018**



	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average annual increase
Tanker Reports	89822	92577	105775	117726	124780	120578	125837	142884	158046	+6.61%
Barge Reports	8068	10318	8091	10057	14813	16204	18853	24136	32119	+19.86%

Global Inland and Coastal Barging Focus Group



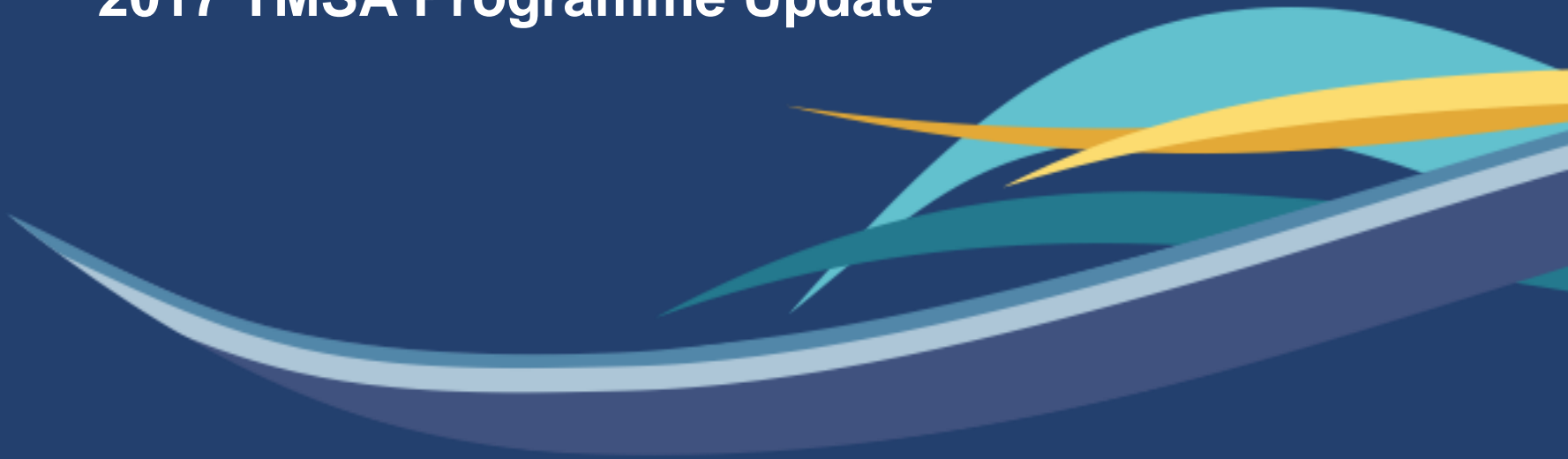
- **OCIMF members are now placing greater emphasis on barge safety.**
- **The current Terms Of Reference for the regional workgroups have been observed by members to be too narrow by only covering the SIRE system as it applies to barges.**
- **A new Global Inland and Coastal Barging Focus Group has been created within OCIMF to more closely focus on overall barge safety issues.**
- **In the coming future the existing regional group Terms Of Reference will be expanded to cover safety issues.**
- **OCIMF will add a Barging Technical Advisor to the Secretariat staff to attend all regional barge groups and help coordinate industry best practice.**

Regional Barge Groups



- **Currently there are three regional barge groups that will be coordinated by the Barge Technical Advisor:**
 - **North America**
 - **South and Central America**
 - **Europe**
- **There are currently 4 different BIQs and BPQs**
 - **The three listed above plus an International variant.**
 - **Further variants may be developed to support member needs.**
- **An internal OCIMF Barge strategy is being developed for areas East of the Arabian Gulf. This may result in more regional groups being established to enhance industry safety in other regions.**

2017 TMSA Programme Update



OCIMF TMSA publications.



The International Safety Management (ISM) code came into effect 1st July 1998 and it stated that:

“A fundamental principle of the ISM Code is that each ship operator is individual and that their SMS should be developed to fit their individual organisation.”

OCIMF introduced Tanker Management and Self Assessment to aid the industry in meeting this expectation and has redeveloped the publication to continue the drive for operational safety.

TMSA – First edition published 2004

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

TMSA2 – Second Edition published 2008

To update and build on operators experience and feedback from the industry.

Expanded to include tank barge operators coastal and inland barges.

Tanker Management and Self Assessment

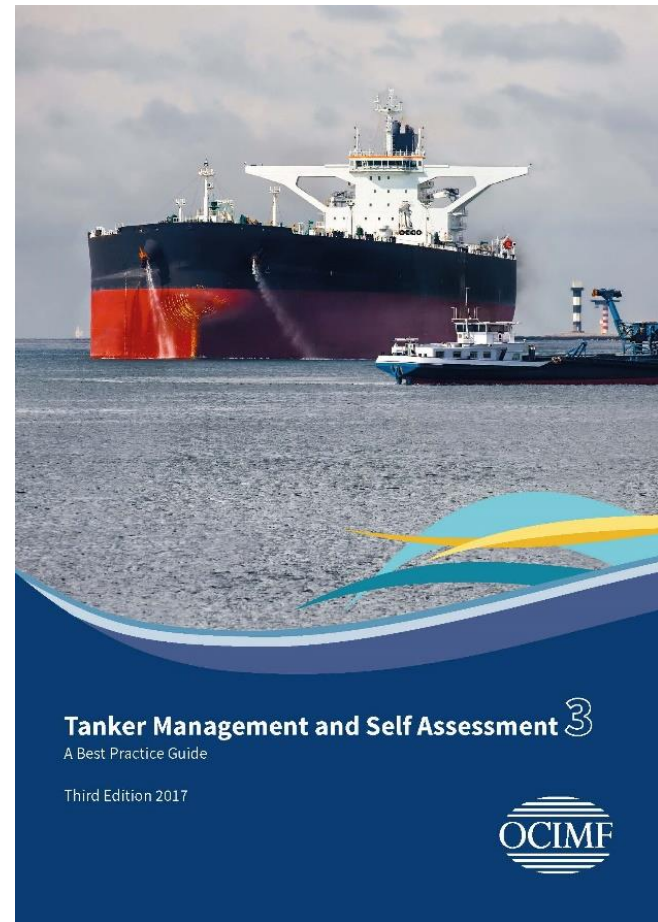
TMSA3 – Third edition published 10th April 2017

This update was made to improve the consistency and clarity of earlier question sets. It also sought to make the self assessment easier to carry out and promote continuous improvement.

- Reflects **changes in legislation and best practice** –
- Seeks to encourage a more **unified interpretation** of the KPIs by providing expanded best practice guidance to complement the new established KPIs.
- Improves the universal application of TMSA to all vessel and company types. TMSA3 can be applied across the industry from small barge companies to the largest tanker fleets.

Continuous improvement

- **an integral requirement of TMSA.**



TMSA 3 - Key changes

- Expanded best practice guidance to complement the established KPIs.
- Removed ambiguity and duplication of some questions.
- Streamlined and merged assessment elements to improve consistency and make conducting the self assessment easier.
- Expanded content was added in Element 6 and 6A for:
 - Cargo,
 - Ballast,
 - Tank Cleaning,
 - Bunkering
 - Mooring and Anchoring Operations
- Added Element 13 – Maritime Security. (NEW)
- Updated for New industry legislative requirements



The TMSA programme will continue to evolve with time.

New KPIs may be added and best practice guidance updated in future editions.

TMSA Statistics

TMSA3 Migration: From 9th April 2018 all TMSA reports created or published within SIRE must be in the TMSA3 format.

898 out of the 1040 (86.35%) Vessel Operators subscribed to TMSA in 2017 or 2018 have either a Published a TMSA3 report or are in the process of preparing a TMSA3 for publication.

Published reports as of Q1 2018:

- Operators with a published TMSA3: **728** (70% of registered operators)
- Operators with a published TMSA2: **221** (21.25% of registered operators), **112** of which have a TMSA3 in draft
- Operators with no published TMSA report: **91** (8.75% of registered operators), **58** of which have a TMSA3 in draft

TMSA Key Statistics	2016	2017
TMSA published (2 or 3)	2,085	1,895
TMSA downloaded	37,228	38,223

2017 OVID / OVMSA Programme Performance



OVID Programme



- The Offshore Vessel Inspection Database (OVID) was created in response to a request from OCIMF members to provide a database of offshore vessel inspections broadly following the SIRE format.
- In 2010 OCIMF initiated the OVID programme to provide a robust web-based inspection tool and report database mirroring the SIRE programme.
- The OVID inspection protocol allows offshore projects and marine assurance teams to assess the safety and environmental performance of vessels and operators in a uniform and effective manner.
- Inspections covering the classed and operational capabilities of vessels are carried out by OCIMF accredited inspectors on behalf of the commissioning OCIMF member companies.

OVID Programme Recipients

- **OVID Programme Recipient status was created in January 2017 as an effort to streamline the industry's offshore vessel safety inspections**
- **Eligibility is extended to companies that charter offshore vessels in support of their operations or have offshore vessels operating at their facilities. Such companies eligibility is evaluated based on their shared concerns for marine safety and pollution prevention being aligned to OCIMF's mission**
- **Some of these Programme Recipients may not be involved in the hydrocarbon industry and may or may not be DoC holders of an offshore vessel**
- **All of these Programme Recipients have a need for marine assurance but were unable to utilize the OVID programme under previous programme guidance**
- **These Programme Recipients are required to obtain approval from a Technical Vessel Operator through the OVID system, prior to receiving access to any vessel's OVID Report**

OVID Programme Recipients



Some types of eligible companies are:

- **Oil companies that are not currently OCIMF members.**
- **Offshore project management, engineering, procurement 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 in vessel / units / equipment to provide services to OCIMF members.**
- **Government agencies.**



OVID Vessel Inspection Request platform

- **OCIMF members operating in the offshore industry segment sought a more efficient way for vessel operators to request an OVID inspection.**
- **In January 2017 an OVIR portal was created as part of the OVID programme. From this portal Technical Vessel Operator's may submit a request for an inspection of their vessel / equipment into a secure website. This request can be viewed by all OCIMF members participating in OVID who may chose to commission an inspection.**
- **The goal is for vessel operators to begin tracking the status of their vessel's OVID and self request an annual OVID inspection to be available for all member and recipient companies in a routine manner.**
- **In turn, this readily available safety inspection will help reduce the time spent evaluating offshore vessels before proceeding to the internal on-hire processes of OCIMF OVID Members and OVID Programme Recipients.**

OVID Programme Participants



The table below shows a comparison of the numbers and types of the participants registered in the OVID Programme in 2017 and 2016:

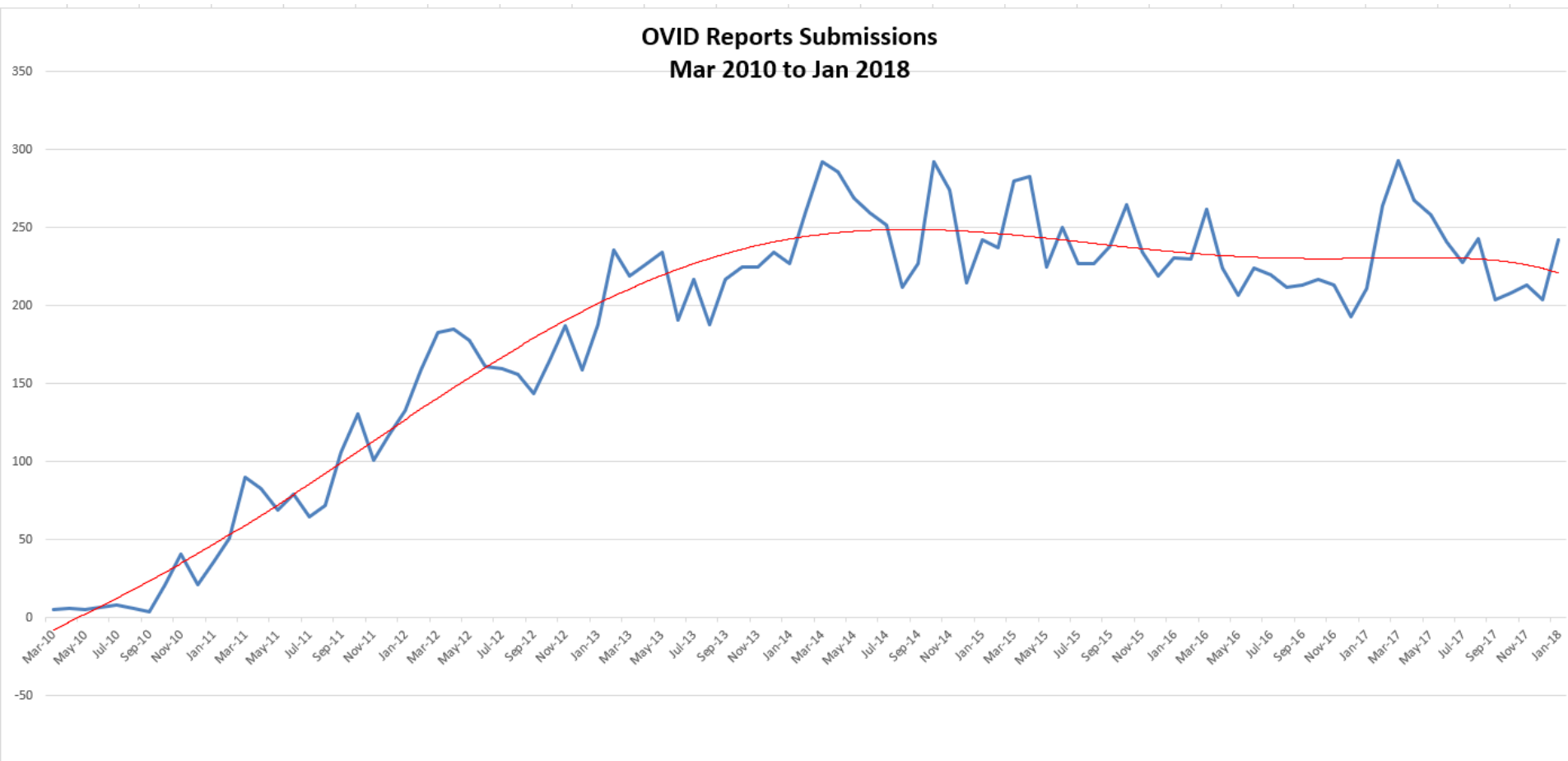
OCIMF Membership	2016	2017
Member Companies, all programmes	106	109
OVID Programme Participants	2016	2017
OVID Submitting Members	57	63
OVID Recipient Members (including PSC)	0	30
OVID Technical Vessel Operators	1643	1834
Accredited OVID Inspectors	492	508

OVID Programme key Statistics



OVID Programme Key Statistics	2016	2017
Distinct vessels inspected in 12 months	2,557	2,736
VPQs/BPQs downloads	13,501	34,200
Inspection reports published	2,644	2,820
Ratio of inspection reports to vessels	1.03	1.03
OCIMF Members Inspection report downloads by	1,364	1,494
Recipient Members Inspection report downloads * Became available in 2017	0*	12
PSC Inspection report downloads		
TOTAL Inspection report downloads :	1,364	1,506

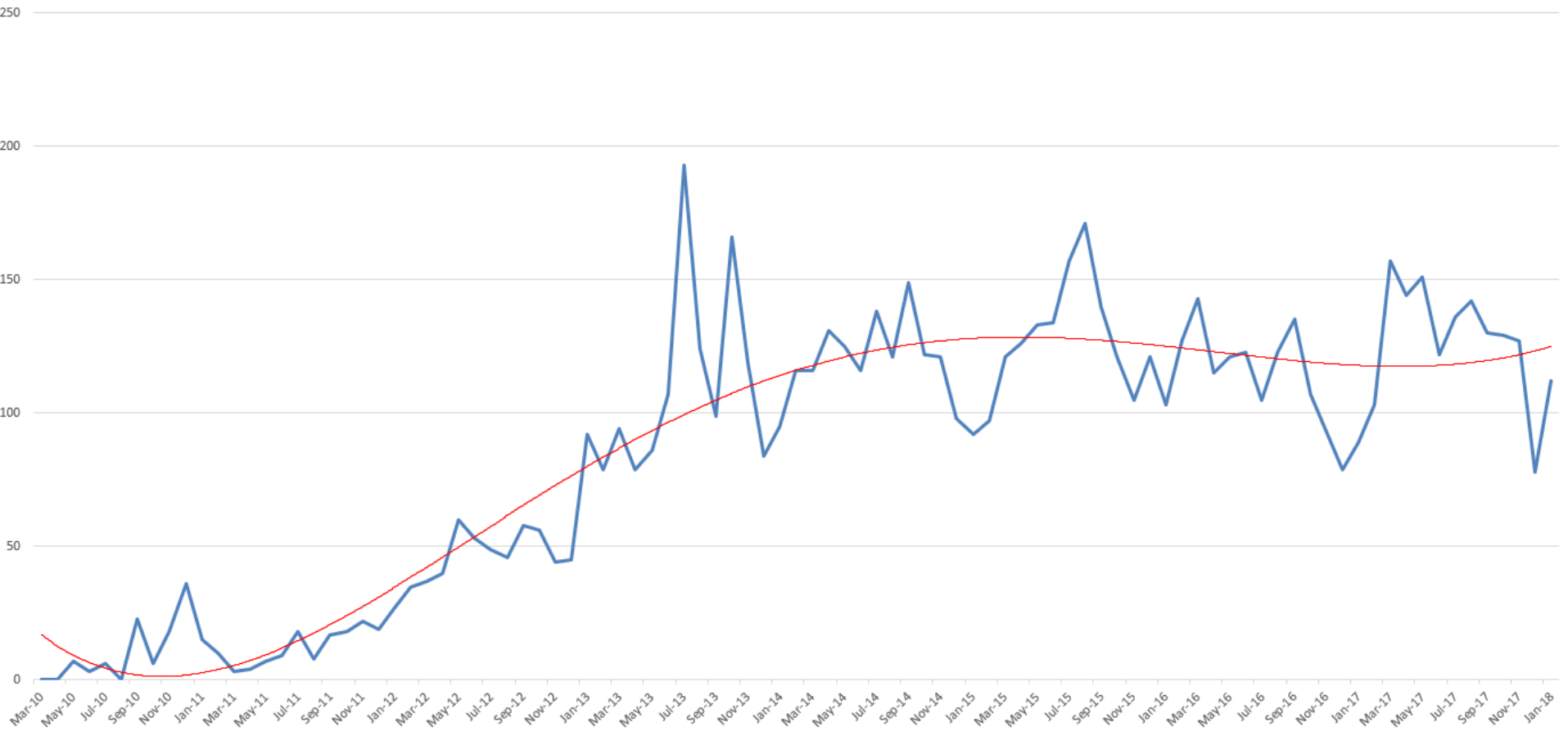
OVID Report Submissions



	2011	2012	2013	2014	2015	2016	2017
Report Submissions	1001	1970	2600	3066	2927	2646	2835

OVID Report Downloads

OVID Reports Downloads
Mar 2010 to Jan 2018



	2011	2012	2013	2014	2015	2016	2017
Report Downloads	150	550	1322	1448	1518	1374	1508

2017 OVMSA Programme



Offshore Vessel Marine Self Assessment



- The OVMSA concept is based on the success of the TMSA methodology
- OVMSA helps Technical Vessel Operators prioritise the development and improvement of their own Safety Management System, while providing insight into industry performance indicators that may be used to drive an internal continuous improvement process.
- In addition to functioning as a tool for the operator, OCIMF member companies can use the OVMSA system to develop an overview of overall operator performance in conjunction with OVID inspections.
- Many OVIQ questions answered in the course of an OVID inspection were designed to be matched against OVMSA by the OCIMF member company Marine Assurance teams.

OVMSA Statistics

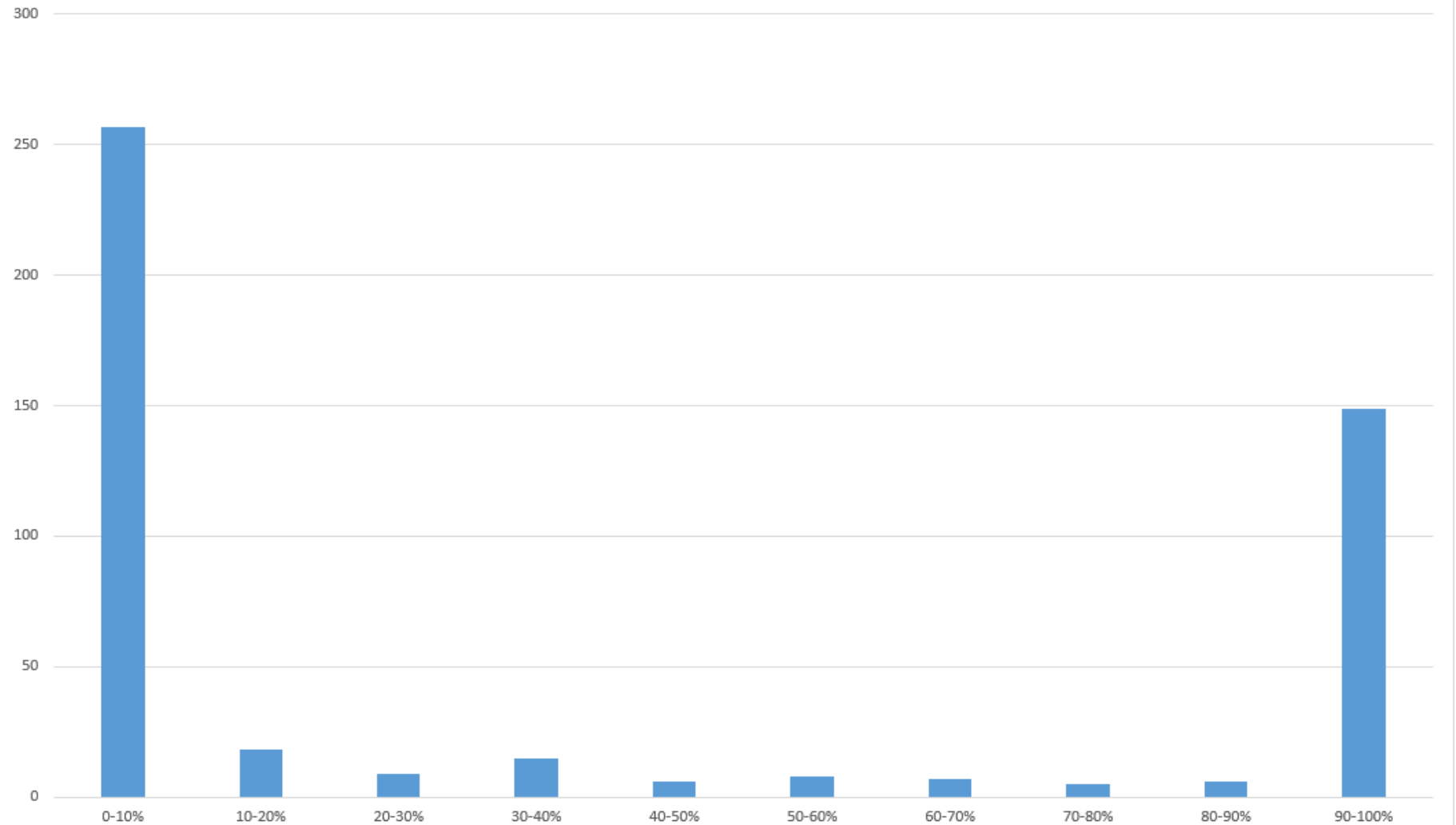
- **448** published OVMSAs are more than **1 year old**
- **327** published OVMSAs are more than **2 years old**
- **194** published OVMSAs are more than **3 years old**

1033 Operators using OVMSA (have a draft or published document) out of **1978** registered operators : **52.22%**

773 Operators with published OVMSAs: **39.08%**

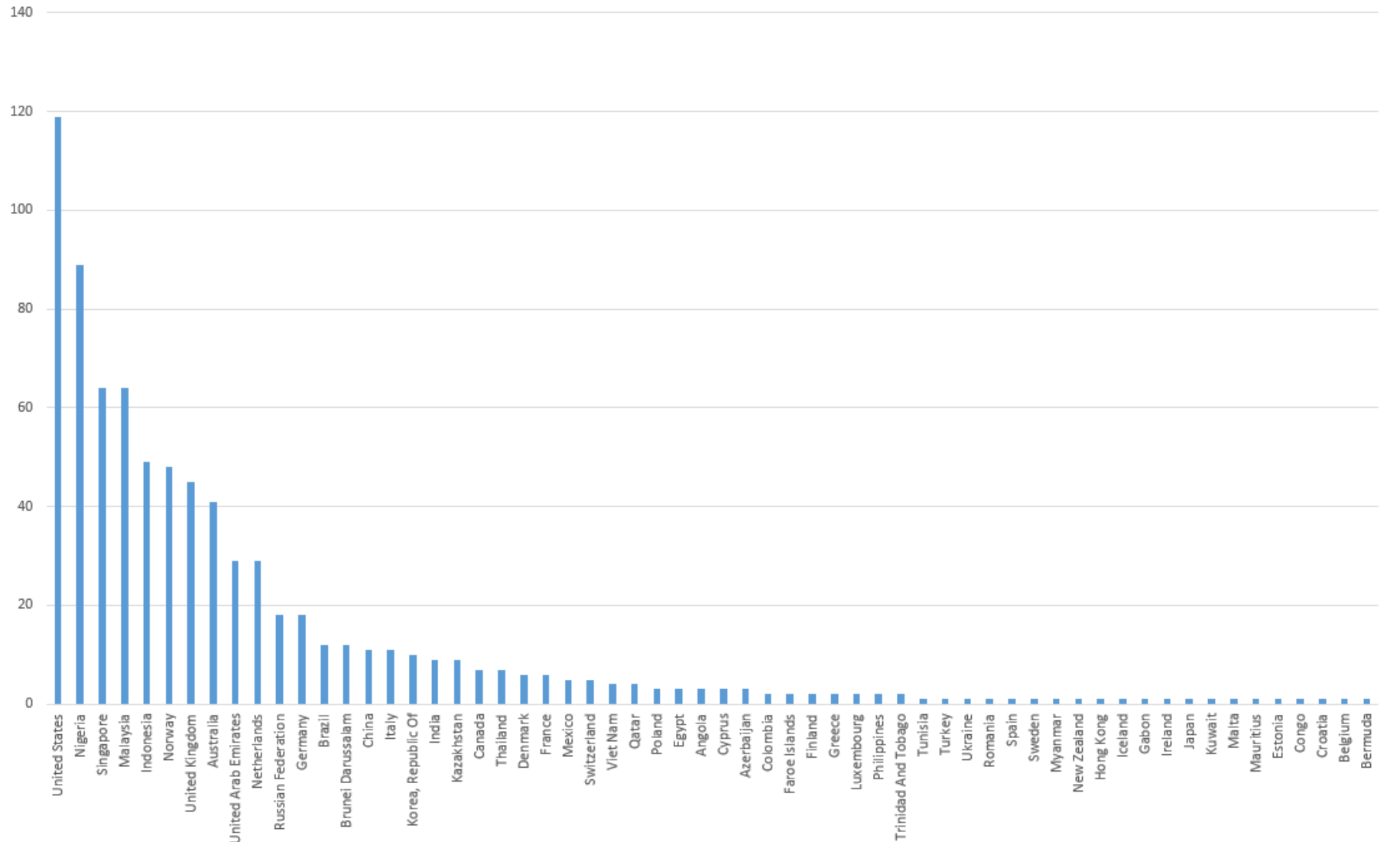
OVMSA

Completeness of OVMSAs In Progress



OVMSA

Published OVMSAs By Operator Country



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OCIMF

A Voice for Safety

Importance of vessel inspection and vetting

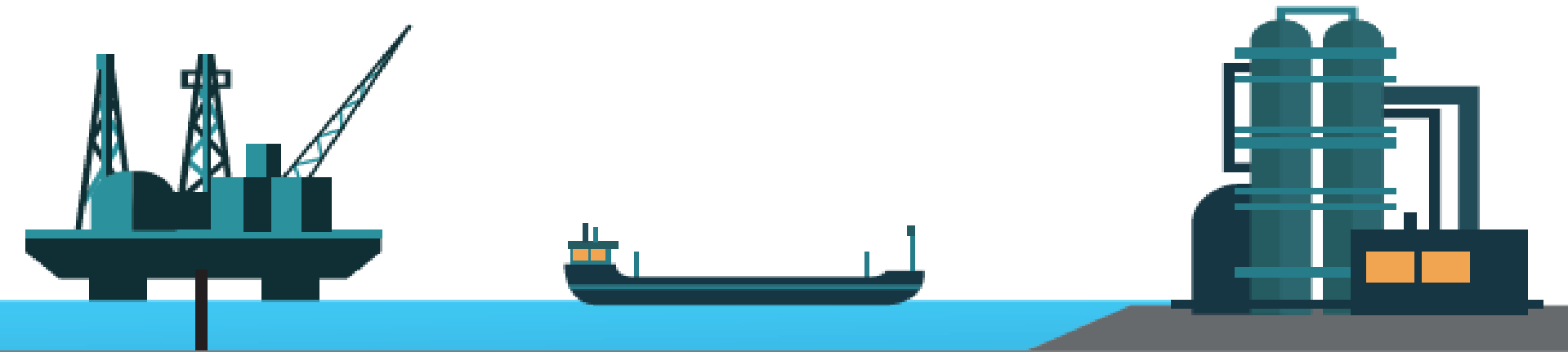
Akihito Otake - Idemitsu Tanker Co Ltd



@Asia Pacific Regional Marine Forum

Importance of Tanker Inspection and Vetting

14 June 2018



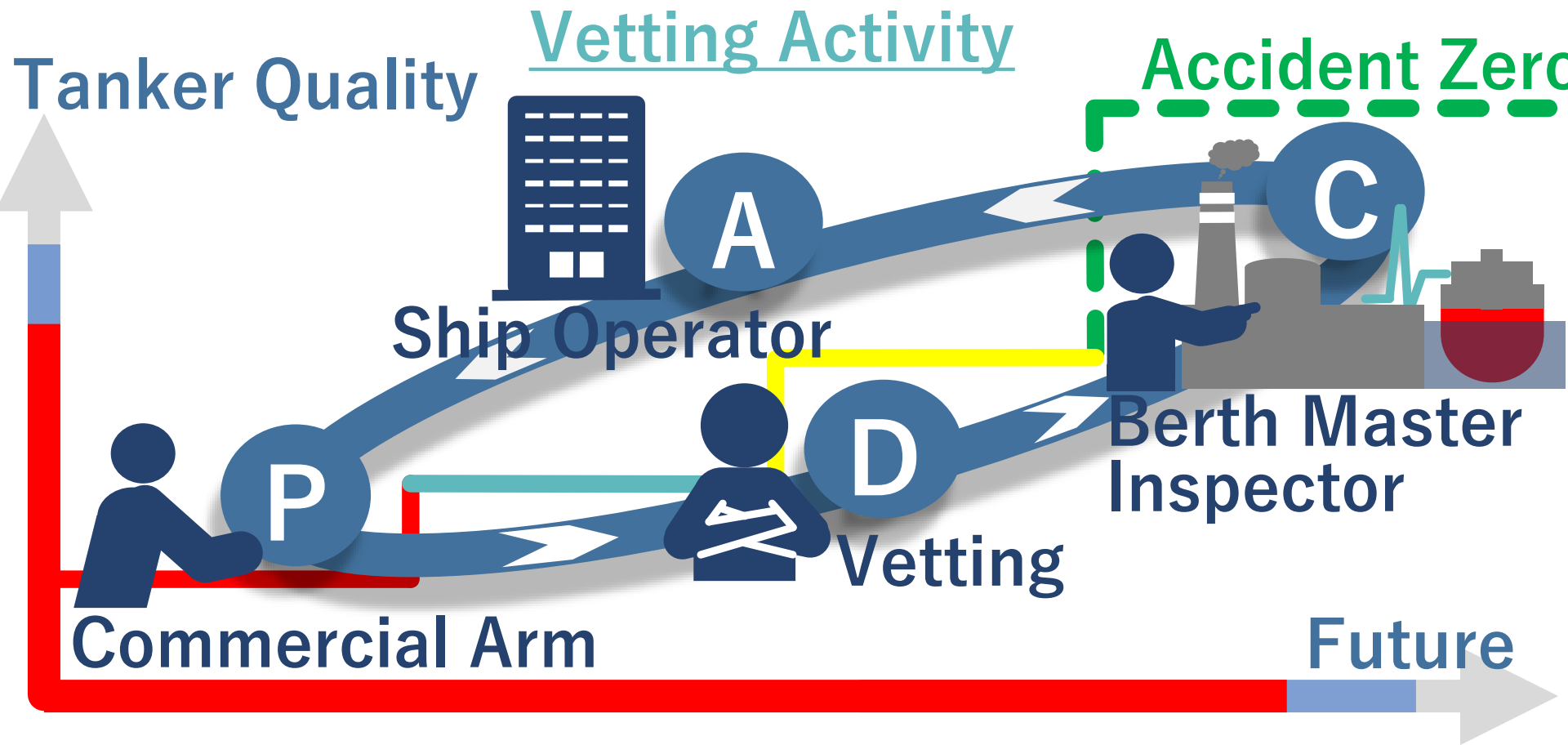
IDEMITSU TANKER CO.,LED.
Tanker Vetting and Inspection Service Office

1. Introduction-1

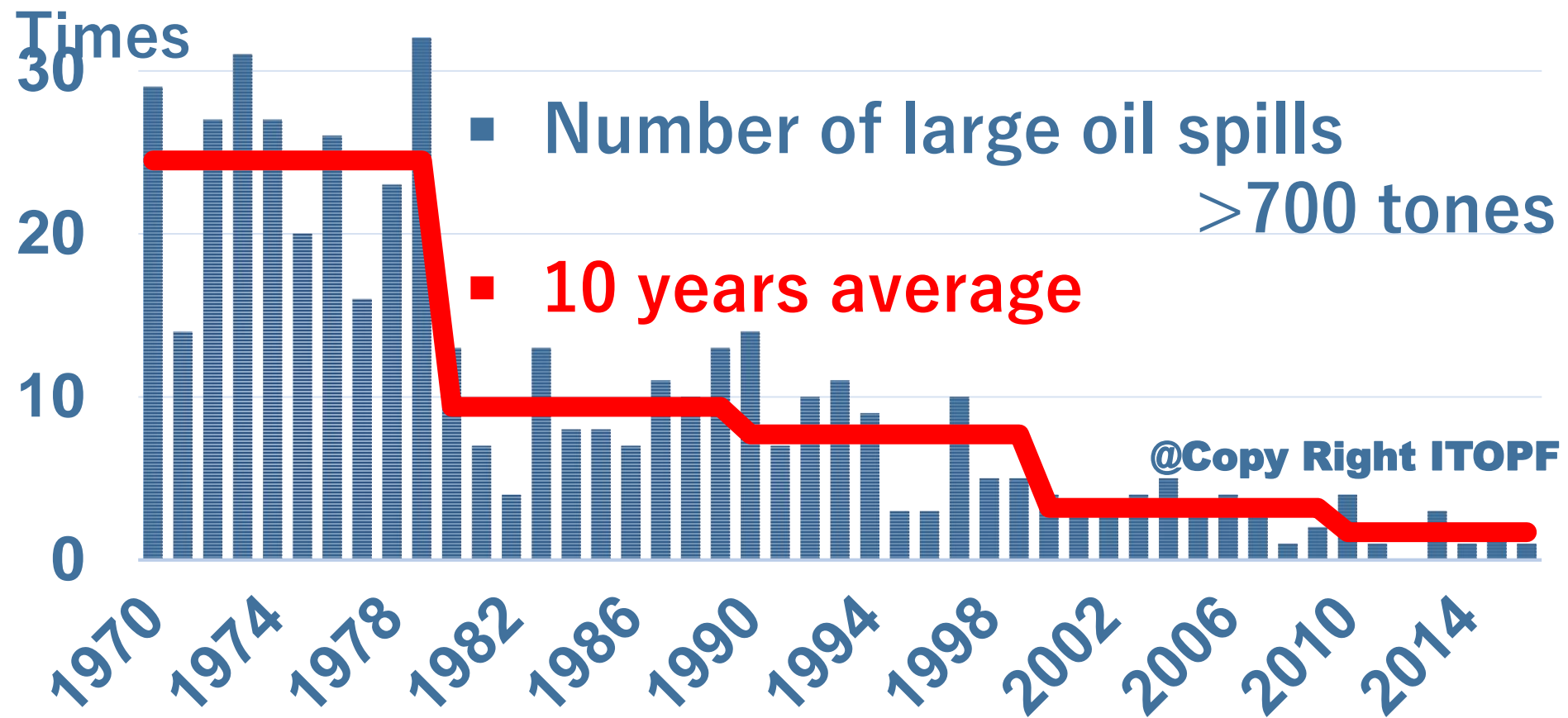
SIRE set in 1993



1. Introduction-2



2. Decrease of serious incidents



3. Voice of Commercial Arm - 1

Trader : “Cargo holder has nothing to do”

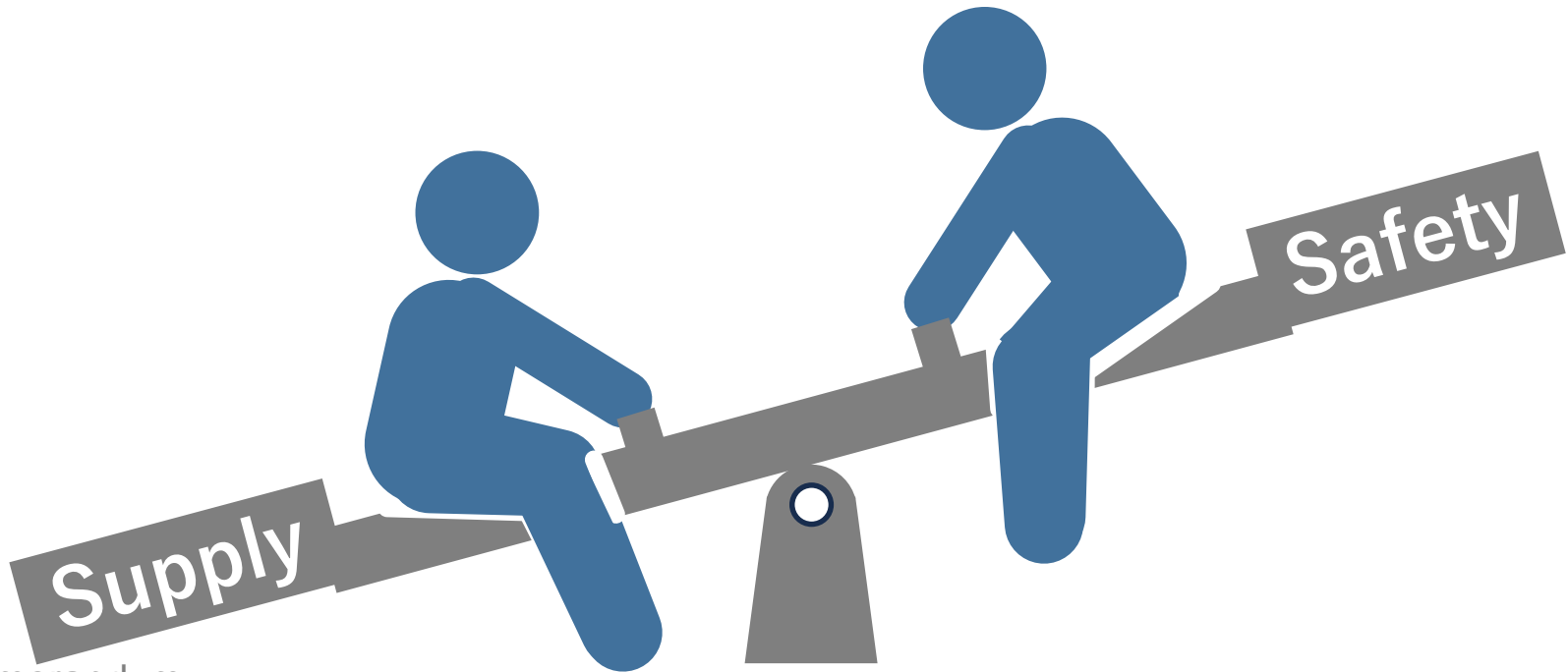


My memorandum

Not only ship owner is liable in safety

3. Voice of Commercial Arm - 2

Buyer : “Procurement is the 1st priority”



My memorandum

Supply security is to make balance with safety

3. Voice of Commercial Arm-3

Trader : “Can you omit or skip vetting?”

- voyage
- calling on a 3rd party terminal
 - got clearance by Oil Majors



My memorandum

Vetting is the 1st step to start business

3. Voice of Commercial Arm-4

Accountant : “Is vetting worth the cost?”

Safety



Cost?

My memorandum

Safety is most cost-effective

4. Vetting Activity Updates-1

Learning from the history

Safety Education Center in Airline Industry

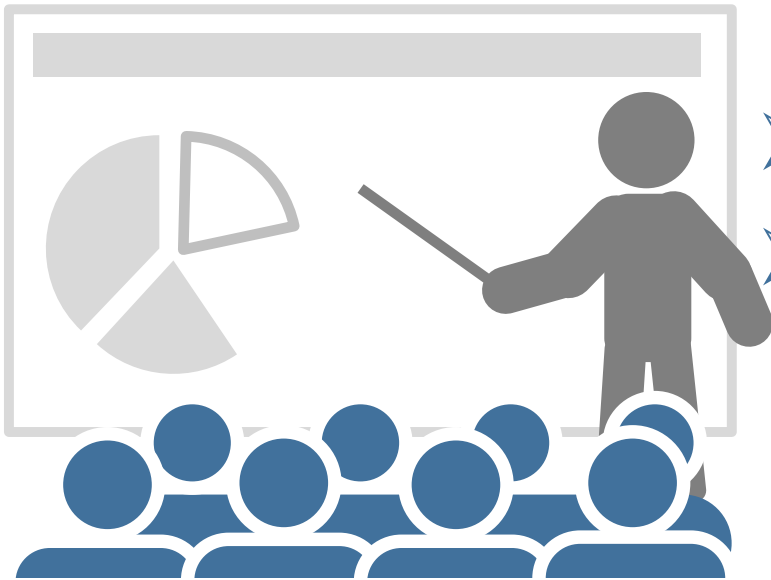


My memorandum

Highly recommended for everyone

4. Vetting Activity updates-2

In-house education



- Learning accident
- Significance of vetting

My memorandum

Changing mind : Safety is most cost-effective

5. Summary

5.1 Tanker Vetting is a system whereby oil companies evaluate, maintain and improve the quality of tankers, aiming at Zero accident (Best practice).

5.2 As a result of reflecting the major accident of the ship and taking countermeasures, major accidents of tankers have decreased.

5.3 However, the young generation does not know the big accident as a real experience.

5.4 It is important to make opportunities to learn from history and think deeply about the significance of Vetting.

5. Summary

END

➤ **Thank you for listening and patience**

The text "OCIMF" is centered and surrounded by decorative blue horizontal bars. There are four bars above the text and four bars below it, all with a slight 3D effect.

OCIMF

A Voice for Safety

Ship Operator views of Vetting and SIRE

Capt. Richard D'Souza - Teekay Marine (Singapore) Pte. Ltd.





TEEKAY

VETTING – OPERATOR'S PERSPECTIVE

OCIMF Regional Forum, Tokyo

Agenda

- Introduction to Teekay
- History in Vetting
- Leveraging the SIRE program
- SIRE – An opportunity
- Looking Ahead

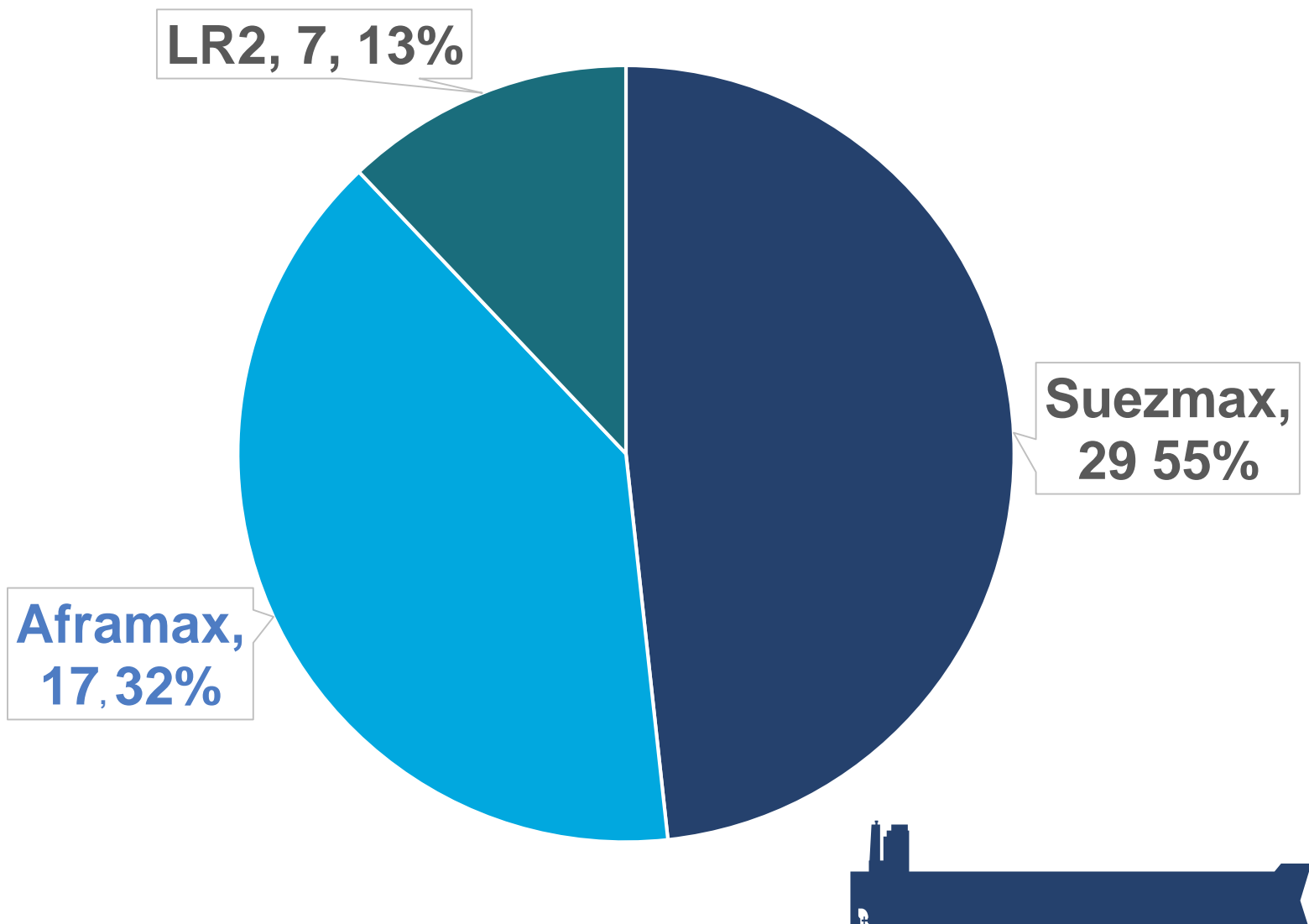




Teekay Marine Singapore



Teekay Tankers – Owned and Operated Fleet





THE WORLD'S LEADING TANKER BRAND

TOGETHER We will be the best

**Operate the
best ships
in the
industry**

Our Ships
are our Product

**Provide our
customers
with the best
service in the
market**

Customer is King

**Be our
investors'
best choice
in the sector**

Financial Strength

**Develop the best
opportunities to
grow and
diversify**

Opportunity
Development

Acting with an ownership mindset and live by our values

Safety &
Sustainability

Passion

Integrity

Reliability

Innovation

Teamwork

Global and Diverse Customer Network

- Customer relationships spanning 45 years based on our reputation for reliability and operational excellence
- Provides access to diverse cargo streams and agility to respond to changing market dynamics





Vetting - History

Vetting



To avoid this...

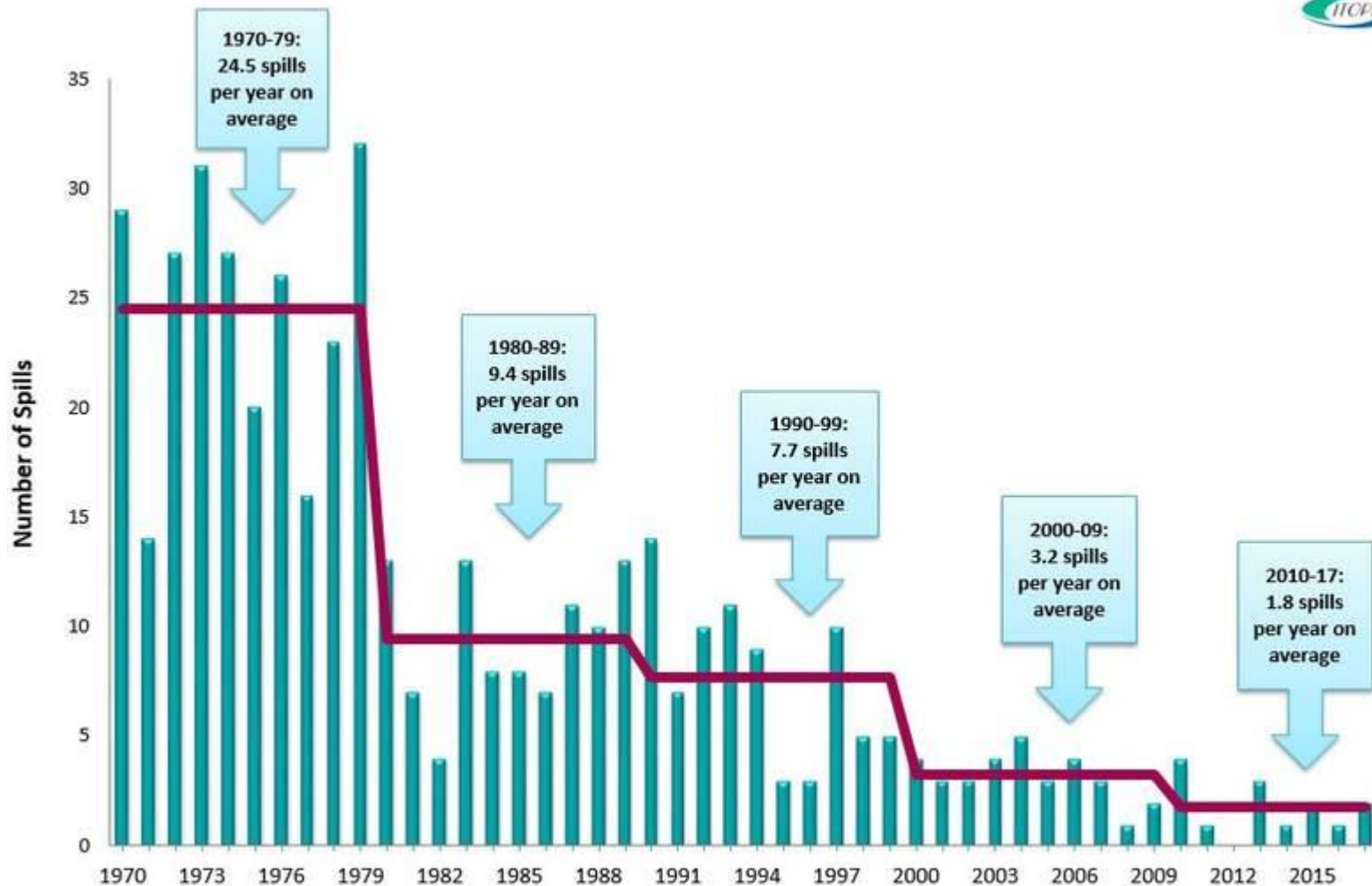


And to avoid this...

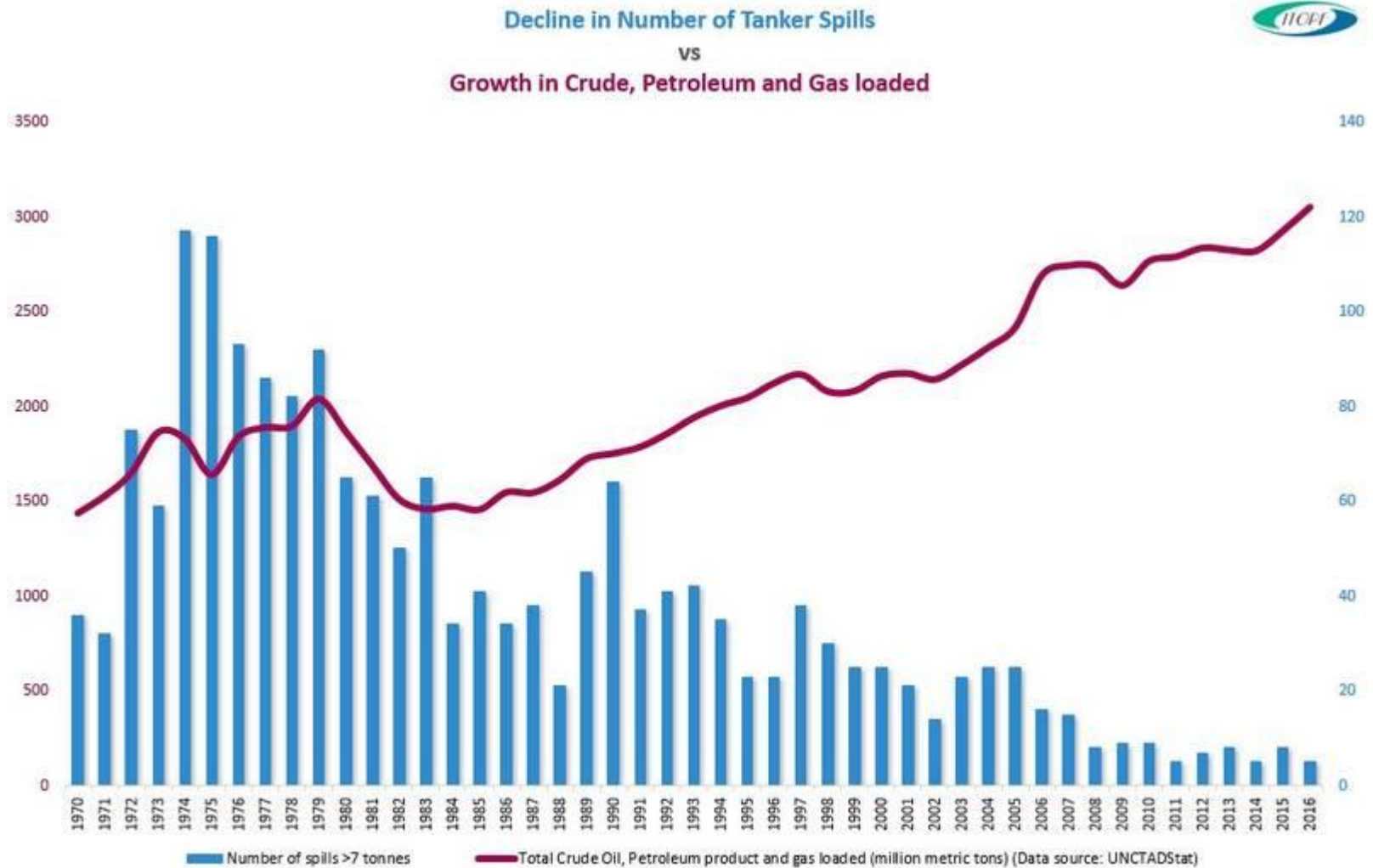


Is it working?

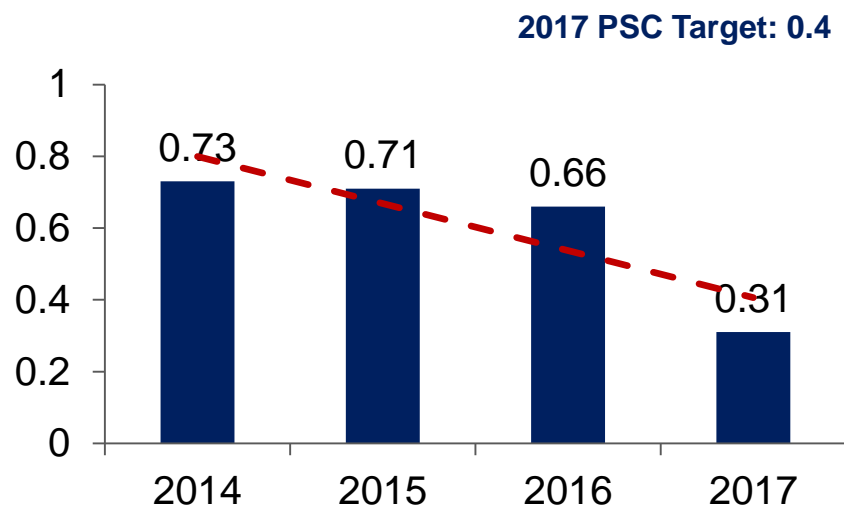
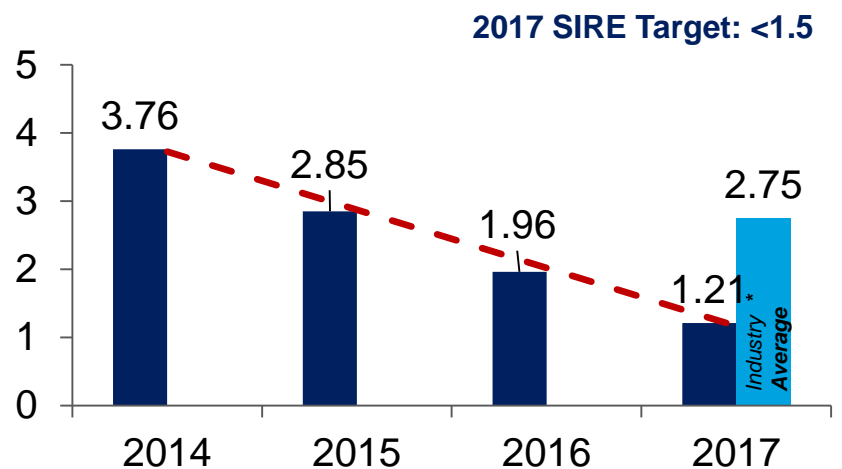
Oil Spills (>700 T) 1970-2017



Is it working?



TK - Vetting and Port State Control



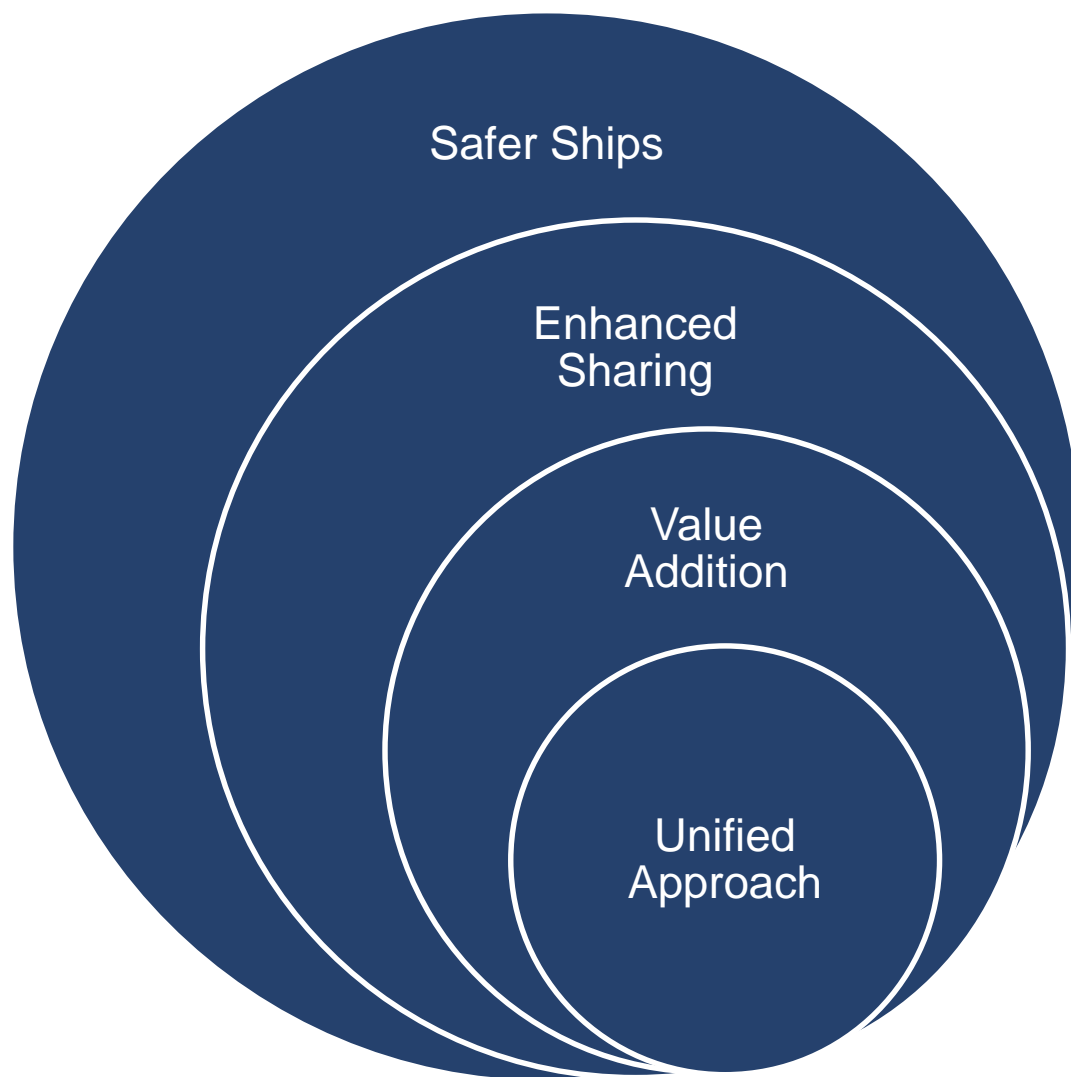
* Intertanko Figures from OCIMF Data Mining





Leveraging the SIRE Program

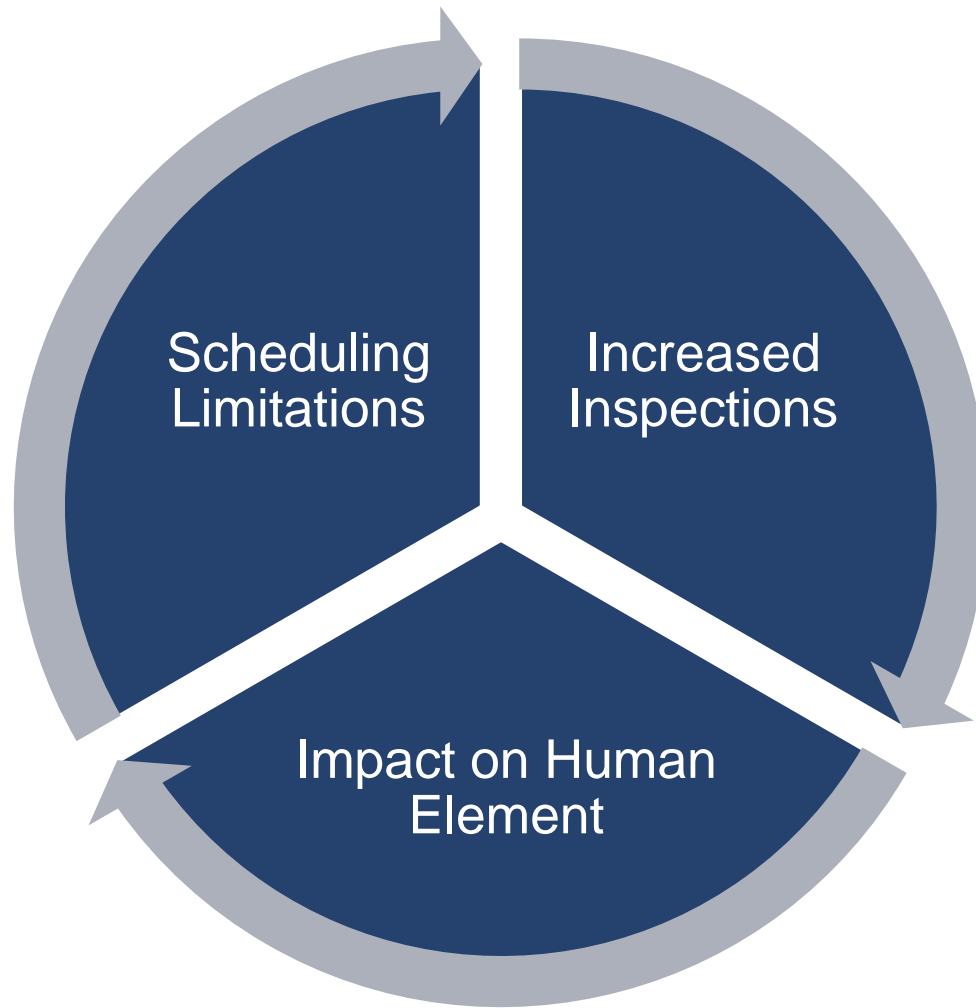
Leveraging the SIRE program





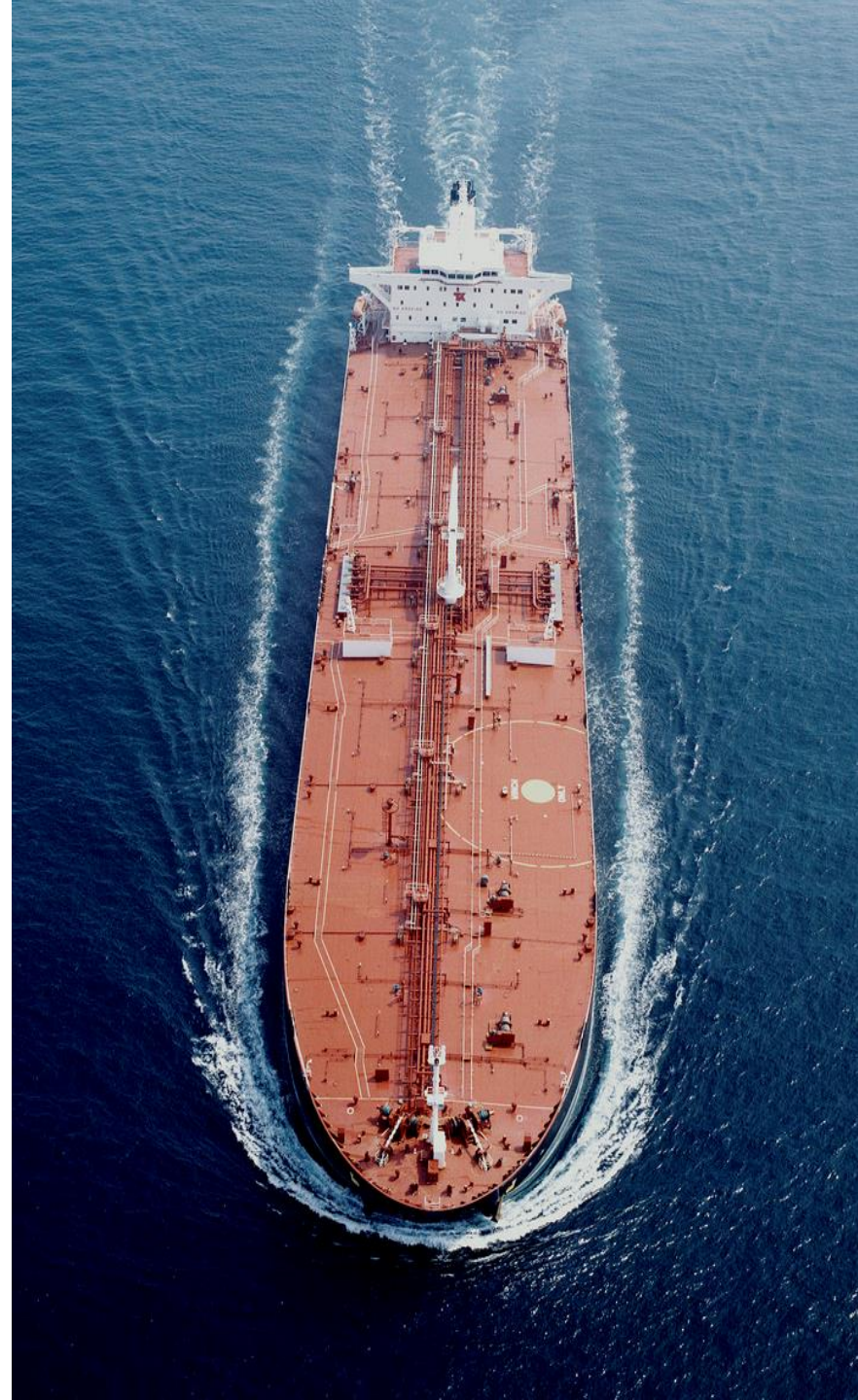
Vetting – An Opportunity

Vetting – Oil Major individual requirements



Vetting – Operational Restrictions

- Trading pattern
- Offshore ports
- Last minute cancellations
- Boarding restrictions
- Out of SIRE window



SIRE – Conduct of Inspection

- Individual KPI
- Differing interpretation of VIQ question
- Lack of pragmatism
- Oil Major Inspectors v/s Contracted inspection parties



Impact on Vessel Clearance

- VIQ Number v/s Risk
- VIQ Observation v/s Risk
- Service providers contracted by Oil Majors
- Risk of Observation and its effect on vessel clearance
- Blanket rejections
- Imposed 'sanctions'

REJECTED





Vetting – Looking Ahead

Vetting – Looking Ahead

- Direct bookings into OCIMF
- Oil major inspector (inhouse)
- Linking TMSA to SIRE
- Uniformity in Officer matrix requirement
- Uniformity in risk profile
- Focus on Terminal feedback



A large oil tanker ship is shown from a high-angle perspective, sailing on the ocean. The ship's deck is visible, featuring various structures, pipes, and equipment. The sky is filled with dramatic, colorful clouds in shades of orange, yellow, and blue, indicating a sunset or sunrise. The horizon line is visible in the distance.

**Together, we will operate
the best ships
in the industry.**



Photo by Ivan Kryukovskikh



Questions ?



Lunch



OCIMF

A Voice for Safety

Piracy and Security

The OCIMF view of Current Maritime Security Threats

Phillip Pascoe – General Counsel



➤ Introduction –

- OCIMF Adviser / MSSC / MNLO / Cyber Security WG
- Cyber Security
- Gulf of Guinea
- South East Asia
- Northern Indian Ocean / Gulf of Aden / Bab al Mandeb
- Hull Vulnerability Study
- BMP5 / Global Piracy Document

Cyber Security

OCIMF Cyber Security Committee

• Key Themes

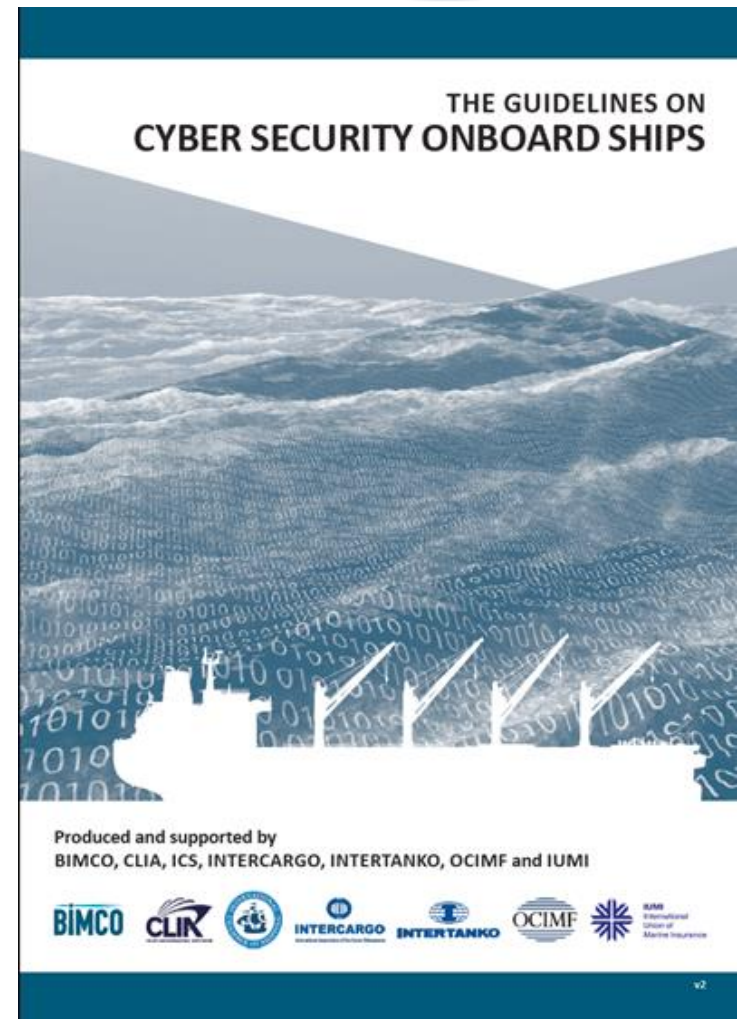
- Cyber Assessment – better understanding of networks and IT components.
- Understanding & Awareness – culture & education campaign.
- Process to improve the standards of third party vendors.

• Industry Guidance

- *“The Guidelines on Cyber Security onboard Ship”*
- *“Be Cyber Aware at Sea – Maritime Cyber Security”* (Video available online)
- *“Cyber Security – Smart safe shipping”* (Steamship Mutual DVD)

• Cyber Incident Sharing

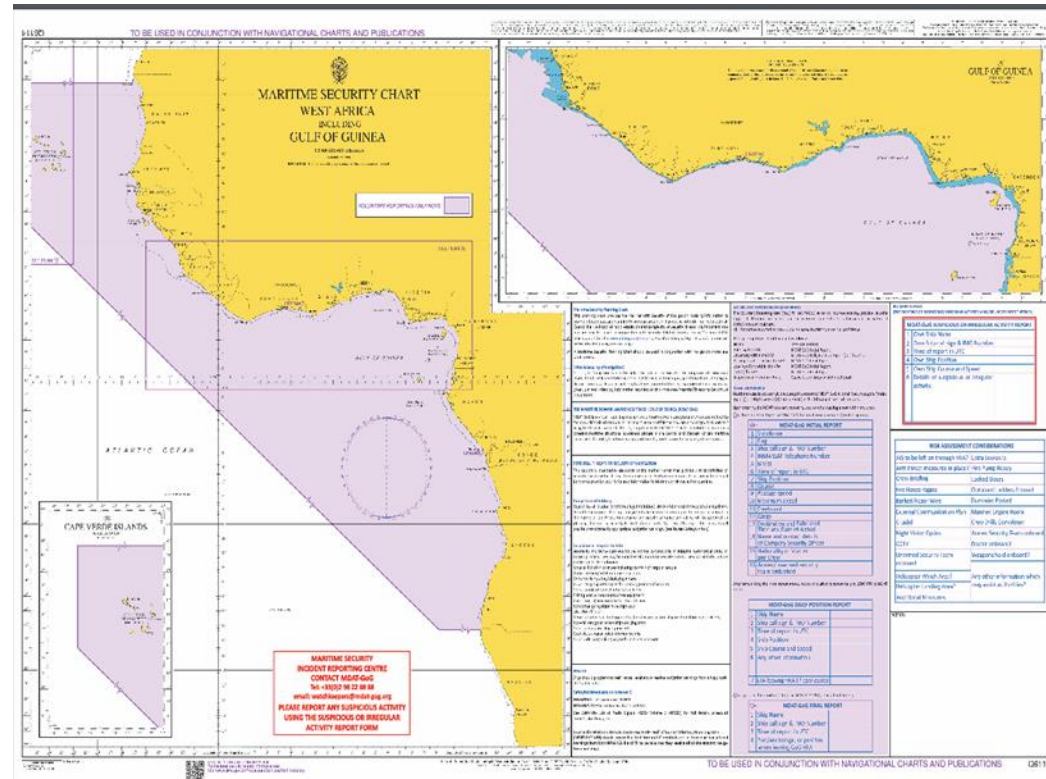
• TMSA 3 / Review of SIRE VIQ

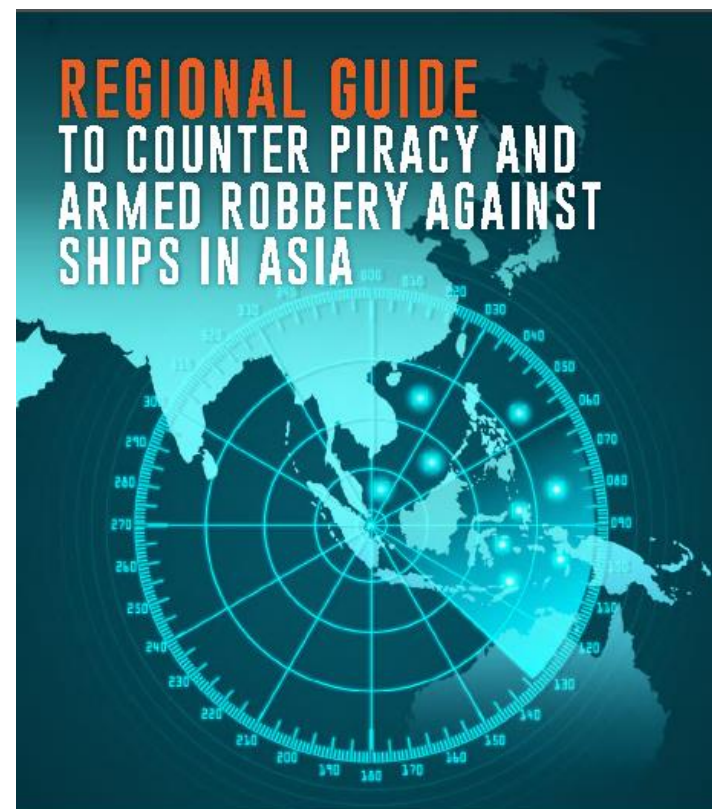
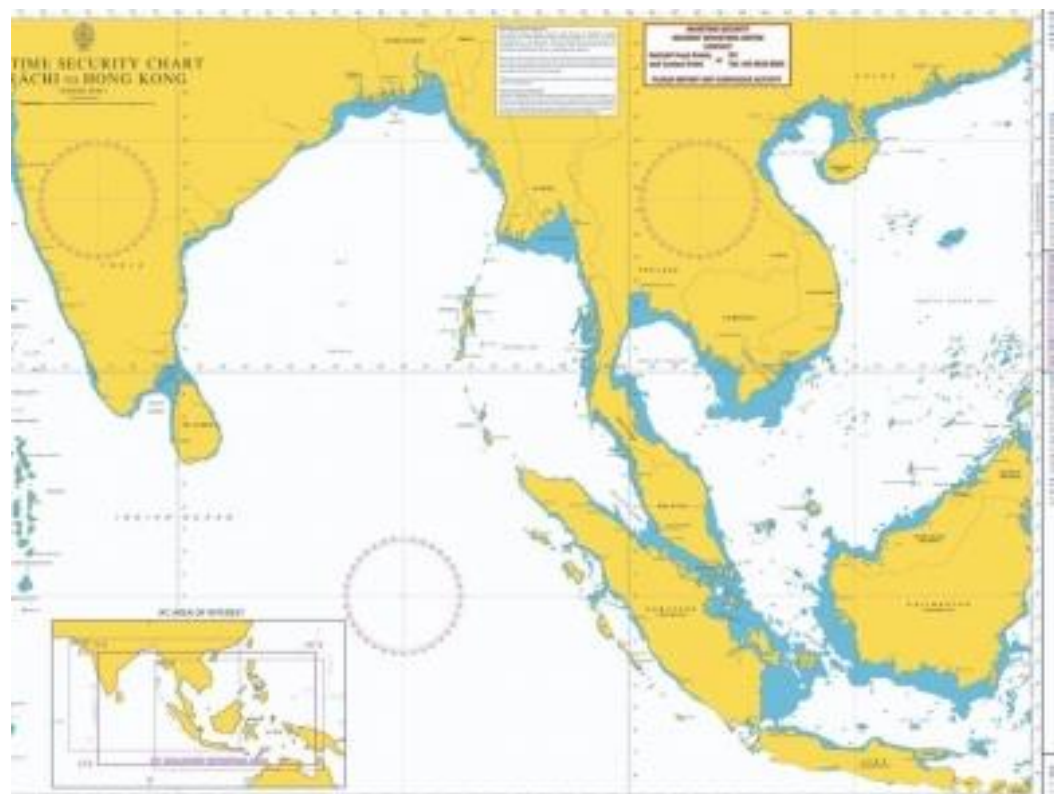


Gulf of Guinea

Ship Reporting

- MTISC-GoG –
 - OCIMF lead Pilot project end June 2016
- MDAT-GoG –
 - Joint UK /FR initiative commenced June 2016
- **Key Initiatives**
 - Yaoundé Code of Conduct
 - Adopted 2013 by 25 West & Central African States
 - G7+ "Friends of the Gulf of Guinea" FOG





Working Group:

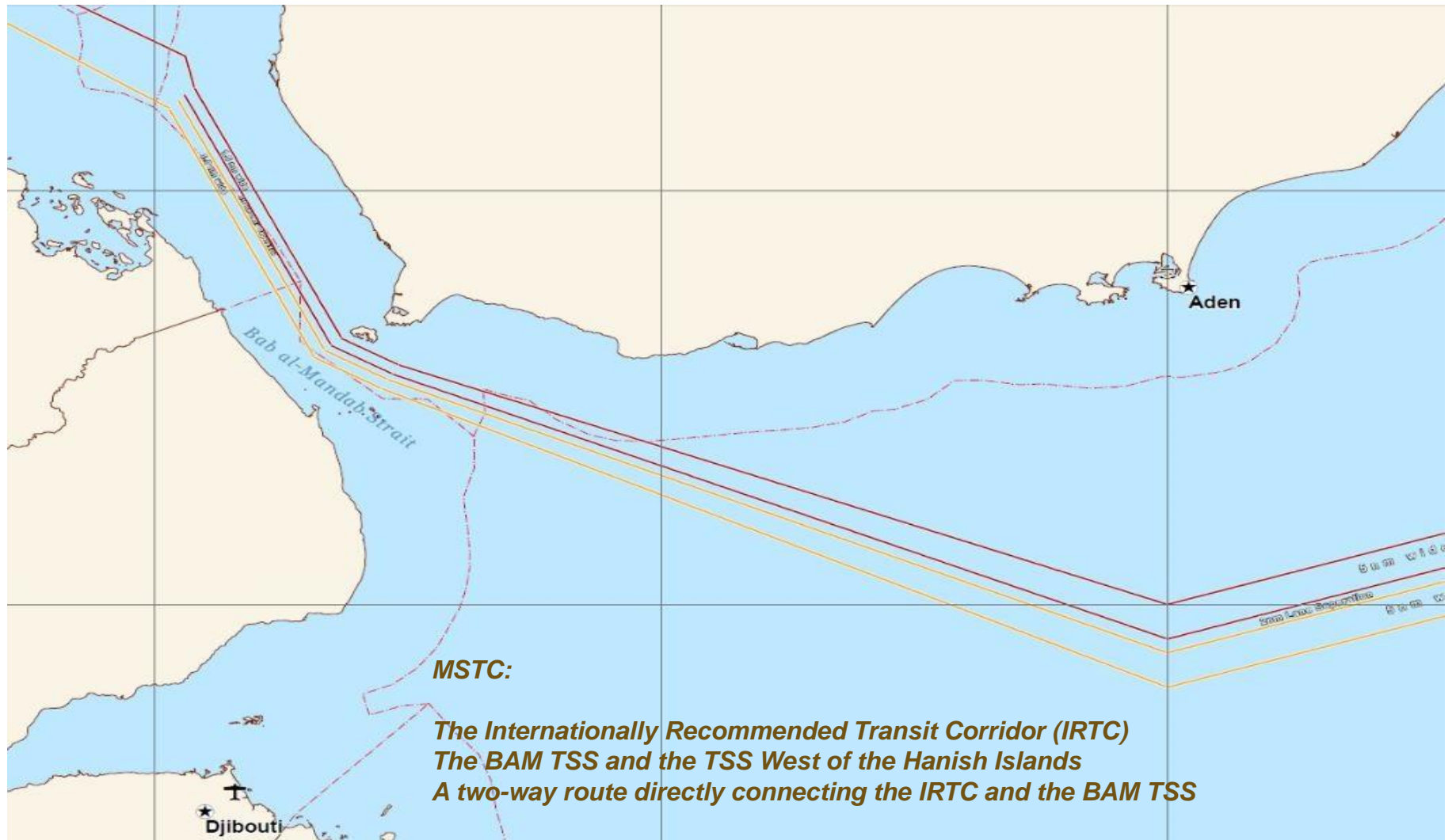


Northern Indian Ocean / Gulf of Aden / Bab el Mandeb

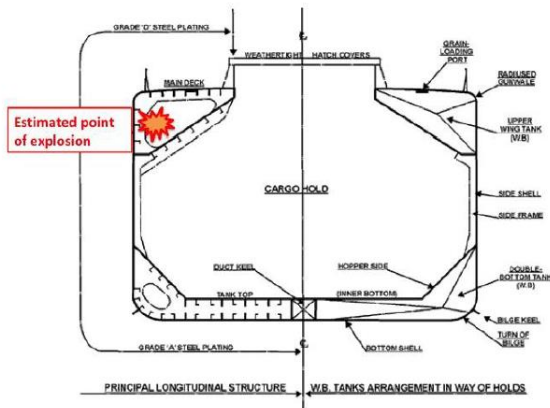


➤ Current key issues

- EUNAVFOR – Op Atalanta
- Industry designated High Risk Area
 - BMP4 – Sept 2011
 - HRA Review and amendment 2015
 - IMO MSC99 – No change to the HRA
- Other Maritime Security Threats to Shipping
 - New threats to Merchant shipping related to the Yemen conflict
 - CMF - Maritime Security Transit Corridor (MSTC)



Story Board: MV INCE INEBOLU – 10 May 2018



Hull Vulnerability Study

•**Aim:** To study the vulnerability of a tanker to a range of credible threats, including a large waterborne IED, representative anti-ship missile and two anti-tank missile variants. The analysis considered damage to the hull and internal bulkheads, the vulnerability of critical systems and personnel survival.

Output:

- Short term, measures that can be deployed easily and immediately on operational ships.
- Medium term, vulnerability reduction measures that can be introduced into in-service ships as a part of re-fit or retro-fit procedures.
- Long term, the adoption of survivability enhancement practices in the design of future ships

Examples:

•Short term measures:

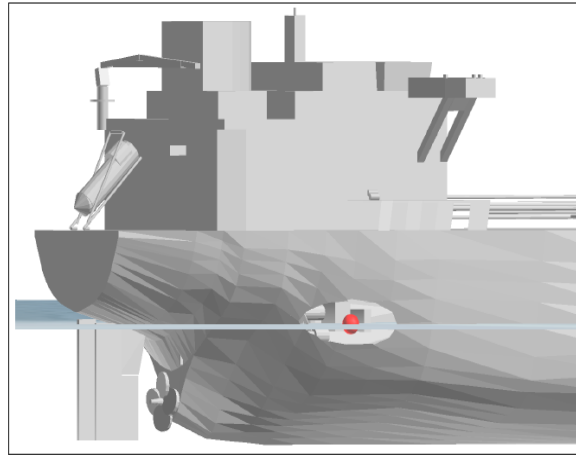
- Alternative safe muster points.
- Ballistic protection/body armour for crew.
- Placement of life rafts.

•Medium term:

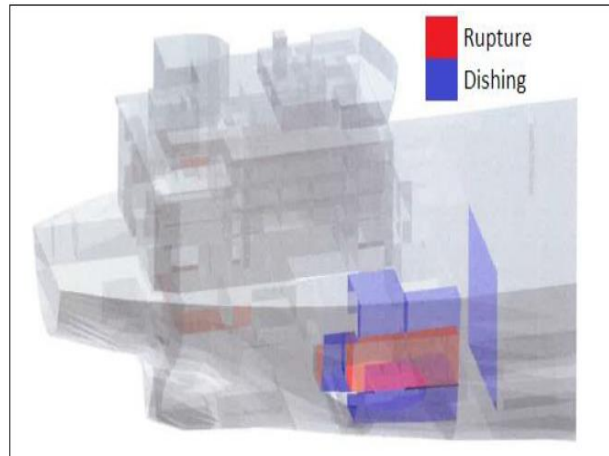
- Structural armouring of critical locations
- Blast suppression systems (armour plated hatches).

•Long term:

- Duplication of critical systems.
- Side Protection systems on hull.



The detonation of 300kg of TNT 1m from the hull will result in a large hull breach of around 9m in diameter.



Industry Guidance

- History
 - BMP3 - June 2010
 - BMP4 – Sept 2011
 - HRA Amendments 2015
- BMP 5
- Global Counter Piracy Document
- Industry Maritime Security website
- Due to be launched 28th June 2018





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A Voice for Safety

Incident – Machinery Breakdown

Rahul Baberwal - AMPOL





MACHINERY BREAKDOWN

AMPOL Marine Assurance

14th June 2018



CALTEX

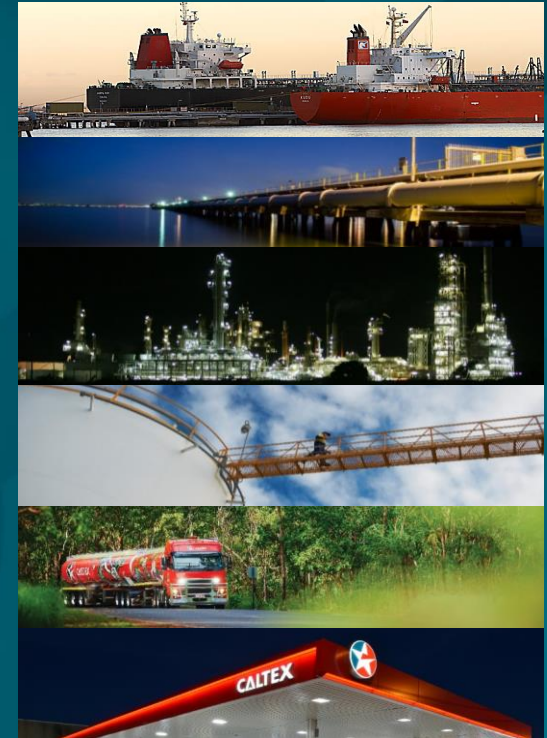
Content

- Introduction
- Machinery Breakdown Summary

Year 2017

YTD 2018

- Analysis & Take-Away(s)
- Measures Taken / Going Forward.....
- Q&A



INTRODUCTION

- **Ampol is a wholly owned subsidiary of Caltex Australia, listed on the Australia Stock Exchange (ASX)**
- Ampol is responsible for entire Marine Assurance activities for Caltex Australia Group
- Ampol plays a critical role in Caltex Australia's integrated supply chain
- Today we will share analysis & leanings from the Machinery Breakdown incidents recorded on our chartered tonnage over last 17 months (Year 2017 & YTD 2018)

MACHINERY BREAKDOWN - Year 2017

SUMMARY – Year 2017

• Main Propulsion System

- ME Fuel Injector Leakage
- ME Cylinder Head Jacket Crack
- Fuel Oil Back Wash Filter Failure
- Automation: Alpha Lube Oil Feedback Signal Faulty
- ME Exhaust Valve Failure

• Cargo System / Cargo Equipment(s)

- Cargo Pump Failure during Discharging Operation
- Inert Gas System Failure
- Gas Detection System Failure

• Navigational Equipment(s)

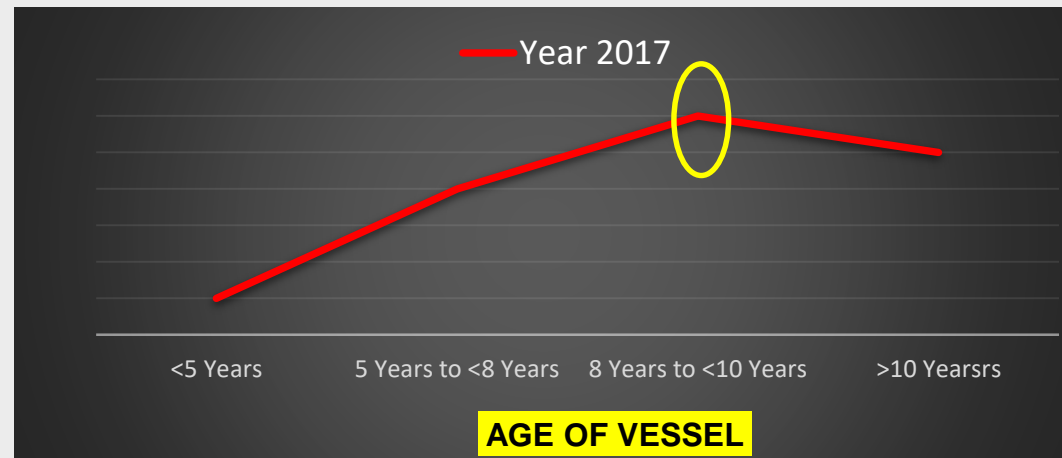
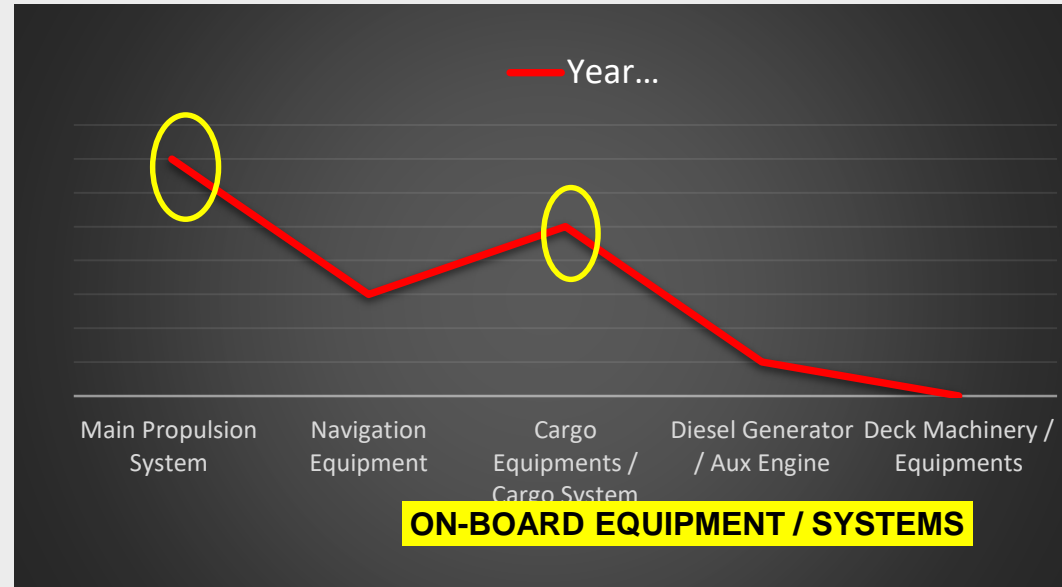
- Radar Failure
- Steering Gear Failure

• Diesel Generator / Auxiliary Engine

- Loss of Power and steering while departing from Port

• Deck Machinery / Equipment(s)

- Nil



MACHINERY BREAKDOWN – YTD 2018

SUMMARY - YTD 2018

• Main Engine

- Exhaust valve Failure
- Cylinder Head Jacket Crack
- Automation :incorrect signal received from Cylinder to CCU
- Reversing Mechanism failure
- Exhaust Gas Boiler: Soot Blowing valves stuck in open Position

• Navigational Equipment(s)

- ECDIS Failure
- Navtex Failure

• Cargo System / Cargo Equipment(s)

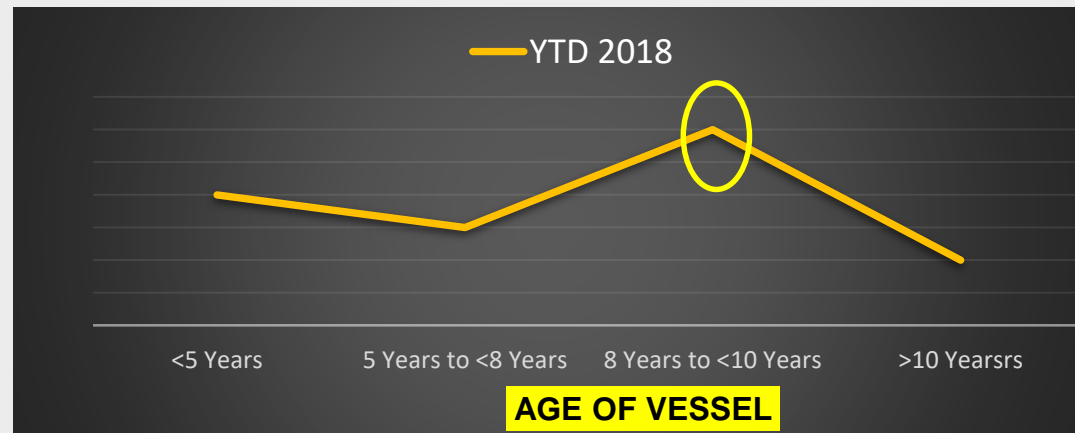
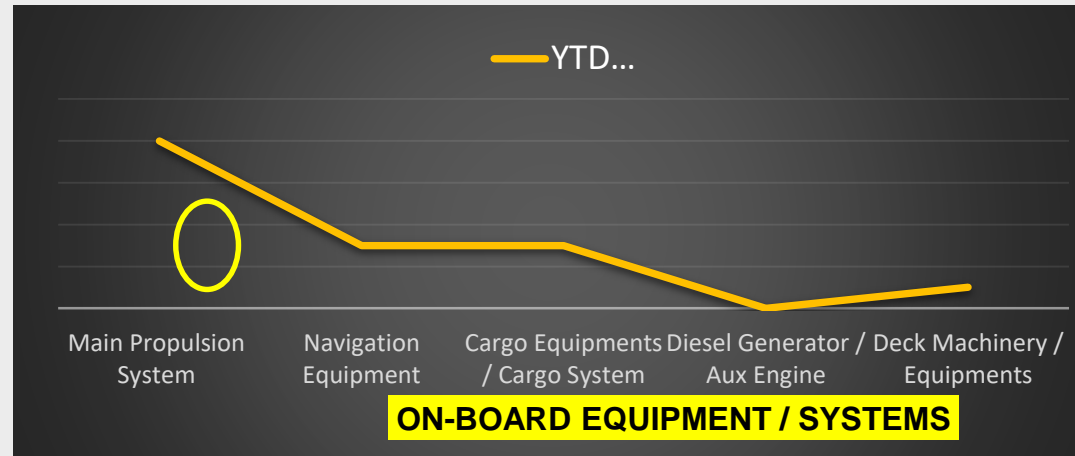
- Oil Leakage from hydraulic pilot line for Cargo Pump
- Hydraulic oil leak from a hose coupling on the actuator for Slop Pump
- Failure of Auxiliary Boiler automation system

• Diesel Generator / Auxiliary Engine

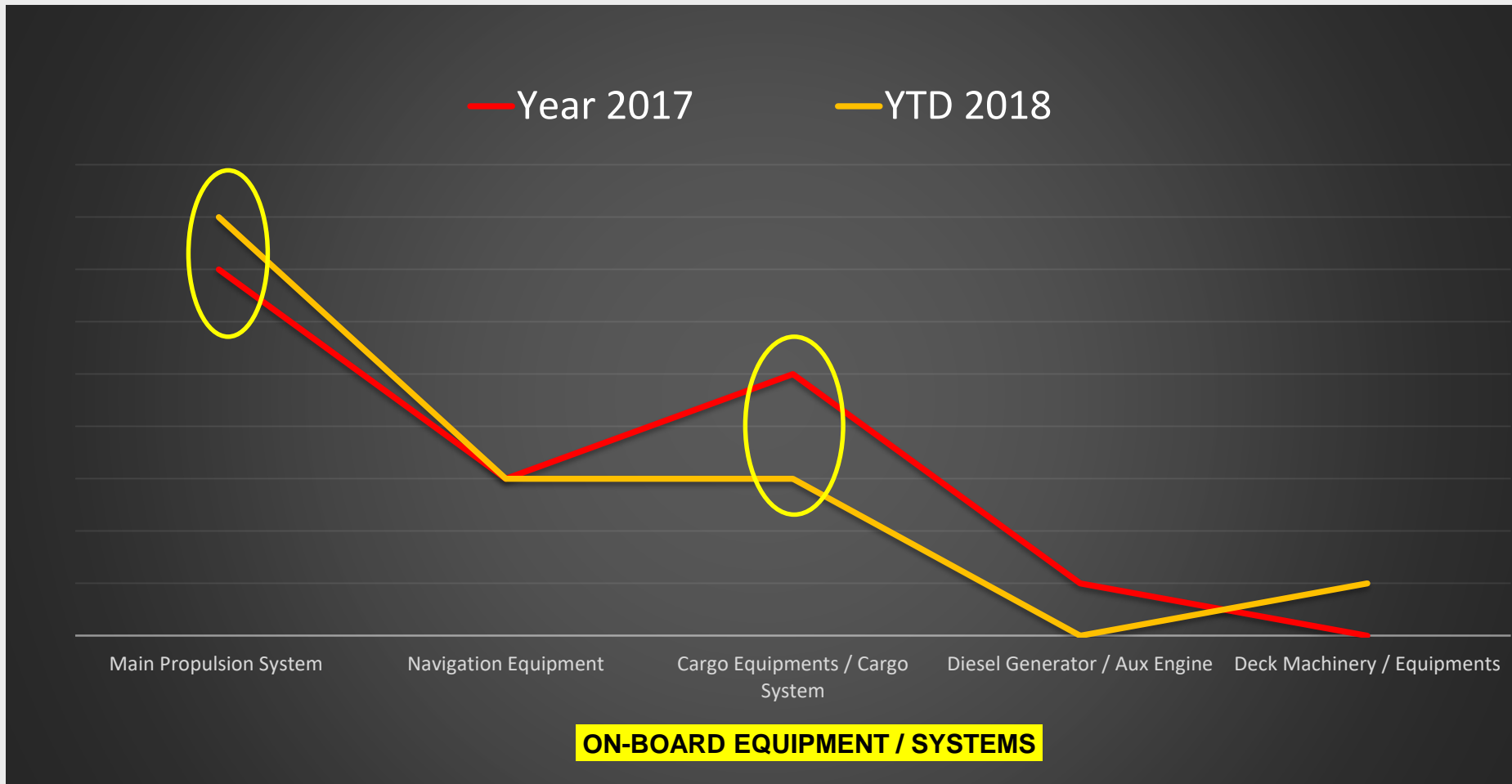
- Nil

• Deck Machinery / Equipment(s)

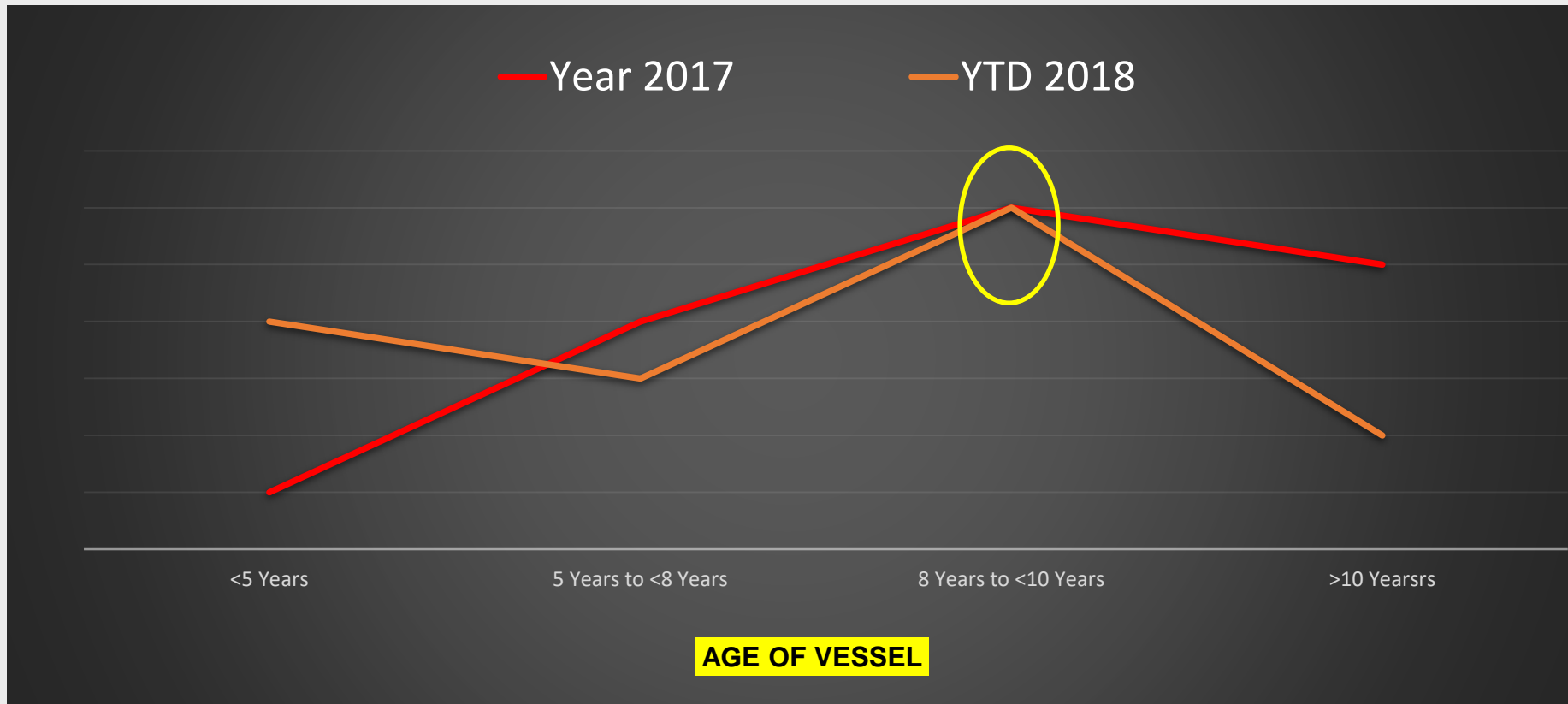
- Malfunction of Winch Hydraulic System
- Parting of Mooring Ropes



MACHINERY BREAKDOWN - Year 2017 Vs YTD 2018



MACHINERY BREAKDOWN – “AGE” OF THE VESSEL



ANALYSIS & TAKE-AWAY(s)

TREND ANALYSIS:

- **Root Cause / Direct Cause** : did not reveal any non-compliance with Maintenance requirements (PMS)
- **Substantial increase** in the number of Machinery Breakdown
- **Show Stopper** : Main Propulsion System
- **Mid Age Crisis** : Majority cases reported on vessel(s) between 8 - 10 Years
- **Others** : Vessel Type, Trade Pattern and/ or Technical Operators

TAKE-AWAY(s):

- **Planned Maintenance System (PMS)**
- **Critical Age Span between 8-10 Years**
- **Repetition of Similar Incident on Same Vessel**
- **Spares or Inventory Management**
- **Incident Management & Non Compliance with Reporting and Communication requirements post Incident**

NOTE : Poor Incident Management & non-compliance with reporting requirements / Inadequate communication may lead to temporary hold on entire fleet.

Steps Taken / Going Forward.....

- Safety Forum

- Safety Forum is conducted on biannual basis with Technical Operators
- Brain Storming session with Technical Operator(s) on Machinery Breakdown
- Importance of Reporting & Communication
- Life between 2nd intermediate Survey to 2nd Renewal Survey

- TMSA Review

Enhanced Focus on:

- Element 4: Implementation and effectiveness
- Element 11: Emergency Preparedness capabilities

- Vessel Clearance Process

Following considered as High Risk observations:

- Repetition of Machinery Breakdown(s)
- PMS Overdue Jobs
- Inadequate Spare Management System

- OCIMF Incident Repository

CONCLUSION

**General trend in increase of Machinery
Breakdown Incidents**

and.....

***“We all collectively need to take
responsibility to improve the SAFETY &
operational RELIABILITY of vessel’s at sea”***



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V - OCIMF Updates

Incident - Damage to Fishing nets in Japanese waters

Capt Alok Kumar - Tanker Group - MMS Co. Ltd.



Damage to Fishing net in Japanese waters

Case Study & Information sharing

OCIMF

ASIA PACIFIC REGIONAL MARINE Forum

Tokyo – 14 June 2018

**Capt. Alok Kumar
MMS Co., Ltd.**

INCIDENT – INTRODUCTION

**Laden VLCC drawing 20.10 M Draft in
Japanese waters on 15 Jan 2018**

**As per information received from the
terminal, the vessel had allegedly
damaged fishing nets**

**At this time, Bay Pilot was on board
and vessel was approaching harbor
pilot station for berthing**

INCIDENT – INTRODUCTION

- Vessel did not see any movement of marker buoys after passing over the fishing nets, therefore it was considered that there has been no damage to the nets and hence this incident was not reported to the terminal and local authorities neither by vessel nor by the bay pilot.
- It was cloudy with NW winds of BF 2 or 3 and good visibility, no significant tidal currents with the daybreak being at 0717 hours.

INCIDENT – BRIEF DETAILS

- 0620 LT: Bay POB
- 0624 LT: Master/pilot exchange done
- 0645 LT: Increased gradually to full ahead
- 0720 LT: About 12.5 miles from terminal, speed about 12kts, vessel sighted many fishing boats on the course line.
- Discussed the situation and alternatives with pilot.
- Decided to slow down engine and alter course to port side, towards the coast to keep clear of the fishing boats.

INCIDENT – BRIEF DETAILS

- 0750 LT: Vessel noticed 2 fishing boats fine on the stbd bow about 2 miles away.
- Bay Pilot informed vessel that five tugs are on the way
- Pilot informed that he has asked the tugs to ensure that the fishing boats keep away from the vessel's planned passage.
- Ships whistle was blown twice by Master as warning for the fishing boats to keep clear.

INCIDENT – BRIEF DETAILS

- 0810 LT: Vessel noted several yellow markers fine on the stbd bow indicating possibility of net on the passage but they could not see the marker on the port side indicating end of the net.
- Bay pilot informed nets are very deep so vessel can safely pass over without damaging it.
- Since it was not safe to alter more to port side within the distance & time available, Master decided to pass over the net with Engines stopped.
- Vessel passed the markers and noticed they did not move indicating vessel may not have touched the net. Same was confirmed to the Master by the Pilot as well.
- Before and after the passing over the net, there were no warning signals from any of the fishing boats such as by waving flags, loud speaker, VHF Radio or flashing lights, and no boats chased the vessel to notify the accident.

INCIDENT — BRIEF DETAILS

- 0820 LT: Harbour pilot on board followed by Master/pilot exchange.
- 0824-0840LT: Five (5) Tugs made fast
- 1050 LT: All fast

INCIDENT — BRIEF DETAILS

ECDIS Display

Of planned passage & actual passage showing the substantial deviation taken to avoid heavy fishing traffic.

INCIDENT – ECDIS SCREEN



INCIDENT — BRIEF DETAILS

[Oct. 2015 revised] (W)—6

LICENSED INLAND SEA PILOT
PILOT INFORMATION CARD

For VLOC bound
For :

Bridge Resource Management Exchange With Pilot(s)

17 Jan 2018

To the Master of _____ Pilot: _____

By Pilot: _____

For safe navigation of your vessel, you are kindly requested to:

- confirm the piloting plan on this card,
- keep a sharp lookout,
- keep watching VHF channel 16, and
- put a question whenever you find discrepancy.

Detail of passage plan and racon information

During vessel's underway or at anchor, the following should be displayed for observing

"The Maritime Traffic Safety Law"	By day	By night
Vessel of 20m or more in L.O.A.	Two (2) black cylinders	Flashing green light
Vessel carrying dangerous cargo on-board: International Code	1 st Green Buoys & B	Flashing red light

Tidal current (N)
Hayasui Seto (S)

Reference position (33-46.7N, 135-45.3E)
With the pilot & tug
ETA: 0830

Other information

INCIDENT – BRIEF DETAILS

Berthing procedure for

Sea Berth

Note

- OOW reports Ship's Sp'd, position, and distance from berth to Master frequently.
- Fix ship's position every 5 minutes.
- In case of intension of dangerous situation, Master must confirm the Pilot about his intension
- If the dangerous situation is not be changed, Master must take the ship's command.

Berthing Speed

Horizontal distance from berth fender	Speed
200m ⇒	15cm/sec or less
100m ⇒	10cm/sec or less
30m ⇒	5cm/sec or less
Fender Touch ⇒	less than 5cm/sec

*Reduce to the berthing speed as much as possible

To BM
Pass Report
Ono Kawa West End.

To BM
Pass Report
Ono Kawa East End.

To BM
Report
"Secure Tug line".

1' 3' < 6k't

Abort line
1' < 3k't

242

Abort line

Abort line is set 1 mile from the berth, thence

- ▶ H.M less than <235> or more than <250>
- ▶ Sp'd over 9 k't

The Master will decide to suspend berthing and return to the point where far from the POB area to approach again.

INCIDENT – CONSEQUENCES

- Around 1630 LT: MMS received call from Charterers that a few Fishermen had approached the terminal and complained about the vessel damaging their nets.
- P&I club was informed and they appointed an ex-Master Mariner Surveyor for the investigation.
- The P&I Surveyor held meetings with terminal staff and then with the Fishermen.
- He conducted an investigation on the vessel on 18th Jan at next port.

INCIDENT – CONSEQUENCES

- MMS received the preliminary report on 19th Jan with following conclusion

“As the 2 fishing nets were provided with the floats regulated by the Governor, we are unfortunately of the opinion that there would be no settlements unless the Tanker holds the full responsibility”

Estimation:

Labors: JPY 400,000.-

Sections: JPY 800,000.-

Loss of earning: JPY 3,500,000.-

INCIDENT – MAJOR CONSEQUENCE

Vessel was put on Technical Hold by the terminal and not allowed to call Terminal until Owners carry out Incident Investigation and submit the report to the Terminal for their review and acceptance.

INCIDENT – OTHER FACTS

- MMS had several exchanges with P&I club Surveyor however he maintained his stand and advised further.

“The fisherman requested the Port Management Office to instruct the vessel to avoid the nets by swerving around either north or south ends of the nets, so that I believe that the vessel should have swerved around the fishing boats which were hauling up the north ends of the nets, or stopped the engine to wait for the nets to be completely hauled up.

No.18 Rule of the International Prevention of Collision at Sea stipulates to the effect that the vessel has to avoid the fishing boats by altering its course and/or reducing its speed or by stopping.”

INCIDENT – OTHER FACTS

- MMS requested P&I club surveyor to interview Bay Pilot to which surveyor replied that the interview will not be allowed by the Pilot Association.
- MMS then contacted the Pilot association to allow us to talk directly to the Bay Pilot, but Pilot association conveyed that any communication has to be passed through the Association and would be verbal only.
- The Pilot's Association confirmed verbally that the Bay Pilot had prior information with respect to heavy fishing activity and had been asked by the agent to pass south of normal approach route to the extent safely possible.
- Reportedly, the Bay Pilot had discussed change of passage plan with the Master due to fishing activity en-route.
- Reportedly, the Bay Pilot was also aware that the net was only 11-12m deep, whereas vessel draft is more than 20m.

INCIDENT – OTHER FACTS

- As per Bridge Team statements - There was no information sharing from Bay pilot to vessel Master regarding possible fishing boat activities.
- The agents had not provided any information to the vessel regarding the dense fishing traffic to be expected approaching terminal under bay pilotage.

INCIDENT – CONCLUSION & RESULT

- Terminal put the vessel on technical hold which was lifted only after submission of investigation report with satisfactory preventive actions.
- Owners paid ¥ 2,000,000 to the fishermen as settlement and release of the claim.

***Thank
you***



Questions ?



Coffee

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OCIMF Secretariat

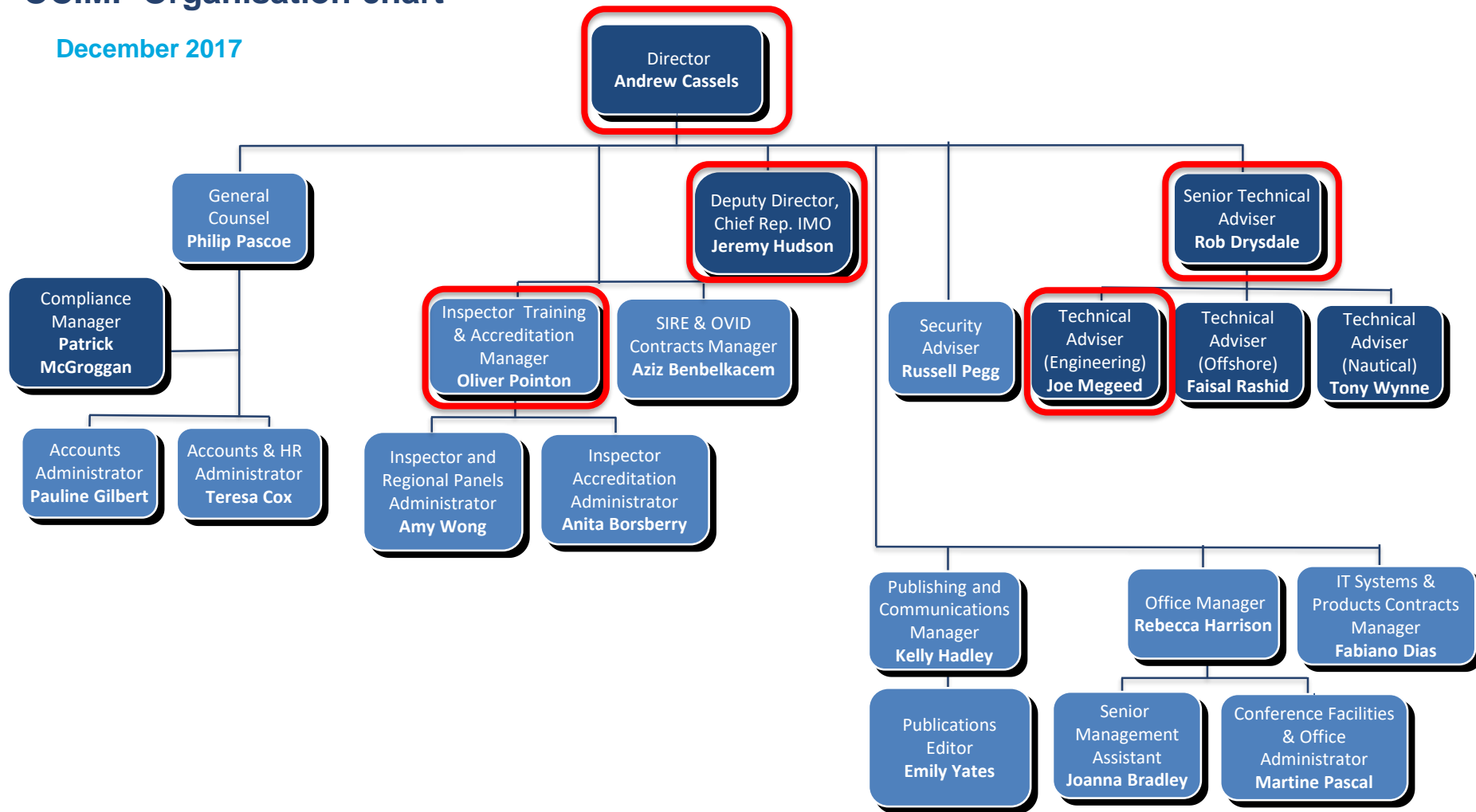
Tony Wynne – Technical Adviser (Nautical)



OCIMF Secretariat

OCIMF Organisation chart

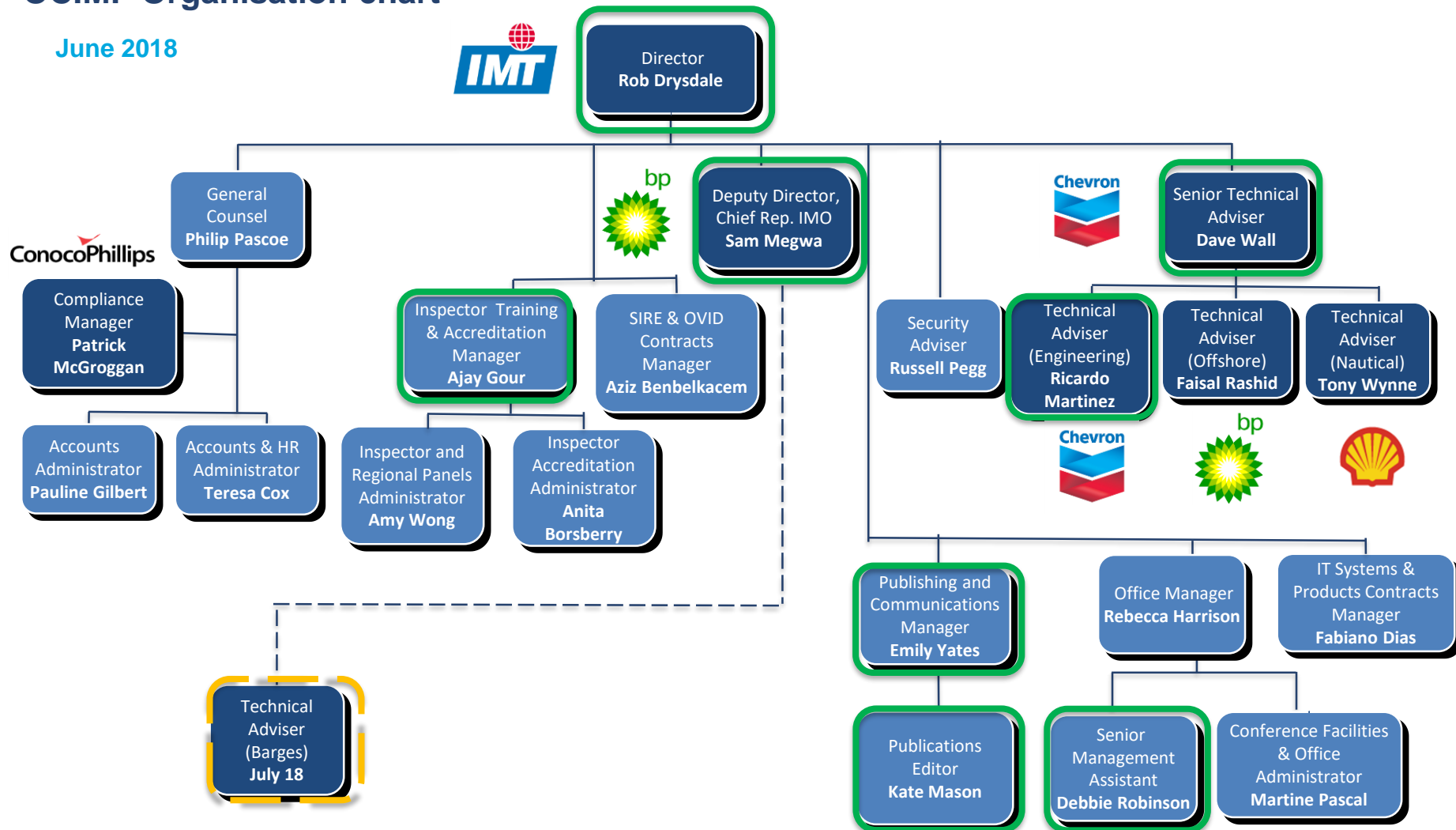
December 2017



OCIMF Secretariat

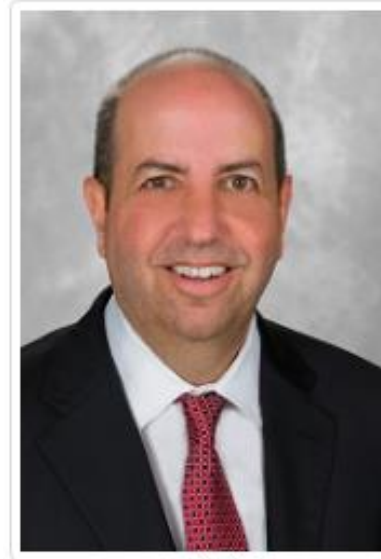
OCIMF Organisation chart

June 2018



New Staff

**Chairman –
Mark Ross (Chevron)**



**Director
– Robert Drysdale (IMT)**



New Staff

Deputy Director
– **Sam Megwa (BP)**



Senior Technical Adviser
– **David Wall (Chevron)**



New Staff

Engineering Adviser
– Ricardo Martinez (Chevron)



**Inspector Training &
Accreditation Manager**
– Ajay Gour



OCIMF Publications

Rob Drysdale – Director (OCIMF)



Publications

Released in 2017

Books

- Recommendations for Oil and Chemical Manifolds and Associated Equipment
- Tanker Management and Self Assessment, Third Edition

Information papers

- Northern Sea Route Navigation
- The Guidelines On Cyber Security Onboard Ships
- Linked Ship/Shore Emergency Shutdown Systems for Oil and Chemical Transfers
- Inert Gas Systems The Use Of Inert Gas For The Carriage Of Flammable Oil Cargoes

Due release in 2018

Books

- Mooring Equipment Guidelines, Fourth Edition (MEG 4)
- Cargo Guidelines for F(P)SOs
- Guidelines for Offshore Tanker Operations
- Construction Specification for Marine Loading Arms
- Effective Mooring

Information papers

- Transfer of Personnel by Crane between Vessels
- Critical Spare Parts
- Industry Expectations for the Provision of Marine Terminal Information Regulations
- Marine Terminals Impacted by Ice or Severe Sub Zero Temperatures
- Navigational Audits and Assessments - A Guide to Best Practice
- Ship Security - Guidelines to Harden Vessels
- Volatile organic compounds (VOC) emissions white paper
- Transiting the Turkish Straits
- Joint INTERTANKO – Recommendations for Effective Sharing of Lessons Learnt from Incidents
- Joint INTERTANKO – Competency Assessment Verification

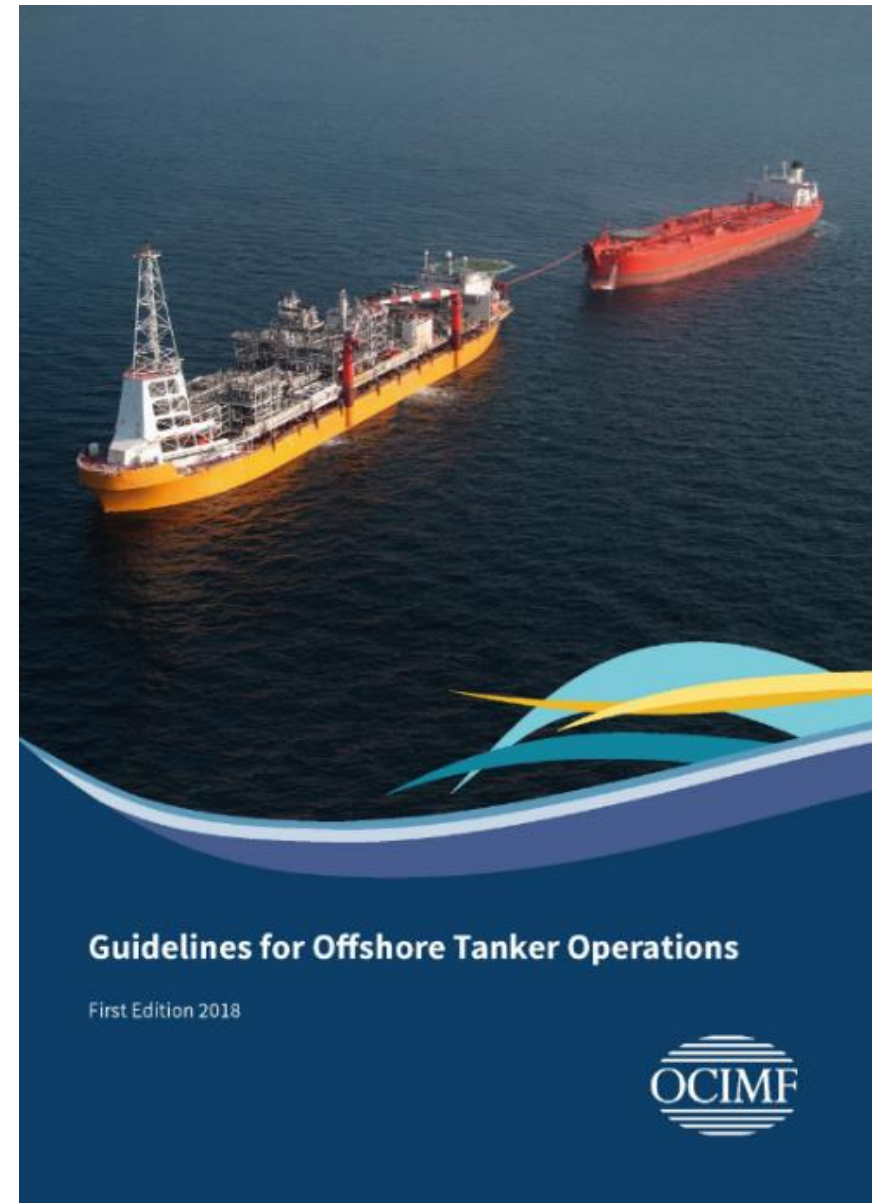
Guidelines for Offshore Tanker Operations (GOTO)

GOTO updates and supersedes the following OCIMF publications:

Offshore Loading Safety Guidelines with Special Relevance to Harsh Weather Zones.

Tandem Mooring and Offloading Guidelines for Conventional Tankers at F(P)SO Facilities.

Recommendations for Equipment Employed in the Bow Mooring of Conventional Tankers at Single Point Moorings.





Questions ?

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