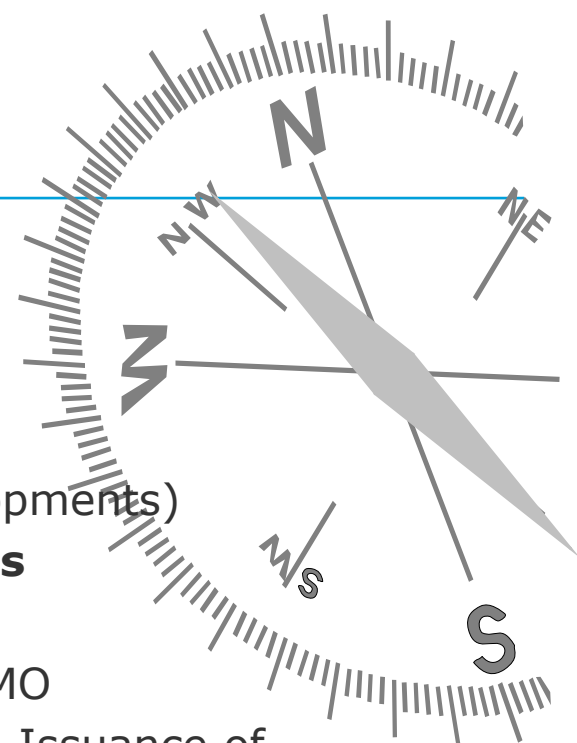




ISM Code & Auditing Techniques

EMSA Training – Module 3 & 4

Navigator



Module 1 – Evolution of Management Systems and the ISM Code

Module 2 – ISM Code Requirements (incl. latest developments)

➔ **Module 3 – Stakeholders in Shipboard Operations**

Module 4 – Knowledge of Shipboard Operations

Module 5 – The ISM Code and the EC Regulations & IMO

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Module 7 – The Auditor

Module 8 – Audit Planning and Organization

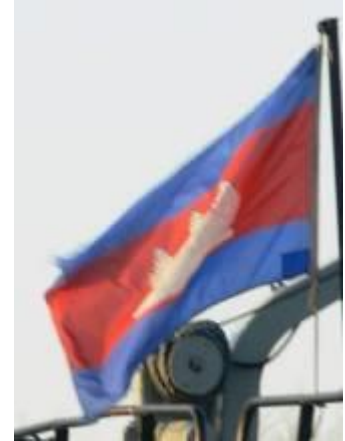
Module 9 – Audit Conduction

Module 10 – Audit Reporting & Follow-up

Module 11 – Role Play

Flag States - Tasks

- Development of national law on shipping
- Implementation of international Conventions into its own national law
- Ensure compliance of ships flying its flag with its own national law
 - often delegated to Recognized Organisations (RO) = Classification Societies



Module 3 / Activity 1

Flag State Tasks

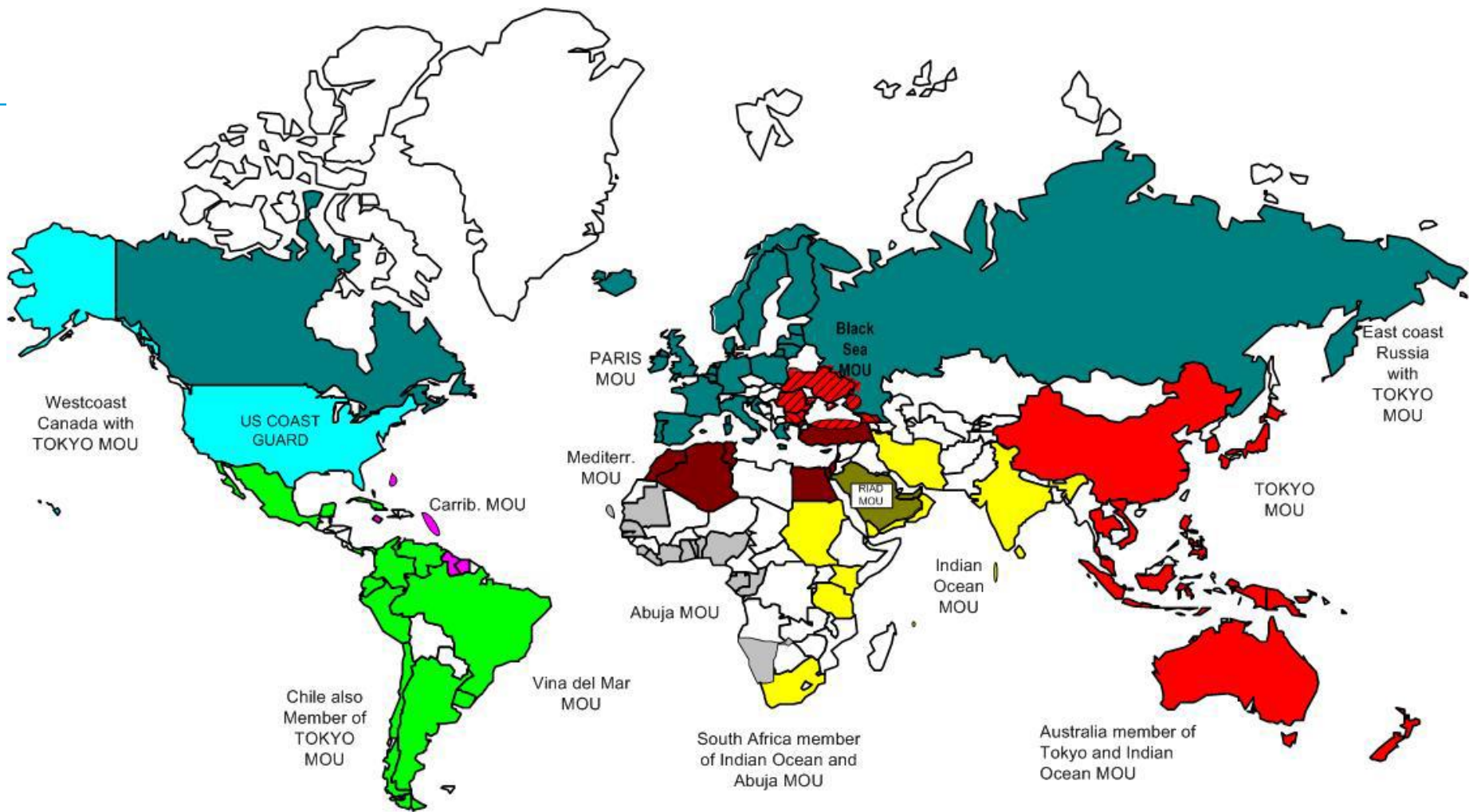
<https://forms.office.com/Pages/ResponsePage.aspx?id=DQSIkWdsW0yxEjajBLZtrQAAAAAAAAAAAAANAAfIJy5IUMzhWS1oxNIFHVk5RODJFVEQyT0c1SkoxUi4u>



Port State Administrations - Tasks

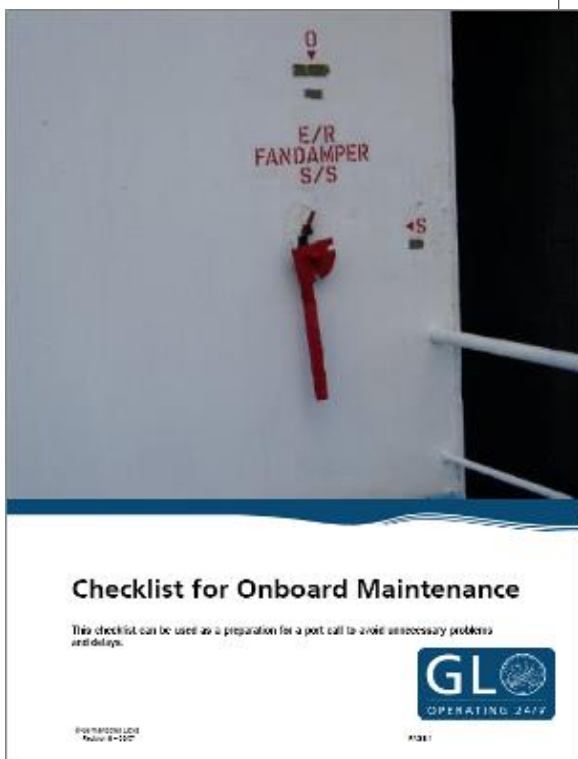
- Port State controls (PSCs) of foreign ships within its ports for compliance with international standards
- Alliance in regional associations
 - e.g. Paris MOU for Europe, Tokyo MOU for Pacific Area
- PSC legalized by all important IMO conventions





Distribution of PSC MOUs worldwide

DNV-GL Tools: Top Ten PSC Findings & Maintenance Checklists

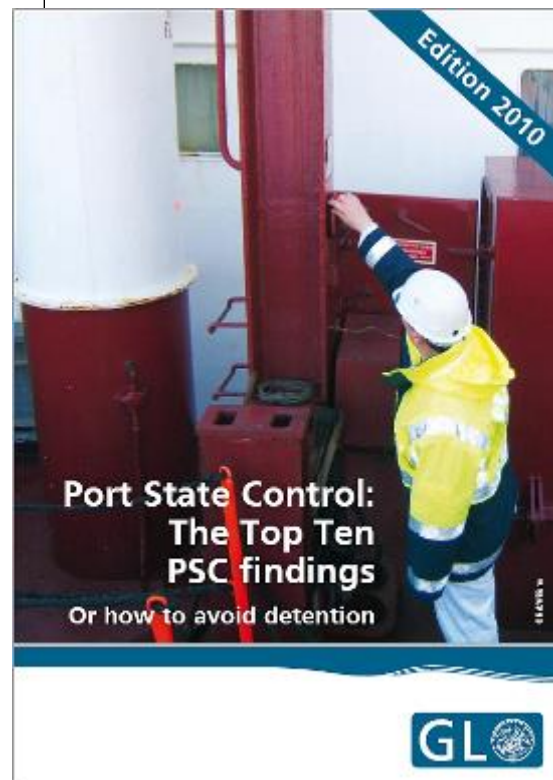


7 Hull and Machinery Condition:

No.	Item	Yes	No	Action taken
7.1	As far as visible, are the ship's side shell plates without damage and excessive wastage?	<input type="checkbox"/>	<input type="checkbox"/>	
7.2	Is the structure of cargo holds with regard to bulkheads, frames, brackets, tank tops etc. without damages and excessive wastage?	<input type="checkbox"/>	<input type="checkbox"/>	
7.3	Are electric cable arrangements properly installed and insulated, no loose wiring?	<input type="checkbox"/>	<input type="checkbox"/>	
	Are light covers properly fixed on all lamps?	<input type="checkbox"/>	<input type="checkbox"/>	
	Does the main switchboard have insulation mats around it?	<input type="checkbox"/>	<input type="checkbox"/>	
7.4	Is the engine room with regard to work and fire safety in a generally clean condition?	<input type="checkbox"/>	<input type="checkbox"/>	
7.5	Is the main propulsion system in proper working condition?	<input type="checkbox"/>	<input type="checkbox"/>	
7.6	Is the auxiliary engine and power system including 100% power redundancy in proper working condition?	<input type="checkbox"/>	<input type="checkbox"/>	
7.7	Is the emergency generator arrangement for immediate supply of electrical power in proper working condition?	<input type="checkbox"/>	<input type="checkbox"/>	
7.8	Is the jacketed piping system on high pressure fuel lines properly installed and alarms working?	<input type="checkbox"/>	<input type="checkbox"/>	
7.9	Are engines and piping systems free of leakages?	<input type="checkbox"/>	<input type="checkbox"/>	
7.10	Are the anchoring devices in good condition without damages?	<input type="checkbox"/>	<input type="checkbox"/>	
7.11	Are the mooring ropes in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>	

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What are the tasks of a classification society?



Classification Societies - Tasks

- Development of *class rules*, i.e. standards for ships' design, construction and operational maintenance
- Research programs in ship technology
- Survey and *Classification* of ships
- Publication of a register book
- *Statutory* surveys and certification as delegated by Administrations



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Dual Tasks: Class - Statutory

Classification

Rules for Classification and Construction

Recognized technical standards



Internal

**Application and Interpretation
by DNV GL**

Statutory

IMO: Conventions, Codes, Resolutions

National Law, additional national requirements

Administration is responsible and may authorize Classification Soc.



External

**Application by DNV GL
on behalf of Administration,
Interpretation by Administration**

Delegation of Authority

- Authorization of Recognized Organizations (RO)

- Minimum standards (Res.MSC.349(92), dictating: *resolution A.739(18) entitled Guidelines for the authorization of organizations acting on behalf of the Administration, as amended by resolution MSC.208(81), and resolution A.789(19) entitled Specifications on the survey and certification functions of ROs*
- Formal written agreement
- Instructions if a ship has been found unfit to proceed
- Provision of RO with national law and interpretations
- RO to assist in the interpretation of regulations
- Surveys, audits and issue of certificates
- Program for monitoring and communication

DNV GL Tool: Authorization List

Flags that are not direct members of IMO are listed separately at the bottom of the list	SOLAS Convention 74	SOLAS Protocol 78	Assembly Res. A.883(21)	SOLAS Protocol 88	Stockholm Agreement 96	LOAD LINES Convention 66	Assembly Res. A.883(21)	LOAD LINES Protocol 88	TONNAGE Convention 69	SFV Protocol 93	Cape Town Agreement 2012	STCW Convention 78	STCW-F Convention 95	MARPOL 73/78 (Annex III)	MARPOL 73/78 (Annex II)	MARPOL 73/78 (Annex IV)	MARPOL 73/78 (Annex V)	MARPOL Protocol 97 (Annex VI)	ANTI FOULING 01	BALLAST WATER 2004	HONG KONG CONVENTION	MLC	ILO 92	ILO 133	ILO 152
Afghanistan																									
Albania	x	x				x			x			x		x	x	x	x			x		x			
Algeria	x	x		x		x		x	x			x		x	x	x	x						x		
Andorra																									
Angola	x	x				x			x			x		x	x	x	x								
Antigua & Barbuda	x	x		x		x		x	x			x		x	x	x	x	x	x	x	x		x		
Argentina	x	x		x		x		x	x			x		x	x	x	x					x			
Armenia																									
Australia	x	x		x		x		x	x			x		x	x	x	x	x	x	x		x	x	x	
Austria	x	x				x			x			x		x	x	x	x								
Azerbaijan	x			x		x		x	x			x		x	x	x	x	x							
Bahamas	x	x		x		x		x	x			x		x	x		x	x	x			x			
Bahrain	x			x		x		x	x			x		x			x								
Bangladesh	x	x		x		x		x	x			x		x	x	x	x	x				x			
Barbados	x	x		x		x		x	x			x		x	x	x	x	x	x	x	x	x			
Belarus	x					x								x	x	x	x								
Belgium	x	x		x		x		x	x			x		x	x	x	x	x	x	x	x	x	x	x	x
Belize	x	x		x		x		x	x			x		x	x	x	x	x				x	x	x	
Benin	x	x				x			x			x		x	x	x	x	x				x			
Bhutan																									

IACS - Tasks

- Standards among Classification Societies
- Publications (www.iacs.org.uk)
 - unified requirements
 - interpretations
 - recommendations
 - common structural rules
- Representation at IMO

IACS

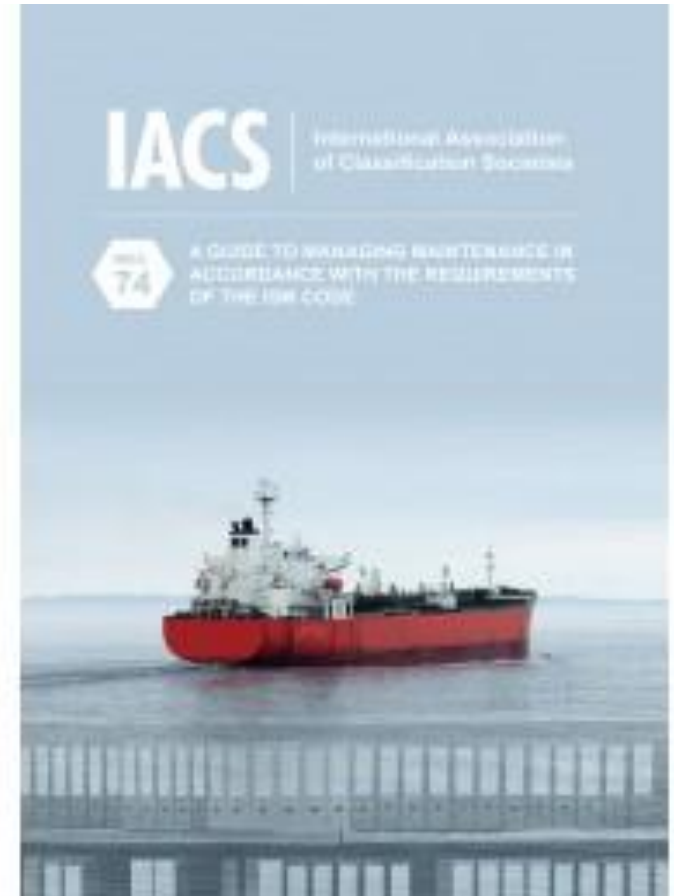
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES LTD.



EMSA - ISM Code & Auditing Techniques

IACS Recommendation 74 – A Guide to Managing Maintenance

- The “Guide to Managing Maintenance” laid down in the IACS Rec. 74 (Rev.2 Aug 2018)
- Most failures in shipboard safety management systems leading to a PSC detention refer to maintenance



Industrial Organizations

- ISO International Standard Organization
- ICS International Chamber of Shipping
- BIMCO The Baltic and International Maritime Council
- OCIMF Oil Companies International Marine Forum
- INTERTANKO Int. Association of Independent Tanker Owners
- INTERCARGO Int. Association of Dry Cargo Ship-owners

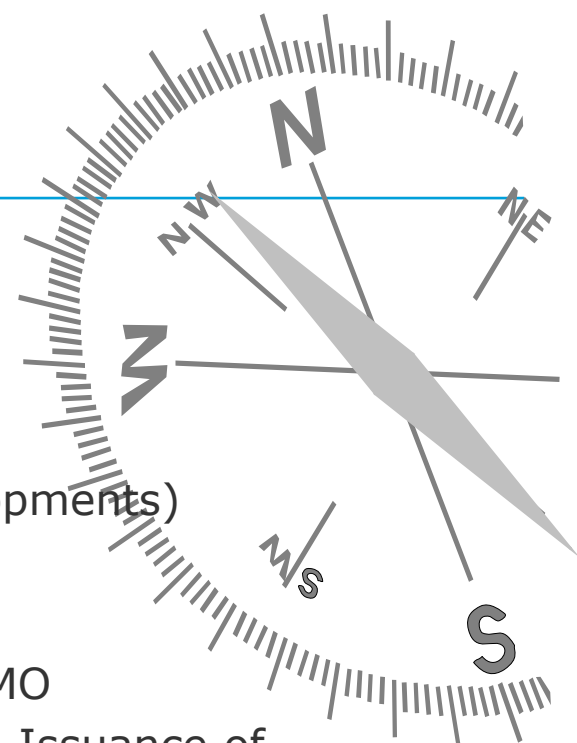
➤ Creating Industry Standards

Closing – Module 3

Do you have any further questions?



Navigator



Module 1 – Evolution of Management Systems and the ISM Code

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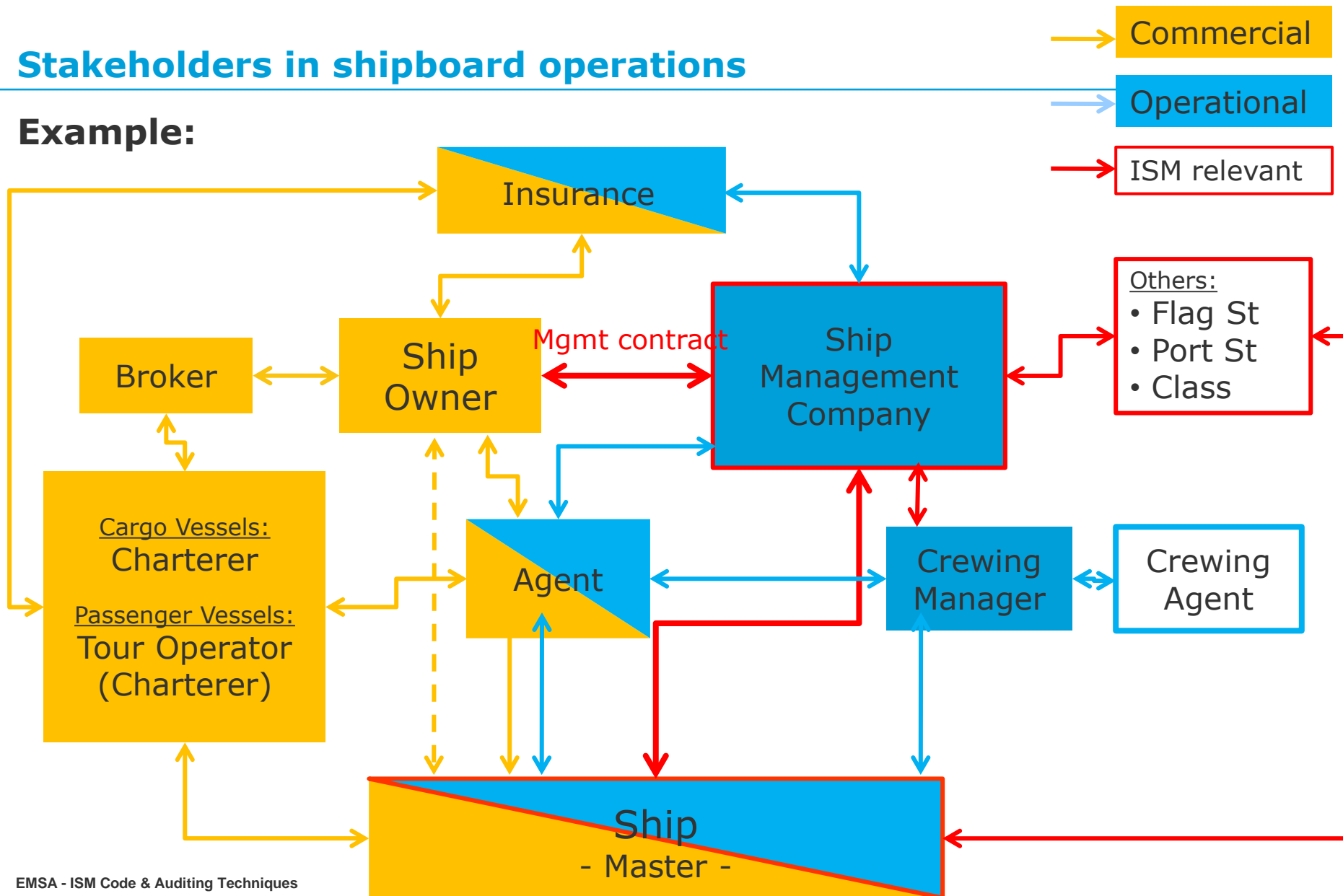
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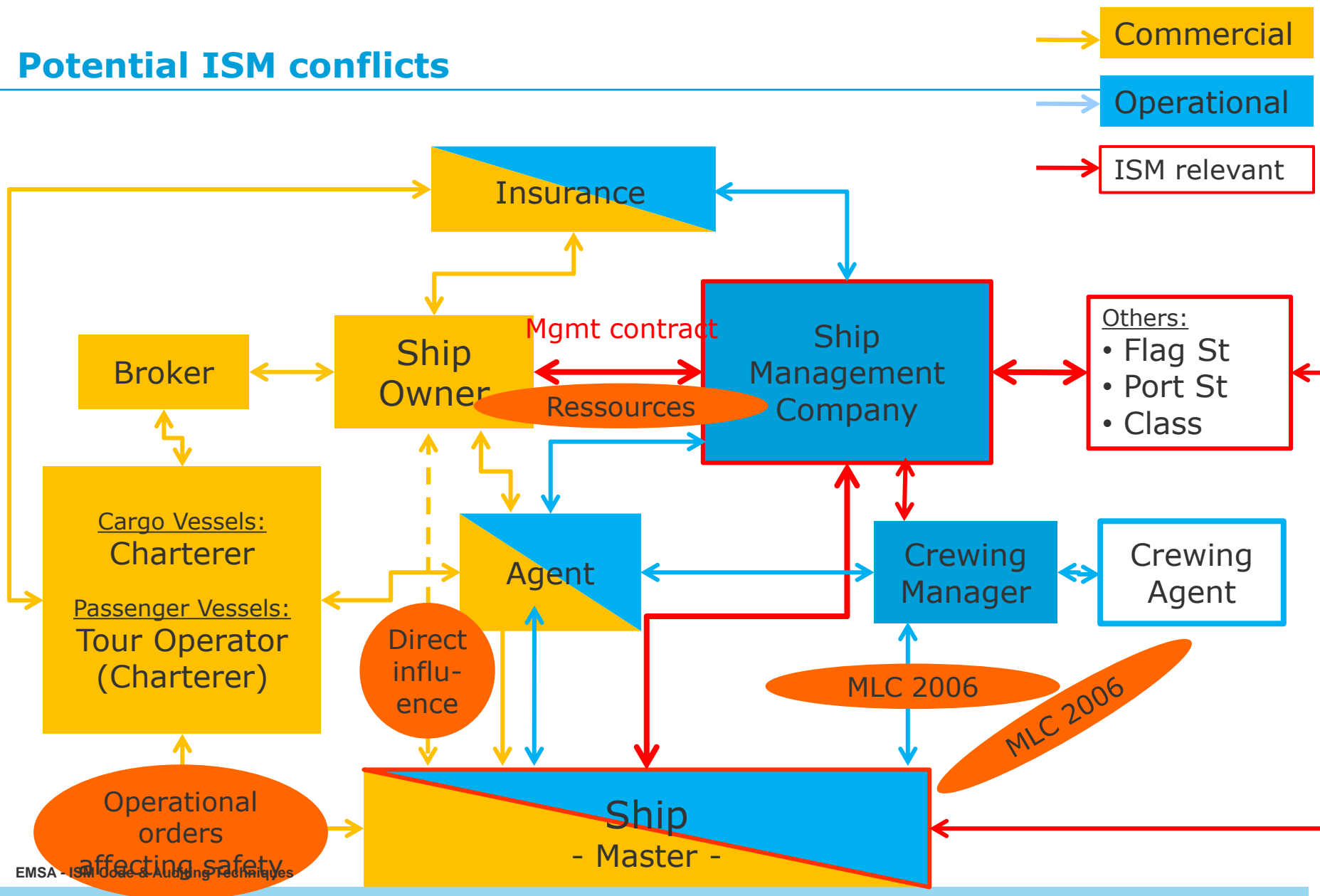
Stakeholders in shipboard operations

Example:



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Potential ISM conflicts



Conflicting goals in shipping

Officers and crew see several different goals and objectives, and some of these goals might at times be in conflict with one another...

Revenue Goals



"If we stop for maintenance, we will be delayed and lose a good deal"

SMS Goals



"To be in compliance with the rest hour regulation"

Budget Goals



"The budget on spare parts is spent, and it's only September"

Time Goals



"We are told to be in Rotterdam in 12 hours. Full speed ahead"

Could there possibly be conflicting goals on safety in some circumstances that might result in safety not being the top priority?

The Master

- Represents Owners / Charterers
- Protects Owners / Charterers interests against third parties
- Is fully responsible for all shipboard operations (Cargo / Passenger related)
- SMS responsibility acc. to ISM Elem. 5



Seaworthiness and Cargo-Worthiness

Seaworthiness



Cargo-worthiness

The Ship-owner

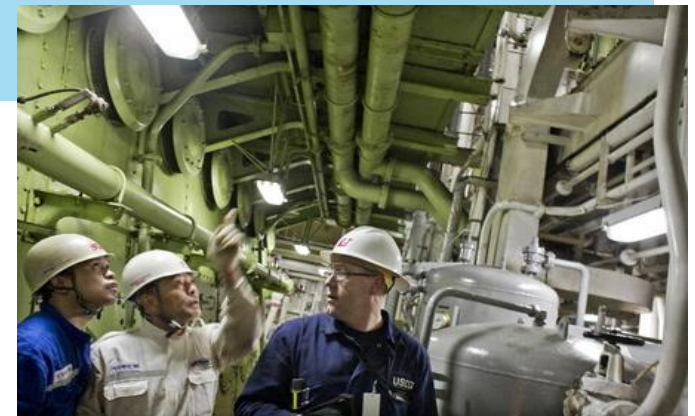
- Owns merchant (commercial) ships
- Operates these for delivery of cargo
- At a certain freight rate
- Liner – Tramp services
- Is organized through Company
- Bareboat charter / Sub-charter / Beneficial owner
- Contracts ship management companies for nautical and technical management



Ship Management Company (1)

Technical Management

- Co-ordination of all technical aspects related to ship operations by Company's technical inspectors (superintendents – mostly ex ship engineers)
- Regular inspections on board / continuous technical support
- Technical procurement
- Organization of planned maintenance
- Providing technical support for repair works, incl. docking for major repairs
- Organize shipyard guarantee works / periodical dry dockings
- Budget control for all technical expenditures
- Hiring in external services (if applicable)



Ship Management Company (2)

Nautical Management

- Co-ordination of all nautical , safety and pollution prevention aspects related to ship operations by Company's nautical inspectors
- Development and supervision of ship management systems
- Occupational health and safety
- Regular inspections on board / continuous support of ship's command
- Supervision of planned safety maintenance and shipboard training
- Ship's administration (Registration, flag- and port State affairs)
- Ship's documentation (Ship's papers, sea charts, etc.)
- ISPS matters

Crew Management

- Supervision crew's certification and qualification according to STCW, MLC and flag State requirements



Despite the above stated managements, the only management with a regulatory status is the Company in the ISM Code, i.e.: the Company appearing in the DOC / SMC, who is responsible for ensuring that all these activities are carried out in accordance with the requirements in the ISM Code – and the ISM Company is **responsible for** both technical management, crew management and nautical management – even if the tasks are delegated to other entities.

The Charterer

Operational function

Commercial function

- Owns cargo, or
- Operates passenger transport services, or
- Acts as Tour operator
- May employ shipbroker
- May also be a party without a cargo



Charter Types and Contracts

Voyage Charter

- Hiring of vessel and crew
- Payment on a per-ton or lump sum basis
- Owner pays fuel / crew

Time Charter

- Hiring of vessel for specific period
- Owner manages the vessel
- Charterer pays fuel, port dues, "daily hire"

Bareboat Charter

- Hiring of complete vessel ("bare boat")
- Charterer pays all operating expenses
- Title of ownership

The Ship Broker

- Specialist intermediaries between ship-owners and the charterers
- Specialized for dry cargo chartering / tanker chartering / container / sales & purchase broker (S&P) / salvage chartering / new building
- Continuously monitoring the shipping market (spot market, charter market. etc.)
- Acting as negotiator – charterer/ owner regarding terms & conditions & payment, co-ordinating communication
- Paid on a commission basis



The Crew Manager / Crewing Agent

Crew Manager

- Provides qualified crew
- Is contracted by ship managers
- Mostly employer of crew
- Entire or part of the crew
- Arranging signing on/off
- May organize shorebased training

Crewing Agent

- Selects and interviews crew
- Contracted by crew manager, ship owner / manager



The Agent

- Charterer's / Owner's local representative
- Intermediate between charterer / owner/ ship and third parties
- Main tasks:
 - Immigration, customs, etc.
 - Navigational aids – pilot, tug
 - Financial arrangements
 - Port services
 - Contact person for berth arrangements, terminal operations & schedule
 - Miscellaneous (crew change, order taxi, purchase, etc.)



Types of agents:

- **Ship's clearing agent – husbandry**
- **Forwarding / Customs clearing agents**
- **Cargo agents**

The Underwriter / Insurance

- Marine Insurance cover loss or
- Specialized underwriters: Hull & Machinery (H&M), cargo, Loss of hire (LoH)
- Protection & Indemnity clubs (P&I) cover all risks not covered by insurance
- Determine the extent of damage to cargo, ship and other liabilities
- Specialized in claims assessment
- Give an estimate of damage in writing as a legal document for insurers



Closing – Module 4

Do you have any further questions?

