



Common Marine Inspection Document for Small Workboats

(Marine Inspection for Small Workboats - MISW)

IMCA M 189 Issue 6
July 2022

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Vessel name:	
IMO number	
Date inspected:	
Date uploaded:	



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IMCA M 189 Issue 6


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Information below this line not included in reports generated by the eCMID database:

Key to answer settings:

ANSWER resulting in findings | ANSWER requiring comment |  image can be uploaded

IMCA M 189 Issue 6 – Version History

Date	Reason	Revision
July 2022	Hybrid supplements added	Issue 6
May 2021	'Index of certificates' replaced with 'Certificates and publications' New supplements on the High Speed Craft (HSC) Code and on Walk-to-Work, plus minor editorial changes elsewhere	Issue 5
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

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IMCA M 189 Issue 6 – July 2022

Explanatory notes and guidance on completion of this document can be found in the latest issue of IMCA M 167

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Inspection summary

Report completed by (<i>inspector's name</i>)		Date	
Inspector's employer		AVI number	
Company on whose behalf inspection is carried out			
Report summary seen and discussed by (<i>Master's name</i>)		Date	
Port of inspection			
Vessel operation at time of inspection			

Inspector's findings
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Inspector's additional comments

Debrief

The inspector shall discuss the inspection findings with the master before leaving the vessel. The closing meeting report should be completed (template available in the inspection application under File > Download documents) and submitted with the final report as an attached image file.

Distribution list for reports

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 an oil company client, 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 M 167 – *Guidance on the IMCA eCMID system* – available via www.ecmid.com with user guides to the eCMID website and software.

1 Vessel particulars

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

2 Certificates and publications

2.1	Is the vessel clear of conditions of class, port/flag state and any safety related memoranda?	Yes	<u>No</u>	NA	NS	
<p>Review most recent Class status report & record Class notation of the vessel and any limitations or conditions noted in certificate.</p> <p>If not in Class, record details of alternative arrangements and/or Flag State certification and survey regime in place.</p>						
2.2	Are all statutory certificates issued by RO or flag state valid and in date?	Yes	<u>No</u>	NA	NS	
<p>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.</p>						
2.3	Does the vessel carry valid certificates of insurance?	Yes	<u>No</u>	NA	NS	
<ul style="list-style-type: none"> • Is the P&I Certificate of Entry current? • Does the vessel carry Certificate of insurance for wreck removal? (Compulsory for vessels >= 300GRT) • Employer Liability Insurance. • Hull and Machinery Insurance. <p>List the type of certificates carried and any limitations noted with respect to cover.</p>						
2.4	If the vessel is required to carry IMDG cargo, is a valid document of compliance for carriage of dangerous goods onboard?	Yes	<u>No</u>	NA	NS	
<p>Confirm IMDG certificate.</p> <p>Verify if IMDG segregation is complied with.</p> <p>Are the crew suitably trained and is the relevant documentation available (e.g., IMDG Code, Manifest(s), DG Emergency and First aid schedule)?</p>						
2.5	Additional Section 2 comments?	Yes	No			

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3 Inspection

3.1	Has the vessel a copy of the latest port state inspection onboard?	Yes	<u>No</u>	NA	NS	
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Note date of last port state inspection and if over 12 months the reason why.

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.

None of the response options will generate a finding.

3.2	Has the vessel a copy of the latest eMISW onboard?	Yes	<u>No</u>	NA	NS	
-----	--	-----	-----------	----	----	--

Note date of last eMISW and if over 12 months the reason why.

Company, date and relevant findings (if any).

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, the inspector should select 'No' and state the reason, e.g. required by industry guidelines. In this case the finding will be recorded.


3.3	Are there any pending conditions of class or pending class memoranda?	<u>Yes</u>	No	NA	NS	
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If any, comment on the nature of the conditions of class and/or class memoranda (if any).

3.4	Additional Section 3 comments?	Yes	No			
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4 Logbooks

4.1	Does the vessel have appropriate logbook(s) (e.g. official/deck/radio/engine)?	<u>Yes</u>	<u>No</u>		NS	
<p>Comment if no logbook is available for use.</p> <p>Comment on appropriate entries in the logbooks.</p>						
4.2	Additional Section 4 comments?	Yes	No			

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5 Weather-tight integrity

5.1	Is it possible to secure all openings to prevent the ingress of water whilst at sea?	Yes	No					
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?	Yes	No					
Comment on the state and condition of seals, fastening and securing fittings.								
5.3	If there are any opening skylights fitted, can they be effectively secured from either side?	Yes	No	NA	NS			
Note the condition of fastening and securing fittings for the skylights. Note: In a new vessel, a skylight which is provided as a means of escape should be capable of being opened from both sides.								
5.4	Are blanks available for securing in place, in the event of breakage of a skylight?	Yes	No	NA	NS			
Note the stowages for the blanks and their ease of access in an emergency.								
5.5	Can all opening port-lights be effectively secured?	Yes	No	NA	NS			
Comment on the condition of securing arrangements and fittings. If any opening or port-lights are below the weather deck, are there dead-lights or blanks available to be secured in place?								
5.6	Are all weather-tight closures to ventilators in full working order?	Yes	No	NA	NS			
5.7	Does the hull and structure of the vessel appear in a good state of repair?	Yes	No					
Comment on the state and condition of the hull, hull coatings (marine growth) and superstructure (visual observation).								
5.8	When a deck is fitted with bulwarks such that water may be trapped, are there effective draining ports?	Yes	No	NA				
5.9	Are sea inlets and discharges below the waterline fitted with a seacock or other effective means of closure?	Yes	No	NA	NS			
5.10	Is there evidence of any water leaking into the vessel below decks?	Yes	No	NA	NS			
Comment on the evidence of leaking and if possible include a photograph. 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. 'Yes' generates an entry in the Findings section.								
5.11	If the vessel has a self-righting capability are all safety criteria being met?	Yes	No	NA	NS			
Note whether correct means of crew, passenger and cargo securing arrangements are fitted and serviceable. Note whether appropriate services for recovery from inversion are fitted and serviceable.								
5.12	Additional Section 5 comments?	Yes	No					

6 Machinery and electrical


6.1	Are engine/generator machinery and spaces clean and well maintained?	Yes	No			
6.2	Are vent pipes for fuel tanks protected against water ingress by a goose neck or other efficient means?	Yes	No	NA	NS	
6.3	Are vent pipes for fuel and lube oil tanks fitted with a flame or spark arrestor?	Yes	No	NA	NS	
6.4	Are there means available to effectively control fuel spillages or leaks from permanent or temporary equipment?	Yes	No	NA	NS	
Comment on the means of control e.g. savealls, drains, temporary means, such as oil spill equipment, etc.						
6.5	Is there a safe means of isolating the fuel supply in the event of an emergency?	Yes	No	NA	NS	
Comment on the means used and the ease of access to/operation of isolation method. Is the means for isolating accessible from outside the machinery space?						
6.6	Are there any fuel or oil leaks in the machinery spaces?	Yes	No	NA	NS	
Comment on the evidence that leakage has occurred and any indication of control measure/mitigation. Caution: Inspector to be aware of hazard/risk of fire depending on circumstances. A photograph should only be taken if it is safe to do so. 'Yes' generates an entry in the Findings section.						
6.7	Are the bilges empty and free from oil residue?	Yes	No	NA	NS	
Note: Inspector should ask the reason(s) why the bilges are oily and record above.						
6.8	When batteries are the sole means of starting the propulsion engine, are there at least two sets of batteries available?	Yes	No	NA	NS	
Comment on the state and condition of battery arrangements.						
6.9	Are there safe means of isolating electrical supplies?	Yes	No	NA	NS	
6.10	Are electrical systems protected from water?	Yes	No	NA	NS	
Comment on the state and effectiveness of protection.						
6.11	Are battery spaces adequately ventilated?	Yes	No	NA	NS	
6.12	Are all batteries secured firmly to prevent movement?	Yes	No	NA	NS	
6.13	Is there adequate and appropriate PPE for personnel checking/maintaining the batteries (e.g. face shields, rubber gloves)?	Yes	No	NA	NS	
6.14	Is effective emergency lighting provided to allow escape from below/under-deck/after deck to allow essential activities to be conducted?	Yes	No	NA	NS	

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6.15	If steering by remote control, are there effective means of emergency steering?	Yes	No	NA	NS	
6.16	Are there two fully working bilge pumps? Comment on the condition of bilge pumps and pumping arrangements.	Yes	No	NA	NS	
6.17	Is at least one bilge pump available for duty in an emergency? Note: The pumps and sources of power, if power-driven, should be in widely separated spaces so that any single event does not disable all the pumping systems.	Yes	No	NA	NS	
6.18	Is an operating bilge alarm fitted in watertight spaces containing machinery or in cargo holds?	Yes	No	NA	NS	
6.19	Are operating manuals available for the machinery? Comment on whether the manuals are in a language that can be understood by the crew.	Yes	No	NA	NS	
6.20	Are adequate tools and the manufacturers' recommended emergency spares available for the machinery? Comment if emergency spares are not as per manufacturers' recommendations (if known).	Yes	No	NA	NS	
6.21	Are maintenance records available for the onboard equipment? Comment on the state and condition of records.	Yes	No	NA	NS	
6.22	Is the engine room free from untreated hazards? Comment on any hazards that appear to have been overlooked or remains 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 in to 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. (Ref MSC.1/Circ.1321, 11 June 2009 – Guidelines for measures to prevent fires in engine-rooms and cargo pump-rooms)	Yes	No	NA	NS	
6.23	Does the vessel have a planned maintenance system in place covering critical equipment and spares? Are critical equipment spares defined onboard the vessel and is a current list available? (Ref ISM 10.3 and flag state requirements)	Yes	No	NA	NS	
6.24	Is the external fuel transfer system in a well maintained and operational condition? Comment on the condition of system connections (signs of leaks, corrosion, etc.) Comment on the maintenance and condition of the dry-break coupling. Has a risk assessment been made for the transfer process? Are formal fuel transfer procedures and checklist in place? Is scheduled pressure test of system carried out and recorded?	Yes	No	NA	NS	
6.25	Additional Section 6 comments?	Yes	No			

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	
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?	<u>Yes</u>	<u>No</u>	NA	NS	
Comment on the condition of records and the date of the most recent review. Comment on the system of review of records by company management.						
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			

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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	
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Note: Comment on if 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		
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8.3	Additional Section 8 comments?	Yes	No			
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9 Escape









9.1	Are there at least two means of escape from any normally occupied space?	Yes	<u>No</u>	NA	NS	
<p>Note on the ease of access to escape routes.</p> <p>Note: 'No' will appear in the Findings section – if two means of escape are not realistically practical due to vessel type, select 'NA' and add a comment to explain.</p>						
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			

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10 Fire

10.1	Are fire detectors and fire call points, where fitted, in working order?	Yes	<u>No</u>	NA	NS	
Comment on if there is there a procedure for testing fire detectors and if it is complied with.						
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	
This may be a manual or power-driven pump.						
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?	Yes	<u>No</u>	NA	NS	
Comment on the number and type of fire extinguishers as required by the vessel's safety plan. Comment on the condition of the extinguishers and the system for maintaining them.						
10.8	Is there a fixed firefighting system for the engine room?	Yes	<u>No</u>	NA	NS	
Comment on the type of firefighting system fitted and method of operation. Note: If there is no fixed firefighting system for the engine room due to type of vessel select 'NA' and explain how engine room firefighting is effectively conducted.						
10.9	Is there a fire blanket in the galley/pantry/cooking area?	Yes	<u>No</u>	NA	NS	
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			


11 Radio

11.1	Is the radio equipment in good working order?	Yes	<u>No</u>	NA	NS	
<p>Note: Radio installation and vessel's radio licence should be in accordance with each other.</p> <p>Safety radio equipment should be tested at regular intervals, e.g. prior to sailing, weekly or monthly.</p>						
11.2	Has the vessel had a recent Class radio survey, or radio verification report (eg. Mecal), or annual UK Code survey which physically tested the equipment?	Yes	<u>No</u>	NA	NS	
<p>Note: Not all eMISW 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.</p>						
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? Is the hydrostatic release unit (HRU) fitted correctly?	Yes	<u>No</u>	NA	NS	
<p>Comment on if the EPIRB battery and HRU are within valid dates</p> <p>Note: A 406 MHz EPIRB. Vessels trading exclusively in sea area A1 may fit a VHF DSC EPIRB in lieu of a 406 MHz EPIRB.</p>						
11.5	Is a search and rescue transponder (SART) fitted?	Yes	<u>No</u>	NA	NS	
<p>Note: The fitting of a SART may be a recommendation or a requirement depending upon the local maritime administration.</p>						
11.6	Is a Navtex receiver fitted?	Yes	<u>No</u>	NA	NS	
<p>Note: NAVTEX is a system used for the broadcast of localised marine safety information (MSI) by radio TELEX.</p> <p>Comment on how the crew monitor, utilise and keep control of the NAVTEX messages.</p>						
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?	Yes	<u>No</u>	NA	NS	
<p>Comment on whether these are available in languages appropriate to the national content of the crew.</p>						
11.9	Are there clear instructions for the operation of the hand-held VHF radios?	Yes	<u>No</u>	NA	NS	
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 hand-held VHF radio(s) available and charged?	Yes	<u>No</u>	NA	NS	
<p>Comment on the number of spare batteries and the routine for checking battery life.</p>						
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			

12 Navigation equipment

12.1	Are navigation lights in good working order?	Yes	<u>No</u>	NA	NS	
Note: Including secondary system if fitted.						
12.2	Is there a means of making an efficient sound signal?	Yes	<u>No</u>			
12.3	Are navigational day shapes available?	Yes	<u>No</u>	NA		
12.4	Is the magnetic compass in working order?	Yes	<u>No</u>	NA	NS	
<p>Comment on: Does the light work on the magnetic compass? Does the magnetic compass have a valid deviation card? Confirm that the recorded deviation corresponds with the actual deviation. If no deviation record is maintained, comment if the last adjustment was within the last two years.</p> <p>A fluxgate compass is an acceptable alternative only if provided with an independent back up power supply.</p>						
12.5	Is a global navigation satellite system or a terrestrial radio navigation system available?	Yes	No	NA	NS	
‘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	
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.						
12.8	Are approved, current, corrected charts available?	Yes	<u>No</u>	NA	NS	
Note: An electronic chart plotting system complying with appropriate maritime administration requirements may be fitted in place of a chart outfit.						
12.9	Are relevant publications onboard? Are current tide tables available?	Yes	<u>No</u>	NA	NS	
Note: Are current tide tables available? Is there a tidal stream atlas available for the area of operation? Is there a copy of the list of radio signals available for the area of operation? Is a copy of the International Code of Signals available?						
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			

13 Navigation

13.1	Is the vessel provided with operator policy statements, instructions and procedures with regard to safe navigation?	Yes	No	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	No	NA	NS	
<p>Passage plan should be prepared by an appropriate officer and verified by master; Passage plan information should be readily available for watchkeepers' use. Note 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.' SOLAS Chapter V, Regulation 34 applies to all vessels.</p>						
13.3	Does the vessel have written procedures for entry into a 500-metre zone?	Yes	No	NA	NS	
13.4	Are up-to-date navigation warnings and weather forecasts available?	Yes	No	NA	NS	
<p>Comment on the routine for how these are provided to the vessel.</p>						
13.5	Additional Section 13 comments?	Yes	No			

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14 Accommodation

14.1	Is all heavy equipment in the accommodation secured?	Yes	<u>No</u>	NA	NS	
14.2	Is there an efficient working ventilation system for confined spaces that may be entered by personnel? <i>(Ref IMCA SEL 034 – Working in confined spaces)</i>	Yes	<u>No</u>	NA	NS	
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	<u>No</u>	NA	NS	
14.6	Is the vessel to be at sea for more than 24 hours? If yes, questions 14.7 to 14.13 should be answered. 'No' does not generate a finding.	Yes	No			
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	
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	
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			

15 Safety of personnel

15.1	Does the crew have access to and use appropriate personal protective safety equipment?	Yes	No			
Comment on the availability of safety equipment and how this is determined.						
15.2	Is there a safe means of access to and from the vessel?	Yes	No	NA	NS	
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. Is the vessel's gangway certified? Does the vessel have a certificate for the for the pilot ladder(s)? Are gangways marked with maximum POB/SWL? Comment on maintenance and inspection routines for the gangway.						
15.3	Is there a procedure for the transfer of personnel to and from an offshore structure and other vessels?	Yes	No	NA	NS	
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. <i>(Ref IMCA SEL 025/IMCA M 202 – Guidance on the transfer of personnel to and from offshore vessels and structures)</i>						
15.4	Is there evidence of full compliance with the company's HSE management system?	Yes	No	NA	NS	
Comment on whether key personnel have knowledge of the safety management system appropriate to their duties. Note: All loose gear on and below deck should be safely secured away. Smoking regulations should be in place and complied with. Safety signs and relevant safety information should be prominently displayed.						
15.5	Are risk assessments conducted onboard where necessary?	Yes	No	NA	NS	
Note if training in the conduct of risk assessments is provided to personnel.						
15.6	Does the safety management system address regulatory requirements and industry guidance?	Yes	No	NA	NS	
Note if risk assessments are conducted for substances hazardous to health, display screen equipment, radiation, noise, manual handling, lifting equipment management systems, SIMOPS as applicable. Note if 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	
Comment on the process if one exists, including the apparent level of use. If 'No' is selected then please provide details in the comments box of what arrangements are in place. 'No' does not generate a finding.						

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15.8	Is a permit to work (PTW) system in use onboard?	Yes	No	NA	NS	
<p>Comment on the types of tasks covered by permits and whether there is evidence that the system is effectively applied.</p> <p>For example, 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.</p> <p>Note:</p> <ul style="list-style-type: none"> • How isolations are identified and managed • Use of a 'tag out' system • Training in the PTW system 						
15.9	Are enclosed spaces and controls for entry identified onboard?	Yes	No	NA	NS	
<p>Note:</p> <ul style="list-style-type: none"> • Entry permit system should be in use (to include testing of atmosphere for oxygen and toxic gases) with records available for inspection. • This atmosphere test should be conducted both before and during the enclosed space entry to ensure acceptable limits are maintained throughout the operation. • Atmosphere measuring instrumentation should be calibrated; a process should be in place to ensure staff are trained and aware of limitations of gas meters. • Records should be fully completed and signed off when work is completed. • Enclosed spaces should be adequately ventilated before and during entry. • Vent fans should be available and be operated in extraction mode when in use. • Appropriate breathing apparatus available; if there are limitations on its use, is there a process for ensuring users are aware of these limitations? • Rescue equipment available for use. 						
15.10	Are procedures used for carrying out hot work on the vessel?	Yes	No	NA	NS	
<p>Note:</p> <ul style="list-style-type: none"> • Requirements for PPE and confirm available for use. • Records fully completed including signatures. • Welding equipment should be routinely inspected, inspection recorded. • Flashback arrestors fitted to gas and oxygen bottles. • Fire sentry system used to monitor adjacent spaces and compartments. • Spare gas and oxygen bottles stored apart in dedicated stowages, clearly marked and outside accommodation and machinery spaces. • Cylinders colour coded. 						
15.11	Are there adequate guardrails around the deck?	Yes	No	NA	NS	
<p>Are the guardrails in accordance with the International Convention on Load Lines, 1966, as amended, Regulations 25 or national regulations as applicable?</p> <p>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.</p>						
15.12	Are there at least two safety harnesses onboard and additional harnesses for all those required to work on deck?	Yes	No	NA	NS	
<p>Comment on the routine in use for maintenance and the replacement of harnesses.</p>						
15.13	Is the surface of the working deck non-slip?	Yes	No	NA	NS	
15.14	Are personnel provided with protective clothing appropriate to the prevailing air and sea temperatures?	Yes	No	NA	NS	

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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	
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Note: Survival suit may include an approved immersion suit, dry suit, transfer suit or floatation suit to ISO 15027-1.

Immersion suits can be supplied by the passengers themselves.

15.16	Have measures been taken to prevent personnel being exposed to noise levels that exceed 80dB (A)?	Yes	<u>No</u>	NA	NS	
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Are noise-warning signs posted as appropriate?

Comment on the provision of ear defenders and the appropriate signage to areas greater than 80dB (A).

(Ref IMO Resolution A.468(XII) (1981) – Code on noise levels on-board ships – which became mandatory for new ships on 1 July 2014)

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		
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Note:

- Evidence of crew and contractor inductions.
- Induction appropriate to the vessel, operation and structure.
- Includes a safety tour process for new personnel.

15.18	Are personnel visiting the vessel given an appropriate safety briefing?	Yes	<u>No</u>			
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Note arrangements in place for briefing/managing the safety of visitors.

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	
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Note arrangements in place for briefing/managing the safety of contractors.

15.20	Are formal written emergency procedures provided for man-overboard, collision, emergency towing, grounding, fire, explosion, gas or toxic vapour release?	Yes	<u>No</u>	NA	NS	
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Comment on the suitability and crew awareness of the procedures available.

15.21	Is a record of emergency training drills and exercises maintained?	Yes	<u>No</u>	NA	NS	
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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?	Yes	<u>No</u>	NA	NS	
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Note: A plan for the response by onshore personnel to an emergency occurring on the vessel at sea should be in place as part of the company's safety management system.

15.23	Are adequate and valid medical stores provided?	Yes	<u>No</u>	NA	NS	
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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).


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15.24	Are procedures for control, stowage and handling of chemicals and flammable/combustible materials in place and being consistently applied?	Yes	<u>No</u>	NA	NS	
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Note:

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

15.25	Is there an asbestos management system?	Yes	<u>No</u>	NA	NS	
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Note if there is a requirement for an asbestos management plan

If yes, comment on the basic details and availability of general arrangement plans.

Are warning signs displayed and an asbestos log maintained?

If there is no plan where one is applicable an ‘asbestos free’ certification should be available.

15.26	Does the safety management system address hazards associated with slips, trips and falls as well as other risks?	Yes	<u>No</u>	NA	NS	
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Is there evidence that the crew have a proactive approach to safety issues? For example, routine scheduled safety inspections.



15.27	Additional Section 15 comments?	Yes	No			
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16 Crane




16.1	Is there a valid test certificate for the crane if fitted? <i>(Ref IMCA LR 006/M 187 – Guidelines for lifting operations)</i>	Yes	<u>No</u>	NA	NS	
16.2	Is the crane wire appropriately rated for the crane's safe working load (SWL) rating plate? Comment on whether the crew responsible for handling loads hold a slinger & signaller qualification? Are the crew associated with handling loads competent in slinger & signaller techniques? <i>(Ref IMCA LR 006/ M 187 – Guidelines for lifting operations)</i>	Yes	<u>No</u>	NA	NS	
16.3	Is there a competent crane operator onboard? Comment on whether the crew responsible for handling loads hold a slinger & signaller qualification? Are the crew associated with handling loads competent in slinger & signaller techniques? <i>(Ref IMCA LR 006/ M 187 – Guidelines for lifting operations)</i>	<u>Yes</u>	<u>No</u>	NA	NS	
16.4	Additional Section 16 comments?	Yes	No			

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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	
<p>Note: For example, certificate issued by the flag or coastal state, a certificate as a yachtmaster offshore (motor) or a boatman's licence for the appropriate area. (Ref IMCA C 017 – Guidance on competence assurance and assessment: Marine roles for small vessels)</p>						
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	
<p>If operating exclusively within the territorial waters of another coastal state, is there evidence that the crew manning complement and the crew's certificates of competency have been accepted by the coastal state authorities?</p>						
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	
<p>Note: This may not be a requirement of flag or coastal state authorities.</p>						
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 & 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	
<p>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)</p>						
17.9	Is there a maximum contract duration for officers/crew?	Yes	<u>No</u>		NS	
<p>State the maximum duration.</p>						
17.10	Additional Section 17 comments?	Yes	No			

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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			

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19 Clean seas

19.1	Are adequate arrangements in place to prevent the discharge of sewage in prohibited areas?	Yes	No	NA	NS	
<p>Are prohibited areas for sewage discharge identified?</p> <p>Note - MARPOL IV only applies to ships engaged in international voyages of 400GT and above.</p>						
19.2	Are arrangements in place for the retention of garbage onboard?	Yes	No	NA	NS	
19.3	Is a garbage management plan in place and is an associated garbage record book maintained?	Yes	No	NA	NS	
<p>Note: MARPOL requirement for vessels >100 GT or certified to carry 15 persons or more.</p>						
19.4	Are arrangements in place for the handling of oily wastes?	Yes	No	NA	NS	
19.5	Are arrangements in place for the prevention of discharge of oil/oil-contaminated water overboard?	Yes	No	NA	NS	
<p>Comment on the suitability and effectiveness of arrangements.</p> <p>Note: Vessels may be fitted with automatic bilge pump arrangements and procedures should be in place to prevent the accidental discharge of oil via such systems.</p> <p>Note: Add MARPOL Annex I Reg. 15 < 400GT C6</p>						
19.6	Additional Section 19 comments?	Yes	No			

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
20 Life-saving appliances

20.1	Is/are there a life raft(s) onboard sufficient for the proposed maximum POB?	Yes	<u>No</u>	NA	NS	
If no life raft is fitted, comment on the intended method to abandon the vessel at sea if required to do so.						
20.2	Are the number and type of life buoys as required and are they in satisfactory condition?	Yes	<u>No</u>	NA	NS	
Note: Refer to the vessel's fire and safety plan.						
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	
20.5	Is effective emergency lighting provided to illuminate survival craft launching and embarkation areas?	Yes	<u>No</u>	NA	NS	
20.6	Is effective emergency lighting provided to illuminate man-overboard (MOB) rescue equipment and recovery area?	<u>Yes</u>	<u>No</u>	NA	NS	
Comment on the condition, effectiveness and ease of operation. Note any provision of emergency lighting for man-overboard rescue.						
20.7	Is there a thermal protective aid for every person carried on the vessel?	Yes	<u>No</u>	NA	NS	
20.8	Are there effective means to recover a person from the water?	<u>Yes</u>	<u>No</u>	NA	NS	
20.9	Are life-saving signal tables available?	Yes	<u>No</u>	NA	NS	
Note: Requirement for SOLAS No.1 poster and/or No.2 card or similar.						
20.10	Is there a means of sounding a general alarm in the event of an emergency?	<u>Yes</u>	<u>No</u>	NA	NS	
Comment on the suitability and effectiveness of the alarm if fitted. Notes: 1. Alarm should be audible in all spaces personnel may be located. 2. Some national authorities require an alarm to be fitted – inspectors should have knowledge of current applicable regulations.						
20.11	Is there a training manual for use of life-saving appliances (LSA)?	<u>Yes</u>	<u>No</u>		NS	
Comment on whether the training manual includes ship-specific equipment and is in the appropriate language.						
20.12	Are there instructions for onboard maintenance of the LSA?	Yes	<u>No</u>	NA	NS	
Note: These may be contained in a dedicated manual or the builders' supplied vessel operation manual.						
20.13	Additional Section 20 comments?	Yes	No			

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21 Mooring and berthing

21.1	Are there adequate mooring points on the vessel?	Yes	<u>No</u>	NA	NS	
21.2	Is there a sufficient number of mooring lines in good condition?	Yes	<u>No</u>	NA	NS	
21.3	Are mooring winches and fairleads in good condition?	Yes	<u>No</u>	NA	NS	
Note: The condition of winches and fairleads and evidence of maintenance should be checked.						
21.4	Is adequate fendering available?	Yes	<u>No</u>	NA	NS	
Note: The provision of suitable and sufficient fenders is often overlooked on small vessels.						
21.5	Additional Section 21 comments?	Yes	No			

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22 Vessel and cyber security

22.1	Is the vessel required to have an approved ship security plan that meets (ISPS) code requirements?	Yes	No	NA	NS	
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Note: Not mandatory for vessels under 500GT

22.2	If the vessel is not required to have an approved ship security plan because of tonnage or trading area, are there any security procedures in place?	Yes	No	NA	NS	
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If a vessel is not required to have a ship security plan, verify that security procedures are in place onboard covering:

- 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, storing and vessel gangway watchkeeping requirements?	Yes	No	NA	NS	
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Is a visitors' log maintained and comment on where this is located when the vessel is in port?
 Confirm that security badges are issued to all visitors while the vessel is in port.
 Confirm that a gangway watch is maintained.
 Confirm that random searches of visitors' baggage are conducted.
 Is there signage at the gangway?
(Ref ISPS Code Part A Chapter 7)

22.4	Does the vessel have a cyber security management system and/or a cyber security plan?	Yes	No		NS	
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If none record as 'No' to include as a finding and comment on any other arrangements with respect to cyber security.

Describe the cyber security management system / plan. How often is the plan reviewed? 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.

Note any associated procedures in the SMS.

Are cyber security issues included as part of internal audits?

Note: If there is a designated cyber security officer or if this is combined with the CSO duties. Has the CySO undertaken specific training on CyS.

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

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22.5	Is connection of personal IT devices such as phones, tablets and laptops to the ships network controlled?	Yes	No	NA	NS	
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The measures should be more than just a password entry.
 Is there a requirement to sign on a portal, sign up process?
 Are these devices covered by the company firewall/ protective software?
 Are there download restrictions? Type of files, running applications, etc.
 Is the information on number, type and application owners information readily available?
 Is the information on internet access logged, including browsing history?
 Does the system prevent web browsers and email clients from executing malicious scripts.
(Ref IET Code of Practice – Cyber Security for Ships App F)

22.6	Are there formal interfacing procedures and protocols in place for visitors, technicians, port officials, etc. to use their equipment onboard?	Yes	No		NS	
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Access to certain networks for maintenance reasons should be approved and coordinated following appropriate procedures as outlined by the company/ship operator.
 Procedures should 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, should be used.
(Ref IET Code of Practice – Cyber Security for Ships)

22.7	Are there formal controls and procedures in place for handling data using portable media devices such as USB memory sticks, CD/DVDs, and portable computers?	Yes	No		NS	
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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 systems if fitted?	Yes	No	NA		
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The measures should be more than just password entry. Are there dedicated portable device for updates. Administrative privileges controlled/ differing levels of access.
 Periodic Service by service engineer.
 OS updates.
 Record of software issues and events investigated.
 Measures in place to protect the data integrity of the system.

22.9	Additional Section 22 comments?	Yes	No			
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Supplement 1 Dynamic Positioning

S1.1	Is the vessel's DP class notation free from any class-imposed restrictions?	Yes	No	NA	NS	
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Comment on the vessel's DP class notation. DP class restrictions, if any, should be stated.
 Note: If the vessel does not have a DP notation, select NA and add a comment accordingly.

S1.2	Does the vessel have onboard a copy of the most recent DP trials report?	Yes	No		NS	
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Note: The inspector should review the previous report and verify that appropriate corrective action has been taken on any findings. Actions not closed-out are to be carried forward to this report under the original date.
 Note where not available and state reasons why.
 'No' does not generate a finding.

S1.3	Does the vessel have onboard a copy of the most recent vessel DP failure modes and effects analysis (FMEA) or failure modes, effects and criticality analysis (FMECA)?	Yes	No	NA	NS	
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Note: The inspector should review the previous report and verify that appropriate corrective action has been taken on any findings. Actions not closed-out are to be carried forward to this report under the original date.
 Note: where not available and state reasons why.
 Note: FMEA only required for DP 2 and DP3 vessels
 'No' does not generate a finding.

S1.4	Does the vessel have appropriate DP checklists?	Yes	No	NA	NS	
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Note: Field arrival checklist, DP watch handover checklist, ER DP checklists.

S1.5	Does the vessel have onboard a DP operations manual?	Yes	No	NA	NS	
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Note: The DP operations manual is specific to the vessel. State if the DPOs and engineers are familiar with the DP operations manual. The DP operations manual contents are outlined in [IMCA M 109 – A guide to DP-related documentation for DP vessels](#). Note where not available and state reasons why.

S1.6	Do the DP operators have access to the DP capability plots?	Yes	No		NS	
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Note: The inspector should check that the DP capability plots show the worst case failure (theoretical and practical footprints using [IMCA M 140 – Specification for DP capability plots](#)). Note where not available and state reasons why.

S1.7	Do the DP operators carry the appropriate DP qualification?	Yes	No	NA	NS	
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Comment on the number of qualified DP operators.
 Comment, where appropriate, on whether the DP operators signed a statement to say that they have read and understood the vessel's FMEA.
 Note: Details of onboard training should be noted.

S1.8	Does the vessel maintain a DP incident log?	Yes	No	NA	NS	
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Note: The inspector should check for recorded incidents, subsequent required actions and note of closed-out actions.

S1.9	Is the DP equipment maintenance log up to date?	Yes	No	NA	NS	
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Note: The inspector should comment if any DP related equipment is not functional.

S1.10	Does the vessel operator contribute to the IMCA DP station keeping reporting scheme?	Yes	No		NS	
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Note: A 'No' does not generate a finding.

S1.11	Additional Supplement comments?	Yes	No			
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Supplement 2 Towing

S2.1	Is there a suitable towage point arrangement on the vessel, allowing it carry out towing operations safely?	Yes	<u>No</u>		NS	
S2.2	Is the towing equipment certified?	Yes	<u>No</u>	NA	NS	
S2.3	Are there protected areas provided for crew working on the stern during a towing operation?	Yes	<u>No</u>	NA	NS	
S2.4	Has a risk assessment for towing operations been made?	Yes	<u>No</u>	NA	NS	
S2.5	Is there a safe method to release the towing rope?	Yes	<u>No</u>		NS	
<p>Comment on the suitability and adequacy of the safety of the procedure, including whether it is understood by the crew members and is subject to adequate testing procedure.</p> <p>Note: The inspector should look for evidence that the release system is understood and tested.</p>						
S2.6	Is there a towing operations manual and does it reference vessel stability?	Yes	<u>No</u>	NA	NS	
S2.7	Does the master have a tug CoC or a towage endorsement?	Yes	<u>No</u>		NS	
S2.8	Are the crew familiar with the vessel's towing procedures?	Yes	<u>No</u>	NA	NS	
S2.9	Does the vessel have emergency towing procedures?	Yes	<u>No</u>	NA	NS	
S2.10	Does the vessel have a valid bollard pull test certificate?	Yes	<u>No</u>	NA	NS	
<p>Note: Comment only required 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.</p> <p>Select NA if not required.</p>						
S2.11	Is there a system to prevent girding/girting?	Yes	<u>No</u>	NA	NS	
<p>Note: Towing from amidships on conventionally propelled vessels should be avoided – use of systems such as gob wire should be in place.</p>						
S2.12	Additional Supplement comments?	Yes	No			

Supplement 3 Diving

S3.1	Does the vessel have a procedure for the secure mooring and recovery of moorings?	Yes	No	NA	NS	
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S3.2	Does the vessel have procedures for the safe use of engines and DP (if fitted)?	Yes	No	NA	NS	
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S3.3	Does the vessel have a planned procedure for the recovery of a diver?	Yes	No		NS	
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Note: Arrangements should also be in place to recover an injured or unconscious diver from the water to the deck.

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

S3.4	Do the crew have an understanding of the stability implications when carrying a dive spread?	Yes	No	NA	NS	
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S3.5	Does the vessel carry the international signal(s) that diving is underway?	Yes	No		NS	
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Note: This will typically be the signal flag alpha or 'diver down' flag, suitable lights (if relevant), etc.

S3.6	Has a Diving Equipment System Inspection Guidance Note (DESIGN) document been completed within the last 12 months?	Yes	No	NA	NS	
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Note: The inspector is not being asked to confirm the adequacy of the document, merely that it is present.


'No' does not generate a finding.

If a mothercraft is present there should be a DESIGN document for the dive system on the small vessel and a separate DESIGN document for the elements of the dive system on the mothercraft, e.g. decompression chamber.

S3.7	Does the vessel have emergency procedures for diver decompression illness?	Yes	No	NA	NS	
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Note: Twin-lock air recompression chamber complying with the requirements of [IMCA D 023 – 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	No	NA	NS	
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S3.9	Additional Supplement comments?	Yes	No			
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Important references relating to this supplement as follows:

IMCA D 015 – Mobile/portable/daughtercraft surface supplied systems

IMCA D 023 – DESIGN for surface orientated (air) diving systems

IMCA D 040 – DESIGN for mobile/portable surface supplied systems.

Supplement 4 Anchor Handling

S4.1	Is the anchor handling winch appropriately certified?	Yes	No	NA	NS	
<p>Note: Check correct machinery guards and emergency stops are fitted.</p>						
S4.2	Are the anchor handling equipment maintenance records up to date?	Yes	No	NA	NS	
<p>Comment on the completeness of the maintenance records relating to all anchor handling equipment including wires.</p> <p>Note if any equipment maintenance is out of date.</p>						
S4.3	Is the anchor handling deck area clearly visible from the bridge or covered by CCTV?	Yes	No	NA	NS	
<p>Comment on the lighting to cover the work areas.</p>						
S4.4	Is the deck area sheathing free from any significant damage?	Yes	No	NA	NS	
<p>Note: The inspector should check sheathing for potential trip hazards.</p>						
S4.5	Are there protected areas provided for crew working on the stern?	Yes	No	NA	NS	
<p>Comment if there is provision for deck crew safety lines.</p>						
S4.6	Is there a safe method to release the anchor handling winch?	Yes	No	NA	NS	
<p>Note: The inspector should confirm that the procedure is understood by the operating crew and that the procedure is the subject of a testing schedule.</p>						
S4.7	Additional Supplement comments?	Yes	No			

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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	No		NS	
S5.2	Is emergency towing apparatus and equipment certificated and in a satisfactory condition?	Yes	No	NA	NS	
Note: The inspector should make an objective assessment of the condition of the equipment.						
S5.3	Is there an emergency recovery system available for the tow?	Yes	No	NA	NS	
S5.4	Is the towing gear included in a planned maintenance system?	<u>Yes</u>	No	NA	NS	
Comment on the provision of spares available.						
S5.5	Is adequate fendering available and in a satisfactory condition?	Yes	No	NA	NS	
S5.6	Do the navigation lights and shapes meet local and COLREG requirements?	<u>Yes</u>	No	NA		
Comment on the provision of adequate electrical power arrangements.						
S5.7	Is the deck equipment/machinery (if fitted) in a satisfactory condition?	<u>Yes</u>	No	NA		
Note: When deck equipment such as fairleads, bollards, mooring fittings, generators, cranes, pumps, etc. is fitted, the inspector should make an objective assessment of the adequacy and condition of the fitted equipment/machinery.						
S5.8	Are the vessel's handrails adequate to prevent personnel falling overboard?	Yes	No	NA		
S5.9	Is there a safety induction procedure for workers who board the barge?	Yes	No	NA		
S5.10	Is there a suitable arrangement for anchoring the vessel if needed?	Yes	No	NA	NS	
Note: Inspector should describe the arrangements for deploying and recovering the anchor(s).						
S5.11	Is there a suitable arrangement for boarding the vessel at sea?	Yes	No	NA	NS	
Note: Inspector should note the permanent and temporary provisions for boarding the vessel at sea (e.g. pilot ladders, fixed ladders).						
S5.12	Additional Supplement comments?	Yes	No			

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.

S6.1	Does the vessel hold a valid safety certificate for the HS-OSC code?	Yes	No	NA		
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A High-Speed Craft safety certificate is issued after completion of an initial or renewal survey to a craft which complies with the requirements of the Code. The Certificate shall be issued or endorsed either by the Administration or by any person or organization recognised by it. On all craft, all certificates issued under this chapter, or certified copies thereof, shall be carried on the craft. Except where the flag state is a party to the 1988 SOLAS protocol, a copy of each of these certificates shall be posted up in a prominent and accessible place in the craft.

(Ref. HSC Code section 1.8)

S6.2	If the craft is certificated to operate as either a small commercial workboat or HS-OSC, is the changeover procedure detailed in the SMS?	Yes	No	NA		
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Operational procedures shall be developed which cover the operation of the craft and changes to the mode of operation (e.g. relocation voyages).

(Ref. HS-OSC Section 1.2.1.2 (b))

S6.3	If the vessel is currently in HS-OSC operation, does the vessel hold a valid permit to operate for the applicable project/ sea area?	Yes	No	NA		
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To operate commercially, all high-speed craft (HSC) must have a permit to operate (POHSC), setting out the safety limitations and conditions imposed on their operation. This is drawn up on the basis of the information contained in the route operational manual and the type rating certificates for the operating crew. The management and reduction of risk is complemented by detailed operating and maintenance manuals, which must be carried onboard and agreed as part of the POHSC process.

(Ref. HSC Code section 1.9)

S6.4	If the craft is currently operating as HSC-OSC is the route operations manual for current charter identified in the POHSC and available?	Yes	No	NA		
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A previous copy of the manual could be reviewed should the vessel not be in HS-OSC use.

The route operational manual shall include 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;
- .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.

(Ref. HSC Code section 18.2.2)

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S6.5	Are the crew members qualified in accordance with the STCW Convention?	Yes	No	NA		
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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?	Yes	No	NA		
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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	No	NA		
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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 certificate' issued by the administration as per the HSC code section 18.3.3	Yes	No	NA		
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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.

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

S6.10	Can the control station be securely separated from passenger interactions?	Yes	No			
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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)

S6.11	Do the fire alarm system call points look in good condition, armed and ready for immediate operation?	Yes	No	NA		
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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)

S6.12	Do areas accessible to passengers contain controls, electrical 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?	Yes	No	NA		
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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?	Yes	No	NA		
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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?	Yes	No	NA	NS	
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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 comments?	Yes	No			
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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. This supplement has been prepared by industry with the intent of providing a standardised approach to W2W system inspections. Note that this supplement should not be used for the selection, or as a commissioning checklist for installation of walk to work systems. The basis for this supplement is IMCA M 254, *Guidelines for Walk to Work Operations*.

S7.1	Does the walk to work system have an FMEA?	<u>Yes</u>	No		
<p>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)</p> <p>Add date and revision details of analysis within comments</p> <p><i>(Ref. IMCA M 254 Section 3.10)</i></p>					
S7.2	Has regular testing of the FMEA been undertaken and all findings closed out?	<u>Yes</u>	No		
<p>Due to the safety critical nature of gangway operations regular testing of the FMEA is required. Mobile systems should be tested every time the system is mobilised onto a vessel. Permanent installations should be tested annually or whenever there is significant modification to the system.</p> <p>Add date and revision details of test record within comments</p> <p><i>(Ref. IMCA M 254 Section 3.10)</i></p>					
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>	No		
<p>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.</p> <p><i>(Ref. IMCA M 254 Section 3.10)</i></p>					
S7.4	For permanent installations, are the walk to work systems integrated into the vessel's planned maintenance system?	<u>Yes</u>	No	NA	
<p>Planned maintenance system should be reviewed to ensure maintenance routines are up to date.</p> <p><i>(Ref. IMCA M 254 Section 6)</i></p>					
S7.5	For mobile systems, are there critical maintenance routines in place?	<u>Yes</u>	No	NA	
<p>Maintenance routine records should be sighted.</p> <p><i>(Ref. IMCA M 254 Section 6)</i></p>					
S7.6	Are there critical spares held onboard for the walk to work system?	<u>Yes</u>	No		
<p>Appropriate spare parts for the gangway system are required to be carried onboard.</p> <p><i>(Ref. IMCA M 254 Section 4.1.11 and Section 6)</i></p>					
S7.7	Is there a walk to work operations manual in place?	<u>Yes</u>	No		
<p>The W2W operations manual ideally only contains information specific to operating the vessel and its W2W system during W2W operations. The manual should contain information on the following:</p> <ul style="list-style-type: none"> • 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) 					

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- W2W trials procedure
- W2W operations procedure.

(Ref. IMCA M 254 Section 4.3)

S7.8	Are there logs maintained during W2W operations to record events?	Yes	<u>No</u>			
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Logs should be maintained during W2W operations including (but not limited to):

- Transfer log
- Bridge log
- Gangway log

(Ref. IMCA M 254 Section 4.4)

S7.9	Is the W2W system included in the vessel operator’s safety management system (SMS) from an emergency preparedness perspective?	Yes	<u>No</u>			
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The SMS should establish procedures on how to respond to, for example:

- Field operator emergency response plan
- Response to evacuation requests

(Ref. IMCA M 254 Section 8 and ISM Code chapter 8)

S7.10	Does the gangway have an independent alert system for gangway crossing?	Yes	<u>No</u>			
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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 M 254 Section 8.3)

S7.11	Is there evidence of the conduct of W2W system emergency response drills covering different possible scenarios?	Yes	<u>No</u>			
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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 M 254 Section 8.5)

S7.12	Is there evidence of specific crew training and competence on the normal and emergency use of the W2W system?	Yes	<u>No</u>			
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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 M 254 Section 5)

S7.13	Is there a proactive system in place to report, record and learn from W2W related incidents/events?	Yes	No	NA	NS	
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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 M 254 Section 5)

S7.14	Additional Supplement comments?	Yes	No			
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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 M 250, *Introduction to Hybrid Battery Systems for DP Vessels*.

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

Add date and revision details of analysis within comments.

(Ref. IMCA M 250 Section 6.5)

S8.2	Are state of charge (SOC) and state of health (SOH) clearly displayed to the operator?	Yes	<u>No</u>		
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The operator needs to know the SOC and SOH.

S8.3	Are alarms available at the control position for all relevant situations?	Yes	<u>No</u>	NA	
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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.

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

Where NA has been selected, provide an explanation with details

Include date and revision details of test records within comments.

(Ref. IMCA M 250 Section 6.5)

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S8.5	Has all associated DP documentation onboard been updated to include the hybrid battery system?	Yes	No		NS	
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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 M 250 Section 6.6)

S8.6	Have the crew attended a type-specific course for the operation and maintenance of the hybrid system fitted?	Yes	No			
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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 M 250 Section 6.6)

S8.7	Have the crew undertaken an approved course in battery and stored energy maintenance and does the vessel carry the correct tools to undertake tasks associated with proactive and reactive maintenance?	Yes	No	NA		
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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 M 250 Section 6.6)

S8.8	Are maintenance routines in place for hybrid battery systems?	Yes	No			
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Hybrid battery systems, when installed, need to form part of the vessel’s maintenance regime. No battery system is completely maintenance free.

(Ref. IMCA M 250 Section 6.5)

S8.9	Are spares held onboard for the hybrid battery system?	Yes	No			
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Appropriate spare parts for the hybrid system carried onboard.

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

S8.10	Is a hybrid battery system operations manual in place?	Yes	No			
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What is the purpose of the hybrid battery system installed on the vessel? The operations manual should be able to explain the purpose of the system.

S8.11	Are records of battery history maintained?	Yes	No			
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Logbooks should be kept for battery time in service, SOH, replacement status.

S8.12	Is adequate signage on display?	Yes	No			
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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			
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Is the ASOG sufficiently populated to include the hybrid system?

Are CAM and TAM modes clearly defined with regards the hybrid configuration?

(Ref. IMCA M 220 Section 3)

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S8.14	Are regular hybrid battery system endurance tests carried out and documented? In line with annual DP trials performance tests.	Yes	No	NA		
S8.15	Are battery spaces/boxes adequately ventilated and away from heat source? Air ducts should not be obstructed.	Yes	No			
S8.16	Is there evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted? The following scenarios are suggested for emergency response drills. <ul style="list-style-type: none"> • 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 	Yes	No			
S8.17	Is there a system in place to report, record and learn from hybrid battery system related incidents/events? 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.	Yes	No	NA	NS	
S8.18	Are fire detection and fighting systems in place and functional? <ul style="list-style-type: none"> • 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 	Yes	No			
S8.19	Additional Supplement comments?	Yes	No			

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>			
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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>			
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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>			
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Inspector to comment on 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>			
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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.

(Ref. ISM Code Chapter 6)

S9.5	Have the crew undertaken approved training in battery and stored energy maintenance?	Yes	<u>No</u>			
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Onboard training may have been given specific to the installed system by the OEM, this should be considered

S9.6	Are maintenance routines in place for the battery systems?	Yes	<u>No</u>		NS	
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Battery systems, when installed, need to form part of the vessel's maintenance regime. No battery system is completely maintenance free.

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

S9.7	Does the vessel carry the correct tools to undertake tasks associated with proactive and reactive maintenance?	Yes	<u>No</u>	NS		
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Specialist tools maybe required to complete maintenance tasks.

S9.8	Are records of battery history maintained	Yes	<u>No</u>			
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Logbooks should be kept for battery time in service, SOH, replacement status.

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S9.9	Are critical spares held onboard for the battery system?	Yes	No	NA		
<p>Appropriate spare parts for the hybrid system carried onboard. This should include auxiliary systems – cooling, ventilation, firefighting etc.</p>						
S9.10	Is a battery system operations manual in place?	Yes	No			
<p>What is the purpose of the hybrid battery system installed on the vessel?</p>						
S9.11	Are battery spaces/boxes adequately ventilated and away from heat sources?	Yes	No			
<p>Air ducts should not be obstructed.</p>						
S9.12	Are regular hybrid battery system endurance tests carried out and documented	Yes	No			
<p>In line with annual system performance tests.</p>						
S9.13	Is there evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted?	Yes	No			
<p>The following scenarios are suggested as a minimum for emergency response drills:</p> <ul style="list-style-type: none"> • 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 <p>(Ref. ISM Code Chapter 8)</p>						
S9.14	Are the charging points and cable in good order?	Yes	No	NA		
<p>Condition of plugs, sockets and cable to be noted. Are charging points located above deck sufficient to prevent inadvertent down-flooding if the vessel is heeled? Sealed and watertight cap Constructed with non-sparking material</p>						
S9.15	Is a system in place to report, record and learn from hybrid battery system related incidents/events?	Yes	No			
<p>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.</p>						
S9.16	Is appropriate signage on display?	Yes	No			
<p>Examples include:</p> <ul style="list-style-type: none"> • 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 						
S9.17	Are fire detection and fighting systems in place and functional?	Yes	No			
<ul style="list-style-type: none"> • 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 comments?	Yes	No			