

Singapore Offshore Forum

Fullerton Hotel, Singapore

3 June 2015

Offshore dismantling and removal (decommissioning) – technical challenges

Adrian Potts
Project Director
Houder Limited

Singapore Offshore Forum, 3 June 2015

The Standard



OFFSHORE DISMANTLING AND REMOVAL – TECHNICAL CHALLENGES

Presented by:

Adrian Potts

Project Director

Houlder Limited

Stages of decommissioning, dismantling and removal

- Government regulatory and environmental requirements
- Decommissioning
- Lift and removal
- Transport to shore
- Disposal ashore

Contents

- Government regulatory and environmental requirements
- Decommissioning
- Lift and removal
 - Market value – North Sea estimated GBP 30 Billion
 - UK versus Asia i.e. Malaysia and Indonesia
- Transport to shore

Heavy Lift Vessels

- Allseas PIONEERING SPIRIT Heavy Lift vessel



- Heerema THIALF Heavy Lift vessel



Government regulatory and environmental requirements

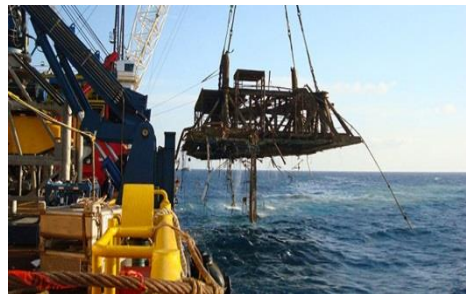
- License approval
- Risk assessment
- Legislation and regulations

Lift and removal

- Radioactive waste management
- Cutting and plugging of subsea piles
- Blanking of subsea pipelines
- Plugging of wells and flow lines
- Removal of PLEM, Flow lines and Mid water Arches (MWA)
- Cut and release Topside from Jacket, lift and place on barge
- Cut and release Jacket from subsea piles, lift and place on barge



Subsea



PLEM Decom



Topside Removal



Jacket Removal

Transport to shore

- Sea-fastening
- Offload at the disposal yard
- Lift from Barge onto the environmentally quarantined area

c



Jacket to shore



Disposal yard

BP P15 B Removal and disposal project



Execution – BP P15 B Project

- Site Survey
- Detailed Workpacks
- Reverse Installation
- Minimal personnel - No Additional Accommodation
- Detailed interface definition
- North Sea Operators ⇒ Commitment
- Authorities ⇒ Permits
- Risk assessment and Risk mitigating plans
- HSE plan



Offshore dismantling and removal – market covers

David Hallows
Executive Director
Willis Energy

Singapore Offshore Forum, 3 June 2015

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The background of the slide is a photograph of an offshore oil rig at sea. A large crane on the rig is lifting a massive, dark-colored cylindrical object, likely a wellhead or a large pipe, from the water. The rig's structure is silhouetted against a bright, hazy sky. In the foreground, the blue surface of the ocean is visible. The overall scene depicts a complex industrial operation in a maritime environment.

Willis

OFFSHORE DISMANTLING & REMOVAL INSURANCE

A PRESENTATION BY: DAVID HALLOWS

JUNE 2015

CONTENT

The background image shows an offshore oil rig in the middle of a heavy-lift operation. A large red crane is positioned on the rig, and its cables are attached to a massive, dark-colored cylindrical component that is being lowered into the sea. The rig's structure is complex, with various pipes, ladders, and platforms visible. The sky is a clear, pale blue, and the water in the foreground is a darker blue. The overall scene is industrial and captures a significant moment in offshore engineering.

- HISTORY
- PLATFORM OPERATORS & J-V PARTNERS COVER
- THIRD PARTY LIABILITY COVER
- CONCLUSIONS

HISTORY



HISTORY

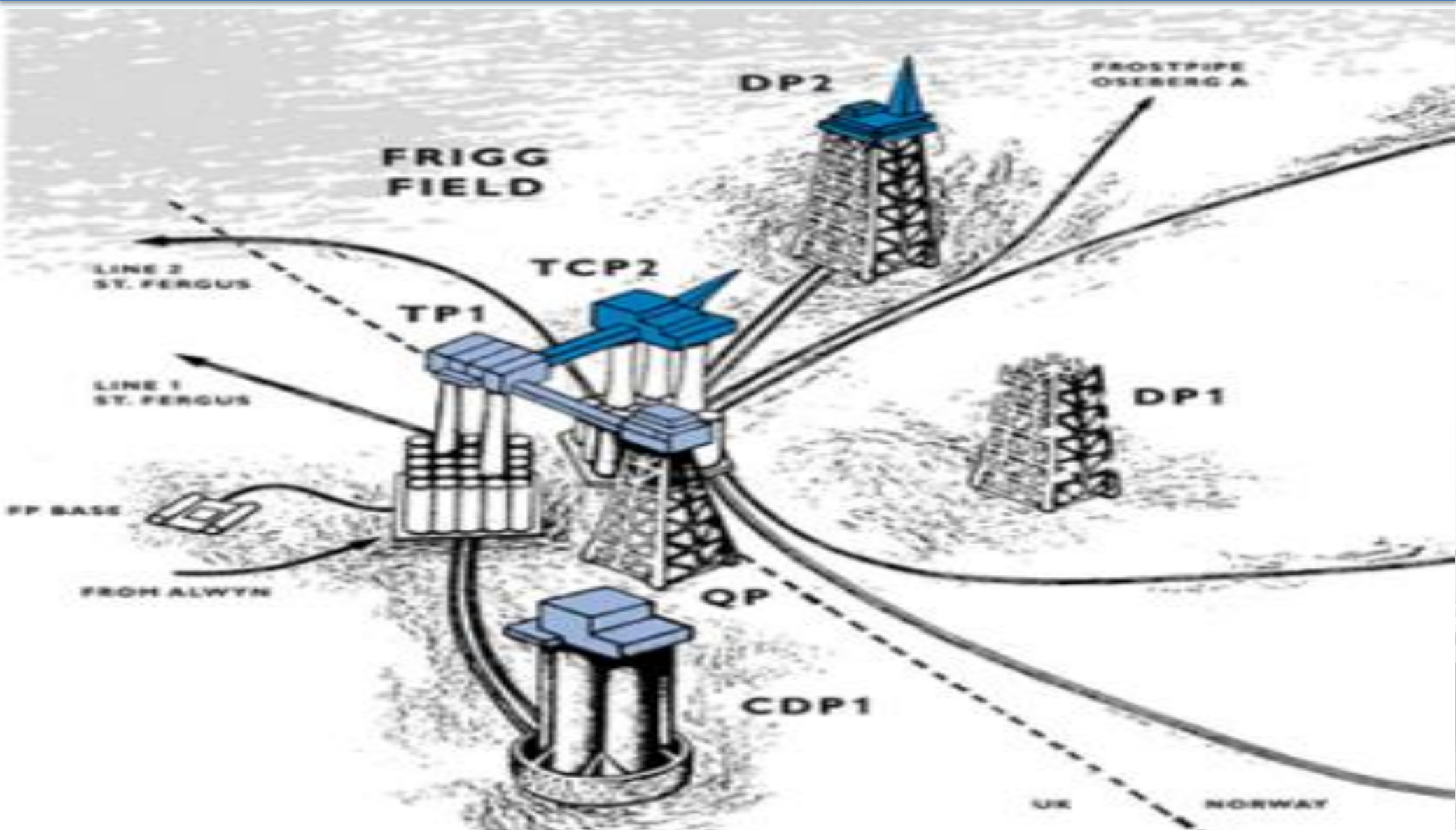
2000 onwards


- Statoil - Ekofisk 2/4S Platform
- ConocoPhillips - Ekofisk Tank Topside
- Total - Frigg Field Cessation
- Wintershall - Southern North Sea

HISTORY



HISTORY



- 
- Demand from Platform Operators for a dedicated insurance solution

Why?

- Traditional Operating Policies
 - Extent of Removal of Wreck cover?
 - Dropped Objects cover?
- Traditional Liability Policies
 - Specialised contractual liability cover?




■ Protection & Indemnity Clubs

- Extent of cover for non-Vessel Owners?
- Claims directly against platform Operator?
- Removal of wreck costs due to heavy weather?

■ Offshore Construction Policies

- Terms & conditions driven by design / construction criteria

The background image shows an offshore oil rig in the process of dismantling a large vessel. The vessel is tilted and partially submerged in the water. Several large cranes are visible on the rig, with cables extending to the vessel. The scene is set in a hazy, overcast environment.

- Oil Insurance Limited (O.I.L.)

- Dropped Objects cover?

- Cover for Contractors & Sub-contractors?

- Result : Offshore Dismantling & Removal Policy Wording

PLATFORM OPERATORS & V PARTNERS COVER

J-



Contract Object Cover

- Policy automatically provides Total Loss cover in respect of property being removed
- Trigger “All Risks”
- Underwriters will consider full repair / replacement cost cover if required

Extra Cost and Expense Cover

- Cover is in respect of extra cost & expense of completing the dismantling & removal exercise
- Not intended to respond to pure weather downtime or to finance the removal exercise for the Contractor

Extra Cost and Expense Cover

- Operator must be liable for these costs and physical damage must have occurred either,
 - to the property being removed or
 - to the Contractor's vessel/equipment or
 - to Third Party property
- Trigger "All Risks"

Removal of Wreck

- Cover for Insured Property
- Cover includes property of others
- Policy expressly refers to “Dropped Objects”
- Policy responds:
 - When the Assured is legally / contractually liable for removal costs
 - When the wreck interferes with the Assured’s normal operations
 - When the wreck interferes with the normal operations of others

Removal of Wreck

- Trigger “All Risks”
- Reputational risk
- Contractual clarity re Contractor’s responsibility essential

Contractual Liability Cover

- Contractual liability cover for :
 - Damage to another party's property
 - Loss of use resulting from such damage.
- Proximity agreements

THIRD PARTY LIABILITY COVER



Third Party Liability Cover

- Provides cover in respect of liabilities incurred at or under Statute, International Convention and Common Law
- Wording designed to respond to contractual responsibility of Platform Operator beyond contractual responsibilities assumed by Contractors

Examples

- Third Party liability. Each for own incl. insurance responsibility
- Third Party liability. Each for own but Operator responsible for arranging insurance
- Operator indemnifies Contractor for their Third Party liabilities. Operator agrees to arrange insurance for such contractual liability

CONCLUSIONS



Conclusions

- Clarity of policy wording critical
- Clarity of contract provisions essential
- Essential broker demonstrates ability & tools to analyse contracts
- Dedicated Offshore Dismantling & Removal underwriting capacity now exists
- A role for such underwriting capacity and P & I Clubs to co-exist

CONTACT DETAILS:

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Offshore dismantling and removal – club cover

John Croucher

Offshore Underwriting Director

Charles Taylor & Co. Limited

Singapore Offshore Forum, 3 June 2015

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Club cover and decommissioning

- Pooling Agreement and relevant exclusions
- Scope of work and different ship types
- How does this impact availability of cover?
- What does this mean for contractors?

Pooling Agreement and relevant exclusions



- No direct reference to “Decommissioning, Dismantling or Removal”
- Scope of Specialist Operations Exclusion is non exhaustive:

Rule 5.11 – Non Exhaustive Definition

“including but not limited to well stimulation, cable or pipe laying, construction, installation or maintenance work....”

- Decommissioning falls within this exclusion from poolable cover

What does this mean for cover?

Depends on scope of work and nature of decommissioning spread

Four broad categories of parties involved:

1. Entered unit being decommissioned
2. Principal decommissioning Contractors
3. Transportation subcontractors
4. Supply / Support Ships

Entered unit being decommissioned

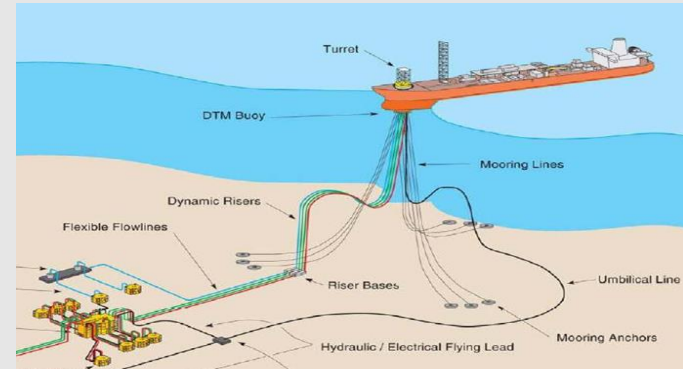
Applicable to entered production units

FPSO Hull



Cover under the SOR can be maintained
To US\$1bn

Flowlines, risers, umbilical etc.



Once disconnected cover under OLE to
US\$5m sublimit

“Field Property” excluded

Important to look at the scope of Specialist Operations Exclusion

Applies - during course of performing specialist operations and arising out of specialist nature of operation

1. **Poolable** - Personal Injury, Pollution and Removal of Wreck of entered ship remain poolable
2. **Non Poolable** - Other Third Party P&I liabilities are covered to limit of the extension
3. **Excludes** - Contract Work and failure to perform

Principle decommissioning contractors



Drilling Units – Plugging and Abandoning Wells – SOR – Max US\$500m

Other structural decommissioning -

1. Pollution / ROW / Personal Injury – Poolable
2. Other third party P&I liability – Covered to limits of Specialist Operations / Contractual cover N.B expect 500m zone indemnity
3. Loss, damage to, ROW, or pollution from Contract Work – Excluded from P&I. Covered under DAR Policy
4. Failure to perform – Operational Risk

Transportation Subcontractors



1. Movement within 500m Zone – Specialist Operation
2. Transportation to Shore – Pooling agreement restriction – Heavycon or better
3. Cargo Barges – We would expect an indemnity for loss, damage or wreck removal of cargo



1. At Law – right to limit maintained
2. Knock for knock contracts
3. Scope of work key – specialist operations defined by nature of work not ship type

Summary

1. P&I cover is designed for marine liabilities
2. Obligation to leave a clean sea bed is a field operator's risk and not to be deferred as a liability under a subcontract
3. Market placement of DAR cover is designed to give you access to cover which is excluded under P&I

Break

London Offshore Forum, 13 May 2015

The Standard 

Time	Topic	Speaker
1700	Comparative approaches to causation	Nigel Chapman, Partner, Clyde & Co
1720	Overview of club offshore claims trends	Sharmini Murugason, Regional Offshore Claims Director, Charles Taylor Mutual Management (Asia) Pte Limited
1735	Club loss prevention initiatives	Yves Vandeborn, Director of Loss Prevention, Charles Taylor Mutual Management (Asia) Pte Limited
1755	The Standard Syndicate 1884	Robert Dorey, Active Underwriter, The Standard Syndicate
1815	Round up and questions	

1830 **Drinks reception**

Comparative approaches to causation

Nigel Chapman

Partner

Clyde & Co

Singapore Offshore Forum, 3 June 2015

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The background image shows an offshore oil rig structure with yellow and grey metal frameworks. Several workers in orange safety suits and hard hats are visible on the rig. In the foreground, there are stacks of large, dark, corrugated metal pipes. The sky is clear and blue.

CLYDE & Co

Comparative approaches to causation

Nigel Chapman

Singapore Offshore Forum, 3 June 2015

Comparing what with what?

- **Contract and tort under English law as to**
 - Analysis of operative cause
 - Remoteness of resulting loss – where is the cut-off?
 - What loss is recoverable
- **Brief look at approaches in other jurisdictions, eg**
 - USA
 - Mexico
 - China

Analysis of operative cause

- **“But for” cause**
 - The breach
 - or as originating cause
 - Intervening event
- **“Predominant” cause**
 - Subsequent intervening event
 - Multiple causes
- **The court is not Sherlock Holmes**

The metaphysical context

“Causes are spoken of as if they were as distinct from one another as beads in a row or links in a chain, but – if this metaphysical topic has to be referred to – it is not wholly so. The chain of causation is a handy expression, but the figure is inadequate. Causation is not a chain, but a net. At each point influences, forces, events, precedent and simultaneous, meet: and the radiation from each point extends infinitely. At the point where these various influences meet it is for the judgment as upon a matter of fact to declare which of the causes thus joined at the point of effect was the proximate and which was the remote cause”.

Leyland Shipping 1918 AC350, per Lord Shaw

Remoteness/foreseeability of loss

- **Contract test is narrower than tortious test**

- **Contract – Hadley v Baxendale**

Losses naturally resulting from breach, provided that they could be reasonably foreseen at the time of contract as a natural result of such breach or were otherwise reasonably within the contemplation of the parties at that time as a probable consequence of breach. “Special circumstances” falling outside that test must be specifically explained at the time of contract.

- **Tort - Wagon Mound 1 and 2**

Recoverable if the kind of damage is reasonably foreseeable at the time of breach in principle, notwithstanding that the extent or degree of damage and the mechanism of occurrence are unexpected.

What loss is recoverable?

- **Contract**

Innocent party placed in same position as if contract had been performed.

- **Tort**

Innocent party placed in same position as if tort had not been committed.

- **Example application: misrepresentation**

Other jurisdictions? – 3 contrasting positions

- **USA**
 - Distinction between contract and tort applies
 - Punitive element to damages; intervening act will not break causation
- **Mexico**
 - Same approach to contract and extra-contractual loss
 - Any intervening event will break chain. Loss recoverable is only that directly resulting from breach.
- **China**
 - Reasonable foreseeability is test for both contract and tort
 - Lack of mitigation by victim and act of third party will break causation

Thank you for listening

See: www.clydeco.com/offshore for a more detailed article on this subject

1,500

Lawyers and fee
earners worldwide

1st

Law Firm of the Year
Legal Business Awards
2011

300

Partners worldwide

40

Offices across Europe,
Americas, Middle East,
Africa and Asia.

Loss prevention initiatives

Capt Yves Vandeborn

Director of Loss Prevention

**Charles Taylor Mutual Management (Asia) Pte
Limited**

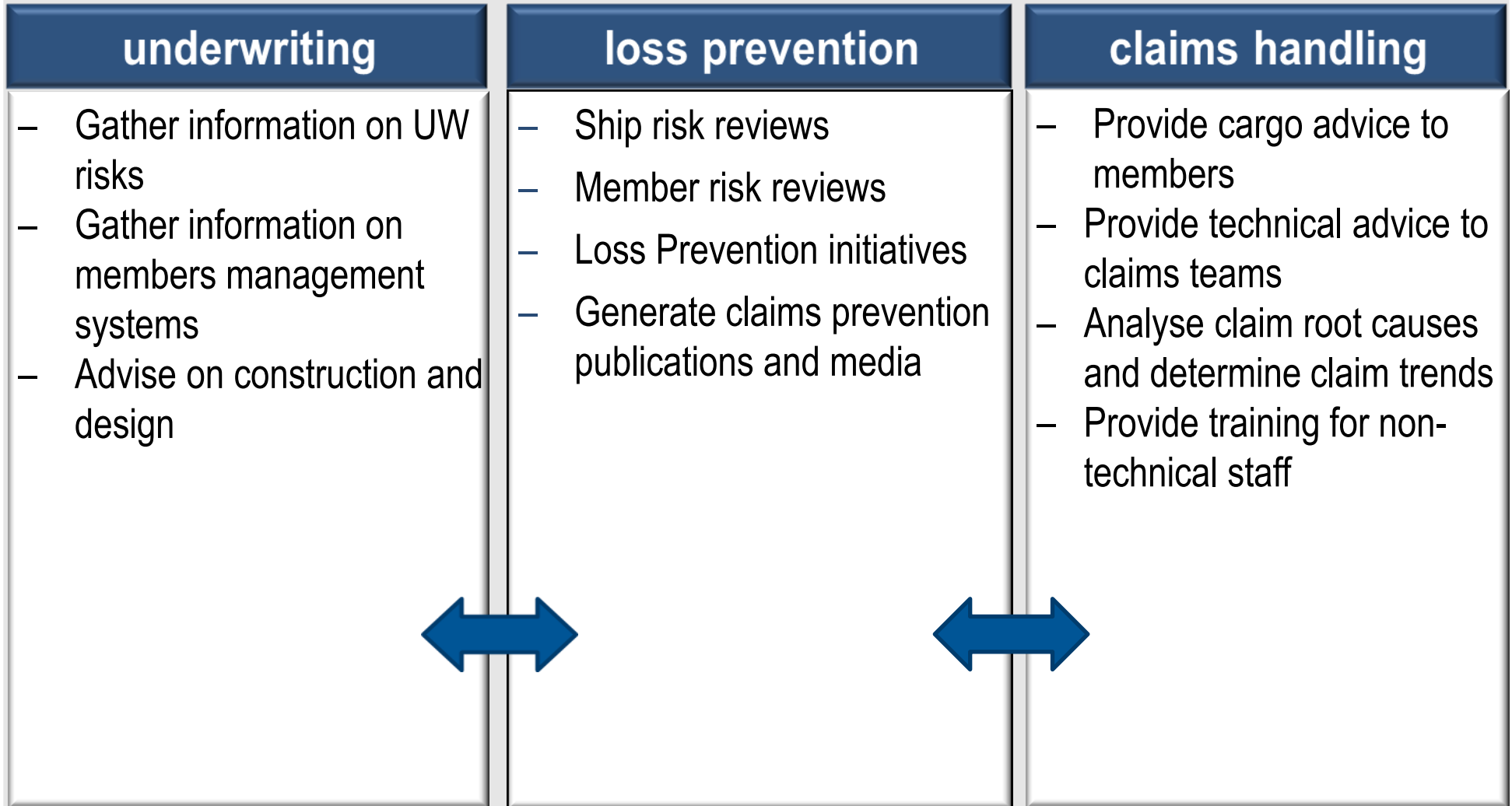
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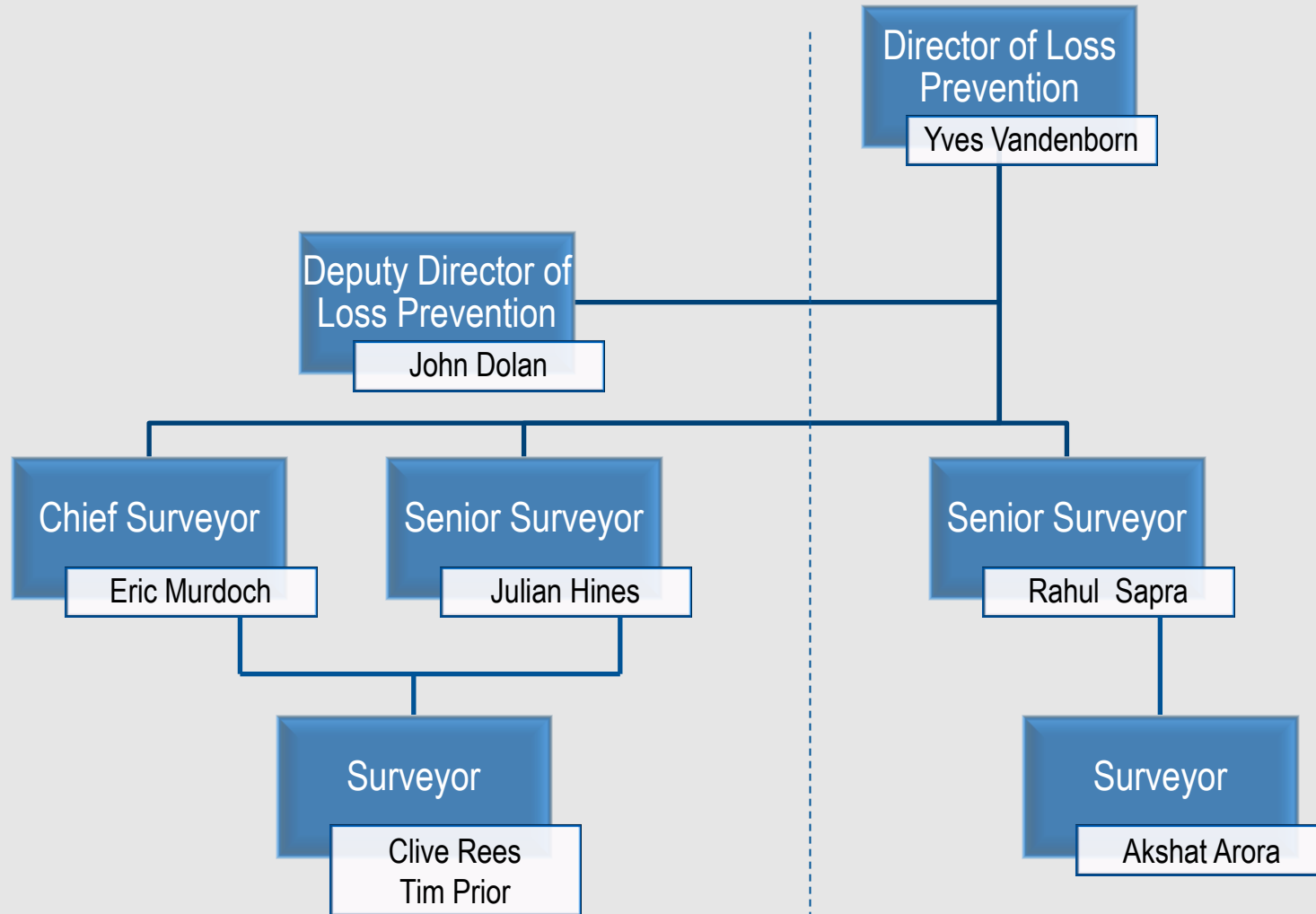


Loss prevention department

How we support our colleagues



Loss prevention department



Loss prevention department

- Member risk review
- Ship risk review
- Safety and loss advisory committee (SLAC)
- Safety & loss publications, training, seminars
- Desk top risk assessment



Loss prevention initiatives

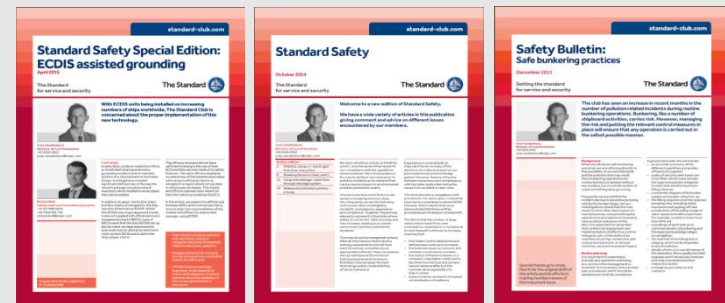
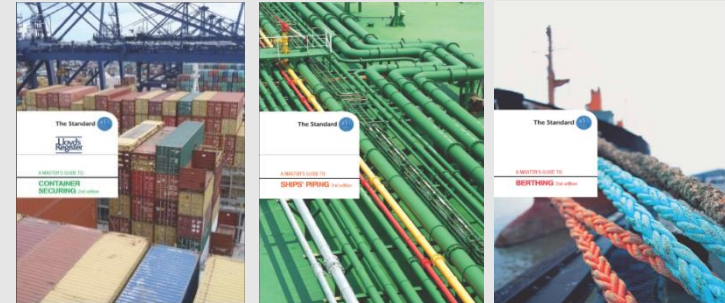
Safety and Loss Advisory Committee

- Composed of senior technical and marine experts from membership
- Committee members are senior, to effect change in own organisations
- SLAC purpose is to:
 - examine root causes of claims
 - address claim's trends
 - discuss new regulations
 - review activities/initiatives of LP department
- SLAC reports directly to board
- Standard Club operates three SLAC divisions:
 - Asia division
 - Europe division
 - London Class division

Loss prevention initiatives

Publications: Rolling program of education

- Master's Guides examples
 - Container Securing
 - Ship's piping
 - Berthing
- Recent Standard Safety articles
 - ECDIS special edition
 - Life boat safety and regulations
 - Error chains
- Offshore Special Edition 2014
 - FLNG, LNG as fuel
 - Knock-for-knock developments
 - Heavylift contracting issues
 - DP – common incidents



Loss prevention initiatives - past

- In-house loss prevention specialist team
- Member Risk Review
 - started in 1993 and formalized in 2009 basis TMSA guidelines
 - revised 2014 with focus on risk exposure
 - questions included on all aspects of ship / unit management
- Ship Risk Review
 - own checklist - focus on risk exposure
(reviewed annually to include latest and upcoming regulations)
- Since 2009 surveyed over 2,000 ships
 - captured survey findings
 - analysed data
 - experience developed a desk top risk assessment

Loss prevention initiatives - present

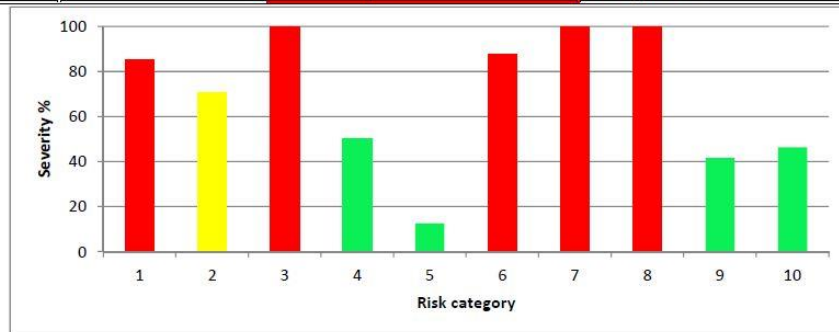
- Desk top risk assessment
- Based on 10 criteria, including:
 - type and age of ship / unit and operations
 - structural integrity
 - mooring and positioning system
 - operating environment
 - management
 - compliance
 - inspection records, PSC and casualty profile
- Early assessment of a ship or offshore unit and potential risk triggers

Loss prevention initiatives - present

No.	Category	Rating	Indicator	Comments
1	General description	34	Exercise Caution	Elderly single hull tanker; converted in 2001 in Singapore.
2	Management	17	Marginal	Chartered to SNPC
3	Compliance	70	Exercise Caution	Compliant to Congo regulatory regime, but no mention of independent verification bodies or best practice.
4	Manning	26	Good	Minimal information on experience factor
5	Operating environment	3	Good	Benign
6	Position keeping	21	Exercise Caution	design life
7	Security	25	Exercise Caution	Known area of civil unrest
8	Shipboard operations	45	Exercise Caution	Heavy high sulphur crude. H2S ship ?
9	Offtake operations	10	Good	
10	Additional services	13	Good	

Material data that may increase risk		
No.	Increased risk	
1	Hull configuration	Single hull
2	Class / Certificating authority	Non IACS
3	Business management system verification	None
4	Safety case or equivalent regime area	No
5	Competence of inspection regime	West Africa
6	Mooring design life	Exceeded
7	Regional security	West Africa
8	Known piracy / civil unrest area	Yes
9	Marginal field production	< 10,000 bbls/day
10	Field life remaining	Extended life
11	Recovered crude oil type	Heavy Sour
12	Hydrogen Sulphide content (H2S)	High

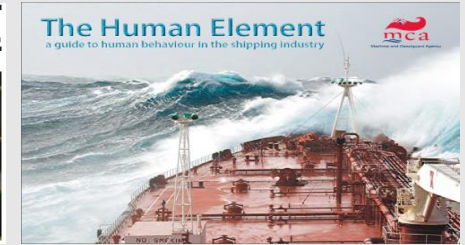
Overall Evaluation	32	Exercise Caution	Appeared to have dropped out of class due to steel diminution. Heavy high sulphur crude possibly a H2S ship. Been on field since 2001 and has exceeded initial design life. Marginal field.
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Loss prevention initiatives

– Historical Initiatives

- Horizon fatigue study
- Videotel hazard series
- Human Element book



– Current external initiatives

- PEME Scheme
- Spot the hazard competition
- New Videotel collaboration



Loss prevention initiatives – future

FPSO assessment - same hazards but different risks

Over the course of the FPSO life

- Change in production fluid properties
- Structural fatigue
 - cyclic loading
 - corrosion and erosion
- Mooring arrangement fatigue
- Change from original design spec
- Extended design life

Market forces suppressed oil prices

- Less maintenance
 - more physical / structural defects
- Unit upgrades deferred
- Change of crew and experience lost
- Change of class/flag - less onus regimes

Prevention is better than cure

Loss Prevention is a service department

- Provide technical due diligence
- Provide an internationally based focus on accurate risk assessment
- Provide technical experts and advice to our members on loss prevention

The Standard Syndicate 1884

Robert Dorey

Active Underwriter

The Standard Syndicate

Singapore Offshore Forum, 3 June 2015

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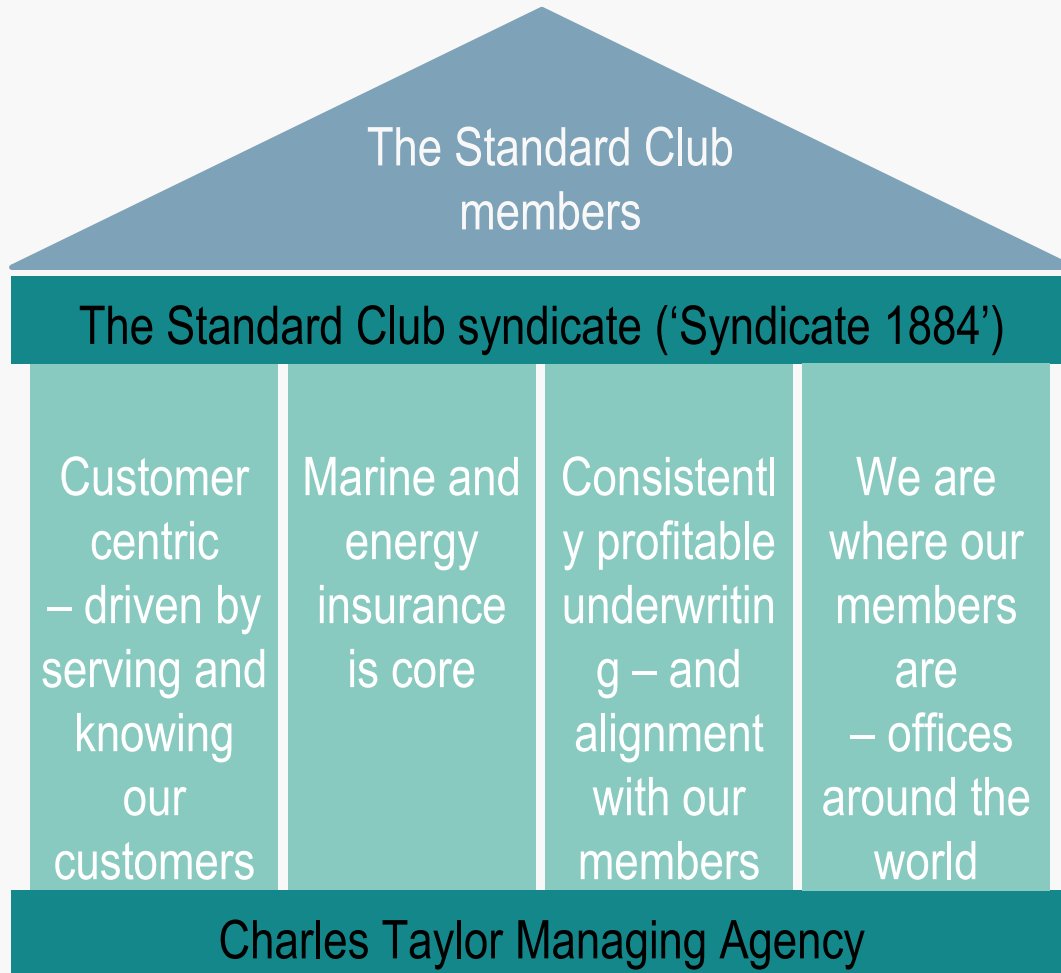
The Standard Syndicate

The Standard Club Offshore Forum

Singapore, 3 June 2015

- On 1 April 2015, The Standard Club established a new Marine and Energy syndicate at Lloyd's London (Syndicate 1884)
 - The Syndicate is managed by a new Managing Agent which is jointly owned by the club and Charles Taylor
 - The Syndicate intends to offer a truly global service and will use a service company distribution model to write business straight to the box in London and later, subject to approvals, Lloyd's Asia
 - The service company plan is already operational in parts of Europe and is known as The Standard Syndicate Services Limited
-

Vision for The Standard Syndicate

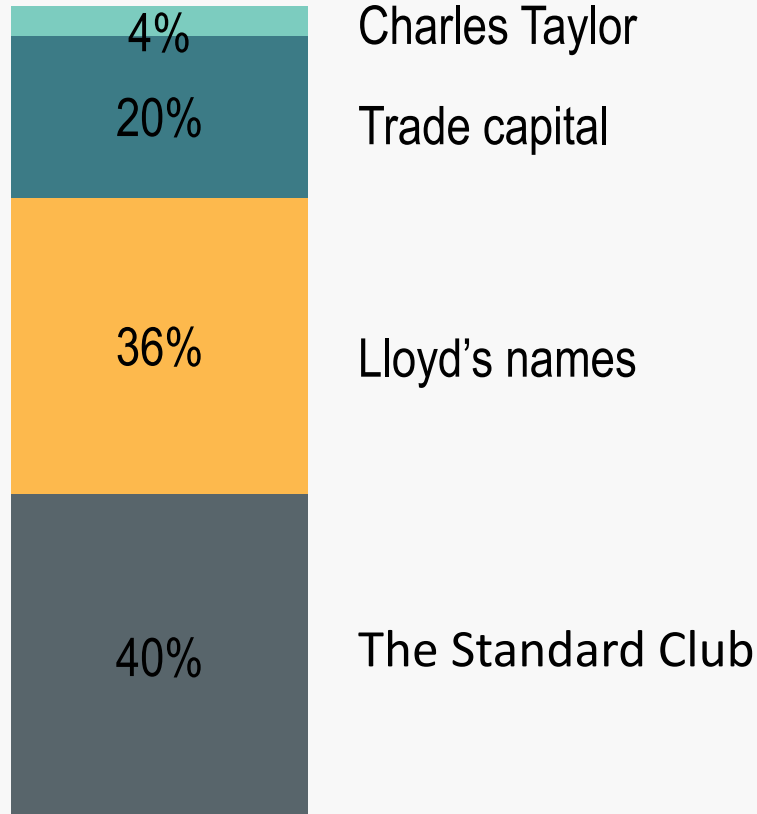


Our aims

- Lead business to drive service, handle claims and influence risk management
- Develop products & services with the Lloyd's market that will attract more business from current Club members and new clients
- Build on our global reach to create a pipeline of non-Lloyd's business into the market with our Syndicate as the conduit

Club members are already invested

Capitalisation of The Standard Syndicate



- We have chosen to use a mixed capital base to ensure engagement with experienced capital providers
- We expect capital partners to take a long term position in The Standard Syndicate and help accelerate profitable growth
- Our success is your success

What sets The Standard Syndicate apart?

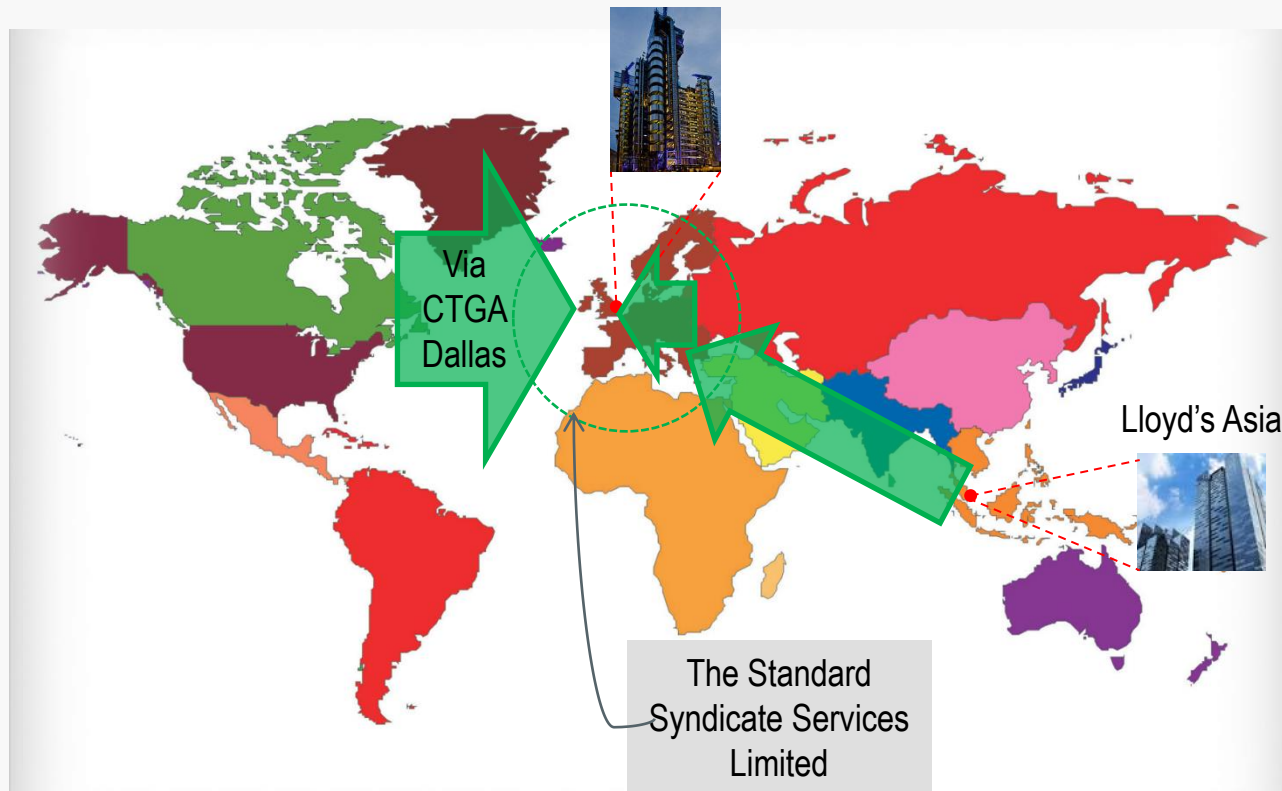


Alternative approach from other Lloyd's syndicates:

- Club quality service and extra mile claims handling familiar to members
 - Marine covers tailored to shipowners' needs
 - Lloyd's insurance in local markets
 - Low cat. risk proposition
-
- Alignment of Club and Member interests in directing attractive business to the Syndicate
 - Underwriting Excellence for long-term sustainability and profitability

Our distribution model brings Lloyd's to your local markets

Lloyd's London



- Underpins our commitment to bring new business to London
- Distributed service locally mirroring the club approach
- Strong aspirations to become a truly global offering
- Flexible distribution model to meet our assureds' needs

Note: Approvals pending for The Standard Syndicate in Lloyd's Asia;

Accessing the syndicate

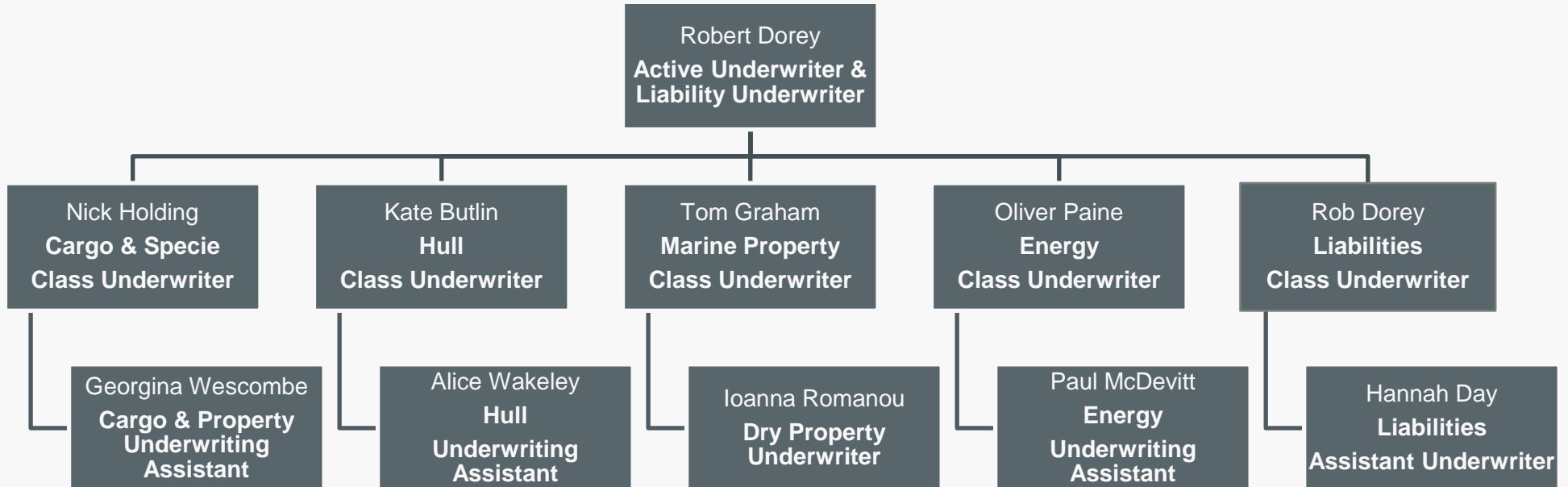
Line sizes

- Energy - \$35m any one complex or asset (maximum \$20m per insured)
- Marine - \$10m
- Liabilities - \$10m
- Cargo - \$10m
- D&O / E&O - \$5m

Line sizes

- 4h Gallery Lloyd's of London
 - Boxes 435 & 436
 - TSS
 - s1884
-

The Underwriting team



Underwriter biographies



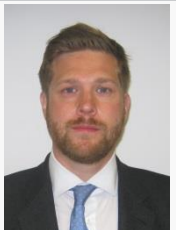
Robert Dorey – Active Underwriter/Liability, D&O and E&O

- Joined Charles Taylor in 1996, as a claims handler from legal practice
- 5 years in claims; 5 years mutual underwriting
- 2006 lead and managed the Standard Offshore team (19 people) offshore/energy liabilities
- Only Club that could secure \$1bn limit of reinsurance in the market
- Grew offshore book of Club from \$26m premium (GN) in 2006 to \$71m in 2014 – average loss ratio for the period 55%
- April 2014 full time move over to CTMA to lead underwriting plan and delivery



Tom Graham – Class Property Underwriter

- Worked at Insure London LLP (MGA) for 5 years specialising in Ports and Terminals property (Argenta were part of the program)
- Wrote “wet” property risks worldwide; capacity fluctuated between \$15m and \$5m
- Average incurred loss ratio was circa 45% over 5 years
- Joined Skuld Syndicate in 2012 to set up the Ports and Terminals Property sector alongside Marine Liability
- First year capacity was \$10m and produced a Net premium of \$5m with 6.6% incurred loss ratio
- Lead 1/3 of the business that was written, 1/3 was written combined with marine liability, 1/3 was standalone property



Oliver Paine – Class Energy Underwriter

- Joined team at travellers in 2006, from Marsh
- Since 2009 team has written an upstream energy book excluding Gulf of Mexico windstorm with average current gross incurred loss ratios of 45% over from 2009-2014
- Over the last four years significantly beaten target ULR and provided an ROE in excess of the syndicate and company's expectations
- Over this period gross premium income has risen from \$32.6m in 2009 to \$52.3m in 2014 (\$38.4m net written premium prior to treaty reinsurance costs)
- Running the book since 2011 which is from when there has been the majority of growth



Nick Holding – Class Cargo Underwriter

- Most recently at FM Global delivering cargo insurance products and servicing to Fortune 500/Footsie100 type companies
- Most recently running a cargo book of approx. \$12m GPI with combined ratio (net loss ratio plus expenses) averaging 55-70% over last 5 years of account
- Over 25 years cargo insurance experience in underwriting and broking roles
- Maritime Business degree/ACII qualified



Kate Butlin – Hull Underwriter

- Was a Class Underwriter at Talbot Underwriting writing Hull and all ancillary interests including Marine War.
- Previously at Atrium Underwriting
- Over 15 years experience in Marine Hull Insurance
- Holds an LLB (Hons) Law Degree / DipCII
- Joined The Standard Syndicate March 2015



Sarah McGurk – Business Development Underwriter The Standard Syndicate Services Limited

- Insurance and reinsurance broker for 15 years, working with JLT in London and Canada and Willis
- Worked in Canada for 10 years where she was a retail broker for a mix of clients from international oil and gas companies to logistics and transportation clients
- D&O underwriter for 5 years with Travelers in both Canada and London
- Has worked in Lloyd's and insurance company environments
- Post-graduate and graduate qualifications in English Law
- Hold ACII and CIP qualifications

Regulatory status



The Standard Syndicate 1884 is managed by Charles Taylor Managing Agency Ltd. Charles Taylor Managing Agency Ltd is a Lloyd's managing agent and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

The Standard Syndicate Services Limited is a service company and a Lloyd's coverholder that is part of the Charles Taylor PLC group of companies. The Standard Syndicate Services Limited is an appointed representative of Charles Taylor Managing Agency Ltd which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. The Standard Syndicate Services Limited has authority to enter into contracts of insurance on behalf of the Lloyd's underwriting members of The Standard Syndicate 1884 which is managed by Charles Taylor Managing Agency Ltd.

www.syndicate1884.com

Round up and questions

London Offshore Forum, 13 May 2015

The Standard 



Please feel free to contact us with feedback or suggestions for our future forums.

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Charles Taylor Services Limited (CTS) is authorised and regulated by the Financial Conduct Authority to carry out general insurance mediation activities for commercial clients. For more details please see www.fsa.gov.uk/register/home.do or call the FCA on 0845 606 1234. CTS is a wholly owned subsidiary of Charles Taylor Holdings Limited. The ultimate parent and controlling company is Charles Taylor plc.

The Standard



www.standard-club.com

**Charles
Taylor**

www.ctplc.com