Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA



# eCMID Small Vessel Inspection (<500gt)

IMCA M189 Issue 7 February 2025

Vessel name:	
IMO number:	
Date inspected:	
Date uploaded:	

Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA



The International Marine Contractors Association (IMCA) is the international trade association representing offshore marine contractors, service companies, and the industry's supply chain.

IMCA's mission is to improve performance in the marine contracting industry. Our value proposition is to influence our industry in key technical, contractual, policy and regulatory matters that are in the collective best interest of the marine contracting industry.

For over 25 years IMCA has maintained an important body of knowledge to assist our industry in the form of published guidance documents promoting good practice across a wide range of technical and professional disciplines. Documents have a self-explanatory title and are catalogued using a code containing letters and numbers. The letter indicates the discipline, and the number is simply sequential within that discipline.

Members are expected to adopt as a minimum standard the technical guidelines (published documents, information notes and other materials) produced by the Association appropriate to the technical division(s) and region(s) to which the relevant Member belongs.

#### **Legal Notice**

IMCA's store terms and conditions are available at https://www.imca-int.com/legal-notices/terms/ and apply to all downloads from IMCA's website, including this document.

IMCA makes every effort to ensure the accuracy and reliability of the data contained in the documents it publishes, but IMCA shall not be liable for any guidance and/or recommendation and/or statement herein contained. The information contained in this document does not fulfil or replace any individual's or Member's legal, regulatory or other duties or obligations in respect of their operations. Individuals and Members remain solely responsible for the safe, lawful and proper conduct of their operations.

## IMCA M189 Issue 7

Document designation: This document is categorised as Recommended Practice

**Feedback** – If you have any comments on this document, please email us:

feedback@imca-int.com



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## Information on this page is not included in reports generated by the eCMID database

## Legend

**Question risk classification:** 

3.1 High-risk question | 3.3 Other question

**Answer settings:** 

ANSWER resulting in findings | ANSWER requiring comment

**Guidance notes:** 

Inspector Notes – elements for the inspector to review and respond to. These are displayed in the eCMID Inspection App and are available to vessel operators when reviewing the report.

Reader Notes – a summary for the final inspection report of the aspects considered by the inspector. These are shown in the downloadable PDF report and are available to vessel operators when reviewing the report. **References** are included in both versions of the guidance notes.

## **Version History**

Version History					
Date	Reason	Revision			
February 2025	Updated inspector guidance notes in app. New reader notes in PDF.	Issue 7			
	General review and update of questions and references.				
	Print format of review copy updated to match latest IMCA template				
	Renamed from eMISW to eCMID Small Vessel Inspection (aligned with M149)				
August 2023	Updated closing meeting guidance, revised DP supplement, minor edits	Issue 6.2			
December 2022	New 'additional images' appendix available.	Issue 6.1			
June 2022	Hybrid supplements added	Issue 6			
May 2021	'Index of certificates' replaced with 'Certificates and publications'	Issue 5			
	New supplements on the High Speed Craft (HSC) Code and on Walk-to-Work, plus minor editorial changes elsewhere				
April 2020	Minor updates to address user feedback	Issue 4.1			
September 2018	General update of question sets, explanatory notes moved to M 167	Issue 4			
June 2016	Addition of vessel-specific supplements	Issue 3			
May 2012	Layout changed to facilitate inclusion on the CMID database	Rev. 2			
December 2007	Due to the revision of the small vessel code	Rev. 1			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## **Table of Contents**

Explanatory notes and guidance on completion of this document can be found in the latest issue of IMCA M167

Repo	ort Overview.		.6
1	<b>Vessel Partic</b>	ulars	.9
2	Certificates a	and Publications1	LO
3	Inspection	1	L <b>2</b>
4	Logbooks	1	L3
5	Weathertigh	t Integrity1	L <b>4</b>
6	Machinery a	nd Electrical1	۱6
7		2	
8	Freeboard	2	21
9	Escape		22
10	Fire		23
11	Radio		25
12	Navigation E	quipment2	27
13		2	
14	Accommoda	tion3	30
15	Safety of Per	sonnel3	32
16		3	38
17	Manning		39
18	Reporting	4	<b>ļ</b> 1
19	Clean Seas	4	12
20	Life-Saving A	ppliances4	13
21	Mooring and	Berthing4	15
22	Vessel and C	yber Security4	16
Supp	lement 1	Dynamic Positioning	50
Supp	lement 2	Towing5	56
Supp	lement 3	Diving5	58
Supp	lement 4	Anchor Handling6	50
Supp	lement 5	Barges (non-Self-Propelled)6	51



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

Supplement 6	High Speed Craft Code Compliance	63
Supplement 7	Walk to Work	68
Supplement 8	Hybrid Battery Systems for DP Vessels	72
Supplement 9	Battery Propulsion Systems for non-DP Vessels	76
Appendix – Add	itional Images	80





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## **Report Overview**

## **Inspection Details**

Date of inspection  Start date  Start time  End date  End time  Place of inspection  Place of inspection  Country  Vessel operation at time of inspection  Inspection  Company name  Company who has commissioned and receives the report  Inspector  Inspector  Inspector's name  Supervisor's name  Audited by (if applicable)  Auditor's name  Company disclaimer  Inspection Summary	Place of inspection  Place of inspection  Place of inspection  Country  Vessel operation at time of inspection  (e.g. mobilising, loading, discharging, bunkering, repairs or idle)  Inspection company  Company name  Company who has commissioned and receives the report  Inspector  Inspector  Inspector's name  AVI number  Supervisor's AVI number  Audited by (if applicable)  Auditor's name  Company disclaimer	Vessel name				
Vessel operation at time of inspection  Inspection Company  Company who has commissioned and receives the report  Inspector  Inspector  Supervisor (if applicable)  Audited by (if applicable)  Auditor's name  Company disclaimer  (e.g. mobilising, loading, discharging, bunkering, repairs or idle)  Supervisor or idle)  AVI number  Supervisor's name  AVI number  Audited by (if applicable)  Auditor's name	Vessel operation at time of inspection  (e.g. mobilising, loading, discharging, bunkering, repairs or idle)  Inspection company  Company name  Client  Company who has commissioned and receives the report  Inspector  Inspector's name  AVI number  Supervisor (if applicable)  Audited by (if applicable)  Auditor's name  Company disclaimer	Date of inspection	Start date	Start time	End date	End time
Inspection company  Company name  Client  Company who has commissioned and receives the report  Inspector  Inspector's name  AVI number  Supervisor (if applicable)  Audited by (if applicable)  Auditor's name  Company disclaimer	Inspection company  Company name  Client  Company who has commissioned and receives the report  Inspector  Inspector's name  AVI number  Supervisor (if applicable)  Audited by (if applicable)  Auditor's name  Company disclaimer	Place of inspection	Place of inspection		Country	
Client  Company who has commissioned and receives the report  Inspector  Inspector's name  AVI number  Supervisor (if applicable)  Supervisor's name  Audited by (if applicable)  Auditor's name  Company disclaimer	Client  Company who has commissioned and receives the report  Inspector  Inspector's name  AVI number  Supervisor (if applicable)  Supervisor's name  Audited by (if applicable)  Auditor's name  Company disclaimer		(e.g. mobilising, loadi	ng, discharging, bunkering, rep	l airs or idle)	
Inspector Inspector's name AVI number  Supervisor (if applicable) Supervisor's name Supervisor's AVI number  Audited by (if applicable) Auditor's name  Company disclaimer	Inspector Inspector's name AVI number  Supervisor (if applicable) Supervisor's name Supervisor's AVI number  Audited by (if applicable) Auditor's name  Company disclaimer	nspection company	Company name			
Supervisor (if applicable)  Supervisor's name  Audited by (if applicable)  Auditor's name  Company disclaimer	Supervisor (if applicable)  Supervisor's name  Supervisor's AVI number  Audited by (if applicable)  Auditor's name  Company disclaimer	Client	Company who has co	mmissioned and receives the re	eport	
Audited by (if applicable)  Auditor's name  Company disclaimer	Audited by (if applicable)  Auditor's name  Company disclaimer	Inspector	Inspector's name		AVI number	
Company disclaimer	Company disclaimer	Supervisor (if applicable)	Supervisor's name		Supervisor's AVI n	umber
		Audited by (if applicable)	Auditor's name			
nspection Summary	nspection Summary	Company disclaimer				
		nspection Summary				

## **Inspection Findings**

Report summary seen and discussed with

An automatically generated list of findings appears here, showing the question, answer, inspector's comments and any responses from the vessel operator.

Name

☐ Delegated representative

Position

□ Master



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

#### **Additional Comments**

An automatically generated list of questions with additional vessel operator comments appears here, showing the question, answer, inspector's comments and vessel operator's response.

## **Closing Meeting**

A closing meeting must be held to present the inspection findings and conclusions.

The closing meeting should be chaired by the inspector and attended by the vessel master and the appropriate heads of department, in addition to other interested parties as determined by the master, e.g. Chief Officer, Chief Engineer, Chief Steward etc.

The closing meeting should be formal and minutes, including records of attendance, should be completed and submitted with the final inspection report. This can be entered in the eCMID Inspection App, Summary section, as text. Alternatively, a template is available in the same location which can be downloaded, completed then uploaded as an image file.

As appropriate, the following should be explained to the closing meeting attendees:

- i) advising that the inspection evidence collected was based on a sample of the information available and is not necessarily fully representative of the overall effectiveness of the vessel's processes;
- ii) the method in which the report will become available, i.e. eCMID database;
- iii) presentation of the inspection findings and conclusions in such a manner that they are understood and acknowledged by the vessel's management;

Any diverging opinions regarding the inspection findings or conclusions between the inspector and the vessel management team should be discussed and, if possible, resolved. If not resolved, this should be recorded in the closing meeting minutes. All such information must be documented factually with no subjectivity.

The inspector should note that the closing meeting is not a forum to accept or agree on any corrective actions or responses to the findings. The inspector should advise the vessel master that the responses or corrective actions to inspection findings are to be managed as per the vessel's safety management system. The vessel operator should provide responses on the eCMID database as appropriate.

For further information on closing meetings refer to ISO 19011.

Was a closing meeting held?	□ Yes □ No
Enter or upload the closing meeting report here	



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## **Distribution List for Reports**

A written copy summarising the findings should be left on the vessel.

The final report, when uploaded to the eCMID database provides access to the report for the following:

- 1) vessel owner
- 2) the party who commissioned the inspection, if not the vessel owner, such as a company client or charterer
- 3) any other eCMID database user who has been assigned access by the vessel operator.

**Further information** on the eCMID processes can be found in IMCA M167 – *Guidance on the IMCA eCMID system* – available via www.ecmid.com with user guides to the eCMID website and software.





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 1 Vessel Particulars

All fields must be completed prior to uploading. Those which may be set as 'not applicable' are marked NA in the right column. Where data is required in a certain format, this too is indicated.

	Requested information
Name of vessel	
Type of vessel	
Detail of engines, berths and any special features	LONGTEXT
Length overall (LOA) – in metres	NUMBER
Gross tonnage (GT)	NUMBER
Previous name(s)	
Vessel owner/operator Name:	
Address:	LONGTEXT
Tel:	
E-mail:	EMAIL
Date current vessel operator assumed responsibility for vessel	DATE
Manning agent Name:	NA
Address:	LONGTEXT NA
Tel:	NA
E-mail:	DATE NA
Flag	SELECT
(if the vessel has changed flag within the past six months, report date of change)	DATE NA
(if the vessel has changed flag within the past six months, report previous flag)	SELECT NA
Port of registry	
Classification society (if applicable)	SELECT NA
(if the vessel has changed class within the past six months, report date of change)	DATE NA
(if the vessel has changed class within the past six months, report previous classification society)	SELECT NA
Class ID number	NA
Category	
Vessel certificate (details of operating code, e.g. MCA Workboat Code – include max. distance from shore, day trips only, etc.)	
Issued (on date)	DATE
Valid until	DATE
Issued by	
Last annual inspection	DATE
Total allowance number of persons onboard (PoB)	NUMBER



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

#### 2 Certificates and Publications

2.1	Is the vessel clear of conditions of class, port/flag state and any safety	Yes	<u>No</u>	NA	NS	
	related memoranda?					

#### Provide:

- Class notation of the vessel and any limitations or conditions noted in certificate.
- If not in Class, record details of alternative arrangements and/or Flag State certification and survey regime in place.

When answering the above the AVI will verify:

- The class notation of the vessel and any limitations or conditions noted in the certificate.
- If not in Class, then the alternative arrangements and/or Flag State certification and survey regime in place.

2.2	Is the vessel free from any pending conditions of class or pending class	Yes	<u>No</u>	NA	NS	
	memoranda?					

**Comment** on the nature of the conditions of class and/or class memoranda (if any).

When answering the above the AVI will verify the nature of the conditions of class and/or class memoranda (if any).

2.3	Are all statutory certificates issued by RO or flag state valid and in	Yes	<u>No</u>	NA	NS	
	date?					

Note: As applicable, e.g.: Passenger ship safety certificate, International Oil Pollution Prevention Certificate, International Air Pollution Prevention Certificate, International Sewage Pollution Prevention certificate, Load Line/exemption certificate, Maritime Labour Convention compliance statement, Radio Station licence, Ship Sanitation exemption certificate, Minimum safe manning document, Flag State Safety Certificate.

When answering the above the AVI will verify, as applicable, e.g.: Passenger ship safety certificate, International Oil Pollution Prevention Certificate, International Air Pollution Prevention Certificate, International Sewage Pollution Prevention certificate, Load Line/exemption certificate, Maritime Labour Convention compliance statement, Radio Station licence, Ship Sanitation exemption certificate, Minimum safe manning document, Flag State Safety Certificate.

2.4	Does the vessel carry valid certificates of insurance?	Yes	<u>No</u>	NA	NS		
-----	--	-----	-----------	----	----	--	--

#### Verify:

- The P&I Certificate of Entry is current
- Whether the vessel carries a Certificate of insurance for wreck removal (Compulsory for vessels >= 300GRT)
- Employer Liability Insurance.
- Hull and Machinery Insurance.

**Comment** on the type of certificates carried and any limitations noted with respect to cover.

When answering the above the AVI will verify:

- The P&I Certificate of Entry is current
- Whether the vessel carries a Certificate of insurance for wreck removal (Compulsory for vessels
   = 300GRT)
- Employer Liability Insurance.
- Hull and Machinery Insurance.
- Any limitations noted with respect to cover

2.5	If the vessel is required to carry IMDG cargo, is a valid document of	Yes	<u>No</u>	NA	NS	
	compliance for carriage of dangerous goods onboard?					

Verify:



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- That IMDG segregation is complied with.
- The crew are suitably trained and relevant documentation is available (e.g., IMDG Code, Manifest(s), DG Emergency and First aid schedule)

When answering the above the AVI will verify:

- That IMDG segregation is complied with.
- The crew are suitably trained and relevant documentation is available (e.g., IMDG Code, Manifest(s), DG Emergency and First aid schedule)

2.6	Additional Section 2 comments?	Yes	No			
-----	--------------------------------	-----	----	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 3 Inspection

3.1	Has the vessel a copy of the latest port state inspection onboard?	Yes	<u>No</u>	NA	NS	
-----	--	-----	-----------	----	----	--

Note: None of the response options will generate a finding.

**Comment** on where and when the inspection was carried out. If vessel was detained, or significant deficiencies were listed, record the reason for detention or nature of those deficiencies.

**Provide** date of last port state inspection and if over 12 months the reason why.

When answering the above the AVI will verify:

- Where and when the inspection was carried out
- If vessel was detained, or significant deficiencies were listed, the reason for detention or nature of those deficiencies.
- Date of last port state inspection and if over 12 months the reason why.

3.2	Has the vessel a copy of the latest eCMID Small Vessel inspection	Yes	<u>No</u>	NA	NS	
	(formerly eMISW) onboard?					

Note: If the vessel is new or has been laid up and has not been subjected to an eMISW inspection, the inspector can use NA.

If no inspection has been carried out and this should normally have been completed, select 'No' and **comment**, stating the reason, e.g. required by industry guidelines. In this case the finding will be recorded.

#### **Provide:**

- Date of last eMISW
- Company
- Relevant findings (if any).
- If over 12 months the reason why.

When answering the above the AVI will verify

- Date of last eMISW
- Company
- Relevant findings (if any).
- If over 12 months the reason why.

3.3	Additional Section 3 comments?	Yes	No		



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 4 Logbooks

Ī	4.1	Does the vessel have appropriate logbook(s) (e.g.	Yes	<u>No</u>	NS	
		official/deck/radio/engine)?				

#### Comment:

- On appropriate entries in the logbooks
- If no logbook is available for use.

When answering the above the AVI will verify that appropriate entries have been made in the logbooks.

4.2	Additional Section 4 comments?	Yes	No			
-----	--------------------------------	-----	----	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

5	Weathe	rtight	Integrity
---	--------	--------	-----------

5 V	veatnertignt integrity					
5.1	Is it possible to secure all openings to prevent the ingress of water whilst at sea?	Yes	<u>No</u>			
	Comment if there is unreasonable difficulty doing this					
5.2	Are doors located above the weather deck, which give access to spaces below, weather-tight and able to be operated from either side?	<u>Yes</u>	<u>No</u>			
	<b>Comment</b> on the state and condition of seals, fastening and securing fitt When answering the above the AVI will verify the state and condition of fittings.		fastei	ning a	nd se	curing
5.3	If there are any opening skylights fitted, can they be effectively secured from either side?	Yes	<u>No</u>	NA	NS	
	Note: In a new vessel, a skylight which is provided as a means of escape opened from both sides.  Comment on the condition of fastening and securing fittings for the skyling Note: In a new vessel, a skylight which is provided as a means of escape opened from both sides.  When answering the above the AVI will verify the condition of fastening	ights. e shou	ld be	capal	ole of	being
	skylights.		1			
5.4	Are blanks available for securing in place, in the event of breakage of a skylight?	Yes	<u>No</u>	NA	NS	
	Comment on the stowage for the blanks and their ease of access in an en When answering the above the AVI will verify the stowage for the blank an emergency.			ease	of acc	ess ir
5.5	Can all opening port-lights be effectively secured?	<u>Yes</u>	<u>No</u>	NA	NS	<b>©</b>
	<ul> <li>Comment:</li> <li>On the condition of securing arrangements and fittings.</li> <li>If any opening or port-lights are below the weather deck, whether th available to be secured in place</li> <li>When answering the above the AVI will verify:</li> <li>The condition of securing arrangements and fittings.</li> <li>If any opening or port-lights are below the weather deck, whether th available to be secured in place</li> </ul>					
5.6	Are all weather-tight closures to ventilators in full working order?	Yes	<u>No</u>	NA	NS	0
5.7	Does the hull and structure of the vessel appear in a good state of repair?	Yes	<u>No</u>			<b>©</b>
	Comment on the state and condition of the hull, hull coatings (marine (visual observation)	growt	th) an	d sup	erstru	ıcture
5.8	When a deck is fitted with bulwarks such that water may be trapped, are there effective draining ports?	Yes	<u>No</u>	NA		<b>©</b>

Page 14 of 80



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

5.9 Are sea inlets and discharges below the waterline fitted with a seacock or other effective means of closure?

...

5.10 Is the vessel clear of any evidence of water leaking into the below decks?

#### Note:

- This should not be confused with water brought down from the upper deck during wet conditions.
- Leaking from internal fresh water supplies should be reported in machinery or accommodation sections.

**Comment** on the evidence of leaking and if possible, include a photograph.

#### Note:

- This should not be confused with water brought down from the upper deck during wet conditions.
- Leaking from internal fresh water supplies should be reported in machinery or accommodation sections.

#### **Comment** whether:

- Correct means of crew, passenger and cargo securing arrangements are fitted and serviceable.
- Appropriate services for recovery from inversion are fitted and serviceable.

When answering the above the AVI will verify:

- That correct means of crew, passenger and cargo securing arrangements are fitted and serviceable
- That appropriate services for recovery from inversion are fitted and serviceable.

5.12	Additional Section 5 comments?	Yes	No		



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 6 Machinery and Electrical

6.1	Are engine/generator machinery and spaces clean and well maintained?	Yes	<u>No</u>			
6.2	Are vent pipes for fuel tanks protected against water ingress by a goose neck or other efficient means?	Yes	<u>No</u>	NA	NS	
6.3	Are vent pipes for fuel and lube oil tanks fitted with a flame or spark arrestor?	Yes	<u>No</u>	NA	NS	
6.4	Are there means available to effectively control fuel spillages or leaks from permanent or temporary equipment?	Yes	<u>No</u>	NA	NS	0
	Comment on the means of control e.g. savealls, drains, temporary means etc.	, such	ı as oi	l spill	equip	ment,
6.5	Is there a safe means of isolating the fuel supply in the event of an emergency?	Yes	<u>No</u>	NA	NS	
	Comment:					
	<ul> <li>On the means used and the ease of access to/operation of isolation</li> <li>Whether the means for isolating is accessible from outside the mach</li> </ul>			·.		
	When answering the above the AVI will verify the ease of access to/op and whether it is accessible from outside the machinery space.	eratic	n of i	solati	on me	ethod
6.6						
	Are the machinery spaces free from fuel or oil leaks?	Yes	<u>No</u>	NA	NS	
	Are the machinery spaces free from fuel or oil leaks?  Note:  Inspector to be aware of hazard/risk of fire depending on circumstare. A photograph should only be taken if it is safe to do so.  Comment on the evidence that leakage has occurred and a measure/mitigation.  Note:  The inspector will be aware of hazard/risk of fire depending on circue. A photograph should only be taken if it is safe to do so.	nces.	ndicat			
6.7	Note:  Inspector to be aware of hazard/risk of fire depending on circumstare.  A photograph should only be taken if it is safe to do so.  Comment on the evidence that leakage has occurred and a measure/mitigation.  Note:  The inspector will be aware of hazard/risk of fire depending on circumstary.	nces.	ndicat			
6.7	<ul> <li>Note:</li> <li>Inspector to be aware of hazard/risk of fire depending on circumstare.</li> <li>A photograph should only be taken if it is safe to do so.</li> <li>Comment on the evidence that leakage has occurred and a measure/mitigation.</li> <li>Note:</li> <li>The inspector will be aware of hazard/risk of fire depending on circue.</li> <li>A photograph should only be taken if it is safe to do so.</li> <li>Are the bilges empty and free from oil residue?</li> <li>If negative, the AVI should comment on the reason(s) why the bilges are</li> </ul>	nces. ny ii mstar Yes	ndicat	ion	of co	ontrol
6.7	Note:  Inspector to be aware of hazard/risk of fire depending on circumstare.  A photograph should only be taken if it is safe to do so.  Comment on the evidence that leakage has occurred and a measure/mitigation.  Note:  The inspector will be aware of hazard/risk of fire depending on circue.  A photograph should only be taken if it is safe to do so.  Are the bilges empty and free from oil residue?	nces. ny ii mstar Yes	ndicat	ion	of co	ontrol

Page 16 of 80

When answering the above the AVI will verify the state and condition of battery arrangements.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

6.9	Are there safe means of isolating electrical supplies?	Yes	<u>No</u>	NA	NS	
		l	l	I	I	l
	<b></b>					
6.10	Are electrical systems protected from water?	<u>Yes</u>	<u>No</u>	NA	NS	
	Comment on the state and effectiveness of protection.	ı	1	ı	ı	ı
	When answering the above the AVI will verify the state and effectiveness	of pr	otect	ion.		
6.11	Are battery spaces adequately ventilated?	Yes	<u>No</u>	NA	NS	
6.12	Are all batteries secured firmly to prevent movement?	Yes	<u>No</u>	NA	NS	
6.13	Is there adequate and appropriate PPE for personnel	Yes	<u>No</u>	NA	NS	
	checking/maintaining the batteries (e.g. face shields, rubber gloves)?					
		l	l	l	l	l
6.14	Is effective emergency lighting provided to allow escape from below/ under-deck/after deck to allow essential activities to be conducted?	Yes	<u>No</u>	NA	NS	
6.15	If steering by remote control, are there effective means of emergency	Yes	<u>No</u>	NA	NS	
0.20	steering?					
6.16	Are there two fully working bilge pumps?	<u>Yes</u>	<u>No</u>	NA	NS	
	Comment on the state and effectiveness of protection.					
	When answering the above the AVI will verify the condition of	oilge	pump	s an	d pur	nping
	arrangements.	l	I	l		I
6.17	Is at least one bilge pump available for duty in an emergency?	Yes	<u>No</u>	NA	NS	
	Note: The pumps and sources of power, if power-driven, should be in wid any single event does not disable all the pumping systems.	ely se	parat	ed spa	aces s	o that
	Note: The pumps and sources of power, if power-driven, should be in wid	elv se	narat	ed sna	aces s	o that
	any single event does not disable all the pumping systems	2., 30	Parat	-		o and
6.18	Is an operating bilge alarm fitted in watertight spaces containing machinery or in cargo holds?	Yes	<u>No</u>	NA	NS	<b>©</b>
		1	1	1	1	1
6.19	Are operating manuals available for the machinery?	<u>Yes</u>	<u>No</u>	NA	NS	

**Comment** on whether the manuals are in a language that can be understood by the crew.

When answering the above the AVI will verify that the manuals are in a language that can be understood by the crew.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

6.20	Are adequate tools and the manufacturers' recommended emergency spares available for the machinery?	Yes	<u>No</u>	NA	NS	
	Comment if emergency spares are not as per manufacturers' recommen	datio	ns (if k	nowr	n).	
	When answering the above the AVI will verify that emergency spares	are	as pei	r man	ufact	urers'

recommendations (if known).

6.21 Are maintenance records available for the onboard equipment?

Yes No NA NS

**Comment** on the state and condition of records.

...

# 6.22 Is the engine room free from untreated hazards? Yes No NA NS NA NS

Note: SOLAS: All surfaces above 220°C are to be insulated or equivalent protected in order to avoid ignition of flammable fluids.

Typical hot surfaces on engine 'body' are as follows: indicator valves (if fitted), cylinder covers, exhaust pipe from each cylinder, tie into exhaust manifold, exhaust manifold in particular overlaps between steel sheets and laggings, foundation and lifting lugs on exhaust ducts, turbochargers, in particular flanges to such, cut-outs for pressure/temperature sensors, etc.; housing surfaces of floodlights.

**Comment** on any hazards that appear to have been overlooked or remain a hazard due to inadequate mitigation, e.g. missing or damaged lagging on hot surfaces, loose floor plates, unguarded rotating machinery etc.

Note: SOLAS: All surfaces above 220°C are to be insulated or equivalent protected in order to avoid ignition of flammable fluids.

Typical hot surfaces on engine 'body' are as follows: Indicator valves (if fitted), cylinder covers, exhaust pipe from each cylinder, tie into exhaust manifold, exhaust manifold in particular overlaps between steel sheets and laggings, foundation and lifting lugs on exhaust ducts, turbochargers, in particular flanges to such, cut-outs for pressure/temperature sensors, etc.; housing surfaces of floodlights.

Comment on any hazards that appear to have been overlooked or remain a hazard due to inadequate mitigation, e.g. missing or damaged lagging on hot surfaces, loose floor plates, unguarded rotating machinery etc.

(Ref. MSC.1/Circ.1321) 11 June 2009 – Guidelines for measures to prevent fires in engine-rooms and cargo pump-rooms.)

6.23 Does the vessel have a planned maintenance system in place covering critical equipment and spares?

**Verify** that critical equipment spares are defined onboard the vessel and that a current list is available. When answering the above the AVI will verify that critical equipment spares are defined onboard the vessel and that a current list is available.

(Ref. ISM 10.3 and flag state requirements.)

6.24 Is the external fuel transfer system in a well maintained and operational condition?

#### Verify that:

- A risk assessment has been made for the transfer process
- Formal fuel transfer procedures and checklists are in place
- A scheduled pressure test of the system is carried out and recorded

#### Comment on:

- The condition of system connections (signs of leaks, corrosion, etc.)
- The maintenance and condition of the dry-break coupling



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

When answering the above the AVI will verify:

- A risk assessment has been made for the transfer process
- Formal fuel transfer procedures and checklists are in place
- A scheduled pressure test of the system is carried out and recorded
- The condition of system connections (signs of leaks, corrosion, etc.)
- The maintenance and condition of the dry-break coupling

6.25	Additional Section 6 comments?	Yes	No			
------	--------------------------------	-----	----	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 7 Stability

7.1	If required does the vessel have an approved stability information booklet onboard?	Yes	<u>No</u>	NA	NS				
7.2	If the vessel is required to carry an approved stability booklet, is there a competent person and appropriate system available to calculate the vessel's stability?	Yes	<u>No</u>	NA	NS				
	Note: Competence should be based on requirements of operating are national or industry standards as applicable.	a whe	ether	by int	ternat	ional,			
	Note: Competence should be based on requirements of operating area whether by international, national or industry standards as applicable.								
7.3	Are any stability records available to show the effects of adding or removing loads on the vessel?	Yes	<u>No</u>	NA	NS				
	<ul> <li>Comment on:</li> <li>The condition of records.</li> <li>The system of review of records by company management.</li> <li>Provide the date of the most recent review.</li> <li>When answering the above the AVI will verify the date of the most recompany management.</li> </ul>	ecent	revie	ew of	recor	ds by			
7.4	Are the crew familiar with the stability issues with regards to winches and lifting operations?	Yes	<u>No</u>	NA	NS				
7.5	Additional Section 7 comments?	Yes	No						
		•							



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 8 Freeboard

8.1	If required by flag state, is the vessel marked with a deck line and freeboard mark?	Yes	<u>No</u>	NA	NS	0		
	<b>Comment</b> on if the markings are clearly visible.  When answering the above the AVI will verify the markings are clearly visible.							
8.2	If the vessel is not marked with a deck line and freeboard mark, has the safe maximum draught been determined?	Yes	<u>No</u>	NA		0		
8.3	Additional Section 8 comments?	Yes	No					





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 9 Escape

9.1	Are there at least two means of escape from any normally occupied space?	Yes	<u>No</u>	NA	NS	
	Note: 'No' will appear in the Findings section – if two means of escape due to vessel type, select 'NA' and add a comment to explain.	are no	ot rea	listica	lly pra	ectical
	Comment on the ease of access to escape routes.					
	Note: 'No' will appear in the Findings section.					

When answering the above the AVI will verify the ease of access to escape routes.

	the case of acceptance and the case of acceptance and acceptance acceptance and acceptance acceptance acceptance and acceptance acce					
9.2	Are means of escape clearly marked and the escape route adequately illuminated?	Yes	<u>No</u>	NA	NS	
9.3	If there are not at least two means of escape, are there fire detectors fitted in the space?	Yes	<u>No</u>	NA	NS	
9.4	Additional Section 9 comments?	Yes	No			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 10 Fire

10.1	Are fire detectors and fire call points, where fitted, in working order?	Yes	<u>No</u>	NA	NS	
	<b>Comment</b> on if there is a procedure for testing fire detectors and if it is o	ompl	ied wi	ith.		
	When answering the above the AVI will verify there is a procedure for to is complied with.	esting	fire c	letect	ors ar	nd if it
10.2	If no fire detectors are fitted, are adequate procedures in place to detect smoke or fire?	Yes	<u>No</u>	NA	NS	
	Comment on what these alternative procedures are.					
10.3	Is/are the vessel's fire pump(s) working and available?	Yes	<u>No</u>	NA	NS	
	Note: This may be a manual or power-driven pump.					
	Note: This may be a manual or power-driven pump.	•	1		1	ı
10.4	Is a working emergency fire pump available outside the machinery space?	Yes	<u>No</u>	NA	NS	
10.5	If fitted, can fire hose(s) deliver a jet of water to any part of the vessel?	Yes	<u>No</u>	NA		
10.6	If available, does the jet/spray nozzle work properly on the fire hose?	Yes	<u>No</u>	NA	NS	
10.7	Are the required number and correct type of portable fire extinguishers available on the vessel as defined in the safety plan and with valid service certificates?	<u>Yes</u>	<u>No</u>	NA	NS	
	Comment on:					I
	The number and type of fire extinguishers as required by the vessel'	s safe	ty pla	n.		
	The condition of the extinguishers  The containing the resistation of the extinguishers					
	<ul> <li>The system for maintaining them.</li> <li>When answering the above the AVI will verify:</li> </ul>					
	<ul> <li>The number and type of fire extinguishers as required by the vessel'</li> </ul>	s safe	tv nla	n		
	<ul> <li>The condition of the extinguishers</li> </ul>	Juic	cy più			
	The system for maintaining them.	•	1		1	ı
10.8	Is there a fixed firefighting system for the engine room?	<u>Yes</u>	<u>No</u>	NA	NS	<b>O</b>
	Note: If there is no fixed firefighting system for the engine room due to t explain how engine room firefighting is effectively conducted.	ype o	f vess	el sele	ect 'N	A' and
	<b>Comment</b> on the type of firefighting system fitted and method of operation	ion.				
	When answering the above the AVI will verify the type of firefighting s operation.	ystem	fitte	d and	meth	od of
10.9	Is there a fire blanket in the galley/pantry/cooking area?	Yes	<u>No</u>	NA	NS	<b>©</b>



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

10.10	Do the crew members know how to operate the firefighting equipment?	Yes	<u>No</u>		
10.11	Additional Section 10 comments?	Yes	No		





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 11 Radio

11.1	Is the radio equipment in good working order?	Yes	<u>No</u>	NA	NS	<b>o</b>				
	Verify:									
	<ul> <li>The radio installation and vessel's radio licence are in accordance with each other.</li> <li>Safety radio equipment is tested at regular intervals, e.g. prior to sailing, weekly or monthly.</li> </ul>									
	When answering the above the AVI will verify:									
	<ul> <li>The radio installation and vessel's radio licence are in accordance wi</li> <li>Safety radio equipment is tested at regular intervals, e.g. prior to sai</li> </ul>				onthl	у.				
11.2	Has the vessel had a recent Class radio survey, or radio verification report, or annual UK Code survey which physically tested the equipment?	Yes	<u>No</u>	NA	NS					
	Note: Not all small vessels are required to carry a radio logbook, however a standard exists for testing radio equipment, vessels are recommended to follow standard SOLAS GMDSS requirements for daily, weekly and monthly checks of battery voltage, back-up supply, DSC self-test, DSC external test etc. Operators who have their own customised deck logbooks may have incorporated these tests into the logbook daily pages, so they have a record.									
	Note: Not all small vessels are required to carry a radio logbook, however radio equipment, vessels are recommended to follow standard SOLAS GN weekly and monthly checks of battery voltage, back-up supply, DSC self Operators who have their own customised deck logbooks may have incoming book daily pages, so they have a record.	ا DSS f-test,	requir DSC (	emen exterr	its for nal te	daily,				
11.3	Is the crew familiar with the correct operation of the radio equipment?	Yes	<u>No</u>							
11.4	Is an emergency position indicating radio beacon (EPIRB) fitted and is the hydrostatic release unit (HRU) fitted correctly?	Yes	<u>No</u>	NA	NS					
	Note: Vessels trading exclusively in sea area A1 may fit a VHF DSC EPIRB	in lieu	of a	406 N	1Hz EF	PIRB.				
	Comment on if the EPIRB battery and HRU are within valid dates.									
	Note: Vessels trading exclusively in sea area A1 may fit a VHF DSC EPIRB									
	When answering the above the AVI will verify that the EPIRB battery and	l HRU	are w	ithin	valid (	dates.				
11.5	Is a search and rescue transponder (SART) fitted?	Yes	<u>No</u>	NA	NS	<b>©</b>				
	Note: The fitting of a SART may be a recommendation or a requirement depending upon the loca maritime administration.									
	Note: The fitting of a SART may be a recommendation or a requirement maritime administration.	nt dep	endin	ig upo	on the	loca				
11.6	Is a NAVTEX receiver fitted?	Yes	<u>No</u>	NA	NS	<b></b>				
			•	•	•	•				

Note: NAVTEX is a system used for the broadcast of localised marine safety information (MSI) by radio TELEX.

**Comment** on how the crew monitor, utilise and keep control of the NAVTEX messages.

Note: NAVTEX is a system used for the broadcast of localised marine safety information (MSI) by radio TELEX.

When answering the above the AVI will verify how the crew monitor, utilise and keep control of the NAVTEX messages.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

11.7	Are the required crew members with an approved certificate for operation of the radio equipment onboard?	Yes	<u>No</u>	NA	NS	
11.8	Are cards available giving a clear summary of the radio telephone distress, urgency and safety procedures?	<u>Yes</u>	<u>No</u>	NA	NS	
	Verify these are available in languages appropriate to the national conte					
	When answering the above the AVI will verify these are available in la national content of the crew.	nguag	ges ap	propi	riate t	o the
11.9	Are there clear instructions for the operation of the hand-held VHF radios?	Yes	<u>No</u>	NA	NS	
				1		
11.10	Are the batteries for the radio station in good working condition and securely stowed?	Yes	<u>No</u>		NS	
11.11	Are sealed spare batteries for the handheld VHF radio(s) available and charged?	Yes	<u>No</u>	NA	NS	
	Comment on the number of spare batteries and the routine for checking When answering the above the AVI will verify the number of spare by		-		routii	ne for
	checking battery life.	1	1	1	1	1
11.12	Is the vessel's call sign and Maritime Mobile Service Identity (MMSI) clearly displayed?	Yes	No	NA	NS	
11.13	Additional Section 11 comments?	Yes	No			
			1			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 12 Navigation Equipment

Are navigation lights in good working order?	Yes	<u>No</u>	NA	NS	
Note: Including secondary system if fitted.					
Note: Including secondary system if fitted.					
Is there a means of making an efficient sound signal?	Yes	<u>No</u>			
Are navigational day shapes available?	Yes	<u>No</u>	NA		
Is the magnetic compass in working order?	Yes	<u>No</u>	NA	NS	
	Note: Including secondary system if fitted.  Note: Including secondary system if fitted.  Is there a means of making an efficient sound signal?    Are navigational day shapes available?	Note: Including secondary system if fitted.  Note: Including secondary system if fitted.  Is there a means of making an efficient sound signal?  Yes  Are navigational day shapes available?  Yes	Note: Including secondary system if fitted.  Note: Including secondary system if fitted.  Is there a means of making an efficient sound signal?	Note: Including secondary system if fitted.  Note: Including secondary system if fitted.  Is there a means of making an efficient sound signal?    Are navigational day shapes available?  Yes No NA	Note: Including secondary system if fitted.  Note: Including secondary system if fitted.  Is there a means of making an efficient sound signal?  Yes No NA  Are navigational day shapes available?  Yes No NA

Note: A fluxgate compass is an acceptable alternative only if provided with an independent back up power supply.

#### Verify:

- The light works on the magnetic compass
- The magnetic compass has a valid deviation card
- That the recorded deviation corresponds with the actual deviation.

If no deviation record is maintained, **comment** if the last adjustment was within the past two years.

Note: A fluxgate compass is an acceptable alternative only if provided with an independent back up power supply.

When answering the above the AVI will verify

- The light works on the magnetic compass
- The magnetic compass has a valid deviation card

requirements may be fitted in place of a chart outfit.

- That the recorded deviation corresponds with the actual deviation.
- If no deviation record is maintained, if the last adjustment was within the past two years.

12.5	Is a global navigation satellite system or a terrestrial radio navigation system available?	Yes	No	NA	NS	
	Note: 'No' does not generate a finding.					
	Note: 'No' does not generate a finding.					
12.6	Is there means of measuring the speed through the water and/or distance covered?	Yes	<u>No</u>	NA	NS	
	Note: This is separate from a global navigation system, such as a speed lo	og.				
	Note: This is separate from a global navigation system, such as a speed lo	og.				
12.7	If an echo sounder is fitted is it in working order?	Yes	<u>No</u>	NA	NS	
	Note: Other means to measure the depth of water may be used.					
	Note: Other means to measure the depth of water may be used.					

Are approved, current, corrected charts available?

Note: An electronic chart plotting system complying with appropriate maritime administration

Note: An electronic chart plotting system complying with appropriate maritime administration requirements may be fitted in place of a chart outfit.

12.8



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

12.9	Are relevant publications onboard? Are current tide tables available?	Yes	<u>NO</u>	NA	NS	
	Verify:					
	<ul> <li>Current tide tables are available</li> <li>There is a tidal stream atlas available for the area of operation</li> <li>A copy of the list of radio signals is available for the area of operation</li> <li>A copy of the International Code of Signals is available</li> </ul>	1				
	When answering the above the AVI will verify:					
	<ul> <li>Current tide tables are available</li> <li>There is a tidal stream atlas available for the area of operation</li> <li>A copy of the list of radio signals is available for the area of operation</li> <li>A copy of the International Code of Signals is available</li> </ul>	n				
12.10	Is an efficient waterproof signalling lamp suitable for Morse signalling provided?	Yes	<u>No</u>	NA	NS	
12.11	Is an efficient radar reflector fitted?	Yes	<u>No</u>	NA	NS	
12.12	Is there a working fixed or portable searchlight for a vessel that may operate in darkness?	Yes	<u>No</u>			
12.13	Does the vessel have an anchor as required by relevant regulations sufficient anchor cable for the proposed area of operation?	Yes	<u>No</u>	NA	NS	
12.14	Additional Section 12 comments?	Yes	No			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 13 Navigation

13.1	Is the vessel provided with operator policy statements, instructions and procedures with regard to safe navigation?	Yes	<u>No</u>	NA	NS	
	···					
13.2	Is a comprehensive passage plan available for the current voyage and does it cover the full voyage from berth to berth?	Yes	<u>No</u>	NA	NS	

Note: IMO A.893 states, '1.2 The need for voyage and passage planning applies to all vessels.' **Verify**:

- That the passage plan is prepared by an appropriate officer and verified by the master
- That passage plan information is readily available for watchkeepers' use.

**Comment** on the system of passage planning in use and how the passage plan is produced, whether this is manually or by computer.

Note: IMO A.893 states, '1.2 The need for voyage and passage planning applies to all vessels.'

When answering the above the AVI will verify:

- That the passage plan is prepared by an appropriate officer and verified by the master
- That passage plan information is readily available for watchkeepers' use
- How the passage plan is produced, whether this is manually or by computer.

SOLAS Chapter V, Regulation 34 applies to all vessels.

13.3	Does the vessel have written procedures for entry into a 500-metre zone?	Yes	<u>No</u>	NA	NS	
13.4	Are up-to-date navigation warnings and weather forecasts available?	Yes	<u>No</u>	NA	NS	
	Comment on the routine for how these are provided to the vessel					
13.5	Additional Section 13 comments?	Yes	No			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 14 Accommodation

14.1	Is all heavy equipment in the accommodation secured?	Yes	<u>No</u>	NA	NS	
_		ı	ı	ı	ı	
14.2	Is there an efficient working ventilation system for confined spaces that may be entered by personnel?	Yes	<u>No</u>	NA	NS	
	<b></b>					
	(Ref IMCA HSS034 – Working in confined spaces)	1	ı <u> </u>	ı	П	ī
14.3	Are there adequate stowage facilities for personal effects/luggage for the passengers when embarked?	Yes	<u>No</u>	NA	NS	
14.4	If a pantry or tea and coffee making facilities are provided, is/are the area(s) clean and appropriate for safe use?	Yes	<u>No</u>	NA	NS	
14.5	Are there adequate toilet facilities for the proposed passengers?	Yes	No	NA	NS	
14.5						
14.6	Is the vessel to be at sea for more than 24 hours?	Yes	No			
	If yes, questions 14.7 to 14.13 should be answered.					
	'No' does not generate a finding. No does not generate a finding.					
	If yes, questions 14.7 to 14.13 should be answered.					
	'No' does not generate a finding. No' does not generate a finding.	l	l	l	l	
14.7	Is there a galley/pantry/cooking area with adequate means for preparing food, a stove for cooking and a sink?	Yes	<u>No</u>	NA	NS	
		1	ı	ı	ı	
14.8	Are there adequate means for the safe storage and handling of food supplies, including frozen and chilled where required?	Yes	<u>No</u>	NA	NS	
14.9	Is there adequate ventilation to all accommodation spaces including air conditioning and/or sufficient means of heating if appropriate?	Yes	<u>No</u>	NA	NS	
14.10	Is there adequate electric lighting?	Yes	<u>No</u>	NA	NS	



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

14.11	Is there an adequate supply of fresh drinking water?	Yes	<u>No</u>			
14.12	Are there potable water testing routines that include legionella testing?	Yes	<u>No</u>	NA	NS	
14.13	Is there a bunk or cot for all those that will be onboard?	Yes	<u>No</u>	NA	NS	
14.14	Additional Section 14 comments?	Yes	No			





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 15 Safety of Personnel

15.1 Does the crew have access to and use appropriate personal protective safety equipment?

**Comment** on the availability of safety equipment and how this is determined.

When answering the above, the AVI will verify the availability of safety equipment.

15.2 Is there a safe means of access to and from the vessel? Yes NO NA NS I

#### Verify:

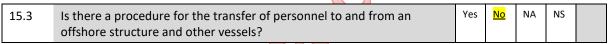
- The vessel's gangway is certified
- The gangway is marked with maximum POB/SWL
- The vessel has a certificate for the pilot ladder(s)

#### Comment on

- The procedures in place for the briefing of passengers on the safe methods of transferring to and from the vessel when in port.
- Maintenance and inspection routines for the gangway.

When answering the above, the AVI will verify:

- The vessel's gangway is certified
- The gangway is marked with maximum POB/SWL
- The vessel has a certificate for the pilot ladder(s)
- Maintenance and inspection routines for the gangway.
- Procedures are in place for the briefing of passengers on the safe methods of transferring to and from the vessel when in port.



Note: A procedure for transfer of passengers to and from the vessel to an offshore structure or other vessel must be available onboard and should be in accordance with the charterers' procedures.

#### Comment on:

• The procedures in place for the briefing of passengers on the safe methods of transferring to and from the vessel when at sea.

(Ref. IMCA HSS025/IMCA M202 – Guidance on the transfer of personnel to and from offshore vessels and structures.)

15.4 Is there evidence of full compliance with the company's HSE management system?

Note: All loose gear on and below deck should be safely secured away.

## Verify:

- Smoking regulations are in place and complied with.
- Safety signs and relevant safety information are prominently displayed.

**Comment** on whether key personnel have knowledge of the safety management system appropriate to their duties.

15.5 Are risk assessments conducted onboard where necessary?

Yes No NA NS

**Verify** that training in the conduct of risk assessments is provided to personnel.

...



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

15.6 Does the safety management system address regulatory requirements and industry guidance?

#### Verify:

- Risk assessments are conducted for substances hazardous to health, display screen equipment, radiation, noise, manual handling, lifting equipment management systems, SIMOPS as applicable.
- There is a system in place to provide crew with industry guidance notes, e.g. Certificate of employer's liability available for third parties working on the vessel.

...

15.7 Is there a formal management of change policy/procedure in place? Yes No NA NS

Note: 'No' does not generate a finding.

#### Comment:

- On the process if one exists, including the apparent level of use.
- If 'No' is selected, then detail what arrangements are in place.

Note: 'No' does not generate a finding.

When answering the above, the AVI will verify:

- The apparent level of use.
- The level of risk assessment required by the process.

15.8 Is a permit to work (PTW) system in use onboard? Yes № NA NS 

Note: Examples are working at height diving (including underwater ship husbandry) hot work

Note: Examples are, working at height, diving (including underwater ship husbandry), hot work, radiation/electrical hazards, fuelling/bunkering, enclosed space access, stored energy, e.g. pressurised systems, tensioned lifting systems.

#### **Comment:**

- On the types of tasks covered by permits
- Whether there is evidence that the system is effectively applied.
- · How isolations are identified and managed
- Use of a 'tag out' system
- Training in the PTW system

When answering the above, the AVI will verify:

- Whether personnel have received formal training in the PTW system
- The types of tasks covered by permits.
- How risk assessments are linked to the permit system.

15.9 Are enclosed spaces and controls for entry identified onboard?

#### Verify:

- Entry permit system is in use (to include testing of atmosphere for oxygen and toxic gases) with records available for inspection.
- The atmosphere test is conducted both before and during the enclosed space entry to ensure acceptable limits are maintained throughout the operation.
- Atmosphere measuring instrumentation is calibrated
- A process is in place to ensure staff are trained and aware of limitations of gas meters.
- Records are fully completed and signed off when work is completed.
- Enclosed spaces are adequately ventilated before and during entry.
- Vent fans are available and be operated in extraction mode when in use.
- Appropriate breathing apparatus is available and if there are limitations on its use, verify there is
  a process for ensuring users are aware of these limitations
- Rescue equipment is available for use.

When answering the above, the AVI will verify:



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- that the entry permit system in use includes testing of atmosphere for oxygen and toxic gases with records sighted.
- that the PTW details all the safety equipment and procedures required.
- that records are fully completed and signed off when work completed.
- that enclosed spaces are identified and labelled with procedures in place for entry
- vent fans are available and operated in extraction mode when in use
- what type of breathing apparatus is available and if there are limitations on its use, confirm there is a process for ensuring staff are aware of these limitations
- the date of last enclosed space rescue drill

#### 15.10 Are procedures used for carrying out hot work on the vessel? 0

#### Verify:

- Requirements for PPE and confirm available for use.
- Records are fully completed including signatures.
- Welding equipment is routinely inspected and inspections recorded.
- Flashback arrestors are fitted to gas and oxygen bottles.
- Fire sentry system is used to monitor adjacent spaces and compartments.
- Spare gas and oxygen bottles are stored apart in dedicated locations, clearly marked and outside accommodation and machinery spaces.
- Cylinders are correctly colour coded.

When answering the above, the AVI will verify:

- The required PPE is available for use.
- All records are fully completed and signed off when work completed.
- There is a requirement for a fire sentry system to monitor adjacent spaces and compartments included in the procedure.

15.11	Are there adequate guardrails around the deck?	Yes	No.	NA	NS	0	

Note: The use of temporary guardrail arrangements may be in place and where these are used suitable provisions and additional safety measures should be complementary to these temporary arrangements.

Verify that guardrails are in accordance with the International Convention on Load Lines, 1966, as amended, Regulations 25 or national regulations as applicable.

Note: The use of temporary guardrail arrangements may be in place and where these are used suitable provisions and additional safety measures should be complementary to these temporary arrangements.

When answering the above the AVI will verify that guardrails are in accordance with the International Convention on Load Lines, 1966, as amended, Regulations 25 or national regulations as applicable.

15.12	Are there at least two safety harnesses onboard and additional	Yes	<u>No</u>	NA	NS	
	harnesses for all those required to work on deck?					

**Comment** on the routine in use for maintenance and the replacement of harnesses.

When answering the above the AVI will verify the routine in use for maintenance and the replacement of harnesses.

15.13	Is the surface of the working deck non-slip?	Yes	<u>No</u>	NA	NS	
15.14	Are personnel provided with protective clothing appropriate to the prevailing air and sea temperatures?	Yes	<u>No</u>	NA	NS	



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

15.15	If the mean seawater temperature is 15°C or less, is there an approved survival suit for each person onboard?	Yes	<u>No</u>	NA	NS	<b>©</b>
	Note: Survival suit may include an approved immersion suit, dry suit, tran ISO 15027-1. Immersion suits can be supplied by the passengers themsel		uit or	floata	ation s	suit to
	Note: Survival suit may include an approved immersion suit, dry suit, tran ISO 15027-1. Immersion suits can be supplied by the passengers themsel		uit or	floata	ation s	suit to
15.16	Have measures been taken to prevent personnel being exposed to noise levels that exceed 80dB (A)?	<u>Yes</u>	<u>No</u>	NA	NS	
	Verify that noise-warning signs are posted as appropriate.					
	<b>Comment</b> on the provision of ear defenders and the appropriate signage (A).	e to ar	eas g	reatei	than	80dB
	When answering the above the AVI will verify that noise-warning signs are the provision of ear defenders for areas greater than 80dB (A).	e pos	ted as	appr	opriat	te and
	(Ref. IMO Resolution A.468(XII) (1981) — Code on noise levels on-b mandatory for new ships on 1 July 2014.)	oard	ships	, whi	ch be	came
15.17	Is a safety briefing/induction given to all personnel who embark for a voyage covering such items as the use of life jackets and procedures to be followed in the case of an emergency?	Yes	<u>No</u>	NA		
	Verify:			1		
	Evidence of crew and contractor inductions.					
	The induction is appropriate to the vessel, operation and structure.					
	<ul> <li>It includes a safety tour process for new personnel.</li> <li>When answering the above the AVI will verify:</li> </ul>					
	Evidence of crew and contractor inductions.					
	<ul> <li>The induction is appropriate to the vessel, operation and structure.</li> </ul>					
	It includes a safety tour process for new personnel.					
15.18	Are personnel visiting the vessel given an appropriate safety briefing?	Yes	<u>No</u>			
	<b>Comment</b> on the arrangements for briefing/managing the safety of visitors.  When answering the above the AVI will verify the arrangements for briefing.		nanag	ging th	ne saf	ety of
15.19	Is there a bridging document or equivalent between vessel owners and external companies for contractors' employees working onboard to ensure responsibilities for health and safety are clearly defined and safety management systems aligned?	Yes	<u>No</u>	NA	NS	
	Comment on the arrangements in place for briefing/managing the safety	of co	ntrac	tors.		
	When answering the above the AVI will verify on the arrangements in places afety of contractors.	ce for	briefi	ng/m	anagiı	ng the
15.20	Are formal written emergency procedures provided for manoverboard, collision, emergency towing, grounding, fire, explosion, gas or toxic vapour release?	<u>Yes</u>	<u>No</u>	NA	NS	
	<b>Comment</b> on the suitability and crew awareness of the procedures available	able.				

When answering the above the AVI will verify the suitability and crew awareness of the procedures available.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

15.21 Is a record of emergency training drills and exercises maintained?

Yes No NA NS

Note: Some national authorities require that emergency exercises and drills are recorded showing who participated and when the exercise or drill took place. Inspectors should have knowledge of the requirements applicable to the vessel.

Note: Some national authorities require that emergency exercises and drills are recorded showing who participated and when the exercise or drill took place. Inspectors should have knowledge of the requirements applicable to the vessel.

15.22 Is there an up to-date onshore/offshore emergency response plan/manual?

Note: This should be in place as part of the company's safety management system.

**Verify** that there is a plan for the response by onshore personnel to an emergency occurring on the vessel at sea.

Note: This should be in place as part of the company's safety management system.

When answering the above the AVI will verify that there is a plan for the response by onshore personnel to an emergency occurring on the vessel at sea.

15.23 Are adequate and valid medical stores provided?

Yes No NA NS 

NA NS

Note: Consider using company standards or the information given in local maritime administration guidance or regulation e.g. MSN 1768 (UK), Maritime Rules Part 50 (New Zealand).

Note: Consider using company standards or the information given in local maritime administration guidance or regulation e.g. MSN 1768 (UK), Maritime Rules Part 50 (New Zealand).

15.24 Are procedures for control, stowage and handling of chemicals and flammable/combustible materials in place and being consistently applied?

#### Verify:

- There is evidence of appropriate Control of Substances Hazardous to Health (COSHH) or equivalent procedures.
- Copies of material safety data sheets are available.
- Specialist advice is available.
- Chemicals are stowed away from ropes or other materials that might be contaminated in the event of spillage.
- Procedures exist for the management of chemicals/oils brought onboard by third parties material safety data sheets etc.

When answering the above the AVI will verify:

- There is evidence of appropriate Control of Substances Hazardous to Health (COSHH) or equivalent procedures.
- Copies of material safety data sheets are available.
- Specialist advice is available.
- Chemicals are stowed away from ropes or other materials that might be contaminated in the event of spillage.
- Procedures exist for the management of chemicals/oils brought onboard by third parties material safety data sheets etc.

15.25 Is there an asbestos management system?

Note: If there is no plan, an 'asbestos free' certificate, where applicable, should be available.

If there is a requirement for an asbestos management plan, **comment**:

- On the basic details and availability of general arrangement plans.
- Whether warning signs are displayed, and an asbestos log maintained

Note: If there is no plan, an 'asbestos free' certificate, where applicable, should be available.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

If there is a requirement for an asbestos management plan the AVI will verify

- The basic details and availability of general arrangement plans.
- Whether warning signs are displayed, and an asbestos log maintained

15.26	Does the safety management system address hazards associated with		<u>No</u>	NA	NS	
	slips, trips and falls as well as other risks?					

**Verify** that the crew have a proactive approach to safety issues. For example, routine scheduled safety inspections should take place.

When answering the above the AVI will verify that the crew have a proactive approach to safety issues. For example, routine scheduled safety inspections take place.

15.27 Additional Section 15 comments?		15.27	Additional Section 15 comments?	Yes	No				
---------------------------------------	--	-------	---------------------------------	-----	----	--	--	--	--



NA

Yes

No

NS



#### **REVIEW COPY – NOT VALID WHEN COMPLETED OFFLINE**

Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## 16 Crane

16.1	Is there a valid test certificate for the crane if fitted?	Yes	<u>No</u>	NA	NS									
	(Ref. IMCA LR006/M 187 – Guidelines for lifting operations.)													
16.2	Is the crane wire appropriately rated for the crane's safe working load (SWL) rating plate?	Yes	<u>No</u>	NA	NS									
16.3	Is there a competent crane operator onboard?	<u>Yes</u>	<u>No</u>	NA	NS									
	Verify the crew associated with handling loads are competent in slinger 8	& sign	aller t	techni	iques.									
	Comment on whether the crew responsible for handling loads hold a slin	ger &	signa	ller qu	ualific	ation.								
When answering the above the AVI will verify the crew associated with handling loads are c in slinger & signaller techniques and the crew responsible for handling loads hold a slinger &														

# place? Verify:

16.4

qualification.

• The chain register/lifting appliance register is up to date

(Ref. IMCA LR 006/M 187 - Guidelines for lifting operations.)

Does the company have a lifting equipment management system in

- Items such as cranes, derricks and pad eyes are clearly marked with their SWL.
- Test certificates are onboard for all items of lifting equipment including chain blocks, strops, ropes, shackles (NB: may have a batch certificate for small shackles).

## Comment on:

- The system in use and system for quarantining equipment.
- Whether a colour-coding or alternative system is in use to identify inspected lifting equipment and confirm it is being adhered to, i.e. no evidence of wrong colour/non-coded equipment in use, that non-coded/wrong colour equipment is segregated and access to same denied.
- The programme for routine testing, i.e. start-up, daily, weekly and monthly checks
- How fixed lifting equipment is maintained.

When answering the above the AVI will verify:

- The chain register/lifting appliance register is up to date
- Items such as cranes, derricks and pad eyes are clearly marked with their SWL.
- Test certificates are onboard for all items of lifting equipment including chain blocks, strops, ropes, shackles (NB: may have a batch certificate for small shackles).
- The system in use and system for quarantining equipment.
- Whether a colour-coding or alternative system is in use to identify inspected lifting equipment and confirm it is being adhered to, i.e. no evidence of wrong colour/non-coded equipment in use, that non-coded/wrong colour equipment is segregated and access to same denied.
- The programme for routine testing, i.e. start-up, daily, weekly and monthly checks
- How fixed lifting equipment is maintained.

(Ref. ILO Con No 152 1979 Art 25(2).)

16.5 Additional Section 16 comments?			
--------------------------------------	--	--	--



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 17 Manning

17.1	Does the crew have valid certificates of competency as required, including flag state endorsements if applicable?	Yes	<u>No</u>	NA	NS	
	Note: For example, certificate issued by the flag or coastal state, a coffshore (motor) or a boatman's licence for the appropriate area.	ertific	ate a	ıs a y	achtn	naster
	Note: For example, certificate issued by the flag or coastal state, a coffshore (motor) or a boatman's licence for the appropriate area.	ertific	ate a	ıs a y	achtn	naster
	(Ref. IMCA C017 – Guidance on competence assurance and assessme vessels.)	ent: N	1arine	e role	s for	small
17.2	Is the manning in compliance with vessel's Minimum Safe Manning Certificate, or as otherwise required as per flag state requirements?	Yes	<u>No</u>	NA	NS	
	Note: If operating exclusively within the territorial waters of another coascomplement and the crew's certificates of competency should have be state authorities.					
	Note: If operating exclusively within the territorial waters of another coase complement and the crew's certificates of competency should have be state authorities.					
17.3	Is there a person onboard familiar with the operation and maintenance of the main propulsion machinery?	Yes	<u>No</u>	NA	NS	
17.4	Is there at least one person onboard who holds an approved medical first aid certificate?	Yes	<u>No</u>	NA	NS	
17.5	Has the person in command and any member of the crew who is liable to use the radar/electronic navigations systems/electronic chart plotters undertaken appropriate training in its use?	Yes	<u>No</u>	NA	NS	
	Note: This may not be a requirement of flag or coastal state authorities  Note: This may not be a requirement of flag or coastal state authorities.					
17.6	Are the crew members able to satisfactorily demonstrate operation of life-saving appliances and firefighting equipment?	Yes	<u>No</u>	NA	NS	
17.7	Do critical personnel (e.g. captain, chief officer and chief engineer) complete a handover period including familiarisation appropriate to their position?	Yes	<u>No</u>			
17.8	Are periods of crew hours of work and rest recorded?	Yes	<u>No</u>	NA	NS	
	Note: Under MI C and STCW requirements ship-owners are required to in-	dividu	ally r	ecord	crew	hours

Note: Under MLC and STCW requirements ship-owners are required to individually record crew hours of work and rest. (MLC Regulation 2.3 and STCW A viii/1 refer)

Note: Under MLC and STCW requirements ship-owners are required to individually record crew hours of work and rest. (MLC Regulation 2.3 and STCW A viii/1 refer)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

17.9	Is there a maximum contract duration for officers/crew?	Yes	<u>No</u>	NS	
	Provide the maximum duration.				
	When answering the above the AVI will verify the maximum duration.				
17.10	Additional Section 17 comments?	Yes	No		





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 18 Reporting

18.1	Are accidents and incidents investigated and reported in accordance with relevant flag state and/or coastal state and operator's requirements?	Yes	<u>No</u>	NA	NS	
18.2	Is there evidence of near misses being reported, investigated and followed up?	Yes	<u>No</u>	NA	NS	
18.3	Additional Section 18 comments?	Yes	No			





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 19 Clean Seas

19.1	Are adequate arrangements in place to prevent the discharge of sewage in prohibited areas?	Yes	<u>No</u>	NA	NS					
	Note: MARPOL IV only applies to ships engaged in international voyages  Verify that prohibited areas for sewage discharge are identified.	of 400	OGT a	nd ab	ove.					
	Note: MARPOL IV only applies to ships engaged in international voyages When answering the above the AVI will verify that prohibited areas identified.					e are				
19.2	Are arrangements in place for the retention of garbage onboard?	Yes	<u>No</u>	NA	NS					
19.3	Is a garbage management plan in place and is an associated garbage record book maintained?	Yes	<u>No</u>	NA	NS					
	Note: MARPOL requirement for vessels >100 GT or certified to carry 15 persons or more.  Note: MARPOL requirement for vessels >100 GT or certified to carry 15 persons or more.									
19.4	Are arrangements in place for the handling and recording of oily wastes?	Yes	<u>No</u>	NA	NS					
	Note: Every vessel of 400 gross tons and above other than an oil tanker, and manned fixed or floating drilling rig or other platform shall maintain an Oil Record Book Part I (Machinery Space Operations).									
	Note: Every vessel of 400 gross tons and above other than an oil tanker, a drilling rig or other platform shall maintain an Oil Record Book Part I (Ma					_				
19.5	Are arrangements in place for the prevention of discharge of oil/oil-contaminated water overboard?	<u>Yes</u>	<u>No</u>	NA	NS					
	Note: Vessels may be fitted with automatic bilge pump arrangements a place to prevent the accidental discharge of oil via such systems.  Comment on the suitability and effectiveness of arrangements.	nd pr	ocedu	ires s	hould	be in				
	Note: Vessels may be fitted with automatic bilge pump arrangements a place to prevent the accidental discharge of oil via such systems.	nd pr	ocedu	ires s	hould	be in				
	When answering the above the AVI will verify the suitability and effective	eness	of arr	anger	nents					
19.6	(Ref MARPOL Annex I Reg. 15 < 400GT)  If applicable, is the Oil Peccel Legheck being preparly maintained	Yes	<u>No</u>	NA	NS					
19.6	If applicable, is the Oil Record Logbook being properly maintained both at sea and in port?	163	<u>140</u>	NA.	NS					
	Note: Every vessel of 400 gross tons and above other than an oil tanker, a drilling rig or other platform shall maintain an Oil Record Book Part I (Ma									
	Note: Every vessel of 400 gross tons and above other than an oil tanker, a drilling rig or other platform shall maintain an Oil Record Book Part I (Ma					_				
19.7	Additional Section 19 comments?	Yes	No							



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

20 Life-Savin	g Appliances
---------------	--------------

20.1	Is/are there a life raft(s) onboard sufficient for the proposed maximum POB?	Yes	<u>No</u>	NA	NS	<u></u>
	<b>Comment</b> if no life raft is fitted on the intended method to abandon the do so.	e vess	el at s	sea if	requii	red to
20.2	Are the number and type of life buoys as required and are they in satisfactory condition?	Yes	<u>No</u>	NA	NS	<u></u>
	Verify against the vessel's fire and safety plan.					
	When answering the above the AVI will verify against the vessel's fire and	d safe	ty pla	n.		
20.3	Is there an approved life jacket for every person carried on the vessel?	<u>Yes</u>	<u>No</u>	NA	NS	
20.4	Are there the required number and type of pyrotechnic distress signals onboard the vessel?	Yes	<u>No</u>	NA	NS	
		l	l	I	l	]
20.5	Is effective emergency lighting provided to illuminate survival craft	Yes	<u>No</u>	NA	NS	<b></b>
Comment if no life raft is fitted on the intended method to abandon the vessel at sea if required t do so  20.2 Are the number and type of life buoys as required and are they in satisfactory condition?  Verify against the vessel's fire and safety plan. When answering the above the AVI will verify against the vessel's fire and safety plan.  20.3 Is there an approved life jacket for every person carried on the vessel?   20.4 Are there the required number and type of pyrotechnic distress signals onboard the vessel?						
20.6		<u>Yes</u>	<u>No</u>	NA	NS	<u></u>
	Comment:					
	On the condition, effectiveness and ease of operation					
	Any provision of emergency lighting for man-overboard rescue.					
	When answering the above the AVI will verify:					
		l	I	1	l	T 1
20.7		Yes	<u>No</u>	NA	NS	
	vesser.					
20.8		Yes	No	NA	NS	
20.8	Are there effective means to recover a person from the water:					
20.0		Yes	No	NA	NS	
20.9		103	<u>u</u>	117		
20.40		Voc	No	NI A	NC	
20.10		<u>res</u>	<u>IVO</u>	NA	INS	
	Neter					

No



## **REVIEW COPY – NOT VALID WHEN COMPLETED OFFLINE**

Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- The alarm should be audible in all spaces personnel may be located.
- Some national authorities require an alarm to be fitted inspectors should have knowledge of current applicable regulations.

**Comment** on the suitability and effectiveness of the alarm if fitted.

### Note:

20.13

Additional Section 20 comments?

- The alarm should be audible in all spaces personnel may be located.
- Some national authorities require an alarm to be fitted inspectors should have knowledge of current applicable regulations.

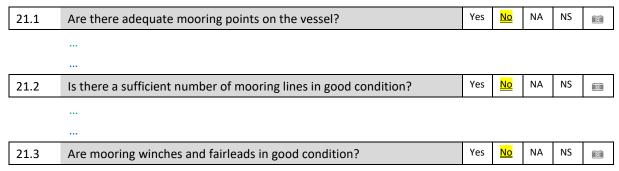
When answering the above the AVI will verify the suitability and effectiveness of the alarm if fitted.

20.11	Is there a training manual for use of life-saving appliances (LSAs)?	Yes	<u>No</u>		NS							
	<b>Comment</b> on whether the training manual includes ship-specific equipment and is in the appropriate language.											
	When answering the above the AVI will verify whether the training manual includes ship-spe equipment and is in the appropriate language.											
20.12	Are there instructions for onboard maintenance of the LSAs?	Yes	<u>No</u>	NA	NS							
	Note: These may be contained in a dedicated manual or the builders manual.	' sup	olied	vesse	opei	ration						



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 21 Mooring and Berthing



#### Verify:

- The condition of winches and fairleads
- Evidence of maintenance.

When answering the above the AVI will verify:

- The condition of winches and fairleads
- Evidence of maintenance.

21.4	Is adequate	fenderii	ng available?					Yes	<u>No</u>	NA	NS	<u></u>
•			6 11 11	 cc		٠.	2					

Note: The provision of suitable and sufficient fenders is often overlooked on small vessels. Note: The provision of suitable and sufficient fenders is often overlooked on small vessels.

21.5 Additional Section 21 comments?

RENEED



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# 22 Vessel and Cyber Security

22.1	Does the vessel have an approved ship security plan that meets (ISPS) code requirements?	Yes	No		
	Note: Not mandatory for vessels under 500GT  Note: Not mandatory for vessels under 500GT				
22.2	If the vessel does not have an approved ship security plan because of tonnage or trading area, are there any security procedures in place?	Yes	<u>No</u>	NS	

### **Verify** that security procedures cover:

- company security obligations
- company security officer or representative
- vessel security obligations
- · vessel security officer
- responding to a security incident
- reporting and follow up of security incidents
- port and vessel operations
- visitor management
- restricted or controlled areas
- training, drills and exercises.

When answering the above the AVI will verify that security procedures cover:

- company security obligations
- · company security officer or representative
- vessel security obligations
- vessel security officer
- responding to a security incident
- reporting and follow up of security incidents
- port and vessel operations
- visitor management
- restricted or controlled areas
- training, drills and exercises.

(Ref. MSC/Circ. 1097, MSC/Circ. 1111, ISPS Code Part B – Chapter 3, Chapter 4 Para 4.20, SOLAS XI-2 Reg 11.)

22.3	Does the vessel have specific port security procedures covering visitors,	Yes	<u>No</u>	NA	NS	
	storing and vessel gangway watchkeeping requirements?					

## Verify:

- A visitors' log is maintained
- Security badges are issued to all visitors while the vessel is in port.
- A gangway watch is maintained.
- Random searches of visitors' baggage are conducted.
- There is relevant signage at the gangway

Comment on where the visitor log is located when the vessel is in port?

When answering the above the AVI will verify:

- A visitors' log is maintained
- Where the visitor log is located when the vessel is in port
- Security badges are issued to all visitors while the vessel is in port.
- A gangway watch is maintained.
- Random searches of visitors' baggage are conducted.
- There is relevant signage at the gangway.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

(Ref. ISPS Code Part A Chapter 7)

22.4	Does the vessel have a cyber security management system and/or a	Yes	<u>No</u>	NA	NS	
	cyber security plan?					

Note: If none, record as 'No' to include as a finding and comment on any other arrangements with respect to cyber security.

#### Comment on:

- The cyber security management system / plan. Whilst the ISPS Code only requires the SSP to be reviewed every five years, given the rapid evolution of cyber security threats it is good practice to review the plan more frequently.
- How often the plan is reviewed
- Any associated procedures in the SMS.
- Whether cyber security issues are included as part of internal audits
- If there is a designated cyber security officer or if this is combined with the CSO duties.
- Whether the cyber security officer has undertaken specific training on cyber security.

Note: If none, this is recorded as 'No' to include as a finding, the AVI will verify any other arrangements with respect to cyber security.

When answering the above the AVI will verify:

- The cyber security management system/plan. Whilst the ISPS Code only requires the SSP to be reviewed every five years, given the rapid evolution of cyber security threats it is good practice to review the plan more frequently.
- How often the plan is reviewed
- Any associated procedures in the SMS.
- Whether cyber security issues are included as part of internal audits
- If there is a designated cyber security officer or if this is combined with the CSO duties.
- Whether the cyber security officer has undertaken specific training on cyber security.

(Ref. IMO MSC-FAL.1/Circ 3 5th July 2017, IET Code of Practice – Cyber Security for Ships Chapter 6, 7.)

22.5	Is connection of personal IT devices such as phones, tablets and	Yes	<u>No</u>	NA	NS	
	laptops to the ships network controlled?					

## Verify:

- Measures are more than just a password entry.
- There is a requirement to sign on a portal, sign up process
- Devices are covered by the company firewall/ protective software
- Download restrictions exist for type of files, running applications, etc.
- Information on number, type and application owners information is readily available
- Information on internet access is logged, including browsing history
- The system prevents web browsers and email clients from executing malicious scripts.

#### When answering the above the AVI will verify:

- Measures are more than just a password entry.
- There is a requirement to sign on a portal, sign up process
- Devices are covered by the company firewall/ protective software
- Download restrictions exist for type of files, running applications, etc.
- Information on number, type and application owners information is readily available
- Information on internet access is logged, including browsing history
- The system prevents web browsers and email clients from executing malicious scripts.

(Ref. IET Code of Practice – Cyber Security for Ships App F.)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

### Verify:

- Access to certain networks for maintenance reasons is approved and coordinated following appropriate procedures as outlined by the company/ship operator.
- Procedures exist that require a clean anti-malware scan of all equipment before connection to any vessel system or network.
- If a visitor requires computer and printer access, an independent computer, which is air-gapped from all controlled networks, is available and used.

When answering the above the AVI will verify:

- Access to certain networks for maintenance reasons is approved and coordinated following appropriate procedures as outlined by the company/ship operator.
- Procedures exist that require a clean anti-malware scan of all equipment before connection to any vessel system or network.
- If a visitor requires computer and printer access, an independent computer, which is air-gapped from all controlled networks, is available and used.

(Ref. IET Code of Practice – Cyber Security for Ships.)

ı	22.7	Are there formal controls and procedures in place for handling data	Yes	No	NA	NS	
	22.7	using portable media devices such as USB memory sticks, CD/DVDs,					
		, , , ,					
		and portable computers?					

Note: Transferring data from uncontrolled systems to controlled systems represents a major risk of introducing malware. Removable media or computers can be used to bypass layers of defences and can be used to attack systems that are otherwise not connected to the internet. A clear policy for the use of such media devices is essential; it must ensure that media devices are not normally used to transfer information between un-controlled and controlled systems.

Policies and procedures relating to the use of removable media should include a requirement to scan any removable media device prior to connecting to any vessel network or systems, using a computer/scanning station that is not connected to the ship's controlled networks.

Note: Transferring data from uncontrolled systems to controlled systems represents a major risk of introducing malware. Removable media or computers can be used to bypass layers of defences and can be used to attack systems that are otherwise not connected to the internet. A clear policy for the use of such media devices is essential; it must ensure that media devices are not normally used to transfer information between un-controlled and controlled systems.

Policies and procedures relating to the use of removable media should include a requirement to scan any removable media device prior to connecting to any vessel network or systems, using a computer /scanning station that is not connected to the ship's controlled networks.

(Ref. IET Code of Practice – Cyber Security for Ships App F.)

22.8	Are there measures to ensure the integrity of electronic chart display	Yes	<u>No</u>	NA	NS	
	systems if fitted?					

Note: The measures should be more than just password entry.

#### Verify:

- Measures are in place to protect the data integrity of the system
- There are dedicated portable devices for updates.
- Administrative privileges are controlled with differing levels of access.
- Periodic Service is conducted by service engineer.
- OS updates.
- There is a record of software issues and events investigated

Note: The measures should be more than just password entry.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## When answering the above the AVI will verify:

- Measures are in place to protect the data integrity of the system
- There are dedicated portable devices for updates.
- Administrative privileges are controlled with differing levels of access.
- Periodic service is conducted by service engineer.
- OS updates.
- There is a record of software issues and events investigated

22.9	Additional Section 22 comments?	Yes	No				
------	---------------------------------	-----	----	--	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 1** Dynamic Positioning

S1.1	Is the vessel's DP class notation free from any class-imposed	Yes	<u>No</u>	NA	NS	
	restrictions?					

Note: Verbal confirmation is insufficient, the most recent class status report or survey status report should be referenced to determine the notation and whether or not there are any imposed restrictions.

If the vessel does not have a DP notation, select NA and comment accordingly.

**Comment** if DP 1 or below, and provide a brief description of the type of equipment used and reference systems fitted on board.

#### Provide:

- The vessel's Class and DP class notation as per certification
- Any DP class-imposed restrictions

Note, If the vessel does not have a DP notation, NA will be selected and a comment entered.

When answering the above the AVI will verify:

- The vessel's DP class notation
- Any DP class-imposed restrictions

If DP 1 or below, the AVI will verify the type of equipment used and reference systems fitted on board.

S1.2	Have DP trials been carried out within the past 12 months and is there	Yes	<u>No</u>	NS	
	a copy of the trials report onboard?				

Note: A classification society annual survey or annual inspection does not fulfil the requirement of this question.

The term 'DP trials' means DP annual trials programme. This is defined in detail within IMCA M190 – Guidance for developing and conducting DP annual trials programmes. A DP annual trials programme would typically be a series of tests each with their own test sheet containing purpose of test, methodology for conducting the test, expected results, actual results, comments and a sign off section for the individual(s) witnessing the trial. Any findings of the programme should be clear, as should the close out actions. IMCA M190 Appendix 1 provides a detailed example of DP annual trials report.

### Verify that:

- Appropriate corrective action is being or has been taken on any findings. Actions not closed out are to be carried forward to this report under the original date.
- The trials report is available onboard and if not state the reasons why

**Provide** the date of the last trials.

Note: A classification society annual survey or annual inspection does not fulfil the requirement of this question.

The term 'DP trials' means DP annual trials programme. This is defined in detail within IMCA M190 – Guidance for developing and conducting DP annual trials programmes. A DP annual trials programme would typically be a series of tests each with their own test sheet containing purpose of test, methodology for conducting the test, expected results, actual results, comments and a sign off section for the individual(s) witnessing the trial. Any findings of the programme should be clear, as should the close out actions. IMCA M190 Appendix 1 provides a detailed example of DP annual trials report.

When answering the above the AVI will verify that:

- Appropriate corrective action is being or has been taken on any findings. Actions not closed out
  are to be carried forward to this report under the original date.
- The trials report is available onboard and if not state the reasons why



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S1.3 Have the DP annual trials been witnessed by an IMCA Accredited DP Yes NO NA Practitioner?

Note: IMCA recommends that the independent witness is accredited according to the IMCA DP Practitioner Accreditation Scheme. Applicable only to DP 2 and DP 3 vessels.

Note: IMCA recommends that the independent witness is accredited according to the IMCA DP Practitioner Accreditation Scheme. Applicable only to DP 2 and DP 3 vessels.

(Ref. IMCA M190, Section 5.2.)

S1.4 Have the DP annual trials been carried out in accordance with the current version of IMCA M190 - Code of Practice for Developing and Conducting DP Annual Trials Programmes?

Note: This refers to whether the annual trials have been carried out in-line with IMCA M190. Trials can be undertaken:

- by a third party onboard the vessel recording the results of the annual trials
- remotely using a Class-approved digital data acquisition application to collect and report the results

**Comment** on whether trials were undertaken by a third party onboard or using a Class-approved digital data acquisition application.

When answering the above, the AVI will verify that DP annual trials have been carried out in accordance to IMCA M190. They will indicate whether a third party was onboard the vessel recording the results of the annual trials or if the results were collected remotely using a Class-approved data acquisition application as described in IMCA M190 Section 7

(Ref. IMCA M190 – Code of practice for developing and conducting DP annual trials programmes)

S1.5 Does the vessel have onboard a copy of the most recent DP trials report?

Note: 'No' does not generate a finding

**Verify** that appropriate corrective action has been taken on any findings from the previous report, actions not closed-out are to be carried forward to this report under the original date.

**Comment** if the report is not available and state reasons why.

Note: 'No' does not generate a finding.

When answering the above the AVI will verify that appropriate corrective action has been taken on any findings from the previous report, actions not closed-out are to be carried forward to this report under the original date.

S1.6 Does the vessel have on board a copy of the most recent vessel DP failure modes and effects analysis (FMEA)?

Note: FMEA is only required for DP 2 and DP3 vessels. For DP 1 select NA if there is no FMEA onboard. If the FMEA is over five years old and there is no review evidence available, then a finding should be generated. Review evidence should be in the form of an updated FMEA in line with five-yearly periodical trials (as defined by IMCA M166 section 3.4).

## Verify:

- That key DP personnel have signed a statement that says they have read and understood the vessel's FMEA
- The DP FMEA document is within five years since first publication for use
- That appropriate corrective action has been taken on any findings from the previous report, actions not closed-out are to be carried forward to this report under the original date.

**Comment** if the report is not available and state reasons why.

Note: FMEA is only required for DP 2 and DP3 vessels. For DP 1 select NA if there is no FMEA onboard.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

If the FMEA is over five years old and there is no review evidence available, then a finding should be generated. Review evidence should be in the form of an updated FMEA in line with five-yearly periodical trials (as defined by IMCA M166 section 3.4).

When answering the above the AVI will verify:

- That key DP personnel have signed a statement that says they have read and understood the vessel's FMEA
- The DP FMEA document is within five years since first publication for use
- That appropriate corrective action has been taken on any findings from the previous report, actions not closed-out are to be carried forward to this report under the original date.

#### S1.7 Does the vessel have appropriate DP checklists?

Yes

Note: This question is applicable to all DP vessels. The AVI should seek object evidence that these checklists are being used prior to, or during DP operations.

**Verify** that the following are available, and in use:

- Field arrival checklist
- DP watch handover checklist
- ER DP checklist

**Comment** where not available and state reasons why.

Note: This question is applicable to all DP vessels.

When answering the above the AVI will verify that the following are available, and in use:

- Field arrival checklist
- DP watch handover checklist
- **ER DP checklist**

#### **S1.8** Does the vessel have on board a DP operations manual?

NS No

Yes

Note: This question is applicable to all DP vessels. DP operations manual contents are outlined in IMCA M109 – A guide to DP-related documentation for DP vessels.

In addition to IMCA M109, The MO MSC.1/Circ. 1580: Guidelines for vessels and units with DP systems, section 4 (applicable to all DP vessels regardless of the year of build) states the following checklists, test procedures, trials and instructions that should be included within the vessel-specific DP operations manuals.

- location checklist 1.
- watchkeeping checklist 2.
- 3. DP operating instructions
- 4. annual tests and procedures
- initial and periodical (five-year) tests and procedures 5.
- 6. examples of tests and procedures after modifications and non-conformances
- 7. blackout recovery procedure
- 8. list of critical components
- 9. examples of operating modes
- 10. decision support tools such as ASOG
- capability plots 11.

#### Verify that:

- The manual is onboard and if not state the reason why
- The DP operations manual is specific to the vessel
- Key DP personnel have signed a statement to say they have read and understood the DP operations manual.

**Comment** where not available and state reasons why.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

Note: This question is applicable to all DP vessels. DP operations manual contents are outlined in IMCA M109 – A guide to DP-related documentation for DP vessels.

In addition to IMCA M109, The IMO MSC.1/Circ. 1580: Guidelines for vessels and units with DP systems, section 4 (applicable to all DP vessels regardless of the year of build) states the following checklists, test procedures, trials and instructions that should be included within the vessel-specific DP operations manuals:

- 1. location checklist
- 2. watchkeeping checklist
- 3. DP operating instructions
- 4. annual tests and procedures
- 5. initial and periodical (five-year) tests and procedures
- 6. examples of tests and procedures after modifications and non-conformances
- 7. blackout recovery procedure
- 8. list of critical components
- 9. examples of operating modes
- 10. decision support tools such as ASOG
- 11. capability plots

When answering the above the AVI will verify that:

- The manual is onboard and if not state the reason why
- The DP operations manual is specific to the vessel
- Key DP personnel have signed a statement to say they have read and understood the DP operations manual.

Note: This question is applicable to all DP vessels.

The worst-case failure should be easily identifiable from brief review of the DP system FMEA/DP operations manual. It is important that the DP capability plots demonstrate capability of the vessel in both intact state and post worst-case failure. The capability plots should represent the environmental conditions in the area of operation and the mission specific operational condition of the vessel. This is a specific requirement of IMO MSC.1/Circ. 1580 – Guidelines for vessels and units with DP systems – and is applicable to all DP vessels regardless of year of build.

### Verify that:

- The plots are available onboard and if not state the reason why
- The DP capability plots show the worst-case failure (theoretical and practical footprints using IMCA M140 Specification for DP capability plots).

### **Comment:**

- On whether the vessel has been modified which may affect the validity of the plots.
- Where not available and state reasons why

Note: This question is applicable to all DP vessels.

The worst-case failure should be easily identifiable from brief review of the DP system FMEA/DP operations manual. It is important that the DP capability plots demonstrate capability of the vessel in both intact state and post worst-case failure. The capability plots should represent the environmental conditions in the area of operation and the mission specific operational condition of the vessel. This is a specific requirement of IMO MSC.1/Circ. 1580 – Guidelines for vessels and units with DP systems – and is applicable to all DP vessels regardless of year of build.

When answering the above the AVI will verify that:

• The plots are available onboard and if not state the reason why



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- The DP capability plots show the worst-case failure (theoretical and practical footprints using IMCA M140 – Specification for DP capability plots)
- Whether the vessel has been modified which may affect the validity of the plots.

# S1.10 Do the DP operators carry the appropriate DP qualification?

Note: This question is applicable to all DP vessels.

The qualification of the DPO will be dependent on the requirement of the vessel operator.

Comment on the number of qualified DP operators (DPOs).

Note: This question is applicable to all DP vessels.

The qualification of the DPO will be dependent on the requirement of the vessel operator.

(Ref IMCA M117 – Code of practice for the training and experience of key DP personnel, sections 7 and 8, for a detailed guide to the gualification and experience requirements of key DP personnel.)

S1.11	Do the key DP personnel take part in onboard training and drills	Yes	<u>No</u>	NS	
	involving various DP scenarios?				

Note: This question is applicable to all DP vessels.

Emergency drill scenarios should be developed from the experience gained during the conduct of annual DP trials and FMEA reviews undertaken onboard the vessel. The annual trials and revised FMEA documents provide the background for specific vessel drills and these should always be readily available for information and reference by operational personnel. Drill scenarios can also be developed from DP station keeping events reported as part of the IMCA DP reporting scheme.

Drills should be relevant to operational activity (e.g. pipelaying, drilling, diving, floatel, etc.) and include scenarios based on the emergency procedures detailed in the DP system operating manual.

Provide details of onboard training and drills,

Note: This question is applicable to all DP vessels.

Emergency drill scenarios should be developed from the experience gained during the conduct of annual DP trials and FMEA reviews undertaken onboard the vessel. The annual trials and revised FMEA documents provide the background for specific vessel drills and these should always be readily available for information and reference by operational personnel. Drill scenarios can also be developed from DP station keeping events reported as part of the IMCA DP reporting scheme.

Drills should be relevant to operational activity (e.g. pipelaying, drilling, diving, floatel, etc.) and include scenarios based on the emergency procedures detailed in the DP system operating manual.

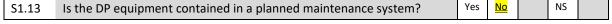
(Ref. IMCA M117 – Code of practice for the training and experience of key DP personnel.)

# S1.12 Does the vessel maintain a DP incident log? Yes No NS

Note: This question is applicable to all DP vessels.

**Comment** on recorded incidents, subsequent required actions and note of closed-out actions.

Note: This question is applicable to all DP vessels.



Note: This question is applicable to all DP vessels.

**Comment** on recorded incidents, subsequent required actions and note of closed-out actions.

Note: The DP FMEA is a good source to identify the systems and subsystems relevant to the DP system.

When answering the above the AVI will verify that:

- The DP planned maintenance system is in use and up to date
- The planned maintenance system contains all the main systems and sub systems making up the overall DP system



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S1.14 Are the vessel's DP events reported to IMCA in accordance with the confidential DP Event Reporting Scheme?

Note: Confidential DP event reporting helps the industry learn lessons and contributes to IMCA documents and bulletins. The vessel may have an IMCA certificate of participation for the IMCA DP event reporting scheme.

### Verify:

- That DP events are reported as part of the company SMS
- The company report the DP events to IMCA

If not, comment on why DP events are not reported to IMCA.

Note: Confidential DP event reporting helps the industry learn lessons and contributes to IMCA documents and bulletins. The vessel may have an IMCA certificate of participation for the IMCA DP event reporting scheme.

When answering the above the AVI will verify that:

- DP events are reported as part of the company SMS
- The company report the DP events to IMCA

S1.15	Are activity-specific operating guidelines in place and available?	Yes	<u>No</u>		NS	
-------	--	-----	-----------	--	----	--

Note: This is a key operating document that defines the safe limit of DP operations.

Decision support tools such as ASOG are a requirement of the IMO MSC.1/Circ. 1580 – Guidelines for vessels and Units with DP systems – and is applicable to all DP vessels regardless of year of build. Decision support tools should be clearly visible to the DPO and engine room watchkeepers.

**Comment** if there is no evidence of an ASOG, and describe what other decision support tools are available to define the safe limit of DP operations?

Note: This is a key operating document that defines the safe limit of DP operations.

Decision support tools such as ASOG are a requirement of the IMO MSC.1/Circ. 1580 – Guidelines for vessels and Units with DP systems – and is applicable to all DP vessels regardless of year of build. Decision support tools should be clearly visible to the DPO and engine room watchkeepers.

If there is no evidence of an ASOG, the AVI will verify what other decision support tools are available to define the safe limit of DP operations?

(Ref. IMCA M220 – Guidance on operational planning.)

# S1.16 Does the vessel have a DP data log?

Note: Most DP control systems have a data logging facility with sufficient memory for at least a few days. If there is no additional designated electronic data logging facility that records data from the DP control system and power system, there should be a process for recording actions, events and incidents. Records should be retained onboard for a period specified by the vessel operator.

This can be electronic, video, voice tape, DP event logbook, DP incident logbook, permanent recorded alarms, screenshots and any other.

**Comment** on how permanent records of DP operations are produced if this is not the case.

Note: Most DP control systems have a data logging facility with sufficient memory for at least a few days. If there is no additional designated electronic data logging facility that records data from the DP control system and power system, there should be a process for recording actions, events and incidents. Records should be retained onboard for a period specified by the vessel operator.

This can be electronic, video, voice tape, DP event logbook, DP incident logbook, permanent recorded alarms, screenshots and any other.

If this is not the case the AVI will verify how permanent records of DP operations are produced.

S1.17	Additional Supplement comments?	Yes	No				
-------	---------------------------------	-----	----	--	--	--	--



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 2** Towing

S2.1	Is there a suitable towage point arrangement on the vessel, allowing it to carry out towing operations safely?	Yes	<u>No</u>		NS	
					1	
S2.2	Is the towing equipment certified?	Yes	<u>No</u>	NA	NS	
			<u> </u>		1	1
S2.3	Are there protected areas provided for crew working on the stern during a towing operation?	Yes	<u>No</u>	NA	NS	
				ı	1	
S2.4	Has a risk assessment for towing operations been made?	Yes	<u>No</u>	NA	NS	
			l		l	
S2.5	Is there a safe method to release the towing rope?  Note: The inspector should look for evidence that the release system is u	Yes	<u>No</u>		NS	
	Comment on the suitability and adequacy of the safety of the procedunderstood by the crew members and is subject to adequate testing prowhen answering the above the AVI will verify the suitability and adequate testing prowhen answering the above the AVI will verify the suitability and adequate testing prowhen answering the above the AVI will verify the suitability and adequacy of the safety of the procedure.	cedur	e.			
	procedure, including whether it is understood by the crew members testing procedure.		-			
S2.6	procedure, including whether it is understood by the crew members		-			
S2.6	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel	and i	s sub	ject to	o ade	
S2.6 S2.7	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?	and i	s sub	ject to	o ade	
	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?	and i	s sub	ject to	NS NS	
	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?	and i	s sub	ject to	NS NS	
	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?	and i	s sub	ject to	NS NS	
\$2.7	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?	Yes Yes	No No	NA	NS NS	
\$2.7	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?   Are the crew familiar with the vessel's towing procedures?	Yes Yes	No No	NA	NS NS	
\$2.7	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?   Are the crew familiar with the vessel's towing procedures?	Yes Yes	No No	NA	NS NS	
\$2.7 \$2.8	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?   Are the crew familiar with the vessel's towing procedures?	Yes Yes Yes	No No	NA NA	NS NS	
\$2.7 \$2.8	procedure, including whether it is understood by the crew members testing procedure.  Is there a towing operations manual and does it reference vessel stability?   Does the master have a tug CoC or a towage endorsement?   Are the crew familiar with the vessel's towing procedures?   Does the vessel have emergency towing procedures?	Yes Yes Yes	No No	NA NA	NS NS	

Note: Select NA if not required

**Comment** if local regulations require specific conditions to be met such as the age of the certificate, e.g. some authorities require re-testing after a specific period.

Note: NA will be selected if not required.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S2.11	Is there a system to prevent girding/girting?	Yes	<u>No</u>	NA	NS	
	Note: Towing from amidships on conventionally propelled vessels should be avoided – use of system such as gob wire should be in place.					stems
	Note: Towing from amidships on conventionally propelled vessels should such as gob wire should be in place.	be av	oided	– use	of sys	stems
S2.12	Additional Supplement 2 comments?	Yes	No			





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 3** Diving

S3.1	Does the vessel have a procedure for the secure mooring and recovery of moorings?	Yes	<u>No</u>	NA	NS	
S3.2	Does the vessel have procedures for the safe use of engines and DP (if fitted)?	Yes	<u>No</u>	NA	NS	
S3.3	Does the vessel have a planned procedure for the recovery of a diver?	Yes	<u>No</u>		NS	
	Note: Arrangements should also be in place to recover an injured or unco to the deck.	nsciou	ıs dive	er fror	n the	wate
	If the inspector is not familiar with diving procedures they should or feasibility of the recovery procedure and avoid any subjective assessmen	-	nside	r the	obse	rvable
	Note: Arrangements should also be in place to recover an injured or unco to the deck.	nsciou	ıs dive	er fror	n the	wate
	If the inspector is not familiar with diving procedures they should or feasibility of the recovery procedure and avoid any subjective assessment		nside	r the	obsei	rvable
\$3.4	Do the crew have an understanding of the stability implications when carrying a dive spread?	Yes	<u>No</u>	NA	NS	
S3.5	Does the vessel carry the international signal(s) that diving is underway?	Yes	<u>No</u>		NS	
	Note: This will typically be the signal flag alpha or 'diver down' flag, suita Note: This will typically be the signal flag alpha or 'diver down' flag, suita					
S3.6	Has a Diving Equipment System Inspection Guidance Note (DESIGN) document been completed within the past 12 months?	Yes	<u>No</u>	NA	NS	
	Note: The inspector is not being asked to confirm the adequacy of the present.	docu	ment,	mere	ely tha	at it is
	'No' does not generate a finding.					
	If a mothercraft is present there should be a DESIGN document for the divalend a separate DESIGN document for the elements of the dive syste decompression chamber.					
	Note: The inspector is not being asked to confirm the adequacy of the present.	docui	ment,	mere	ely tha	at it is
	'No' does not generate a finding.					
	If a mothercraft is present there should be a DESIGN document for the divalend a separate DESIGN document for the elements of the dive syste decompression chamber.					
S3.7	Does the vessel have emergency procedures for diver decompression illness?	Yes	<u>No</u>	NA	NS	
	Note: Twin-lock air recompression chamber complying with the requirem for surface orientated (air) diving systems – should be readily available or					

in a short time period.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

If the inspector is not familiar with diving procedures they should only consider the observable feasibility of these procedures and avoid making any subjective assessment.

Note: Twin-lock air recompression chamber complying with the requirements of IMCA D023 – DESIGN for surface orientated (air) diving systems – should be readily available on the vessel or mothercraft in a short time period.

If the inspector is not familiar with diving procedures they should only consider the observable feasibility of these procedures and avoid making any subjective assessment.

S3.8	Does the vessel carry a first aid kit and an oxygen administration set?	Yes	<u>No</u>	NA	NS	0
53.9	Additional Supplement 3 comments?	Yes	No			

*Important references relating to this supplement are:* 

IMCA D015 – Mobile/portable/daughtercraft surface supplied systems

IMCA D023 – DESIGN for surface orientated (air) diving systems

IMCA D040 – DESIGN for mobile/portable surface supplied systems.





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# Supplement 4 Anchor Handling

S4.1	Is the anchor handling winch appropriately certified?	Yes	<u>No</u>	NA	NS	
	Verify that correct machinery guards and emergency stops are fitted.					
	When answering the above the AVI will verify that correct machinery g are fitted.	uards	and	emerg	gency	stops
S4.2	Are the anchor handling equipment maintenance records up to date?	Yes	<u>No</u>	NA	NS	
	Comment:					
	<ul> <li>If any equipment maintenance is out of date.</li> <li>On the completeness of the maintenance records relating to all a including wires.</li> </ul>	ancho	r han	dling	equip	ment
	When answering the above the AVI will verify:					
	<ul> <li>Equipment maintenance is not out of date.</li> <li>The completeness of the maintenance records relating to all a including wires.</li> </ul>	nchor	han	dling	equip	ment
\$4.3	Is the anchor handling deck area clearly visible from the bridge or covered by CCTV?	Yes	<u>No</u>	NA	NS	0
	Comment on the lighting to cover the work areas.  When answering the above the AVI will verify that the lighting covers the	e work	c area	s.		
S4.4	Is the deck area sheathing free from any significant damage?	Yes	<u>No</u>	NA	NS	<u></u>
	Verify the sheathing is free of potential trip hazards.  When answering the above the AVI will verify that the sheathing is free or	of pote	ential	trip h	azard	s.
S4.5	Are there protected areas provided for crew working on the stern?	Yes	<u>No</u>	NA	NS	
	Comment on the provision for deck crew safety lines.  When answering the above the AW will verify that the provision for deck	crew	safet	y line:	s.	
S4.6	Is there a safe method to release the anchor handling winch?	Yes	<u>No</u>	NA	NS	
	<ul> <li>Verify that the procedure:</li> <li>Is understood by the operating crew</li> <li>Is the subject of a testing schedule.</li> <li>When answering the above the AVI will verify that the procedure:</li> <li>Is understood by the operating crew</li> <li>Is the subject of a testing schedule.</li> </ul>					
S4.7	Additional Supplement 4 comments?	Yes	No			



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 5** Barges (non-Self-Propelled)

S5.1	Is the main towing bridle including chains/wires/shackles/Smit brackets and recovery winch certificated and in satisfactory condition?	Yes	<u>No</u>		NS	
S5.2	Is emergency towing apparatus and equipment certificated and in a satisfactory condition?	Yes	<u>No</u>	NA	NS	<b>©</b>
	Note: The inspector should make an objective assessment of the condition Note: The inspector should make an objective assessment of the condition of the condit					
S5.3	Is there an emergency recovery system available for the tow?	Yes	<u>No</u>	NA	NS	<u></u>
S5.4	Is the towing gear included in a planned maintenance system?	<u>Yes</u>	<u>No</u>	NA	NS	
	Comment on the provision of spares available.					
	When answering the above the AVI will verify the provision of spares ava	ailable				
S5.5	Is adequate fendering available and in a satisfactory condition?	Yes	<u>No</u>	NA	NS	
S5.6	Do the navigation lights and shapes meet local and COLREG requirements?	<u>Yes</u>	<u>No</u>	NA		
	Comment on the provision of adequate electrical power arrangements.  When answering the above the AVI will verify that the provision of arrangements.	adeo	Juate	electi	rical p	oower
S5.7	Is the deck equipment/machinery (if fitted) in a satisfactory condition?	<u>Yes</u>	<u>No</u>	NA		
	Note: When deck equipment such as fairleads, bollards, mooring fittings etc. is fitted, the inspector should make an objective assessment of the the fitted equipment/machinery	_			-	
S5.8	Are the vessel's handrails adequate to prevent personnel falling overboard?	Yes	<u>No</u>	NA		
S5.9	Is there a safety induction procedure for workers who board the barge?	Yes	<u>No</u>	NA		
S5.10	Is there a suitable arrangement for anchoring the vessel if needed?	Yes	<u>No</u>	NA	NS	

 $\label{lem:comment:c$ 

When answering the above the AVI will verify the arrangements for deploying and recovering the anchor(s).



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S5.11	Is there a suitable arrangement for boarding the vessel at sea?	Yes	<u>No</u>	NA	NS	
	Comment on the arrangements for deploying and recovering the anchor(s).					
	When answering the above the AVI will verify the permanent and temporary provisions for board the vessel at sea (e.g. pilot ladders, fixed ladders).					
S5.12	Additional Supplement 5 comments?	Yes	No			

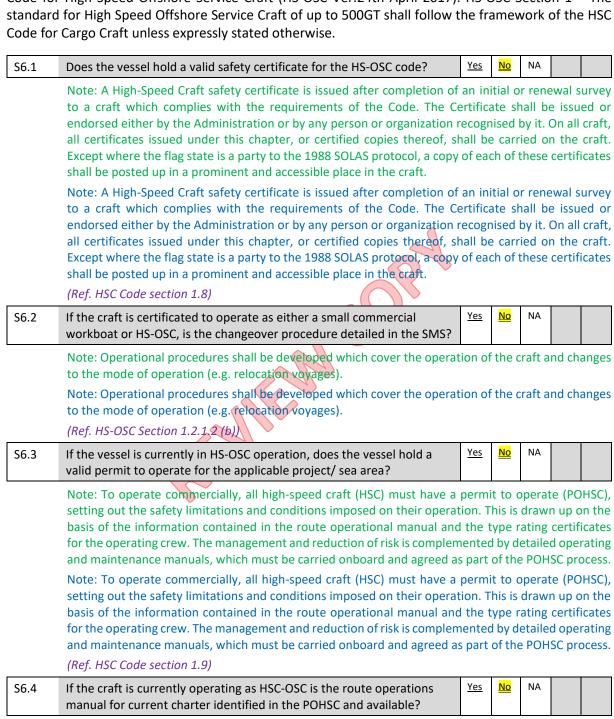




Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## **Supplement 6** High Speed Craft Code Compliance

This supplement contains a question set primarily based on International Code of Safety for High-Speed Craft (2000), 2008 Edition, with the exception of those questions specifically referencing the Code for High Speed Offshore Service Craft (HS-OSC Ver.24th April 2017). HS-OSC Section 1 – The standard for High Speed Offshore Service Craft of up to 500GT shall follow the framework of the HSC Code for Cargo Craft unless expressly stated otherwise.



Note: A previous copy of the manual could be reviewed should the vessel not be in HS-OSC use.

**Verify** that the route operational manual includes at least the following information:

- .1 evacuation procedures;
- .2 operating limitations, including the worst intended conditions;



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- .3 procedures for operation of the craft within the limitations of .2;
- .4 the elements of applicable contingency plans for primary and secondary rescue assistance in the case of foreseeable incidents, including land-based arrangements and activities for each incident;
- .5 arrangements for obtaining weather information;
- .6 identification of the "base port(s)";
- .7 identification of the person responsible for decisions to cancel or delay voyages;
- .8 identification of crew complement, functions and qualifications;
- .9 restrictions on working hours of crew;
- .10 safety arrangements at terminals;
- .11 traffic control arrangements and limitations, as appropriate;
- .12 specific route conditions or requirements relating to position fixing, operations by night and in restricted visibility, including the use of radar or other electronic aids to navigation; and
- .13 communication arrangements between craft, coast radio stations, base ports radio stations, emergency services and other ships, including radio frequencies to be used and watch to be kept.

Note: A previous copy of the manual could be reviewed should the vessel not be in HS-OSC use.

When answering the above the AVI will verify that the route operational manual includes at least the following information:

- .1 evacuation procedures;
- .2 operating limitations, including the worst intended conditions;
- .3 procedures for operation of the craft within the limitations of .2;
- .4 the elements of applicable contingency plans for primary and secondary rescue assistance in the case of foreseeable incidents, including land-based arrangements and activities for each incident;
- .5 arrangements for obtaining weather information;
- .6 identification of the "base port(s)";
- .7 identification of the person responsible for decisions to cancel or delay voyages;
- .8 identification of crew complement, functions and qualifications;
- .9 restrictions on working hours of crew;
- .10 safety arrangements at terminals;
- .11 traffic control arrangements and limitations, as appropriate;
- specific route conditions or requirements relating to position fixing, operations by night and in restricted visibility, including the use of radar or other electronic aids to navigation; and
- .13 communication arrangements between craft, coast radio stations, base ports radio stations, emergency services and other ships, including radio frequencies to be used and watch to be kept.

(Ref. HSC Code section 18.2.2.)

S6.5	Are the crew members qualified in accordance with the STCW	Yes	<u>No</u>	NA	
	Convention?				

Note: Crew members are to be qualified in accordance with the STCW Convention and two shall be trained in crowd control when carrying more than 12 persons other than crew members.

Note: Crew members are to be qualified in accordance with the STCW Convention and two shall be trained in crowd control when carrying more than 12 persons other than crew members.

(Ref. HSC Section 18.3.1 (HS-OSC Version 24 April 2017).)

S6.6	Are at least two crew members trained in crowd control?	<u>Yes</u>	<u>No</u>	NA			
------	---	------------	-----------	----	--	--	--

Note: Crew members are to be qualified in accordance with the STCW Convention and two shall be trained in crowd control when carrying more than 12 persons other than crew members.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

Note: Crew members are to be qualified in accordance with the STCW Convention and two shall be trained in crowd control when carrying more than 12 persons other than crew members.

(Ref. HSC Section 18.3.1 (HS-OSC Version 24 April 2017).)

S6.7	Does the vessel have an ECDIS and are crew trained in its use?	Yes	<u>No</u>	NA		0	
------	--	-----	-----------	----	--	---	--

Note: Craft shall be provided with nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage; an electronic chart display and information system (ECDIS) may be accepted as meeting the chart carriage requirements of this paragraph.

High-speed craft shall be fitted with an ECDIS as follows:

- .1 craft constructed on or after 1 July 2008;
- .2 craft constructed before 1 July 2008, not later than 1 July 2010.

Note: Craft shall be provided with nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage; an electronic chart display and information system (ECDIS) may be accepted as meeting the chart carriage requirements of this paragraph.

High-speed craft shall be fitted with an ECDIS as follows:

- .1 craft constructed on or after 1 July 2008;
- .2 craft constructed before 1 July 2008, not later than 1 July 2010

(Ref. HSC Section 13.8.1/13.8.2.)

S6.8	Do the officers having an operational role onboard hold a 'type rating	<u>Yes</u>	<u>No</u>	NA	
	certificate' issued by the administration as per the HSC code section				
	18.3.3				

Note: Section 18.3.3 The Administration shall issue a type rating certificate to the master and all officers having an operational role following an appropriate period of operational/simulator training and on the conclusion of an examination including practical test commensurate with the operational tasks onboard the particular type and model of craft concerned and the route followed.

The type rating training shall cover at least the following items:

- .1 knowledge of all on-board propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire pumping;
- .2 the failure mode of the control, steering and propulsion systems and proper response to such failures;
- .3 handling characteristics of the craft and the limiting operational conditions;
- .4 bridge communication and navigation procedures;
- .5 intact and damage stability and survivability of the craft in damage condition;
- .6 location and use of the craft's life-saving appliances, including survival craft equipment;
- .7 location and use of escapes in the craft and the evacuation of passengers;
- .8 location and use of fire protection and fire-extinguishing appliances and systems in the event of fire onboard:
- .9 location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps;
- .10 cargo and vehicle stowage and securing systems;
- .11 methods for control of and communication with passengers in an emergency; and
- .12 location and use of all other items listed in the training manual.

Note: Section 18.3.3 The Administration shall issue a type rating certificate to the master and all officers having an operational role following an appropriate period of operational/simulator training



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

and on the conclusion of an examination including practical test commensurate with the operational tasks onboard the particular type and model of craft concerned and the route followed.

The type rating training shall cover at least the following items:

- .1 knowledge of all on-board propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire pumping;
- .2 the failure mode of the control, steering and propulsion systems and proper response to such failures;
- .3 handling characteristics of the craft and the limiting operational conditions;
- .4 bridge communication and navigation procedures;
- .5 intact and damage stability and survivability of the craft in damage condition;
- .6 location and use of the craft's life-saving appliances, including survival craft equipment;
- .7 location and use of escapes in the craft and the evacuation of passengers;
- .8 location and use of fire protection and fire-extinguishing appliances and systems in the event of fire onboard;
- .9 location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps;
- .10 cargo and vehicle stowage and securing systems;
- .11 methods for control of and communication with passengers in an emergency; and
- .12 location and use of all other items listed in the training manual.

(Ref. HSC Code Sections 18.3.3-18.3.5.)

# S6.9 Is the vessel's operations manual available and valid? Yes No NA NS

Note that this requirement is in addition to the permit to operate.

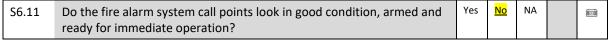
Note that this requirement is in addition to the permit to operate.



Note: Public spaces shall not contain operating controls unless the operating controls are so protected and located that their operation by a crew member shall not be impeded by passengers during normal and emergency conditions.

Note: Public spaces shall not contain operating controls unless the operating controls are so protected and located that their operation by a crew member shall not be impeded by passengers during normal and emergency conditions.

(Ref. HSC Section 4.1.3 and 1.4.16.)



Note: Any required fixed fire-detection and fire alarm system with manually operated call points shall be capable of immediate operation at all times.

Note: Any required fixed fire-detection and fire alarm system with manually operated call points shall be capable of immediate operation at all times.

(Ref. HSC Section 7.7.1.1.1.1.)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S6.12	Do areas accessible to passengers contain controls, electrical	Yes	<u>No</u>	NA		
	equipment, high-temperature parts and pipelines, rotating					
	assemblies or other items, from which injury to passengers					
	could result, excluding such items are adequately shielded,					
	isolated, or otherwise protected?					
	Note: Spaces accessible to passengers shall not contain controls	oloctri	cal c	auinn	aont	high

Note: Spaces accessible to passengers shall not contain controls, electrical equipment, high-temperature parts and pipelines, rotating assemblies or other items, from which injury to passengers could result, unless such items are adequately shielded, isolated, or otherwise protected.

Note: Spaces accessible to passengers shall not contain controls, electrical equipment, high-temperature parts and pipelines, rotating assemblies or other items, from which injury to passengers could result, unless such items are adequately shielded, isolated, or otherwise protected.

(Ref. HSC 4.1.2.)

S6.13 Are the crew able to show the evacuation procedure and competently walk-through a mass evacuation drill?

Note: HS-OSC Section 1.2.1.2 (b) Operational procedures shall be developed which cover the operation of the craft and changes to the mode of operation (e.g. relocation voyages). Such procedures should also reflect the evacuation procedures for the number of persons carried. These procedures should form part of training drills.

Note: HS-OSC Section 1.2.1.2 (b) Operational procedures shall be developed which cover the operation of the craft and changes to the mode of operation (e.g. relocation voyages). Such procedures should also reflect the evacuation procedures for the number of persons carried. These procedures should form part of training drills.

(Ref. HSC Section 4.8.2.)

S6.14 Are seats and safety belts fitted for all passengers and crew as per the vessel's High Speed Safety Certificate?

Note: A seat shall be provided for each passenger and crew member for which the craft is certified to carry. Such seats shall be arranged in enclosed spaces.

Safety belts shall be provided on passenger seats and crew seats, if necessary, to obtain the protective performance measures described in annex 10.

Note: A seat shall be provided for each passenger and crew member for which the craft is certified to carry. Such seats shall be arranged in enclosed spaces.

Safety belts shall be provided on passenger seats and crew seats, if necessary, to obtain the protective performance measures described in annex 10.

(Ref. HSC Section 4.5.1/HSC Section 4.6.2.)

S6.15	Additional Supplement 6 comments?	Yes	No			
-------	-----------------------------------	-----	----	--	--	--



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 7** Walk to Work

The offshore industry is increasingly using walk to work (W2W) as a means of access to offshore assets in both the oil & gas and renewable energy sectors. An actively motion compensated gangway (or motion compensated access device) autonomously compensates for the vessel motions of which it is attached to, by actively altering either its base, telescoping, luffing and slewing angles in order to provide a steady and controlled transitional link between its mother vessel and its target (either another vessel or fixed structure), enabling safe transfer of personnel and, when appropriate, the safe transfer of equipment.

S7.1	Does the walk to work system have an FMEA?	<u>Yes</u>	<u>No</u>							
	Note: The gangway active systems should be designed with the same revessel DP system and therefore subject to failure modes and effects and				ophy	as the				
	Provide date and revision details of analysis within comments.									
	Note: The gangway active systems should be designed with the same redundancy philosophy as the vessel DP system and therefore subject to failure modes and effects analysis (FMEA).									
	When answering the above the AVI will verify the date and revision deta (Ref. IMCA M254 Section 3.10.)	ils of a	analys	sis.						
S7.2	Has regular testing of the FMEA been undertaken and all findings closed out?	<u>Yes</u>	<u>No</u>							
	Note: Due to the safety critical nature of gangway operations regular test Mobile systems should be tested every time the system is mobilised installations should be tested annually or whenever there is significant in Provide date and revision details of test record within comments.  Note: Due to the safety critical nature of gangway operations regular test Mobile systems should be tested every time the system is mobilised installations should be tested annually or whenever there is significant in When answering the above the AVI will verify the date and revision detail (Ref. IMCA M254 Section 3.10.)	onto nodific ting of onto nodific	a vertical	essel. To the EMEA essel. To the EMEA essel.	Perme systems is required Perme e systems in the perme e systems in	anentem. uired				
S7.3	Is there a dedicated and backup system for communication between the gangway and key areas, for example, bridge and engine room?	<u>Yes</u>	<u>No</u>							
	Note: A dedicated system for communication between all relevant operating and control locations of the vessel should be provided. There should be a backup communication system, both primary and backup communications should be checked as part of the pre-operation checklists.  Note: A dedicated system for communication between all relevant operating and control locations of the vessel should be provided. There should be a backup communication system, both primary and backup communications should be checked as part of the pre-operation checklists.  (Ref. IMCA M254 Section 3.10.)									
S7.4	For permanent installations, are the walk to work systems integrated into the vessel's planned maintenance system?	Yes	<u>No</u>	NA						
	Verify that planned maintenance routines are up to date.									

When answering the above the AVI will verify that planned maintenance routines are up to date.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

(Ref. IMCA M254 Section 6.)

**S7.5** For mobile systems, are there critical maintenance routines in place? Yes Note: Maintenance routine records should be sighted. (Ref. IMCA M254 Section 6.) **S7.6** Yes <u>No</u> Are there critical spares held onboard for the walk to work system? Note: Appropriate spare parts for the gangway system are required to be carried onboard. Note: Appropriate spare parts for the gangway system are required to be carried onboard. (Ref. IMCA M254 Section 4.1.11 and Section 6.) **S7.7** Yes <u>No</u> Is there a walk to work operations manual in place?

Note: The W2W operations manual ideally only contains information specific to operating the vessel and its W2W system during W2W operations.

**Verify** the manual contains information on the following:

- The organisation and responsibilities (on the vessel and between the vessel and asset)
- Vessel specification
- W2W philosophy
- Checklists (prior to commencing W2W operations and during W2W operations)
- W2W trials procedure
- W2W operations procedure.

Note: The W2W operations manual ideally only contains information specific to operating the vessel and its W2W system during W2W operations.

When answering the above the AVI will verify that the manual contains information on the following:

- The organisation and responsibilities (on the vessel and between the vessel and asset)
- Vessel specification
- W2W philosophy
- Checklists (prior to commencing W2W operations and during W2W operations)
- W2W trials procedure
- W2W operations procedure.

(Ref. IMCA M254 Section 4.3.)

#### 

Note: Logs should be maintained during W2W operations including (but not limited to):

- Transfer log
- Bridge log
- Gangway log

Note: Logs should be maintained during W2W operations including (but not limited to):

- Transfer log
- Bridge log
- Gangway log

(Ref. IMCA M254 Section 4.4.)

<b>S7</b>	.9	Is the W2W system included in the vessel operator's safety	Yes	<u>No</u>		
		management system (SMS) from an emergency preparedness				
		perspective?				

Note: The SMS should establish procedures on how to respond to, for example:

- Field operator emergency response plan
- Response to evacuation requests



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

Note: The SMS should establish procedures on how to respond to, for example:

- Field operator emergency response plan
- Response to evacuation requests

(Ref. IMCA M254 Section 8 and ISM Code chapter 8.)

S7.10	Does the gangway have an independent alert system for gangway	Yes	<u>No</u>		<u></u>	
	crossing?					

Note: An independent alert system should be fitted for the gangway crossing. The gangway operation manual should provide advice covering the action to be taken on the specific gangway, but in general:

- Green status lights each end of the gangway to indicate 'safe to cross'
- Red lights each end of the gangway and an audible alarm to indicate 'unsafe to cross', persons on the gangway should act as required by the gangway specific emergency procedures

Note: An independent alert system should be fitted for the gangway crossing. The gangway operation manual should provide advice covering the action to be taken on the specific gangway, but in general:

- Green status lights each end of the gangway to indicate 'safe to cross'
- Red lights each end of the gangway and an audible alarm to indicate 'unsafe to cross', persons on the gangway should act as required by the gangway specific emergency procedures

(Ref. IMCA M254 Section 8.3.)

S7.11 Is there evidence of the conduct of W2W system emergency response drills covering different possible scenarios?

Note: The following scenarios are suggested for emergency response drills.

- Emergency evacuation from the asset using the gangway
- Equipment specific drills
- a) Emergency lowering elevator
- b) Automatic retract
- Fire drill with gangway in use
- MOB drill with gangway in use
- Oil leakage drill with gangway in use

Note: The following scenarios are suggested for emergency response drills.

- Emergency evacuation from the asset using the gangway
- Equipment specific drills
  - a) Emergency lowering elevator
  - b)Automatic retract
- Fire drill with gangway in use
- MOB drill with gangway in use
- Oil leakage drill with gangway in use

(Ref. IMCA M254 Section 8.5.)

S7.12	Is there evidence of specific crew training and competence on the	Yes	<u>No</u>		
	normal and emergency use of the W2W system?				

Note: It is the vessel operator's responsibility to ensure all the onboard key personnel involved with gangway system operations are competent to carry out their duties.

Note: It is the vessel operator's responsibility to ensure all the onboard key personnel involved with gangway system operations are competent to carry out their duties.

(Ref. IMCA M254 Section 5.)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S7.13	Is there a proactive system in place to report, record and learn from	Yes	<u>No</u>	NA	NS	
	W2W related incidents/events?					

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

(Ref. IMCA M254 Section 5.)

S7.14	Additional Supplement 7 comments?	Yes	No				
-------	-----------------------------------	-----	----	--	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

## **Supplement 8** Hybrid Battery Systems for DP Vessels

The offshore industry is increasingly upgrading to hybrid battery systems or building new tonnage with hybrid battery systems, in the offshore energy sectors. Battery systems are being fitted to the power grids of vessels and integrated within their power management systems in order to enable more efficient running of internal combustion engines used for power generation. This supplement has been prepared with the intent of providing a standardised approach to hybrid system inspections. Note that this supplement should not be used for the selection, or as a commissioning checklist for installation of hybrid battery systems. The basis for this supplement is IMCA M250 – Introduction to Hybrid Battery Systems for DP Vessels.

S8.1	Does the DP system FMEA include analysis of the hybrid battery	Yes	<u>No</u>		
	system?				

Note: If the battery system connects to or has any ability to influence the DP system and its redundancy concept, then the DP failure modes and effects analysis (FMEA) must be updated to include the new installation and those failure modes and effects that are either affected, or created, by the new installation. Batteries may also be fitted to mission equipment and still influence DP systems.

**Provide** date and revision details of analysis within comments.

Note: If the battery system connects to or has any ability to influence the DP system and its redundancy concept, then the DP failure modes and effects analysis (FMEA) must be updated to include the new installation and those failure modes and effects that are either affected, or created, by the new installation. Batteries may also be fitted to mission equipment and still influence DP systems.

When answering the above the AVI will verify the date and revision details of analysis. (Ref. IMCA M250 Section 6.5.)

S8.2 Are state of charge (SOC) and state of health (SOH) clearly displayed to the operator?

Note: The operator needs to know the SOC and SOH.

Note: The operator needs to know the SOC and SOH.

S8.3 Are alarms available at the control position for all relevant situations? Yes NA

Note: These alarms may include:

- loss of communication between the battery management system and energy management system or power management system battery
- failure of the management system
- failure or fault in the cooling system (if installed)
- the battery management system has disconnected a battery pack(s)
- low remaining battery charge
- ambient temperature in the battery box or battery room above a specified level
- detection of a build-up of explosive gas

These alarms maybe local or presented on the VMS, some may not be applicable.

Note: These alarms may include:

- loss of communication between the battery management system and energy management system or power management system battery
- failure of the management system
- failure or fault in the cooling system (if installed)
- the battery management system has disconnected a battery pack(s)
- low remaining battery charge



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

- ambient temperature in the battery box or battery room above a specified level
- detection of a build-up of explosive gas

These alarms maybe local or presented on the VMS, some may not be applicable.

S8.4	Does the DP annual trials programme consider/include testing the	Yes	<u>No</u>	<u>NA</u>	
	detection and protection devices and performance of the hybrid				
	battery system and are all associated findings closed out?				

Note: Battery installations connecting to, or having the ability to influence, the DP system must form part of the DP annual trials programme. Annual trials need to demonstrate that the hybrid elements remain in suitable condition, and, for example, that batteries retain adequate charge and capacity and that the mode functionality remains intact as installed.

#### Provide:

- Date and revision details of test records within comments.
- An explanation with details when N/A is selected.

Note: Battery installations connecting to, or having the ability to influence, the DP system must form part of the DP annual trials programme. Annual trials need to demonstrate that the hybrid elements remain in suitable condition, and, for example, that batteries retain adequate charge and capacity and that the mode functionality remains intact as installed.

When answering the above the AVI will verify the date and revision details of test records.

(Ref. IMCA M250 Section 6.5.)

S8.5	Has all associated DP documentation onboard been updated to include	Yes	<u>No</u>	NS	
	the hybrid battery system?				

Note: Depending on the design and intended use of the hybrid battery installation, documentation may need to be updated to include specific details. For example, DP operations manuals, ASOG and field arrival trials, may require updating.

Note: Depending on the design and intended use of the hybrid battery installation, documentation may need to be updated to include specific details. For example, DP operations manuals, ASOG and field arrival trials, may require updating.

(Ref. IMCA M250 Section 6.6.)

S8.6 Have the crew attended a type-specific course for the operation and	Yes	<u>No</u>		
maintenance of the hybrid system fitted?				

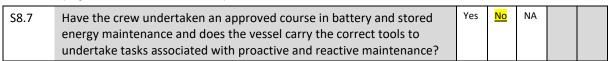
Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation in both intact DP status and in the event of a DP event.

Onboard training may have been given specific to the installed system by the OEM, this should be considered.

Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation in both intact DP status and in the event of a DP event.

Onboard training may have been given specific to the installed system by the OEM, this should be considered.

(Ref. IMCA M250, Section 6.6.)



Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation in both intact DP status and in the event of a DP event.



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

This should include auxiliary systems – cooling, ventilation, firefighting etc.

Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation in both intact DP status and in the event of a DP event.

This should include auxiliary systems – cooling, ventilation, firefighting etc.

(Ref. IMCA M250, Section 6.6.)

# S8.8 Are maintenance routines in place for hybrid battery systems? Yes No

Note: Hybrid battery systems, when installed, need to form part of the vessel's maintenance regime. No battery system is completely maintenance free.

Note: Hybrid battery systems, when installed, need to form part of the vessel's maintenance regime. No battery system is completely maintenance free.

(Ref. IMCA M250, Section 6.5.)

## S8.9 Are spares held onboard for the hybrid battery system?

Yes <u>No</u>

Note: This should include auxiliary systems – cooling, ventilation, firefighting etc.

Note: This should include auxiliary systems – cooling, ventilation, firefighting etc.

## S8.10 Is a hybrid battery system operations manual in place?

Yes <u>No</u>

**Verify** the operations manual explains the purpose of the hybrid battery system installed on the vessel.

When answering the above the AVI will verify that the operations manual explains the purpose of the hybrid battery system installed on the vessel.

### S8.11 Are records of battery history maintained?

Yes <u>No</u>

Note: Logbooks should be kept for battery time in service, SOH, replacement status.

Note: Logbooks should be kept for battery time in service, SOH, replacement status.

### S8.12 Is adequate signage on display?

Yes





Note: Examples include:

- Appropriate precautions are to be taken when opening or entering this space
- Naked lights, smoking and sources of ignition are not permitted within or outside the entrance of a battery box or battery room or ventilation discharge points
- No unauthorised personnel are permitted to enter or open battery boxes or battery rooms

Note: Examples include:

- Appropriate precautions are to be taken when opening or entering this space
- Naked lights, smoking and sources of ignition are not permitted within or outside the entrance of a battery box or battery room or ventilation discharge points
- No unauthorised personnel are permitted to enter or open battery boxes or battery rooms

# S8.13 Do the ASOG, CAM and TAM modes address hybrid DP operations? Yes No

Verify that:

- The ASOG is sufficiently populated to include the hybrid system
- CAM and TAM modes are clearly defined with regards the hybrid configuration

When answering the above the AVI will verify that:

- The ASOG is sufficiently populated to include the hybrid system
- CAM and TAM modes are clearly defined with regards the hybrid configuration

(Ref. IMCA M220 Section 3.)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S8.14	Are regular hybrid battery system endurance tests carried out and documented?	Yes	<u>No</u>	NA	
	Note: In line with annual DP trials performance tests.				
	Note: In line with annual DP trials performance tests.		I I		
S8.15	Are battery spaces/boxes adequately ventilated and away from heat source?	Yes	<u>No</u>		
	Note: Air ducts should not be obstructed.				
	Note: Air ducts should not be obstructed.				
S8.16	Is there evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted?	Yes	<u>No</u>		
	Note: The following scenarios are suggested for emergency response dril	ls.			
	<ul> <li>Emergency stop/shutdown</li> <li>Fire drill within the battery storage area and/ converter area</li> <li>Response to a single cell or module, fault or failure</li> <li>Response to thermal runaway</li> <li>Emergency contact for OEM support</li> </ul>				
	Note: The following scenarios are suggested for emergency response dril	ls.			

- Emergency stop/shutdown
- Fire drill within the battery storage area and/converter area
- Response to a single cell or module, fault or failure
- Response to thermal runaway
- Emergency contact for OEM support

S8.17	Is there a system in place to report, record and learn from hybrid	Yes	<u>No</u>	NA	NS	
	battery system related incidents/events?					

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

S8.18	Are fire detection and fighting systems in place and functional?	Yes	<u>No</u>			
-------	--	-----	-----------	--	--	--

Note: These are to include:

- Gas, smoke and heat detectors in battery areas
- Fire extinguishing medium(s) shall be able to penetrate the casing of batteries to extinguish a potential fire
- Power and control for a fixed fire suppression system shall be located outside of the battery box or battery room
- Portable extinguishers

Note: These are to include:

- Gas, smoke and heat detectors in battery areas
- Fire extinguishing medium(s) shall be able to penetrate the casing of batteries to extinguish a potential fire
- Power and control for a fixed fire suppression system shall be located outside of the battery box or battery room
- Portable extinguishers

S8.19	Additional Supplement 8 comments?	Yes	No			
-------	-----------------------------------	-----	----	--	--	--



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Supplement 9** Battery Propulsion Systems for non-DP Vessels

The offshore industry is increasingly upgrading to hybrid battery systems or building new tonnage with hybrid battery systems, in the offshore energy sectors. Battery systems are being fitted to the propulsion systems of vessels as the main propulsion. This supplement has been prepared with the intent of providing a standardised approach to hybrid system inspections on non-DP vessels. Note that this supplement should not be used for the selection, or as a commissioning checklist for, installation of battery systems.

S9.1	Are state of charge (SOC) and state of health (SOH) clearly displayed to the operator?	Yes	<u>No</u>		
	Note: The operator needs to know the SOC and SOH.				
	Note: The operator needs to know the SOC and SOH.				
S9.2	Are alarms available at the control position for all relevant situations?	Yes	<u>No</u>		

Note: These alarms may include:

- loss of communication between the battery management system and energy management system or power management system battery
- failure of the management system
- failure or fault in the cooling system (if installed)
- the battery management system has disconnected a battery pack(s)
- low remaining battery charge
- ambient temperature in the battery box or battery room above a specified level
- detection of a build-up of explosive gas

These alarms maybe local or presented on the VMS, some may not be applicable.

Note: These alarms may include:

- loss of communication between the battery management system and energy management system or power management system battery
- failure of the management system
- failure or fault in the cooling system (if installed)
- the battery management system has disconnected a battery pack(s)
- low remaining battery charge
- ambient temperature in the battery box or battery room above a specified level
- detection of a build-up of explosive gas

These alarms maybe local or presented on the VMS, some may not be applicable.

S9.3	Does the vessel documentation account for the battery system?	Yes	<u>No</u>					
	Comment on what documentation is available.  When answering the above the AVI will verify what documentation is available.							
	(Ref. ISM Code Chapters 7 and 11.)							
S9.4	Have the crew attended a type-specific course for the operation and maintenance of the hybrid propulsion system fitted?	Yes	<u>No</u>					

Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation.

Note: In addition to maintenance crew training, operator training related to specific functionality may also be required to ensure operators fully understand the functionality and operation.

(Ref. ISM Code Chapter 6.)



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

S9.5	Have the crew undertaken approved training in battery and stored energy maintenance?	Yes	<u>No</u>			
	Note: Onboard training may have been given specific to the installed system be considered	tem b	y the	OEM,	this s	hould
	Note: Onboard training may have been given specific to the installed syst be considered	tem b	y the	OEM,	this s	hould
S9.6	Are maintenance routines in place for the battery systems?	Yes	<u>No</u>		NS	
	Note: Battery systems, when installed, need to form part of the vesse battery system is completely maintenance free.  This should include auxiliary systems – cooling, ventilation, firefighting et Note: Battery systems, when installed, need to form part of the vesse battery system is completely maintenance free.	c.				
	This should include auxiliary systems – cooling, ventilation, firefighting et	C.				
S9.7	Does the vessel carry the correct tools to undertake tasks associated with proactive and reactive maintenance?	Yes	<u>No</u>	NS		
	Note: Specialist tools maybe required to complete maintenance tasks.  Note: Specialist tools maybe required to complete maintenance tasks.					
S9.8	Are records of battery history maintained	Yes	<u>No</u>			
	Note: Logbooks should be kept for battery time in service, SOH, replacen Note: Logbooks should be kept for battery time in service, SOH, replacen					
S9.9	Are critical spares held onboard for the battery system?	Yes	<u>No</u>	NA		
	Note: This should include auxiliary systems — cooling, ventilation, firefigh	ting e	tc.			
	Note: This should include auxiliary systems - cooling, ventilation, firefigh	ting e	tc.			
S9.10	Is a battery system operations manual in place?	Yes	<u>No</u>			
	Verify the operations manual explains the purpose of the hybrid batt vessel.  When answering the above the AVI will verify that the operations manual hybrid battery system installed on the vessel.					
S9.11	Are battery spaces/boxes adequately ventilated and away from heat sources?	Yes	<u>No</u>			
	Note: Air ducts should not be obstructed.					
	Note: Air ducts should not be obstructed.					
S9.12	Are regular hybrid battery system endurance tests carried out and documented?	Yes	<u>No</u>			
	Note: In line with annual system performance tests.					
	Note: In line with annual system performance tests.	r				
S9.13	Is there evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted?	Yes	<u>No</u>			

Note: The following scenarios are suggested as a minimum for emergency response drills:

- Emergency stop/shutdown
- Fire drill within the battery storage area and converter area
- Response to a single cell or module fault or failure
- Response to thermal runaway



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

Emergency contact for OEM support

Note: The following scenarios are suggested as a minimum for emergency response drills:

- Emergency stop/shutdown
- Fire drill within the battery storage area and converter area
- Response to a single cell or module fault or failure
- Response to thermal runaway
- Emergency contact for OEM support

(Ref. ISM Code Chapter 8.)

# S9.14 Are the charging points and cable in good order? Yes No NA

## Verify:

- The condition of plugs, sockets and cable
- Charging points are located above deck sufficient to prevent inadvertent down-flooding if the vessel is heeled
  - Sealed and have a watertight cap
  - o Constructed with non-sparking material

When answering the above the AVI will verify:

- The condition of plugs, sockets and cable
- Charging points are located above deck sufficient to prevent inadvertent down-flooding if the vessel is heeled
- Sealed and have a watertight cap
- Constructed with non-sparking material

S9.15	Is a system in place to report, record and learn from hybrid battery	Yes	No		
	system related incidents/events?				

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near-misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

Note: The vessel operator should proactively encourage the reporting of incidents, accidents and near-misses as required in the vessel operator's safety management system (SMS) and in chapter 9 of the ISM Code.

# S9.16 Is appropriate signage on display?

Note: Examples include:

- Appropriate precautions are to be taken when opening or entering this space
- Naked lights, smoking and sources of ignition are not permitted within or outside the entrance of a battery box or battery room or ventilation discharge points
- No unauthorised personnel are permitted to enter or open battery boxes or battery rooms

Note: Examples include:

- Appropriate precautions are to be taken when opening or entering this space
- Naked lights, smoking and sources of ignition are not permitted within or outside the entrance of a battery box or battery room or ventilation discharge points
- No unauthorised personnel are permitted to enter or open battery boxes or battery rooms



Note: These are to include:

- Gas, smoke and heat detectors in battery areas
- Fire extinguishing medium(s) shall be able to penetrate the casing of batteries to extinguish a potential fire
- Power and control for a fixed fire suppression system shall be located outside of the battery box or battery room



Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

• Portable extinguishers

Note: These are to include:

- Gas, smoke and heat detectors in battery areas
- Fire extinguishing medium(s) shall be able to penetrate the casing of batteries to extinguish a potential fire
- Power and control for a fixed fire suppression system shall be located outside of the battery box or battery room
- Portable extinguishers

S9.18	Additional Supplement 9 comments?	Yes	No				
-------	-----------------------------------	-----	----	--	--	--	--





Only inspection reports uploaded by AVIs into the eCMID database are recognised by IMCA

# **Appendix - Additional Images**

Upload up to 10 additional images below. Where these support earlier responses, refer to the relevant question in the comments.

