



IHM and Ready for Recycling – state of play

EMSA IHM Workshop, 21 September 2016

Jim Heath, Principal Ship Recycling Specialist

Aims

To look at the Hong Kong Convention IHM and Ready for Recycling process and uptake

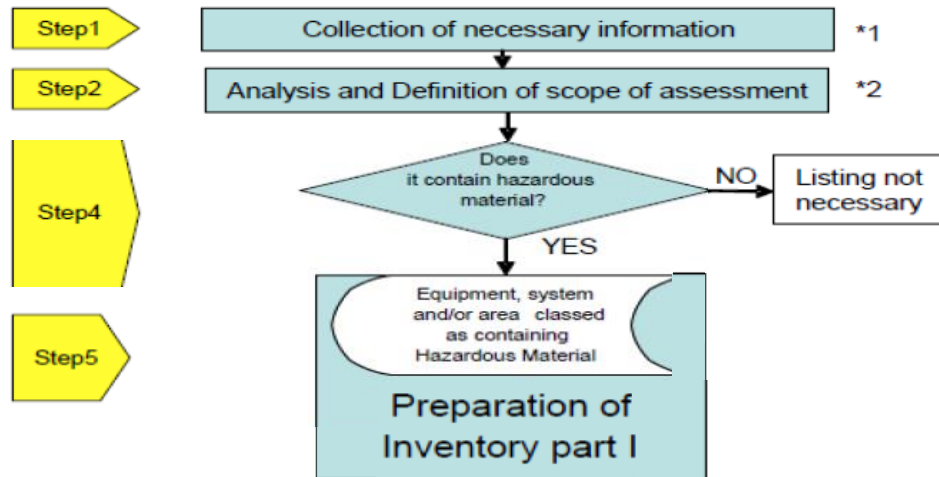
To discuss European Union requirements – and application timeline

To consider implications for shipbuilders and shipowners

To assess the current state of play – and consider EU SRR implementation issues



IHM: Compiling Part I



MATERIAL DECLARATION (MD)									
<Date of declaration>									
Date									
<MD Identification number>									
MD ID-No.									
<Other information>									
Remark 1									
Remark 2									
Remark 3									
<Supplier (respondent) information>									
Company name									
Division name									
Address									
Contact person									
Telephone number									
Fax number									
Email address									
SDoC ID number									
<Product information>									
Product name		Product number		Delivered unit		Product information			
				Amount Unit					
<Materials information>									
This materials information shows the amount of hazardous materials contained in									
Unit									
1 (like kg, m, m ² , piece, etc.) of the product									
Table	Material name	Threshold value	Present above threshold value?	If yes, material mass		If yes, information on where it is used			
			Yes / No	Mass	Unit				
Table A (materials listed in appendix 1 of the Convention)	Asbestos	Asbestos	0.1% *						
	Polychlorinated biphenyls (PCBs)	Polychlorinated biphenyls (PCBs)	50 mg/kg						
		Chlorofluorocarbons (CFCs)							
		Halons							
		Other fully halogenated CFCs							
		Carbon tetrachloride							
		Ozone Depleting Substance (ODS)	No threshold value						
		1, 1, 1-Trichloroethane							
		Hydrochlorofluorocarbons							
		Hydrobromofluorocarbons							
Table B (materials listed in appendix 2 of the Convention)		Methyl bromide							
		Bromochloromethane							
		e.g. Tributyltin (TBT)							
		e.g. Triphenyltin (TPI's)	2500 mg total tin/kg						
		e.g. Tributyltin oxide (TBTO)							
EU SRR **	Perfluorooctane sulfonic acid (PFOS)	No threshold value							
Table	Material name	Threshold value	Present above threshold value?	If yes, material mass		If yes, information on where it is used			
			Yes / No	Mass	Unit				
Table B (materials listed in appendix 2 of the Convention)		Cadmium and cadmium compounds	100 mg/kg						
		Hexavalent chromium and hexavalent chromium compounds	1000 mg/kg						
		Lead and lead compounds	1000 mg/kg						
		Mercury and mercury compounds	1000 mg/kg						
		Polybrominated biphenyl (PBBs)	50 mg/kg						
		Polybrominated diphenyl ethers (PBDEs)	1000 mg/kg						
		Polychloronaphthalenes (C1 + C3)	50 mg/kg						
		Radioactive substances	No threshold value						
		Certain short-chain chlorinated paraffins	1%						
	EU SRR **	Brominated flame retardant (HBCDD)	No threshold value						

* In accordance with regulation 4 of the IMU Hong Kong Convention, for all ships, new installation of materials which contain asbestos shall be prohibited. According to the UN recommendation "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" adopted by the United Nations Economic and Social Council's Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (UNSCCE/GHS), the ILO's Sub-Committee of Experts, in 2002 (published in 2003), carcinogenic mixtures classified as Category 1A (including asbestos mixtures) under the GHS are required to be labelled as carcinogenic if the ratio is more than 0.1%. However, if 1% is applied, this threshold value should be recorded in the inventory and, if available, the Material Declaration and can be applied not later than five years after the entry into force of the Convention. The threshold value of 0.1% need not be retroactively applied in three inventories and declarations.

** Additional materials to be listed, in accordance with Annex I and Annex II of the European Union Ship Recycling Regulation (Regulation (EU) No 1257/21)

[Click here](#) for a brief summary of why this form needs to be completed.

IHM: LR newbuilding procedures

IHM Approval conducted by on-site team

Throughout construction process

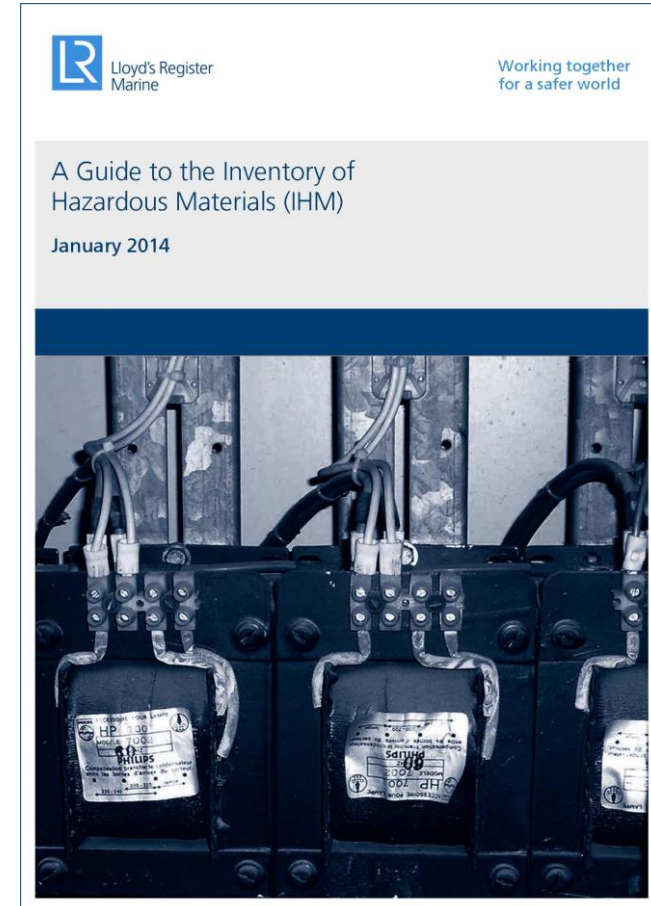
Checks made on contracts between yard / suppliers

Procedures for controlling materials?

Are procedures being implemented?

MD / SDoC forms?

Onboard verification of items



IHM: LR state of play

SoC issued on delivery in compliance with
Regulation 5.2

Supply chain issues

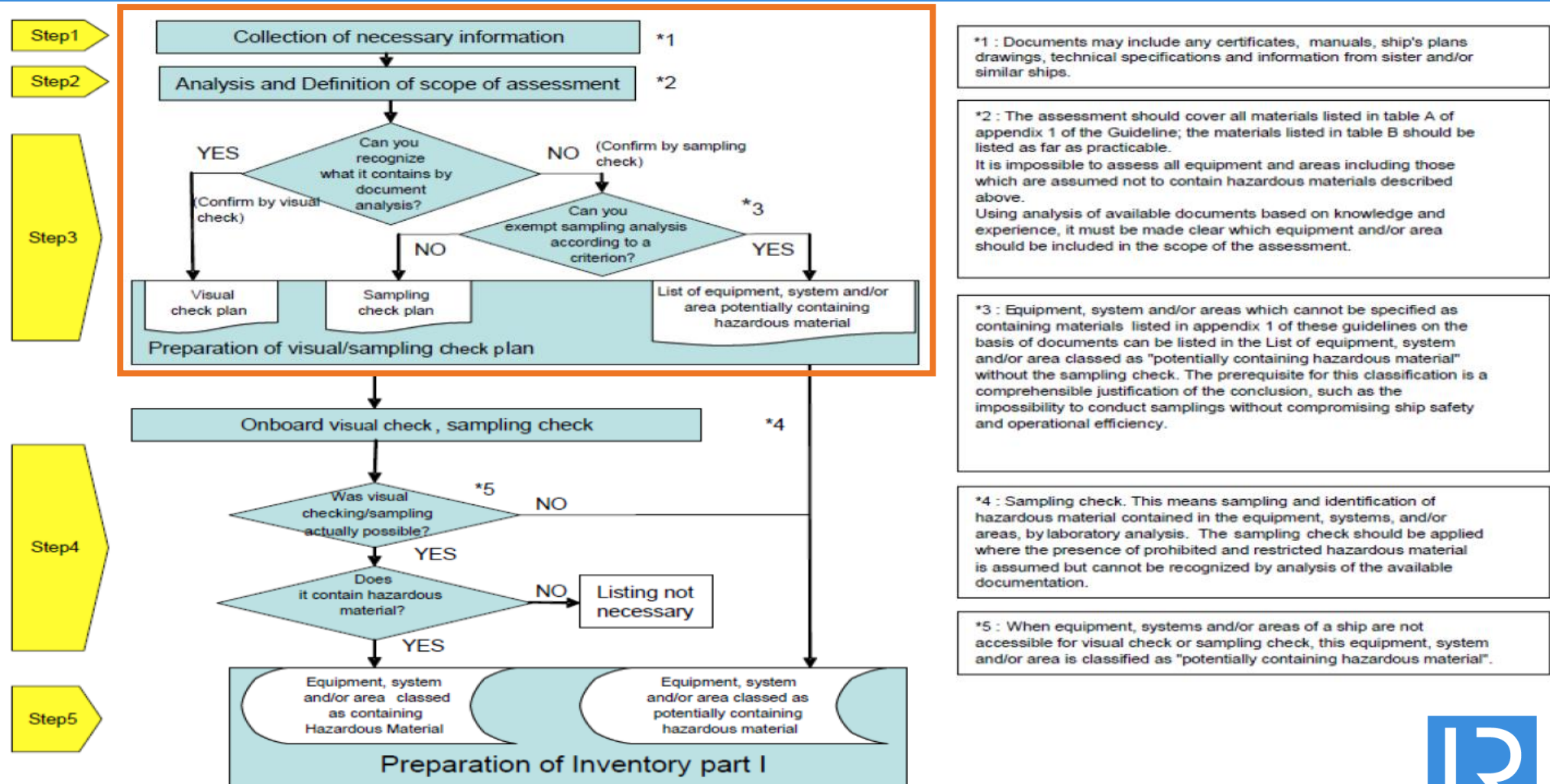
No EU Regulation contracts yet but...

MD / SDoC updated 2015

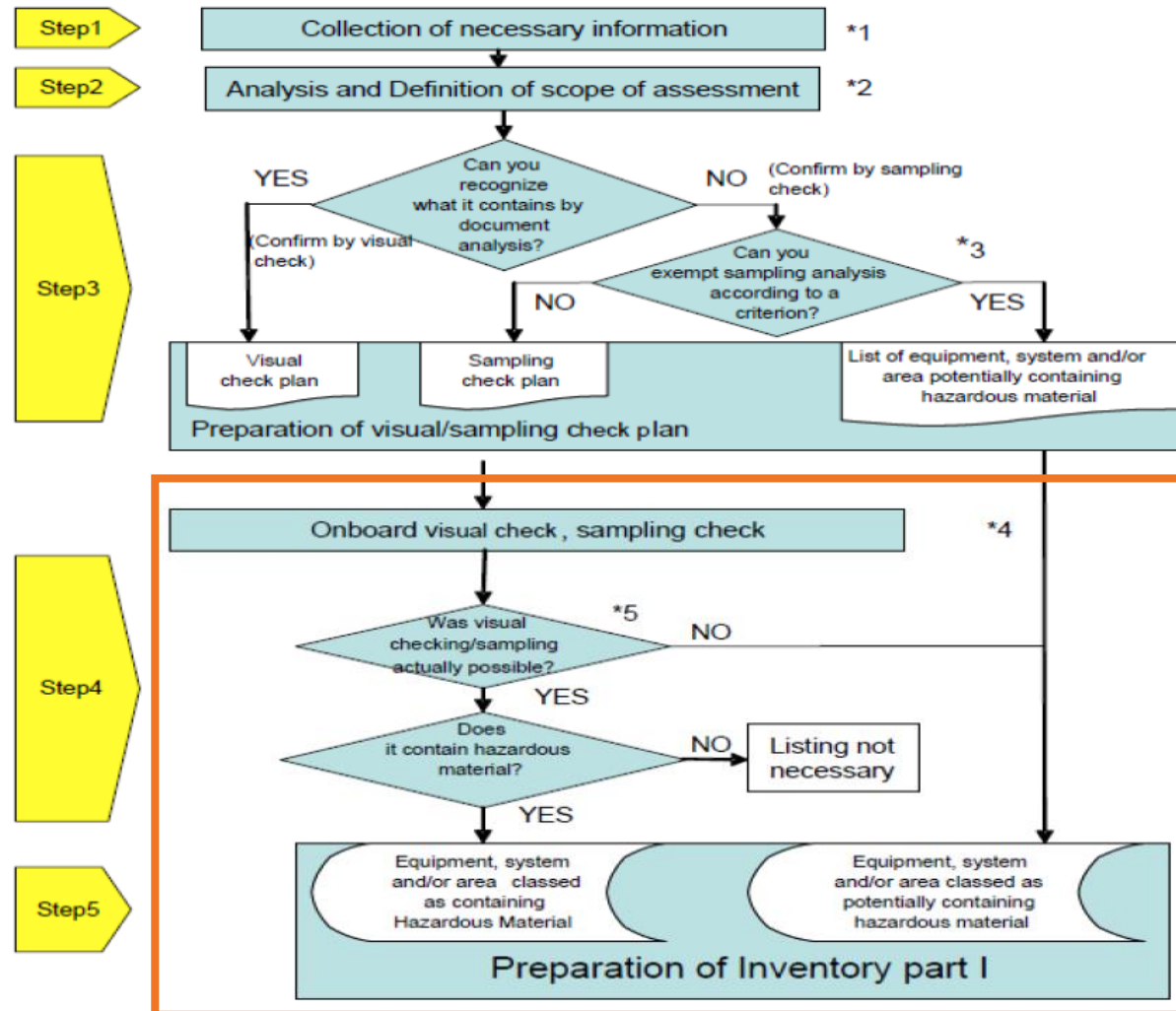
2006-2015: 1,500 contracts



IHM: Compiling Part I



IHM: Compiling Part I



*1 : Documents may include any certificates, manuals, ship's plans drawings, technical specifications and information from sister and/or similar ships.

*2 : The assessment should cover all materials listed in table A of appendix 1 of the Guideline; the materials listed in table B should be listed as far as practicable.
It is impossible to assess all equipment and areas including those which are assumed not to contain hazardous materials described above.
Using analysis of available documents based on knowledge and experience, it must be made clear which equipment and/or area should be included in the scope of the assessment.

*3 : Equipment, system and/or areas which cannot be specified as containing materials listed in appendix 1 of these guidelines on the basis of documents can be listed in the List of equipment, system and/or area classed as "potentially containing hazardous material" without the sampling check. The prerequisite for this classification is a comprehensible justification of the conclusion, such as the impossibility to conduct samplings without compromising ship safety and operational efficiency.

*4 : Sampling check. This means sampling and identification of hazardous material contained in the equipment, systems, and/or areas, by laboratory analysis. The sampling check should be applied where the presence of prohibited and restricted hazardous material is assumed but cannot be recognized by analysis of the available documentation.

*5 : When equipment, systems and/or areas of a ship are not accessible for visual check or sampling check, this equipment, system and/or area is classified as "potentially containing hazardous material".

IHM: LR existing ship procedures

Shipowner is provided with:

IHM template

VSCP

Guide to the IHM

Approved Service Supplier details

Named IHM Approval Office contact:

Halifax

Piraeus

Singapore

Southampton



IHM: LR existing ship procedures

IHM Approval Team review:

Check for expected hazards for ship of similar age / type

Ascertain compliance with Convention requirements

Arrange for onboard verification survey

Statement of Compliance issued onboard



IHM: LR state of play

2006-2015: 650 contracts

IHM is NOT a priority for shipowners...

No EU guidance released

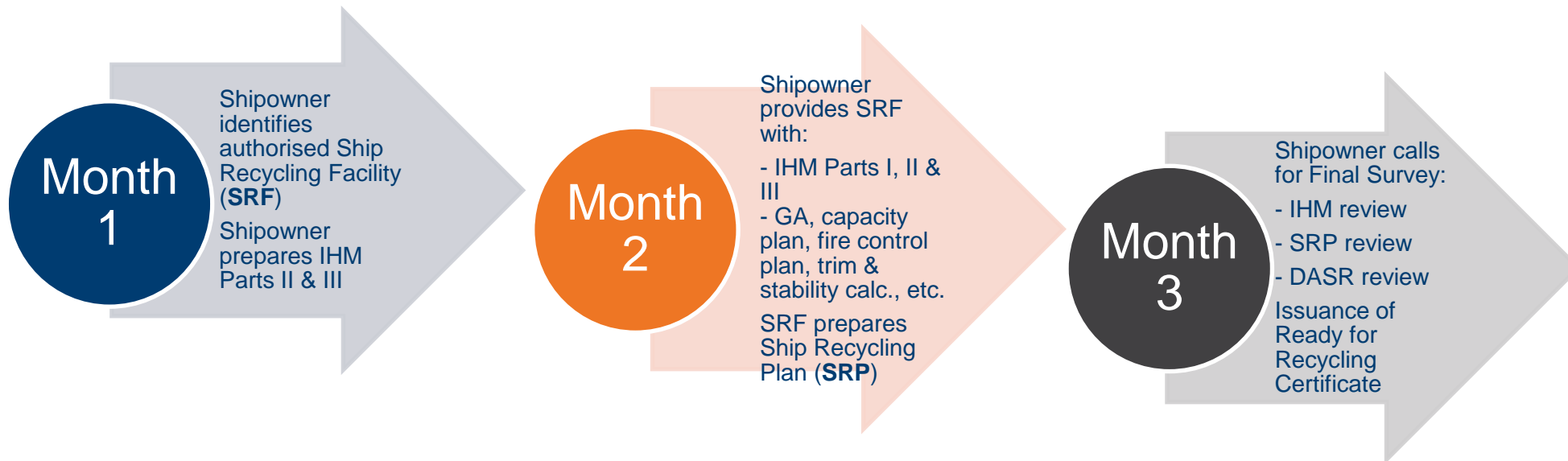
No clear Convention or Regulation application
dates

No contracts...?



Ready for Recycling: existing ship requirements

In an ideal world...



RRC certificate valid for no more than 3 months

i.e. Delivery to SRF to take place within 3 months

Ready for Recycling: LR procedures

Final Survey

- Desktop approval and onboard verification of IHM
Parts I, II and III
- Review ship-specific Ship Recycling Plan / review
facility SRFP
- Issue Statement of Compliance on Ready for
Recycling



Ready for Recycling: LR state of play

2006-2015:

<20 ready for recycling contracts won

Majority as part of Audit During Recycling

Final Survey is NOT a priority for shipowners...



Stakeholder delay / confusion

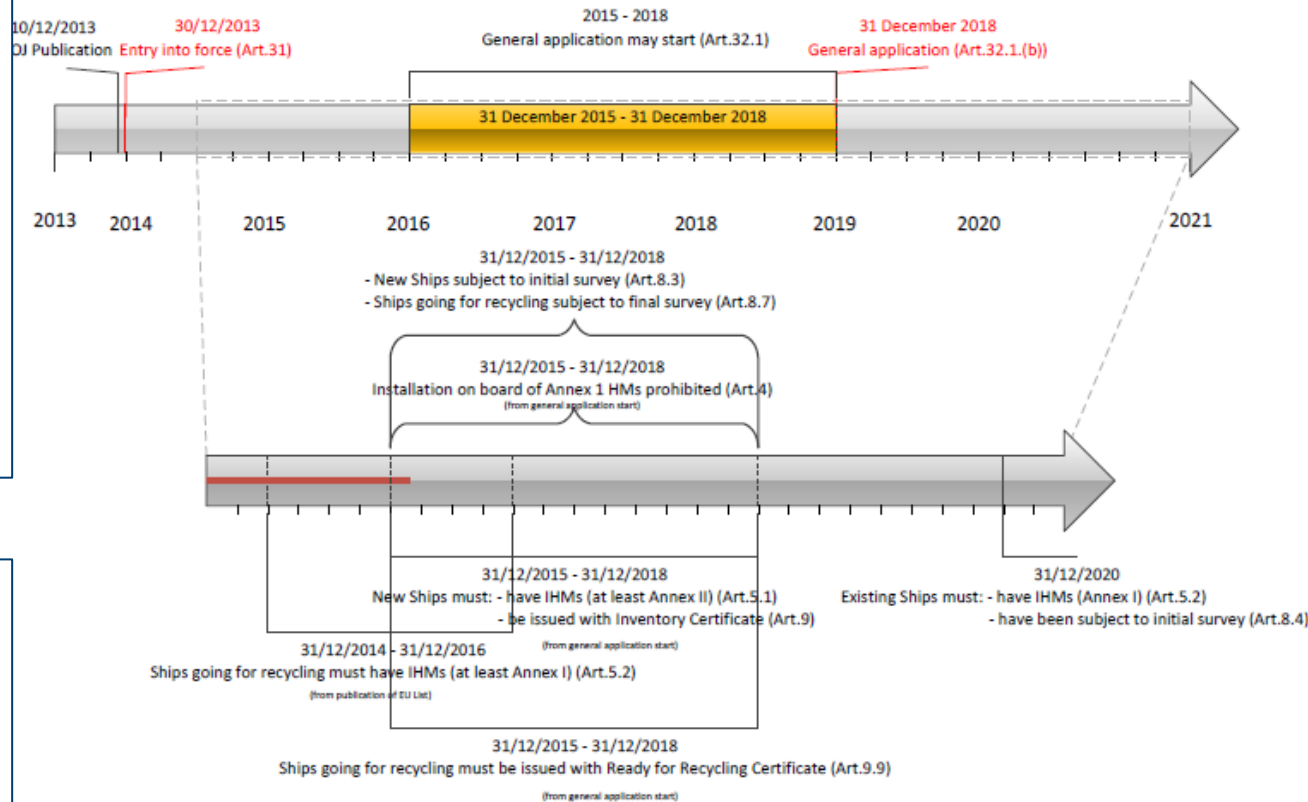
General application date?

Is the EU List progressing?

Delays to Technical Guidance Note;
delays to Workshops;
delays to EC Agent inspections

When should shipbuilders include EU SRR compliance in contracts with shipowners?

Regulation (EU) N.1257/2013 – Application Timeline for EU flagged Ships



Dec 2016 IHM deadline for ships going for recycling...

14 weeks...?

When should existing ships plan / budget for hazmat expert services?

When should they enter into contracts for RO certification?

IHM: Best possible timescale (example #1)

Shipowner

Hazmat Expert

Lloyd's Register

5 x ships on 1 x contract 2 x Hazmat Experts (small company) 1 x Approver and 5 x Surveyors	Jan-17				Feb-17				Mar-17			
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
Contract / planning stage	Shipowner No.1 (5 x ships)											
Hazmat Expert survey			1		1	1						
Sample results / IHM compiled						1						
IHM submitted to Class							1					
Approval / Survey planning								1				
Onboard survey / Certification								1				
Contract / planning stage				2		2	2					
Hazmat Expert survey							2					
Sample results / IHM compiled							2					
IHM submitted to Class								2				
Approval / Survey planning									2			
Onboard survey / Certification										2		
Contract / planning stage					3		3	3				
Hazmat Expert survey								3				
Sample results / IHM compiled								3				
IHM submitted to Class									3			
Approval / Survey planning										3		
Onboard survey / Certification											3	
Contract / planning stage						4		4	4			
Hazmat Expert survey									4			
Sample results / IHM compiled									4			
IHM submitted to Class										4		
Approval / Survey planning											4	
Onboard survey / Certification												4
Contract / planning stage							5		5	5		
Hazmat Expert survey										5		
Sample results / IHM compiled										5		
IHM submitted to Class											5	
Approval / Survey planning												5
Onboard survey / Certification												5

Example: **Best possible** 'realistic' timescale - 5 IHMs on 1 contract

IHM: Best possible timescale (example #2)

Shipowner

Hazmat Expert

Lloyd's Register

15 x ships on 1 x contract 10 x Hazmat Experts (large company) 3 x Approvers and 5 x Surveyors	Jan-17				Feb-17				Mar-17			
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
Contract / planning stage	Shipowner No.2 (15 x ships)											
Hazmat Expert survey			1	2	3							
Sample results / IHM compiled						1	2	3				
IHM submitted to Class							1	2	3			
Approval / Survey planning								1	2	3		
Onboard survey / Certification									1	2	3	
Contract / planning stage			4	5	6							
Hazmat Expert survey						4	5	6				
Sample results / IHM compiled							4	5	6			
IHM submitted to Class								4	5	6		
Approval / Survey planning									4	5	6	
Onboard survey / Certification											6	
Contract / planning stage			7	8	9							
Hazmat Expert survey						7	8	9				
Sample results / IHM compiled							7	8	9			
IHM submitted to Class								7	8	9		
Approval / Survey planning									7	8	9	
Onboard survey / Certification											9	
Contract / planning stage			10	11	12							
Hazmat Expert survey						10	11	12				
Sample results / IHM compiled							10	11	12			
IHM submitted to Class								10	11	12		
Approval / Survey planning									10	11	12	
Onboard survey / Certification												12
Contract / planning stage			13	14	15							
Hazmat Expert survey						13	14	15				
Sample results / IHM compiled							13	14	15			
IHM submitted to Class								13	14	15		
Approval / Survey planning									13	14	15	
Onboard survey / Certification												15

Example: Best possible 'realistic' timescale - 15 IHMs on 1 contract



IHM: Best possible timescale (example #3)

Shipowner

Hazmat Expert

Lloyd's Register

5 x ships on 5 x contracts 10 x Hazmat Experts (small companies) 5 x Approvers and 5 x Surveyors	Jan-17				Feb-17				Mar-17			
	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
Contract / planning stage	Shipowner No.3 (1 x ship)											
Hazmat Expert survey			1		1	1						
Sample results / IHM compiled						1						
IHM submitted to Class							1					
Approval / Survey planning								1				
Onboard survey / Certification								1				
Contract / planning stage		Shipowner No.4 (1 x ship)										
Hazmat Expert survey				2		2	2					
Sample results / IHM compiled							2					
IHM submitted to Class							2					
Approval / Survey planning								2				
Onboard survey / Certification									2			
Contract / planning stage			Shipowner No.5 (1 x ship)									
Hazmat Expert survey					3		3	3				
Sample results / IHM compiled								3				
IHM submitted to Class								3				
Approval / Survey planning									3			
Onboard survey / Certification										3		
Contract / planning stage				Shipowner No.6 (1 x ship)								
Hazmat Expert survey					4			4	4			
Sample results / IHM compiled									4			
IHM submitted to Class									4			
Approval / Survey planning										4		
Onboard survey / Certification											4	
Contract / planning stage					Shipowner No.7 (1 x ship)							
Hazmat Expert survey							5		5	5		
Sample results / IHM compiled										5		
IHM submitted to Class										5		
Approval / Survey planning											5	
Onboard survey / Certification												5

Example: **Best possible** 'realistic' timescale - 5 IHMs on 5 separate contracts

IHM: Best possible timescale (combined)



10 week period (Week 3 to Week 12, 2017)

7 shipowners

25 ships / IHMs

5-7 hazmat expert companies 15-30 hazmat experts

5-9 IHM approval specialists 15-25 verification surveyors

4 year period (January 2017 to December 2020)

At above rate: 10 IHMs completed per month = **480** existing ships

IHM: Projected state of play...?



But what if 2,000 LR Class existing ships ask for an IHM by December 2020...?

40 IHMs need to be completed per month, every month

Will need at least 10 hazmat companies / 36 experts to be available every month

Will need at least 12 dedicated IHM approval specialists / 32 verification surveyors

LR need to certify 2 x IHMs, in full, every working day – starting from NOW – and consider:

Budgeting

No contracts in place, or budgets set, due to lack of clear application dates...

Majority of shipowners expected to leave until the last minute...

Sickness / Leave

Same experts needed at the same time



IHM: Implications for shipowners?

Port State Control

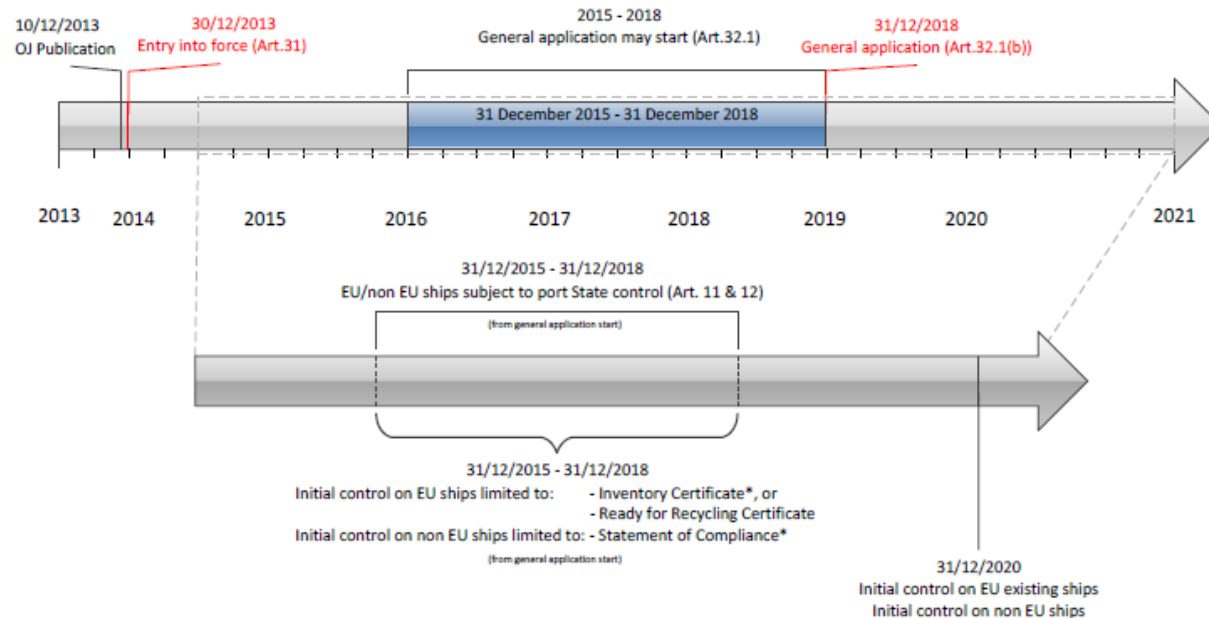
Article 11 – Port State Control

2. A detailed inspection may be carried out by the relevant authority involved in port State control activities, taking into account the relevant IMO guidelines, where a ship does not carry a valid certificate...

Article 11 – Port State Control

3. A ship may be... detained, dismissed or excluded from the ports or offshore terminals under the jurisdiction of a Member State in the event that it fails to submit... a copy of the inventory certificate or the ready for recycling certificate

Regulation (EU) N.1257/2013 – Application Timeline for port State control



*N.B.: For existing EU ships an IHM should be issued after 31/12/2020 (Art.5.2 & Art.32.2(b)). For non-EU ships an IHM should also be issued after 31/12/2020 (Art.12.1 & Art.32.2(b)). Therefore, for all these ships an IC or a SoC respectively may not be controlled before 31/12/2020.

Article 12 - Ships flying the flag of a third country

A ship flying the flag of a third country **may be warned, detained, dismissed or excluded** from the ports or offshore terminals under the jurisdiction of a Member State **in the event that it fails to submit to the relevant authorities of that Member State a copy of the SOC** in accordance with paragraphs 6 and 7 **together with the IHM**

What if the flag of the 3rd country hasn't authorised an RO to issue such a Statement?



Conclusions

Shipbuilders and shipowners are not acting in advance of application dates

Shipbuilders and shipowners are unsure of general application dates

The IHM market is virtually non-existent at the current time

Shipbuilders and shipowners have other, clearer priorities

Hazmat Expert and Class Society capacity is likely to be stretched

IHM certificates / SOC's onboard all ships entering EU waters within 4 years...?



Jim Heath

Principal Ship Recycling Specialist

Lloyd's Register Marine & Offshore

T +44 3304 140 160 E jim.heath@lr.org

Lloyd's Register Global Technology Centre

Boldrewood Innovation Campus, Southampton, SO16 7QF, UK



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for a safer world