IMCA eCMID System Annual Report 2024/25 – Inspection Findings & Quality Assurance

IMCA M270
July 2025

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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.

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Version History

Date	Reason	Revision
July 2025	eCMID and eMISW findings analysis results data cover the twelve-month period from 1 April 2024 to 1 April 2025	Initial publication

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1 Introduction

The IMCA eCMID system provides the marine and offshore industry with standardised formats for vessel inspection. It offers a safety management system (SMS) 'health check' and can help improve the quality and consistency of inspections, as well as reduce the frequency of inspections on individual vessels through the adoption of a commonly recognised inspection process. Full details on the system can be found at www.ecmid.com.

Inspections are undertaken exclusively by accredited vessel inspectors (AVIs), under a certification and continuing professional development (CPD) scheme operated by the IIMS[1] Marine Surveying Academy. The scheme provides assurance that AVIs are suitably qualified and experienced personnel for inspecting the categories of vessels for which they are endorsed.

Two inspection formats are available, as follows. Each has a core section plus optional supplements relevant to specific vessel types and operations. The templates are regularly reviewed and updated, reflecting regulatory and technological developments, analysis of inspection findings, and feedback from the user community. This eliminates low-value questions and ensures a focus on critical safety elements as new questions and sections are introduced.

1) **eCMID** – the Common Marine Inspection Document (IMCA M149) can be used for inspecting any type of vessel of 500grt and more. From February 2025 the rebranding of the IMCA eCMID took place and this will now be referred to moving forward as**: eCMID Vessel Inspection *(≥500gt)*.**

2) **eMISW** – the Common Marine Inspection Document for Small Workboats (IMCA M189) is designed for inspecting any vessel less than 500 gross tonnage. From February 2025 the rebranding of the IMCA eMISW took place and this will now be referred to moving forward as: **eCMID Small Vessel Inspection *(<500gt)*.**

The system enables vessel operators to review and address inspection findings and to add commentary on corrective actions and other feedback. This is then provided for clients and potential clients to review as part of the downloadable inspection report.

An analytics hub, available to all registered users of the eCMID system, provides real-time analysis of aggregated inspection report data. By identifying the questions and sections resulting in the highest proportion of findings during inspections, additional focus can be placed on these areas. This might be by vessel operators reassessing their procedures, through inspectors spending additional time reviewing areas of particular concern, or by IMCA committees updating or promoting relevant guidance. A recent enhancement to the eCMID system is the introduction of 'High Risk' findings, which have been highlighted in the report. Readers are strongly encouraged to take note of these high risk findings and look to their own vessels for compliance.

A cross-industry committee within IMCA's Marine Division oversees the entire IMCA eCMID System. The committee includes representatives of vessel operators, clients, inspectors, and relevant industry organisations.

The latest versions of the eCMID templates contain new additions as follows:

- **Vessel particulars** – We have improved the app and website interfaces to make it easier to record good quality data. A new 'not applicable' option makes clear that an item has been reviewed, where previously this would have been indicated by leaving the field blank.

[1] International Institute of Marine Surveying – https://www.iims.org.uk/

♦ **Required supplements** – Vessel operators can now mandate the completion of relevant supplements, such as DP or heavy lift, which will then link to the relevant inspector accreditation requirements.

♦ **Risk categorisation** – Our cross-industry eCMID Committee has identified those questions associated with the greatest safety risks. Where a finding is recorded, these will now be automatically categorised, listed first in the report, without risking the objectivity of accredited vessel inspectors (AVIs). They will also be available for reporting via the analytics hub on an industry- or fleet-wide basis. This will identify findings requiring the most urgent and important action, whether by the vessel operator or by the wider industry through IMCA and its committees. This is present in the new M149, with a similar categorisation planned for the next issue of M189.

♦ **Inspector guidance** – The instructions for inspectors have been fully revised to more clearly identify what should be assessed, considered, captured via photograph, and included as comments.

♦ **Reader notes** – The PDF inspection report will now include simplified reader notes, summarising what has been assessed by the inspector without including unnecessary details.

♦ **Closing meetings** – Guidance on holding and recording closing meetings between the inspector and the vessel master and other senior crew was updated in 2023. We have now improved the inspection app interface to further assist in completing this important element.

This year's annual report expands on the analysis of the annual findings and compares them with last year's report. It also references specifically related IMCA safety flashes (see section 3). Additionally, the outcomes of the eCMID quality assurance process (Section 4) are also covered.

Within the findings analysis, red/green/black arrows indicate whether the finding frequency has increased or decreased from the previous year or stayed the same. The data covers the twelve-month period to 1 April 2025, with inspections undertaken using eCMID issues 13.1-14.0 and eMISW issues 6.0 to 7.0. The full data set for this analysis is included in Appendix 1 and Appendix 2 for readers who wish to have further information on the findings.

2 Analysis of Inspection Findings

IMCA has analysed a total of 1896 eCMID Vessel Inspection ≥500gt and Small Vessel Inspection <500gt reports on vessel inspections undertaken between 1 April 2024 and 1 April 2025.

2.1 High Risk Category

When looking at the 896 eCMID Vessel Inspection reports, it was found that 8% (73) of vessels had high risk findings. This is very concerning and must be an area of focus for all accredited vessel inspectors carrying out these vessel inspections.

1) **High risk** – From 896 eCMID vessel inspections, analysed in depth in section 0, it is surprising to see that 156 vessels were not clear of Conditions of Class and any safety-related memoranda. Additionally, 84 vessels did not have their statutory and Class certification in date; 20 vessels did not have a valid International Safety Management (ISM) certificate.

   As part of compliance with the ISM Code 1.2 'Objectives', section 1.2.3 '*the safety management system should ensure:* 1.2.3.1 – '*Compliance with mandatory rules and regulations*' and 1.2.3.2 – '*that applicable codes, guidelines and standards recommended by the Organisation, Administrations, classification societies and maritime industry organisations are taken into account*'.

2) **High risk** – There remains a concerning issue of control for entry into confined spaces. 8% or 75 of the vessels inspected did not adequately control enclosed space entry. This now flags up as a 'high risk' finding in the eCMID report. Disappointingly, this figure is only very marginally down from the 2024 report, which was 11% or 98 vessels. The safe management of confined space entry remains a significant issue within the shipping industry. InterManager, the international trade association for the ship and crew management sector, keeps records of these incidents on behalf of the wider shipping community, sharing them with regulators as a non-governmental organisation (NGO) member of the International Maritime Organization (IMO). The statistics reveal that since 1996, 358 have lost their lives in enclosed spaces on ships – 264 seafarers and 94 shore personnel in 238 incidents. From the beginning of all seafarers' basic training, we are instructed on the hazards and procedures of entering confined spaces, yet sadly, we continually hear of these unnecessary fatalities. This is an area where IMCA is currently working with the industry to create awareness campaigns and ultimately eliminate these unnecessary fatalities. No one should lose their life doing their job.

3) Areas of concern were identified in the inspection reports are as follows:

   a) **High risk** – 11% (98) of vessels did not have a valid certificate for their pilot ladder. Also, 10% (87) of vessels did not have records that showed the pilot ladder had been inspected before every use, in addition to inspections as per the ship's planned maintenance system.

   b) **High risk** – 11% (94) of vessels did not have procedures for control stowage and handling of chemicals and flammable/combustible materials in place or being consistently applied.

   c) **High risk** – 7% (60) of vessels were not provided with their own safe means of access. SOLAS clearly states that ships of 30 meters or more are required to have a gangway or accommodation ladder as part of their safety equipment.

   d) **High risk** – 6% (57) of vessels did not have a lock out/tag out policy in place. While the IMO doesn't have a single lock out/tag out policy, it strongly emphasises safety

and provides the framework for vessels to implement effective energy control procedures, which are very similar to lock out/tag out. Most national regulatory bodies, such as the UKHSE, OSHA, require employers to control hazardous energy sources in the workplace, including lock out/tag out procedures.

e) **High risk** – Even though a small percentage, 3% (30) of vessels did not have a permit to work system in use on board, which is of great concern.

f) **High risk** – It was noticed that 3% (25) of vessels did not have a formalised company system for recording work and rest hours. This is mandatory under the Maritime Labour Convention 2006.

g) 6% (56) of vessels did not have systems and procedures in place to ensure the proper housekeeping and cleanliness of the accommodation, galley and messroom. Additionally, 6% (51) of vessels did not carry sufficient medical supplies on board for the medical care of seafarers. Both are infringements of the Maritime Labour Convention; see Care on board Ship and Ashore and Regulation 3.1 – Accommodation and Recreational Facilities.

h) Cybersecurity compliance remains high, although the number of cybersecurity findings has fallen slightly. However, this area still requires improvement, with 8% (75) of vessels not having formal cybersecurity incident response, disaster recovery, and business continuity plans in place. This is captured in the ISM Code 1.2.2.2 – 'Assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards'.

4) Other areas of concern, which are flagged as **high-risk**, were that 7% (61) of vessels had defects with their lifesaving appliances, and 5% (40) of vessels did not have all their fitted life rafts available for immediate use.

5) Firefighting appliances, which were identified as high-risk, showed that 7% (63) of vessels had insufficient firefighting equipment available for use and were not free from defects.

6) Pollution prevention **high-risk** findings showed that 6% (57) of vessels had no arrangements to prevent spillages from entering the water. Additionally, 5% (44) of vessels had the bilge water separator (OWS) not in good working order. An item that was not identified as high-risk but still needed attention was that 8% (70) of vessels did not hold Shipboard Oil Pollution Emergency Plan (SOPEP) and/or Shipboard Marine Pollution Emergency Plan (SMPEP) drills at regular intervals.

   The bridge and machinery spaces, **high-risk** findings, caused some concern namely, 7% (62) of vessels had issues with bridge navigation equipment, 10% (92) of vessels reported that the main, auxiliary, and emergency plant were not fully operational, and 7% (65) of vessels had obvious leaks in the machinery spaces. Other findings were again for the vessel's planned maintenance systems, where critical systems were not identified within the planned maintenance system on 7% (59) of vessels. Lifting equipment **high-risk** findings came under scrutiny, with 13% (113) of vessels not having a lifting equipment management system in place. ISM Code 10 'Maintenance of the Ship and Equipment'.

7) Mooring and/or towing equipment is also on the radar, with 6% (51) of vessels reported to have defects on mooring/towing equipment. The International Group of P&I Clubs reported 858 injuries and 31 fatalities involving mooring operations during the five-year period to 2021 for all shipping areas. These incidents highlight the significant risks associated with mooring operations and the need for comprehensive safety measures. New SOLAS guidelines, Regulation II-1/3-8 for safe mooring, entered into force on 1st January 2024, to address these safety concerns. These regulations, including Circulars

1175/Rev.1, 1619, and 1620, emphasise the importance of maintaining and inspecting mooring equipment to enhance safety and mitigate risks during vessel mooring activities. To raise further awareness of mooring safety, IMCA launched a mooring operation safety video accompanied by a Mooring Safety Poster.

8) When analysing the vessel supplements:

   a) Dynamically positioned vessels, 26% (116) of 450 vessel reports identified that an IMCA Accredited DP Practitioner had not witnessed the vessel's DP Trials. Also, 7% (30) of vessels did not have any evidence of the key DP personnel taking part in onboard training and drills involving various DP scenarios.

   b) Anchor handling vessels, 10% (8) of 83 vessels had no onboard training records confirming the winch operators had been formally trained.

   c) Pipe lay and cable lay vessels, 21% (7) of 32 vessels, did not have the lay system integrated with the vessel's DP system.

   d) Regarding helicopter operations, 16% (22) of 139 vessels did not have an appropriately certified and approved helideck.

   e) Heavy lift vessels, 12% (8) of vessels, were noted not to have an FMEA to cover the ballast and bilge system.

   f) Walk to work gangways, it was found that 19% (11) of 57 vessels did not have an FMEA for the gangway. Also, 21% (12) of these 57 vessels did not have in place regular testing of the FMEA undertaken with all the findings closed out.

   g) Finally, for hybrid battery systems on DP vessels, it was very surprising to see that 45% (17) of 38 vessels did not have evidence that the crew had attended a type-specific course for the operation and maintenance of the fitted hybrid system.

2.2 High Findings

The analysis of 1000 eCMID small vessel inspections in Section 2.4 also showed a high number of findings in similar categories as follows:

1) 55 vessels had outstanding conditions of class any safety-related memoranda
2) 55 vessels had out-of-date statutory certification
3) 45 vessels did not have the appropriate logbook(s) (e.g. official/deck/radio/engine)
4) 235 vessels showed evidence of water leaking into the below decks.
5) 255 vessels had fuel/oil leakages in the machinery spaces.
6) 54 vessels did not carry the latest charts.
7) 56 vessels had not addressed hazards within the machinery space.
8) 51 vessels did not have a planned maintenance system in place covering critical equipment and spares.
9) 54 vessels did not have means of escape clearly marked or adequately illuminated.
10) 36 vessels did not have a working emergency fire pump available outside the machinery space.
11) 56 vessels did not have the magnetic compass in working order.

12) 45 vessels did not have a comprehensive passage plan available for the current voyage and did not cover the full voyage from berth to berth.

13) 43 vessels did not have a valid test certificate for the crane if fitted.

14) 83 vessels did not have a training manual for the use of life-saving appliances (LSAs).

15) 43 vessels did not have a permit to work (PTW) system in use on board.

16) 23 vessels did not have the required number and correct type of portable fire extinguishers.

17) 69 vessels did not carry out potable water testing routines that included legionella testing.

18) 65 vessels did not carry the required number/type of lifebuoys.

19) 65 vessels did not have a cyber security management system and/or a cyber security plan.

2.3 eCMID Vessel Inspection ≥500gt (formerly Common Marine Inspection Document)

The eCMID format is intended for comprehensive inspections of vessels over 500grt.

896 eCMID vessel inspections were undertaken during the analysis period, using template versions 13.1 to 14.0 (released in December 2022 and February 2025, respectively). The top findings for the core sections are set out below. Findings from the optional vessel type and operation-specific supplements are below, with a number indicating how many reports are included in each supplement.

2.3.1 eCMID Vessel Inspection Core Sections (896 reports)

Section	Top concerns	Risk	Previous year's figure
1) Previous inspections	♦ ↑**251** vessels hadn't had an eCMID inspection carried out within the past 12 months. *There have been many instances where an eCMID inspection could have been carried out but wasn't. The annual eCMID inspection is more than just a tick-in-the-box exercise for the vessel charterer. To the vessel operator, it is an extremely valuable insight into how their company safety management system is being effectively applied on board. IMCA has seen several instances where a vessel has urgently requested an eCMID at the client's request because their previous eCMID had expired several months ago. Had the vessel operator planned for the annual eCMID, then the urgency would have been avoided.*		237
2) Certification and publications	♦ ↑**156** vessels reported not clear of conditions of class and any safety-related memoranda	**HIGH**	133
	♦ ↑**84** vessels had out-of-date statutory and/or class certs.	**HIGH**	72

Section	Top concerns	Risk	Previous year's figure
3) Safety management system	♦ ↑**72** vessels did not have a technical inspection conducted by the vessel operator		56
	♦ ↓**51** vessels did not have a system to ensure that all non-conformances were closed out in an agreed period		56
	♦ ↔**28** vessel operators did not have a drug and alcohol policy		28
4) HSE	♦ ↑**53** vessels had no records showing that the pilot ladder had been inspected before every use, in addition to inspections as per the ship's planned maintenance system. Additionally, there was no valid certification	**HIGH**	NEW
	♦ ↑**94** vessels did not have procedures for control, stowage and handling of chemicals and flammable/combustible materials in place	**HIGH**	79
	♦ ↑**75** vessels did not have a controlled entry into an enclosed space	**HIGH**	70
	♦ ↓**62** vessels did not have any evidence of full compliance with the company's HSE management system	**HIGH**	63
	♦ ↑**68** vessels did not provide training in risk assessments to onboard personnel		61
	♦ ↓**87** vessels did not have records that showed the pilot ladder had been inspected before every use or was without valid certification		98
	♦ ↑**60** vessels were not provided with their own safe means of access	**HIGH**	56
	♦ ↑**57** vessels did not have a lock out/tag out policy in place	**HIGH**	47
5) Maritime Labour Convention	♦ ↑**56** vessels did not have systems and procedures in place to ensure the proper housekeeping and cleanliness of accommodation, galley and messroom		43
	♦ ↑**51** vessels did not carry sufficient medical supplies on board for the medical care of seafarers	**HIGH**	34
	♦ ↑**25** vessels did not have a formalised company system for recording work and rest hours		NEW
6) Ship and cyber security	♦ ↑**141** vessels had a cyber security incident involving ship systems in the last 12 months		NEW
	♦ ↓**75** vessels did not have formal cyber security incident response, disaster recovery and business continuity plans in place		82
	♦ ↓**62** vessels did not have any formal training and familiarisation programme in place for the shipboard crew on cybersecurity and procedures		69

Section	Top concerns	Risk	Previous year's figure
	♦ ↑**38** vessels did not have a cyber security management system and/or a cyber security plan	HIGH	NEW
	♦ ↓**39** vessels did not have a formal process in place for equipment disposal, including data destruction		43
7) Crew management	♦ ↑**29** vessels did not have regular crew appraisals and personal development initiatives in place		20
	♦ ↑**22** vessels did not have a competency assessment process in use on board		19
	♦ ↑**14** vessels did not have crew appropriately qualified for the operations and equipment on board		15
	♦ ↑**20** vessels did not meet the requirements of the safe manning certificate	HIGH	13
	♦ ↑**17** vessels did not have accurate data in the crew qualification matrix	HIGH	NEW
	♦ ↑**17** vessels crew did not have valid medical certificates		11
8) Life-saving appliances (LSAs)	♦ ↑**61** vessels had defects recorded on their LSA	HIGH	50
	♦ ↑**48** vessels man overboard/rescue boats, were not operational or defect free	HIGH	45
	♦ ↓**40** vessels life rafts were not available for immediate use	HIGH	45
9) Firefighting appliances	♦ ↑**66** vessels did not have vessel-specific manuals and plans for firefighting equipment available or up to date	HIGH	48
	♦ ↑**63** vessels had defects recorded on their firefighting equipment	HIGH	33
	♦ ↑**42** vessels did not have their fixed fire and gas detection systems fully operational or tested regularly	HIGH	30
	♦ ↑**50** vessels were not provided with fixed firefighting equipment in accordance with applicable regulations for the vessel type		27
	♦ ↑**33** vessels did not have measures in place to effectively isolate ventilation to enclosed spaces, e.g. engine room accommodation galley storerooms	HIGH	NEW
10) Pollution prevention	♦ ↑**70** vessels did not conduct regular SOPEP/SMPEP drills	HIGH	NEW
	♦ ↑**57** vessels did not have adequate oil spill prevention	HIGH	46
	♦ ↑**44** vessels did not have a bilge oily water separator (OWS)/filtering system in good working order	HIGH	22

Section	Top concerns	Risk	Previous year's figure
	♦ ↑**28** vessels had not completed the oil record book		22
11) General appearance	♦ ↑**73** vessels reported issues with general condition		56
	♦ ↔**54** vessels had inadequate medical facilities		54
	♦ ↑**70** vessels had defective deck openings, including watertight doors and portholes	HIGH	52
12) Bridge, navigation and communications equipment	♦ ↓**62** vessels reported that SOLAS communication and navigation equipment was not available for use or were defective	HIGH	72
	♦ ↔**59** vessels failed to maintain the gyro and magnetic compass error log		59
	♦ ↑**43** vessels did not have an established system to ensure that nautical publications, charts and information were both on board and current	HIGH	30
	♦ ↑**33** vessels did not have a comprehensive passage plan available for the previous voyage which did not cover the full voyage from berth to berth	HIGH	NEW
13) Machinery space	♦ ↑**92** vessels reported main, auxiliary and emergency plant reported to be not fully operational	HIGH	91
	♦ ↓**65** vessels had poor engine room housekeeping	HIGH	70
	♦ ↑**59** vessels did not have an inventory of spare parts	HIGH	53
	♦ ↑**58** vessels did not include predictive maintenance techniques such as fuel and lube oil analysis, and or vibration analysis within their planned maintenance system	HIGH	49
	♦ ↑**45** vessels did not have a planned maintenance system in use		43
14) Mooring, towing and lifting equipment	♦ ↓**113** vessels did not have a lifting equipment management system in place		122
	♦ ↓**51** vessels reported defects on mooring/towing equipment	HIGH	67
	♦ ↑**32** vessels did not have all mooring/towing equipment available for use and defect free		NEW
15) Construction and stability	♦ ↑**38** vessels did not have their construction and stability survey report file maintained on board		25
	♦ ↔**21** vessels did not have an approved stability book		21
	♦ ↓**16** vessels did not have procedures in place to govern vessel stability through all stages of vessel operations		25

2.3.2 eCMID Vessel Inspection Supplements

Supplement	Reports	Top concerns	Risk	Previous year's figure
1) Dynamic positioning vessels	450	♦ ↓**116 (26%)** vessels did not have their DP annual trials witnessed by an IMCA Accredited DP Practitioner		136
		♦ ↓**72 (16%)** vessels did not have a copy of the most up-to-date DP trials		78
		♦ ↑ **49 (11%)** vessel's the FMEA was not retained on board and/or had not been reviewed for completeness every five years?	HIGH	NEW
		♦ ↓**19 (4%)** vessels did not have activity specific operating guidelines in place and available		26
		♦ ↓**23 (5%)** vessels did not have on board a DP operations manual		24
2) Anchor handling Vessels	83	♦ ↓**8 (10%)** vessels did not have records held on board which confirmed that winch operators had been formally trained		20
		♦ ↓**8 (10%)** vessels did not have the maximum acceptable vertical and horizontal transverse forces defined and posted		12
		♦ ↑**8 (10%)** vessels did not have the anchor handling equipment maintenance records up to date		5
		♦ ↓**4 (6%)** vessels did not display emergency release procedures	HIGH	5
		♦ ↑**3 (4%)** vessels did not have the anchor handling winches appropriately certified	HIGH	NEW
3) Offshore supply vessels	154	♦ ↓**6 (4%)** vessels did not have appropriately certified securing equipment available		14
		♦ ↓**4 (3%)** vessels did not have documented procedures for the sampling and analysis of cargo tank contents		11
		♦ ↓**9 (6%)** vessels had significant damage to the deck sheathing that could cause potential hazards to personnel	HIGH	10
		♦ ↑**15 (10%)** tugger winches and wires not certificated or well lubricated		9
4) Stand-by vessels (SBVs & ERRVs)	56	♦ ↓**2 (4%)** vessels did not have the survivor areas clean, tidy and ready for immediate use		3

Supplement	Reports	Top concerns	Risk	Previous year's figure
5) Survey vessels	66	♦ ↓**3 (5%)** vessels failed to have adequate lifting certification associated with survey equipment		4
		♦ ↓**1 (2%)** vessels did not have an emergency stop fitted for all winches and hydraulic equipment	**HIGH**	4
		♦ ↑**6 (9%)** vessels failed to adequately mark deck and bulkhead safety/warning markings for survey equipment deployment/recovery		3
		♦ ↑**6 (9%)** no safety/warning markings on deck and bulkheads for survey equipment		3
6) Diving support vessels	20	♦ ↑**3 (15%)** vessels did not have a Diving Equipment System Inspection Guidance Note (DESIGN) document completed by an independent third party within the past 12 months		2
		♦ ↑**2 (10%)** no safe access available around the diving system		1
		♦ ↑**2 (10%)** PLC element of the diving system not assessed and verified		1
7) Pipe- and cable-lay vessels	32	♦ ↑**6 (17%)** vessels did not have an FMEA which covered the pipelay system		5
		♦ ↑**7 (21%)** vessels did not include the lay system within the FMEA		5
		♦ ↔**3 (10%)** vessels did not have documented evidence that the vessel's crew had received training for the operation and maintenance of the onboard laying equipment		3
8) Autonomous underwater vehicles	74	♦ ↔**17 (23%)** vessels had not been subject to an independent audit under IMCA R006 or a similar scheme of the ROV spread		17
		♦ ↑**9 (13%)** Lifting equipment not operated safely or safety measures not in place		NEW
9) Helicopter operations	139	♦ ↔**22 (16%)** vessels did not have the helideck appropriately certified and approved	**HIGH**	22
		♦ ↓**10 (7%)** vessels did not have the helideck firefighting equipment available for immediate use and/or free of defects	**HIGH**	12

Supplement	Reports	Top concerns	Risk	Previous year's figure
		♦ ↑**12 (9%)** vessels did not have the personnel required for helideck operations trained in accordance with relevant requirements		8
10) Accommodation vessels	55	♦ ↓**5 (9%)** vessels did not have a fixed sprinkler system fitted in the accommodation areas ♦ ↑**6 (11%)** vessels did not have an FMEA relating to the gangway system ♦ ↓**1 (2%)** the gangway and/or boat landing isn't monitored and operated by appropriately certified marine personnel during personnel transfer operations	HIGH HIGH	7 5 NEW
11) Jack-up vessels	42	♦ ↑**8 (19%)** vessels did not have certified calibration certificates **for** the longitudinal and transverse inclinometers ♦ ↑**6 (14%)** vessels did not have a MODU/MOU certificate		5 4
12) Heavy lift vessels	65	♦ ↓**8 (12%)** vessels did not have a bilge/ballast system FMEA ♦ ↓**4 (6%)** vessels did not have operational or certified draught sensors ♦ ↓**4 (6%)** vessels did not have documented training and exercises (normal and emergency) covering stability issues concerning the heavy lift operation		13 11 5
13) Barges (non-self-propelled)	24	♦ ↔**2 (8%)** vessels did not have a certified emergency towing bridle, including chains/wires/shackles/smit brackets and pick-up rope, or were in poor condition		2
14) Gravel discharge	45	♦ ↓**3 (6%)** vessels reported that cargo handling/specialist equipment and ship fittings had deficiencies		5
15) Walk to work	57	♦ ↓**12 (21%)** vessels did not have regular testing of the FMEA undertaken, and/or all the findings closed out ♦ ↑**11 (19%)** vessels did not have an FMEA for the walk-to-work system ♦ ↑**10 (18%)** vessels did not have any evidence of conducting W2W system emergency response drills covering different possible scenarios	 HIGH	14 10 7

Supplement	Reports	Top concerns	Risk	Previous year's figure
		♦ ↑**6 (11%)** the W2W system is not included in the vessel operator's safety management system (SMS) from an emergency preparedness perspective	HIGH	NEW
16) Hybrid battery systems for DP vessels	38	♦ ↑**17 (45%)** vessels did not have the crew attend a type-specific course for the operation and maintenance of the hybrid system fitted ♦ ↑**8 (21%)** vessels did not have evidence of conducting hybrid battery system emergency response drills covering different possible scenarios ♦ ↑**12 (32%)** vessels did not have the crew undertake an approved course in battery and stored energy maintenance and did not have the correct tools to undertake tasks associated with proactive and reactive maintenance		6 6 3

2.4 eCMID Small Vessel Inspection <500gt (formerly eMISW – Common Marine Inspection Document for Small Workboats)

The eCMID small vessel inspection serves smaller workboats, which are not required to comply with the ISM ISPS codes, although the principles outlined within the two codes are recommended to be followed.

1000 eCMID small vessel (eMISW) inspections were undertaken during the analysis period, using template versions 6.1 to 6.2 (released in December 2022 and August 2023, respectively). The top findings for the core sections are set out below. Findings from the optional vessel type and operation-specific supplements, with a number indicating how many reports are included in each supplement, are also shown.

2.4.1 eCMID Small Vessel Inspection (eMISW) Core Sections

Section	Top concerns	Risk	Previous year's figure
1) Certificates and publications	♦ ↓**55** vessels were not clear of conditions of class, port/flag state and any safety related memoranda ♦ ↑**55** vessels did not have valid or in-date recognised organisation or flag state certificates ♦ ↓**22** vessels did not carry valid certificates of insurance		63 44 23
2) Inspection	♦ ↑**43** vessels did not have a copy of the latest eMISW (Small Vessel Inspection) on board		33
3) Logbooks	♦ ↑**45** vessels did not have adequate logbooks		34

Section	Top concerns	Risk	Previous year's figure
4) Weathertight integrity	♦ ↑**235** vessels had evidence of water ingress below decks		18
	♦ ↑**28** were found to have watertight closures to ventilators in poor working order		14
	♦ ↑**26** doors located on or above the weather deck which give access to spaces below weather-tight were not able to be operated from either side		18
5) Machinery and electrical	♦ ↑**56** vessels had not addressed hazards within the machinery space		51
	♦ ↑**51** vessels did not have a planned maintenance program		46
	♦ ↑**63** vessels had bilges that were not free from oil residue and/or not empty		37
	♦ ↑**225** vessels had fuel or oil leaks in the machinery spaces		29
	♦ ↑**19** vessels did not have at least one bilge pump available for duty in an emergency		7
6) Stability	♦ ↑**25** vessels did not have any stability records available to show the effects of adding or removing loads on the vessel		16
7) Freeboard	♦ ↑**15** vessels were not marked with a deck line and freeboard mark, when required to do so		8
8) Escape	♦ ↑**54** vessels had not adequately marked and/or illuminated the escape route		30
9) Fire	♦ ↑**36** vessels did not have a fire pump external to the machinery space		27
	♦ ↓**23** vessels did not have 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		26
	♦ ↑**24** vessels did not have fire detectors and fire call points, where fitted, in working order		22
	♦ ↑**13** vessels reported a defective fire pump		12
10) Radio	♦ ↑**35** vessels have not had a recent Class radio survey or radio verification report which physically tested the equipment		31
	♦ ↑**54** vessels did not have cards available giving a clear summary of the radio telephone distress, urgency and safety procedures		29
	♦ ↑**25** sealed spare batteries or handheld VHF radios were not available or charged		22
	♦ ↑**35** vessels did not have clear instructions for the operation of the handheld VHF radio		22
	♦ ↑**23** vessels reported radio equipment not in good order		15
	♦ ↑**54** vessels did not carry the latest charts		44

Section	Top concerns	Risk	Previous year's figure
11) Navigation equipment	♦ ↑**56** vessels reported that the magnetic compass was not in working order		44
	♦ ↑**39** vessels did not have a working fixed or portable searchlight for a vessel that may operate in darkness		22
	♦ ↑**30** vessels had deficiencies with the navigation lights		16
12) Navigation	♦ ↑**45** vessels failed to maintain adequate passage planning		33
	♦ ↑**25** vessels were not provided with operator policy statements, instructions and procedures concerning safe navigation		22
	♦ ↓**12** vessels did not have written procedures for entry into 500m zones		17
13) Accommodation	♦ ↑**69** vessels did not have provision for testing potable water		57
	♦ ↓**4** vessels did not have an efficient working ventilation system for confined spaces that may be entered by personnel		10
	♦ ↑**10** insufficient number of bunks or cots for all those on board		6
14) Safety of personnel	♦ ↑**63** vessels did not have at least two safety harnesses on board and additional harnesses for all those required to work on deck		42
	♦ ↑**38** vessels did not have a safe means of access to and from the vessel		37
	♦ ↑**43** vessels did not have a permit to work (PTW) system in use on board		37
	♦ ↑**52** vessels did not have defined controls on confined space entry		32
	♦ ↑**53** vessels did not keep records of emergency training drills and exercises		28
	♦ ↑**53** procedures for control stowage and handling of chemicals and flammable/combustible materials were not in place or being consistently applied		26
15) Crane	♦ ↓**42** vessels did not have a lifting equipment management system in place		46
	♦ ↑**43** vessels did not have a valid test certificate for the crane		37
	♦ ↑**12** no competent crane operator on board		4
16) Manning	♦ ↑**37** vessels did not have critical personnel (e.g. captain, chief officer & chief engineer) complete a handover period, including familiarisation appropriate to their position		35

Section	Top concerns	Risk	Previous year's figure
	♦ ↑**27** vessels did not record the crew hours of work and rest		24
	♦ ↑**28** manning was not in compliance with vessel's		12
	♦ Minimum Safe Manning Certificates		
17) Reporting	♦ ↑**39** vessels did not keep records for reporting and follow-up of near misses		24
18) Clean seas	♦ ↑**28** vessels did not have a garbage management plan in place, and is an associated garbage record book maintained		13
	♦ ↑**16** vessels did not have arrangements in place for the prevention of discharge of oil/oil-contaminated water overboard		13
	♦ ↑**18** Oil record book not being properly maintained both at sea and in port		NEW
19) Life-saving appliances	♦ ↑**65** vessels did not carry the required number/type of lifebuoys		45
	♦ ↑**83** vessels did not have a training manual for the use of LSA		44
	♦ ↓**19** vessels did not have sufficient life rafts for the POB		21
	♦ ↑**29** vessels did not have an approved life jacket for every person carried on the vessel		13
20) Mooring and berthing	♦ ↓**9** vessels did not have adequate mooring points on the vessel		14
	♦ ↓**9** vessels did not have adequate fendering available		13
	♦ ↑**12** vessels found to have an insufficient number of mooring lines in a good condition on board		12
21) Vessel cyber security	♦ ↓**65** vessels did not have a cyber security management system and/or a cyber security plan		81
	♦ ↓**41** vessels did not have controls for formal interfacing procedures and protocols in place for visitors, technicians, port officials, etc. to use their equipment on board		53
	♦ ↔**41** vessels did not have procedures for the management of portable data storage devices		41
	♦ ↓**16** vessels did not have specific port security procedures covering visitors, storing and vessel gangway watchkeeping requirements		20
	♦ ↓**8** vessels did not have control of the connection of personal IT devices such as phones, tablets and laptops to the ship's network		9

2.4.2 eCMID Small Vessel Inspection (eMISW) Supplements

Supplement	Reports	Top concerns	Previous Year's figure
1) Dynamic Positioning	15	♦ ↑**5 (33%)** DP trials had not been carried out within the past 12 months or there was no copy of the trials report on board	NEW
		♦ ↑**5 (33%)** key DP personnel were not taking part in onboard training and drills involving various DP scenarios	NEW
2) Towing	124	♦ ↓**5 (4%)** vessels did not have certification for the towing equipment	6
		♦ ↔**5 (4%)** vessels did not have a valid bollard pull test certificate	5
		♦ ↑**13 (11%)** vessels did not have a master with tug CoC or a towage endorsement	5
		♦ ↔**5 (4%)** vessels did not have emergency towing procedures	5
		♦ ↑**8 (7%)** vessels did not have a towing operations manual, or it did not reference vessel stability	4
3) Diving	27	♦ ↑**2 (7%)** vessels do not have procedures for the safe use of engines and DP (if fitted**)**	NEW
4) Anchor handling	48	♦ ↓**1 (2%)** vessels did not have protected areas provided for crew working on the stern	5
5) Barges (non self-propelled)	16	♦ ↑3 **(19%) n**avigational lights and shapes did not meet local and COLREG requirements	NEW
6) High-Speed Craft Code compliance	118	♦ ↑**5 (4%)** vessels did not hold a valid permit to operate for the applicable project/sea area	3
		♦ ↔**3 (3%)** vessels did not have the craft certificated to operate as either a small commercial workboat or HS-OSC, and the changeover procedure was not detailed in the SMS	3
		♦ ↓2 **(2%)** vessels did not have an operations manual available or valid	3
7) Battery propulsion	17	♦ ↑**2 (12%)** there was no evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted	NEW

3 Findings Related to IMCA Safety Flashes

Many of the eCMID and eMISW findings identified in this analysis relate to IMCA's safety flashes, which are accessible free of charge and disseminate important information on incidents, potential hazards, and lessons learned from them. This information can ultimately help prevent incidents from occurring elsewhere in the industry.

Below are some examples of incidents and near misses taken directly from IMCA's Safety Flashes web page.

3.1 Enclosed Space Entry

Reference IMCA Safety Flash 02/25 – Confined space entry hot work fatality.

Late last year, an incident was brought to IMCA's attention relating to a confined space entry hot work fatality in a shipyard. A welder entered an 86cm (34") pipe through a 50cm (20") opening to check on welding being carried out. He was found unconscious by another worker who had noticed his absence and called the emergency team. First aid was provided by the shipyard rescue teams, and he was then taken to a local hospital, where, though care was continued, he was sadly pronounced dead.

3.1.1 What went wrong

The report seen by IMCA, identifies the following issues:

- Poor communication – there was no signage at the pipe warning of a confined space or prohibiting entry.
- Physical entry into the confined space was not blocked.
- There was a failure of leadership – inadequate supervision.
- There was a failure in planning and risk assessment – whilst the Permit to Work was comprehensive for all welding activities at the site, it did not address or warn about the specific risk of inert gas (argon) related to the task being performed.
- Motivation: There was a lack of clarity in the criteria for evaluating welders' performance, which generated doubts about possible consequences due to failed welding. In addition, though the welders had been told not to enter the pipe, they were not fully made aware as to why this was: conditions inside the pipe were not known by the welders.
- Procedures were inadequate: The welding procedure did not clearly address the welders' performance criteria, nor did it address the specific risks associated with the use of inert gas.

3.1.2 Actions taken

- Installed physical barriers at all temporary pipe openings with diameters equal to or greater than 40cm (16"), with signage prohibiting entry into the pipe.
- Amended procedure for restricted space requirements for pipes with a diameter equal to or greater than 40cm (16").
- Provided specific additional input to risk assessment and Permit to Work for activities involving inert gases.
- Ensured better communication to welders of the criteria impacting the evaluation of their performance, and reiterated awareness of the Life-Saving Rules and safety with regard to confined space entry.

Members may wish to refer to:

- IMCA Safety Flash 01/25 – Unauthorised entry into confined space.

3.2 Pilot Ladders

Reference IMCA Safety Flash 22/23 – Fall from pilot ladder.

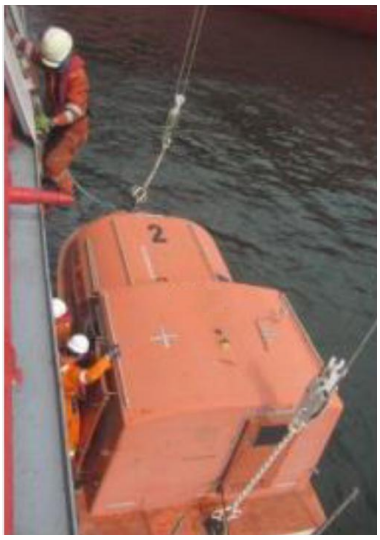
3.2.1 What happened

A Chief Officer slipped and fell from a pilot ladder onto a lifeboat, suffering minor bruising. The incident occurred on a vessel which was coming to the end of ten days spent alongside in a shipyard. The crew were performing a last pre-departure mandatory drill, which was a man overboard recovery with the lifeboat afloat, combined with the periodic over-boarding sea trial of the lifeboat itself. A Pilot ladder has been rigged to join the lifeboat, which was already lowered into the water. The Chief Officer climbed down the ladder, and as he did so, it suddenly slid downward.

He let go of the ladder immediately for fear of getting his hands caught between the sliding ladder and the hull and fell about 2m directly onto the lifeboat.

He was able to clamber safely back on board. The next morning, he reported small bruises on his chest: no medicines were prescribed, and he continued to work normally.

Lifeboat



Person climbing down Pilot Ladder

3.2.2 What was the cause

The Pilot Ladder was not properly secured.

3.2.3 Lessons learned

- *Work Preparation* – always rig the Pilot Ladder securely, ensuring that it is properly attached to the vessel's side and positioned at the correct distance from the waterline. The installation of the pilot ladder should be checked by an officer, who is responsible for ensuring it is correctly installed and complies with the required safety standards.

- *Training Familiarisation* – ensure the crew responsible for rigging and handling the Pilot Ladder are properly trained and familiar with the proper procedures for deploying, securing, and stowing the ladder.

Members may wish to refer to:

- IMCA SF 34/20: Unexpected truck movement caused rigger to fall off a ladder
- IMCA SF 03/23: Near miss: pilot ladder – side rope failed
- IMCA SF 13/17: Fatal fall aboard the tanker Marinor *[ladder slipped].*

3.3 Permits to Work

Reference IMCA SF 05/25 – Acetylene gas explosion.

3.3.1 What happened

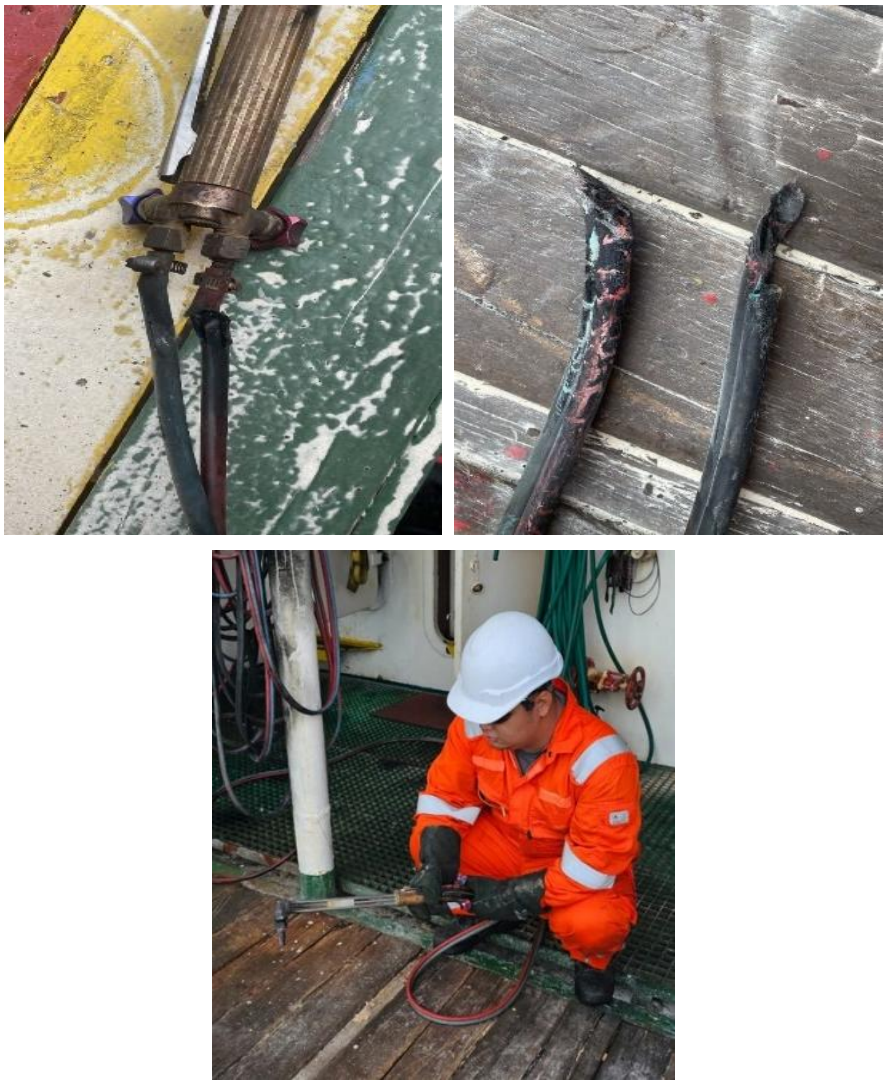
There was a small explosion and fire when crew were working on an oxy-acetylene system. Two engineers were setting up a new oxygen and acetylene cylinder for testing. They installed a flash arrestor and hoses on the cylinder, ensuring they were free from oil and grease. One of the engineers opened the nozzles of the oxy-acetylene bottle, igniting flames at the nozzle tip. A small explosion occurred, followed by flames from the acetylene hose connection on the torch. The hoses burst within seconds, causing that worker to get burnt. The other engineer pulled the injured person to safety. The fire was extinguished using a dry powder fire extinguisher. The injured engineer suffered first-degree burns.

3.3.2 What went wrong

- At the time of the incident, there was no Hot Work Permit in place.
- The person injured was wearing no proper PPE (welding apron, appropriate coveralls, or goggles).

3.3.3 What was the cause

- The oxygen/acetylene torch was not equipped with adequate flame or flashback arrestors.
- There had been excessive bending of the hoses which had led to a compromised flow of gas and increased risk or rupture under pressure.
- There was faulty equipment: The hose crimps on the cutting valve (acetylene) were faulty which led to the flashback occurring.



Showing equipment damaged (re-enactment)

3.3.4 Lessons learned

- Fit flash arrestor to both the oxygen & acetylene gas hoses near to the regulators, for length hose, fit arrestor on both the torch and regulator.
- The fitting of a flashback arrester is not a substitute for safe working practices. After a flashback, carefully check for damage to the torch, hoses, regulators, flashback arrestor and other components, if found faulty replace the parts.

Members may wish to refer to:

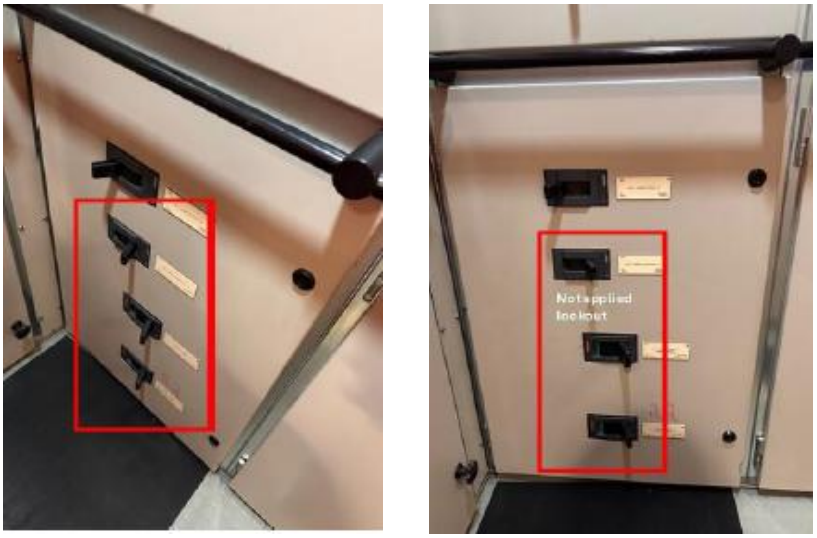
- IMCA SF 21/16 – Proper care of oxy-acetylene cutting and welding equipment
- IMCA SF 25/19 – Ruptured acetylene hose: Fire
- IMCA SF 02/14 – Hose fire caused by flashback in oxygen and acetylene hoses
- IMCA SF 08/14 – Cutting torch hose separates from flame arrestor

3.4 Lock Out / Tag Out

Reference IMCA Safety Flash 11/25 – Lock out / Tag out and unauthorised electrical connections/disconnections.

3.4.1 What happened (1) – Incorrect LOTO standards applied in Engine room

During a walkaround audit of a vessel engine room, problems were observed with the Lock Out/Tag Out (LOTO) process, It was observed that electrical equipment was switched off, but LOTO was not applied in place. Also, for the mechanical isolation, the locking device was not in place, though the mechanical valve was closed and tagged out.



Case 1: No LOTO applied on the main electrical switchboard

Case 2: No mechanical valve lock out was applied on the equipment

3.4.2 What went wrong

- *Case 1*: Lock Out/Tag Out (LOTO) was not applied on the electrical switchboard by ETO during repair of AHT hydraulic pipeline. Though the main switchboard was switched off and emergency release button was activated from the bridge.

- *Case 2*: Valve lock out (mechanical isolation) was not applied on the hydraulic pipe, though the valve was physically closed, and isolation tag was applied on the valve.
- Lack of Control of Work and Isolation process on board – the correct isolation process was not applied by the responsible personnel.
- A suitable LOTO device was not available on board for the electrical isolation points on the main switchboard for AHT hydraulic pipeline, although a previously email instruction had been sent to all fleet vessels to ensure sufficient LOTO devices were available on board.

3.4.3 What can we learn

- Simply switching off a circuit or closing a valve does not guarantee complete isolation – unexpected reactivation can occur due to system malfunctions, human error, or mistaken assumptions. A proper LOTO process ensures that energy sources remain isolated until the work is completed and verified safe for reactivation.
- LOTO should be fully implemented for all maintenance tasks – every maintenance or repair activity involving hazardous energy should follow a thorough LOTO procedure, regardless of the presence of physical barriers like switch-offs or valve closures. The absence of LOTO devices or failure to apply them properly can lead to severe injuries, equipment damage, or even fatalities.
- Ensuring availability of suitable LOTO devices on board – the absence of an appropriate LOTO device for the main switchboard highlighted a critical gap in safety preparedness. Proactively verify that all necessary LOTO devices are on board and suitable for all potential isolation points.

3.4.4 What happened (2) – Unauthorised electrical disconnections and bypasses

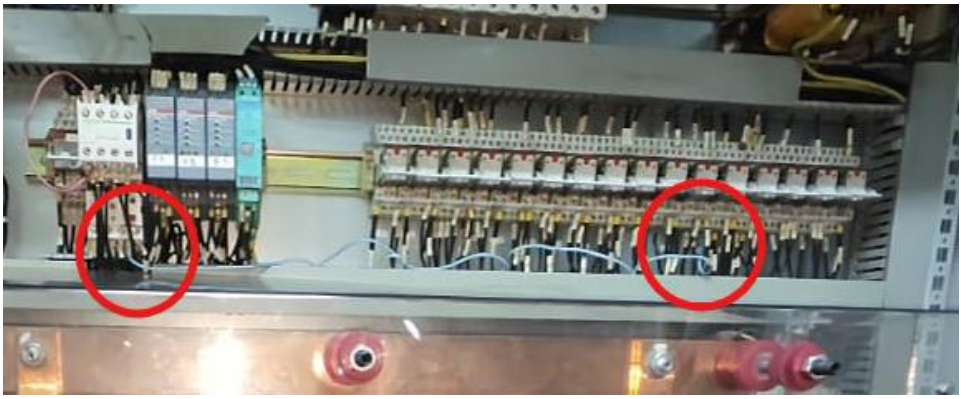
- Unauthorised and undocumented disconnections and bypassing of critical electrical systems were observed (see following page)). Such actions pose significant safety risks and can compromise the integrity of onboard operations.
- Improper reconnections may lead to major equipment damage, including short circuits, power fluctuations, or failures in essential onboard systems.
- Unauthorised disconnections or bypassing of critical electrical systems can expose personnel to serious electrocution hazards, especially if they unknowingly interact with live circuits.

3.4.5 Why did it happen

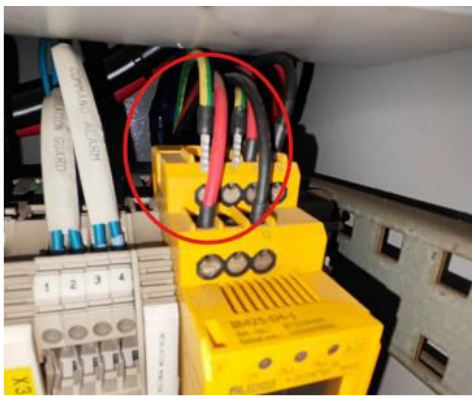
It was assumed that these disconnections or bypasses may have occurred during Dynamic Positioning (DP) trials, where certain critical electrical systems might have been temporarily modified to facilitate testing or troubleshooting. There was:

- A lack of proper documentation – No clear records or logs of temporary modifications.
- A failure to follow reinstatement procedures – Crew members may not have been assigned or reminded to restore the system.

- Miscommunication between teams – Shift changes or multiple personnel handling DP trials may have led to assumptions that another party would restore the system.
- Absence of verification checks – No structured post-trial review to ensure all systems were returned to normal.



Unauthorised bypassing



Unauthorised disconnection

3.4.6 Lessons learned

- Importance of proper documentation and approval: temporary disconnections or bypassing of critical systems should be fully documented and approved by relevant authorities before work starts.
- Ensure – **double check, verify** – that all temporarily altered systems are returned to their original state after trials or maintenance.
- Importance of clear communications particularly at handover: shift changes or team transitions should include detailed briefings on any modifications made, including what needs to be restored.

Members may wish to refer to:

- IMCA SF 11/23 – Equipment starts unexpectedly
- IMCA SF 19/22 – Equipment found live: drawings incorrect for lock out/tag out
- IMCA SF 06/20 – Short circuit on 440V AC bus bars – arc flash.

3.5 Safety Drills

Reference IMCA Safety Flash 19/21 – Catering crew unfamiliar with fire-fighting systems and emergency stops.

3.5.1 What happened

During a recent incident on a members' vessel, the catering crew were found to be unfamiliar with the firefighting systems and electrical equipment emergency stops.

Galley firefighting systems and emergency stops

The lack of awareness came to light when there was a water leak in the galley during testing of the vessel's fire pumps. The water leaked into electrical equipment and there was the potential for electrocution of the catering crew. The engine room crew were called and were able to safely isolate the galley electrical systems using the power supply emergency stops. The catering crew however were unfamiliar with the emergency stops.

A recent audit finding, on another vessel, further highlighted the lack of awareness of the catering crew about the location and use of firefighting systems in the galley.

3.5.2 Actions to be taken

- Ensure that all catering personnel complete all mandatory familiarisation on joining the vessel.
- Review levels of awareness with your catering crew and if required, cause catering crew to repeat appropriate familiarisation.
- Chief Stewards should regularly emphasise the location and use of galley firefighting systems and emergency stops in daily Toolbox Talks.
- Maintain galley fire drills, and if necessary, increase the frequency of galley-related fire drills to ensure all catering crew have sufficient awareness **and confidence** to use galley-related firefighting systems and electrical emergency stops for galley equipment.
- Ensure emergency stops in the galley are fitted, operational, visible, easily accessed and marked appropriately.

Members may wish to refer to:

- IMCA SF 03/20 – Poor condition of on-board equipment

- IMCA SF 13/19 – Galley electric shock – uncontrolled portable electrical equipment
- IMCA SF 08/21 – Electric shock due to water in electrical equipment.

3.6 Firefighting Appliances

Unfortunately, there are still many instances where firefighting equipment and procedures are not as they should be, all below have increased since last year.

As a reminder:

- **66** vessels did not have vessel-specific manuals and plans for firefighting equipment available or up to date.
- **63** vessels had defects recorded on their firefighting equipment.
- **42** vessels did not have their fixed fire and gas detection systems fully operational or tested regularly.
- **50** vessels were not provided with fixed firefighting equipment in accordance with applicable regulations for the vessel type.
- Within the library of IMCA Safety Flashes, you will find instances of the above failings.
- It is a requirement of SOLAS Reg. II-2/14 that all fire protection equipment must be kept in good order and readily available for use. It is also a requirement of SOLAS Reg. I/11 that any defects which affect the safety of the ship or its continued compliance with statutory requirements are to be reported to the class and the flag administration. A ship is only detained when it is considered unfit to proceed to sea, or the identified defects pose an unreasonable risk to the ship, its crew or the environment.

4 Inspection Report Quality Assurance Process

A Secretariat-led quality assurance process was introduced for inspection reports in August 2022.

Quality assurance has been introduced to assist vessel inspectors in producing a consistent level of reporting, focusing on the presentation of the final report and its usefulness for the reader.

It is not the intention to highlight any one report or inspector; instead, we use the collective review and learning to improve the reporting process. This involves highlighting inconsistencies to the AVI community and making improvements to the report format. The goal is for all stakeholders to be satisfied with the final report. Pleasing all is not easy; readers of the final report may vary from those with full knowledge of the vessel and marine issues to those without experience. Some readers will only look at the first few pages, concentrating on the inspection summary, findings, additional comments and the closing meeting; others, however, will want to read into the report's details.

A minimum of 3% of uploaded reports are independently reviewed annually. This review assesses completion against six categories:

1) Has the report been fully completed?
2) Assess the language, noting that the inspector's first language may not be English.
3) Is the content of the report what we would expect?
4) Concentrating on the findings, have they been well recorded?
5) Has the inspector responded correctly to the questions?
6) Quality and use of photographs (if any).

4.1 Overview of Report Feedback

Since quality assurance reviews started in August 2022, reports from 28 countries have been reviewed. During the past 12-month period, 27 eCMID reports and 21 eMISW reports have been reviewed.

The following table compares the first reporting period and provides a snapshot of inconsistencies found in the reviewed reports.

	2024/25 (%)	2022/23 (%)
Inspection summary stated only port and date of inspection	8	12
Blank lines in the vessel particulars	58	90
Close out meeting mentioned	94	86
Closing meeting report template used	27	24
Disclaimer missing or inadequate	71	58
No confidence that all related guidance notes were considered	25	24
Photographs not used	12.5	24
Includes photographs of certificates, noticeboards or documents	44	N/A
Report had no findings	17	12
Recommendations were provided by the inspector	12.5	10

Table 1 – Report inconsistencies

4.2 Detailed QA Report

4.2.1 Full Completion of Reports

A fully completed report will ensure consistency in the final report and give the reader confidence that the inspection has been diligently completed. Both the eCMID and eMISW report formats have been revised. The revision will help the inspector know when to make a comment in support of individual questions and provide a more reader-friendly report. For this reason, the information in the inspector App, designed to assist the inspector, is not automatically reproduced in the final report.

- 8% of inspection summaries did not contain a brief summary of the inspection. The new versions of M149 and M189 now specifically ask the inspector to provide the vessel operation at the time of the inspection and include a brief summary of the inspection.
- 58% of the reports had at least one blank line in the vessel particulars.
  - It is again anticipated that this anomaly will decrease during the year. It is now implicit for the vessel owner to ensure the vessel details are fully completed. A finding will be generated against the owner if this is not the case.
  - Further 'not applicable' options were introduced during the year.
- 94% of reports mentioned that a closing meeting had been held, with brief details of the meeting included. 27% of those used the optional downloadable closing meeting template.
  - The inspector app includes detailed instructions on the closing meeting for the AVI. These instructions will not be carried over to the final report, improving the reader experience.
- 71% of reports did not include a disclaimer at the end of the report, or if they did, the disclaimer was considered inadequate.
  - This seems to be a disproportionate number of reports and will be a feature for information for inspectors this year.

4.2.2 Use of Language

Considering that the inspector's first language may not be English, the language used within the reports was consistent and generally good. Occasionally, unexplained acronyms and abbreviations were used, which some report readers would struggle to understand.

4.2.3 Report Content

Over several years, additional guidance notes have been developed and added to the report template. These notes contain helpful information and instructions for the inspector. However, they are regularly interpreted differently, leading to inconsistent reporting comments.

The new versions of M149 and M189 will help clarify what is required from the inspector and, therefore, bring consistency to the comments made in the final report.

The guidance notes have been separated and bulleted under the following headings to clarify where comment is required, as follows:

- Note
- Review
- Verify
- Comment
- Provide
- *(Reference)*

The instructions to the AVI have been removed from the final report template. This makes the final report more reader-friendly; most questions are now followed by "When answering the above, the AVI will verify……".

4.2.4 Recording of Findings

Findings, when generated, were reported consistently; however, 17% of reports contained no findings.

4.2.5 Response to Questions

There continue to be examples of questions answered by N/A or N/S without explanation. It is anticipated that the reorganisation of the guidance notes will assist AVIs to provide comments when required.

4.2.6 Use of Photographs

- 12.5% of reports did not make use of photographs; the choice to use photographs is decided by the inspector and is encouraged when they add value to the report.
- 44% of reports contained at least one photograph of certificates, noticeboards or documents. The use of photographs of this type is discouraged as the image is often unreadable, provides little or no additional information, and usually only confirms the answer given to the question by the AVI. To discourage photographs of this type, the ability to add photographs to some questions has been removed in the new version of M149 and M189.

4.3 Resulting System Improvements

The QA review process has resulted in several recommendations now included in M149 and M189:

1) Reordering and categorising the guidance notes attached to questions so that it is clear for the inspector what the eCMID committee consider to be guidance and what is instruction.
2) A separate template is now provided for the final report so that the reader sees the guidance and information notes but not the instructions for the inspector.
3) Encouragement and indication that it is the vessel owner who is responsible for missing information from the vessel particulars, not the inspector.

4) The inspection app defaults to having a closing meeting report and requires an explanation to be given if it is not completed.

5) Detailed instructions on the closing meeting are included in the inspector app, but are not carried forward to the final report.

6) The ability to add photographs to certain questions covering certification and documents has been removed.

5 Summary

The high number of ISM non-conformances revealed in this findings analysis demonstrates very clearly why the eCMID Vessel inspection and Small Vessel Inspection (eCMID and eMISW) are credible and justifiable vessel inspection tools in ensuring that we identify, monitor and drive down unsafe practices which have the potential for accidents and incidents.

IMCA continue to publish this findings analysis to allow the membership to focus on reducing the number of findings on their vessels. It also provides IMCA with areas on which to focus, where further guidance may be required, and to ensure that the guidance already in place reaches those who need it the most. Accredited vessel inspectors (AVIs) should also find this analysis helpful in planning focus areas for their inspections. If we all work together, IMCA is optimistic that we can reduce these numbers.

The IMCA Quality Assurance (QA) analysis of inspection reports was introduced in August 2022. The eCMID report inconsistencies highlighted in Table 1 (Section 4.1 above) must be addressed by the AVI. Many of the inconsistencies identified are quick wins, which can only improve the overall quality of the inspection reports. The new reference notes and guidance for the inspector will also ensure that the inspector is clear on what must be done to satisfy each question, ultimately leading to improved and more consistent reports. So far, the QA review process has resulted in several recommendations for improved guidance to inspectors, training enhancements, and improvements to the inspection app and website. A dedicated IMCA Technical Adviser who carries out the QA work will ensure weak areas are continuously identified and strengthened to improve the overall quality of the eCMID inspection system.

At the start of 2024, an IMCA working group was established to categorise eCMID and eMISW findings using a risk rating for each question.

The benefits to the industry of implementing this are:

- Clients and vessel operators can quickly identify the areas of concern and assess the risks in a more measured way, instead of just by the number of findings.
- The inspector does not allocate the rating, as it is pre-determined by the eCMID Committee and the findings categorisation working group. This removes any potential subjectivity by the inspector.
- This will allow for more in-depth data analysis for the vessel operator – e.g. can quickly identify the high-risk findings in the report.
- A more in-depth IMCA findings analysis report.

The working group completed its task in April 2024, and IMCA released the updated M149 eCMID Vessel Inspection template, Issue 14, in February 2025. The updated M189 eCMID Small Vessel Inspection template is due to be released later in 2025.

Further suggestions for improving the eCMID system, the inspection templates, and the IT platform are always welcome from all users via support@ecmid.com.

Appendix 1 – Full Results of eCMID Findings Analysis

eCMID Findings by Section

Question		Answer Type	%	Risk	Total Reports	No. of vessels
2	**Previous inspections**					
2.1	Has the vessel had an eCMID inspection carried out within the past 12 months?	No	28%		896	251
3	**Certification and publications**					
3.1	Is the vessel clear of conditions of class and any safety related memoranda?	No	17%	High	896	156
3.2	Are all the statutory and class certificates in date?	No	9%	High	896	84
3.3	Does the vessel maintain a library of the mandatory procedures and publications?	No	3%		896	30
4	**Safety management system**					
4.10	Has a technical inspection been conducted by the vessel operator?	No	8%		896	72
4.5	Does the system ensure that all non-conformances are closed out in an agreed period?	No	6%		896	51
4.8	Does the vessel operator have a drug and alcohol policy?	No	3%		896	28
4.4	Is there a system in place for reporting non-conformances to the vessel operator?	No	3%		896	25
4.9	Is there evidence that the workforce/marine crew is fully involved in safety management?	No	3%	High	896	23
4.1	Does the vessel have a valid International Safety Management (ISM) certificate?	No	2%	High	896	20
5	**Health, safety and environment (HSE)**					
5.22	Does the pilot ladder have a valid certificate on board?	No	11%	High	894	98
5.17	Are procedures for control stowage and handling of chemicals and flammable/combustible materials in place and being consistently applied?	No	11%	High	896	94
5.23	Are there records which show that the pilot ladder has been inspected before every use in addition to inspections as per the ships planned maintenance system?	No	10%		894	87
5.12	Is entry into enclosed spaces controlled?	No	8%	High	896	75
5.8	Is risk assessment training provided to personnel on board?	No	8%		896	68
5.1	Is there evidence of full compliance with the company's HSE management system?	No	7%	High	896	62

Question		Answer Type	%	Risk	Total Reports	No. of vessels
5.18	Is the vessel provided with its own safe means of access?	No	7%	High	896	60
5.15	Is there a lock out/tag out policy in place?	No	6%	High	896	57
5.21	Does the vessel have a systematic approach to dropped object prevention in place?	No	6%		896	51
5.9	Is there a formal management of change policy in place?	No	5%		896	42
5.19	Is a culture of safety promoted on board and ashore with the company?	No	4%		896	39
5.5	Does the vessel have a system for reporting and recording incidents accidents and near misses?	No	4%		896	36
5.11	Is the permit system effectively applied on board?	No	4%		896	33
5.7	Are risk assessments conducted on board?	No	4%	High	896	31
5.20	Have measures been taken to prevent personnel being exposed to noise levels that exceed 80dB (A)?	No	4%		896	31
5.3	Are personnel joining the vessel given an appropriate safety induction?	No	3%	High	896	30
5.10	Is a permit to work (PTW) system in use on board?	No	3%	High	896	30
5.13	Are specific procedures used for hot work?	No	3%		896	30
5.2	Is there a company personal protective equipment policy?	No	3%		896	29
5.4	Is there a bridging document or equivalent between vessel owners and external companies for contractors' employees working on board to ensure responsibilities for health and safety are clearly defined and safety management systems aligned?	No	3%		896	24
5.6	Do vessel specific emergency procedures exist covering for example fire explosion grounding pollution?	No	3%	High	896	23
5.14	Is all hot work equipment in good order?	No	3%		121	3
5.16	Is there an asbestos management system?	No	2%		896	19
6	**Maritime Labour Convention 2006**					
6.8	Are there systems and procedures in place to ensure the proper housekeeping and cleanliness of accommodation galley and messroom?	No	6%		896	56
6.10	Are there sufficient medical supplies on board for the medical care of seafarers?	No	6%		896	51
6.9	Is the vessel's fresh water supply tested regularly for legionella and other bacteria?	No	5%		121	6

Question		Answer Type	%	Risk	Total Reports	No. of vessels
6.5	Is there evidence of an established committee(s) for occupational safety and health protection and accident prevention with meetings conducted regularly?	No	4%		896	32
6.11	Is there a formalised company system for recording work and rest hours?	No	3%	High	896	25
6.6	Are the certificates of qualification and training of cooks and catering staff in order?	No	2%		896	20
6.7	Is a copy of recruitment and placement service certificate available on board?	No	2%		896	20
6.1	Is a copy of the MLC 2006 available on board?	No	2%		896	19
6.4	Is the collective bargain agreement (CBA) or equivalent available on board?	No	2%		896	19
6.2	Are the crew provided with onboard complaint procedure?	No	1%		896	11
6.3	Is a signed copy of the seafarer employment agreement provided to all seafarers?	No	1%		896	10
7	**Ship and cyber security**					
7.14	Has the vessel or the company been free from any cyber security incident involving ship systems in the last 12 months?	No	16%		896	141
7.20	Are there formal cyber security incident response disaster recovery and business continuity plans in place and regularly tested/drilled?	No	8%		896	75
7.15	Is there a formal training and familiarisation programme in place for the shipboard crew on cyber security and procedures?	No	7%		896	62
7.18	Is there a formal process in place for equipment disposal including data destruction?	No	4%		896	39
7.8	Does the vessel have a cyber security management system and/or a cyber security plan?	No	4%	High	896	38
7.9	Are vessel systems logically and physically separated from information systems? Do logical separations include protective devices such as firewalls network monitoring anti-malware products and intrusion detection applications?	No	4%		896	32
7.10	Is connection of personal IT devices such as phones tablets and laptops to the ships network controlled?	No	3%		896	29
7.12	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?	No	3%		896	26
7.16	Are usernames and passwords for information systems and vessel systems controlled and managed?	No	3%		896	25

Question		Answer Type	%	Risk	Total Reports	No. of vessels
7.11	Are there formal interfacing procedures and protocols in place for visitors, technicians port officials etc. to use their equipment on board?	No	3%		896	23
7.17	Is the stability programme if used on a dedicated computer and not connected to network?	No	3%		896	23
7.7	Does the vessel have specific port security procedures covering visitors storing and vessel gangway watchkeeping requirements?	No	2%		896	17
7.5	Are personnel joining or visiting the vessel given a security induction?	No	2%		896	15
7.2	If the vessel is not required to have an approved ship security plan because of vessel's tonnage or trading area are there any security procedures in place?	Yes	2%	High	896	14
7.19	Are there formal procedures in place for remote monitoring equipment fitted on the vessel?	No	2%		896	14
7.3	Is there an appointed ship security officer and company security officer?	No	2%		896	13
7.4	Is the vessel's security operating level clearly indicated to all personnel?	No	1%		896	12
7.1	If the vessel is required to have an approved ship security plan that meets ISPS requirements, is it held on board?	No	1%	High	896	11
7.13	Are there measures to ensure the integrity of electronic chart display systems if fitted?	No	1%		896	5
8	**Crew management**					
8.9	Are there regular crew appraisals and personal development initiatives in place?	No	3%		896	29
8.5	Does the vessel operator have a competency assessment process in use on board?	No	3%		896	22
8.2	Are the requirements of the safe manning certificate being met?	No	2%	High	896	20
8.1	Based on a random sample is the data in the crew qualification matrix accurate?	No	2%	High	896	17
8.8	Are the crew's medical certificates valid?	No	2%		896	17
8.7	Are the crew appropriately qualified for the operations and equipment on board?	No	2%		896	14
8.4	Do critical personnel (e.g. captain chief officer and chief engineer) complete a handover period including familiarisation appropriate to their position?	No	1%		896	12
8.3	If the master has been promoted within the last 12 months did they receive appropriate pre-command training?	No	1%		896	9
8.6	Has provision been made to provide crew with medical care training?	No	1%		896	5

Question		Answer Type	%	Risk	Total Reports	No. of vessels
10	**Life-saving appliances (LSA)**					
10.10	Is LSA equipment free from defects?	No	7%	High	896	61
10.7	Is the man overboard/rescue boat where fitted operational and defect free?	No	5%	High	896	48
10.3	Are all fitted life rafts available for immediate use?	No	5%	High	896	40
10.8	Are training manuals on board describing LSA equipment and its correct operation?	No	4%		896	38
10.2	Are survival craft including life rafts planned maintenance tasks up to date?	No	3%		896	30
10.6	Are sufficient serviceable life jackets available?	No	3%	High	896	30
10.11	Is there a ship-specific plan and procedure for the recovery of persons from the water?	No	3%		896	25
10.4	Are muster lists posted and correct?	No	2%		896	14
10.5	Are sufficient serviceable immersion suits available?	No	2%	High	896	14
10.1	Are all lifeboats operational and defect free?	No	2%	High	896	13
10.9	Are ship-specific life-saving equipment maintenance instructions available?	No	2%		896	13
11	**Firefighting appliances**					
11.7	Are vessel specific manuals and plans for firefighting equipment available and up to date?	No	7%		896	66
11.2	Is sufficient fire fighting equipment available for use and defect free?	No	7%	High	896	63
11.1	Is the vessel provided with fixed firefighting equipment in accordance with applicable regulations for vessel type?	No	6%	High	896	50
11.4	Are fixed fire and gas detection systems fully operational and tested regularly?	No	5%	High	896	42
11.6	Are measures in place to effectively isolate ventilation to enclosed spaces e.g. engine room accommodation galley storerooms?	No	4%	High	896	33
11.3	Are records of firefighting equipment maintenance available?	No	2%		896	21
11.5	Are vessel personnel familiar with the operation of firefighting life saving and other emergency equipment?	No	2%	High	896	18
12	**Pollution prevention**					
12.1	Are SOPEP/SMPEP drills held at regular intervals?	No	8%		896	70
12.2	Are arrangements in place to prevent any spillages entering the water?	No	6%	High	896	57

Question		Answer Type	%	Risk	Total Reports	No. of vessels
12.3	Is the bilge oily water separator (OWS)/filtering system in good working order?	No	5%	High	896	44
12.4	Does the vessel have a waste/garbage management plan?	No	3%		896	28
12.6	Are oil record book(s) correctly completed and up to date?	No	3%	High	896	28
12.9	Is a list of equipment containing ozone-depleting substances available?	No	2%		896	18
12.5	Does the vessel have a ballast water management plan?	No	1%		896	12
12.8	Are bunker delivery notes and representative sample records available?	No	1%		896	11
13	**General appearance**					
13.2	Are there arrangements in place to address the general condition visual appearance and cleanliness of the weather decks?	No	8%		896	73
13.3	Are all deck openings including watertight doors and portholes defect free and capable of being properly secured?	No	8%	High	896	70
13.6	Are the medical facilities adequate?	No	6%		896	54
13.4	Are there arrangements in place to address the general condition visual appearance and cleanliness of the accommodation?	No	6%		896	52
13.7	Is the vessel's internal and external deck lighting appropriate to the type of vessel?	No	5%		896	46
13.1	Are there arrangements in place to address the general condition visual appearance and cleanliness of the hull?	No	3%		896	27
13.5	Is there evidence to show that the vessel is free of animal or insect infestation?	No	2%		896	21
14	**Bridge, navigation and communications equipment**					
14.13	Is the standard equipment including bridge communications and navigation equipment as listed in SOLAS available for use and free from defect?	No	7%	High	896	62
14.9	Is gyro and magnetic compass error log maintained and up to date?	No	7%		896	59
14.7	Has a system been established to ensure that nautical publications charts and information are both on board and current?	No	5%	High	896	43
14.12	Are GMDSS logs maintained and up to date?	No	4%		896	37

Question		Answer Type	%	Risk	Total Reports	No. of vessels
14.8	Is a comprehensive passage plan available for the previous voyage and does it cover the full voyage from berth to berth?	No	4%	High	896	33
14.6	Has the master written their own standing orders and are night orders being completed?	No	3%		896	30
14.4	Are auto manual and emergency steering changeover procedures displayed?	No	3%		896	29
14.11	Is a maintenance programme for radio and electronic equipment in place?	No	3%		896	28
14.5	Is the deck logbook fully maintained both at sea and in port?	No	2%	High	896	13
14.3	Are vessel manoeuvring characteristics clearly displayed or immediately available in a reference document on the bridge?	No	1%		896	10
14.2	Does the vessel have written procedures for entry into a 500-metre zone?	No	1%		896	9
14.1	Is the vessel provided with operator policy statements instructions and procedures with regard to safe navigation?	No	1%		896	7
14.10	Are navigation warnings and weather forecasts available?	No	1%		896	5
15	**Machinery space**					
15.14	Is main auxiliary and emergency plant reported to be fully operational?	No	10%	High	896	92
15.18	Are all machinery spaces clean and free from obvious leaks?	No	7%	High	896	65
15.5	Is there an inventory of spare parts with minimum stock levels defined?	No	7%		896	59
15.35	Is there evidence that safe working practices are being consistently applied to machinery spaces?	No	7%		896	59
15.2	Are critical systems identified within the planned maintenance system?	No	7%	High	896	58
15.24	Do switchboards have insulated decking or rubber mats to the front and rear?	No	6%		896	51
15.3	Does the planned maintenance system include predictive maintenance techniques such as fuel and lube oil analysis and/or vibrations analysis?	No	6%		896	50
15.25	Are switchboards free from earth faults?	No	6%		896	49
15.1	Is there a planned maintenance system in use?	No	5%	High	896	45
15.34	Is the engine room workshop in good order?	No	5%		896	45
15.12	Is a blackout recovery procedure readily available?	No	5%	High	896	44

Question		Answer Type	%	Risk	Total Reports	No. of vessels
15.13	In the case of a DP vessel are copies of the ASOG/CAMO/TAMO and DP checklists available in the engine control room.	No	5%		896	44
15.16	Is the bilge pumping system fully operational?	No	5%	High	896	41
15.4	Are engine room emergency stops shut-offs and quick closing valves clearly marked and regularly tested with tests recorded?	No	5%	High	896	40
15.19	Is all pipework in good condition?	No	4%		896	38
15.10	If the vessel is certified for UMS is there evidence available to show that the engineers' call alarms are regularly tested?	No	3%		896	30
15.31	Are instructions for the changeover of steering gear from remote to local operation clearly displayed in steering flat?	No	3%		896	29
15.8	If the chief engineer has produced standing orders have these been countersigned by all engineers?	No	3%		896	24
15.21	Are surfaces with temperatures above 220Â°C which may be impinged as a result of a fuel or oil system failure properly insulated?	No	3%	High	896	23
15.30	Is the steering gear/steering compartment free from defects?	No	3%	High	896	23
15.26	Are cable runs and trays in good condition?	No	3%		896	22
15.20	Are sounding pipes for double bottom tanks and gauge glasses fitted with self-closing devices and do these operate freely?	No	2%		896	20
15.27	Are emergency electrical power supplies fully operational?	No	2%	High	896	19
15.22	Where insulation is installed is it intact and free of fuel or oil contamination?	No	2%		896	16
15.7	Is the engine logbook fully maintained both at sea and in port?	No	2%		896	15
15.28	Is the emergency generator fuel tank full?	No	2%	High	896	15
15.33	Are power operated watertight doors provided with operating instructions and warning notices?	No	2%		896	13
15.32	Are the steering gear communications systems in good order?	No	1%		896	12
15.17	Is the bilge alarm system fully operational?	No	1%	High	896	10
15.11	Is the number of certified engineers sufficient to perform a 24-hour watch as the ship's operation may require (i.e. DP operations)?	No	1%		896	9

Question		Answer Type	%	Risk	Total Reports	No. of vessels
15.29	Does the emergency generator have simple instructions for manual operation and they are clearly displayed?	No	1%		896	9
15.23	Are main switchboard generators and critical electrical equipment protected against water spray?	No	1%		896	7
15.6	Are manufacturers' manuals available on board for all equipment in a language understood by the relevant technical personnel?	No	1%		896	5
16	**Mooring, towing and lifting equipment**					
16.4	Does the company have a lifting equipment management system in place?	No	13%		896	113
16.1	Are mooring/towing practices appropriate for the size of vessel?	No	6%		896	52
16.2	Is all mooring/towing equipment available for use and defect free?	No	6%		896	51
16.3	Are anchors cables and securing arrangements available for use and defect free?	No	4%	High	896	32
16.5	Does the vessel have a certified cargo securing manual?	No	3%		896	28
17	**Construction and stability**					
17.1	Is a survey report file maintained on board?	No	4%		896	38
17.2	Is there an approved stability book?	No	2%		896	21
17.3	Are procedures in place to govern vessel stability through all stages of vessel operations?	No	2%		896	16
S1	**Dynamic positioning (DP) vessels**					
S1.3	Have the DP annual trials been witnessed by an IMCA Accredited DP Practitioner?	No	26%		450	116
S1.2	Have DP trials been carried out within the past 12 months and is there a copy of the trials report on board?	No	16%		450	72
S1.5	Regarding the vessel's FMEA are all the below criteria satisfied?	No	11%	High	450	49
S1.10	Do the key DP personnel take part in onboard training and drills involving various DP scenarios?	No	7%		450	30
S1.7	Does the vessel have on board a DP operations manual?	No	5%		450	23
S1.13	Is the DP equipment contained in a planned maintenance system?	No	5%		450	23
S1.14	Are activity specific operating guidelines in place and available?	No	4%		450	19
S1.1	Is the vessel's DP class notation free from any class-imposed restrictions?	No	4%	High	450	18

Question		Answer Type	%	Risk	Total Reports	No. of vessels
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?	No	4%		450	18
S1.9	Do the DPOs have the appropriate and valid DP qualification?	No	3%	High	450	15
S1.11	Does the vessel maintain a DP incident log?	No	3%		450	14
S1.6	Does the vessel have suitable DP checklists?	No	2%		450	11
S1.8	Do the DPOs have access to the DP capability plots?	No	2%		450	9
S1.15	Does the vessel have a DP data log?	No	1%		450	6
S2	**Anchor handling vessels (AHVs)**					
S2.2	Are the anchor handling equipment maintenance records up to date?	No	10%		83	8
S2.9	Are there records held on board which confirm that winch operators have been formally trained?	No	10%		83	8
S2.10	Are the maximum acceptable vertical and horizontal transverse forces defined and posted?	No	10%		83	8
S2.5	Is the deck area sheathing free from any significant damage?	No	7%		83	6
S2.3	Is a clear deck policy in place for anchor handling?	No	5%		83	4
S2.7	Is there a notice posted on the bridge for emergency release procedures?	No	5%	High	83	4
S2.1	Are the anchor handling winches appropriately certified?	No	4%	High	83	3
S2.4	Is the anchor handling deck area clearly visible from the bridge?	No	1%		83	1
S3	**Offshore supply vessels (OSVs)**					
S3.13	Are tugger winches and wires certificated and well lubricated?	No	10%	High	154	15
S3.8	Is the deck sheathing area free from damage that could cause potential hazards to personnel?	No	6%		154	9
S3.20	Are the cargo tank system valves reported to be operational?	No	5%		154	7
S3.4	Is there appropriately certified securing equipment available?	No	4%		154	6
S3.17	Are there procedures for the cleaning of cargo tanks to prevent contamination?	No	3%		154	5
S3.6	Is the deck area clearly visible from the bridge control position?	No	3%		154	4
S3.15	Are there documented procedures for the sampling and analysis of cargo tank contents?	No	3%		154	4

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S3.14	Are cargo tank inspection records available?	No	2%		154	3
S3.21	Are the dry cargo tank systems fitted with operational pressure gauges and relief valves?	No	2%		154	3
S3.3	Is there a cargo plan identifying all classes of permitted cargo including dangerous goods?	No	1%		154	2
S3.7	Is there adequate lighting of the deck area?	No	1%		154	2
S3.11	Is there a safe means of access to manifolds?	No	1%		154	2
S3.12	Is deck pipework free from damage and heavy corrosion?	No	1%		154	2
S3.16	Are the main and stand-by agitators/recirculation system for oil-based mud tanks reported to be operational?	No	1%		154	2
S3.18	Are the cargo tanks appropriately identified and marked with safe working pressure?	No	1%		154	2
S3.1	Is PPE available for crew appropriate to the types of cargo working conditions?	No	1%		154	1
S3.2	Are there cargo discharge rates available for all classes of liquid cargo?	No	1%		154	1
S3.5	Is the relevant industry guidance on board for the safe management and handling of cargo?	No	1%		154	1
S3.9	Is cargo deck perimeter free from projections likely to snag cargo while being transferred?	No	1%		154	1
S3.19	Is there safe access to the cargo tanks?	No	1%		154	1
S5	**Standby vessels (SBVs) (emergency response rescue vessels (ERRVs))**					
S5.4	Are the survivor areas clean and tidy and ready for immediate use?	No	4%		56	2
S5.6	Are all means of recovering survivors/casualties in good order?	No	4%		56	2
S5.7	Are sufficient suitable medical stores available and regularly checked?	No	4%		56	2
S5.10	Is the ongoing onboard training programme being followed?	No	4%		56	2
S5.1	Has the SBV been surveyed for compliance with relevant industry regulations/guidelines?	No	2%		56	1
S5.3	Is the SBV operating in accordance with relevant industry requirements?	No	2%		56	1
S5.5	Are the survivor ready use provisions available?	No	2%		56	1
S5.11	Are there procedures in place to identify any prevention of fire and emergency escape or rescue and recovery performance standards for the relevant installation(s)?	No	2%		56	1
S5.12	Does the helicopter winching zone have appropriate markings and non-slip coatings?	No	2%		56	1

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S6	**Survey vessels (including offshore seismic survey)**					
S6.4	Are deck and bulkhead safety/warning markings for survey equipment deployment/recovery in place?	No	9%		66	6
S6.6	Is there a man overboard alarm system fitted and operational on the slipway/streaming/back deck?	No	9%		66	6
S6.1	Is there a risk assessment for the survey equipment preparation and streaming area/slipway/recovery position/back deck?	No	6%		66	4
S6.10	Does any lifting plant associated with the survey equipment have an appropriate planned maintenance system?	No	6%		66	4
S6.3	Is there sufficient specialist safety equipment available in accordance with the risk assessment requirements?	No	5%		66	3
S6.9	If any lifting plant is associated with the survey equipment is it in full working order?	No	5%		66	3
S6.11	Does any lifting plant associated with the survey equipment have the required certification?	No	5%		66	3
S6.33	Are there any hull penetrations for survey equipment and if so are they class approved and are procedures available for their operation and maintenance?	No	5%		66	3
S6.2	Does the risk assessment include all relevant survey equipment carried on board including new/recently installed systems?	No	3%		66	2
S6.29	Are there procedures for transfer of personnel into survey workboats at sea?	No	3%		66	2
S6.7	Is there adequate man overboard life-saving equipment fitted and operational?	No	2%	High	66	1
S6.8	Are there adequate communications facilities available for bridge to back deck and surveyors?	No	2%		66	1
S6.18	Is there an emergency stop fitted for all winches and hydraulic equipment?	No	2%	High	66	1
S6.20	Are high pressure air warning signs fitted in all appropriate access routes to the gun deck?	No	2%		66	1
S6.21	Is there a lock out/tag out procedure for the HP system?	No	2%		66	1
S6.22	Are there procedures for protecting crew from electrocution from active or powered gun arrays under repair, i.e lock out/tag out system for gun array power?	No	2%		66	1
S6.24	Is there a system for testing the integrity of air compressor and HP air systems?	No	2%		66	1
S6.27	Are there procedures for protecting divers working in the vicinity by preventing the use of air guns?	No	2%		66	1
S6.28	Are there procedures for “soft starts” to minimise potential harm to marine mammals?	No	2%		66	1

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S6.30	Are there procedures for launch operation and recovery of the ship's small boats?	No	2%		66	1
S6.34	Are procedures available for dealing with any hazardous substances used in survey equipment?	No	2%		66	1
S6.35	Are MARPOL instructions and spillage cleaning equipment available for all survey equipment systems?	No	2%		66	1
S7	**Diving support vessels**					
S7.8	Has a Diving Equipment System Inspection Guidance Note (DESIGN) document been completed by an independent third party within the past 12 months?	No	15%		20	3
S7.2	Is there safe access available around the diving system?	No	10%		20	2
S7.7	Has the PLC element of the diving system been assessed and verified?	No	10%		20	2
S7.4	Is a hyperbaric evacuation plan (HEP) in place?	No	5%	High	20	1
S8	**Pipe lay and cable lay vessels**					
S8.4	Is the lay system integrated with the vessel's DP system?	No	21%		32	7
S8.11	Is there an FMEA which covers the pipelay system?	No	17%		32	6
S8.1	Is there documented evidence that the vessel's crew have received training for the operation and maintenance of the onboard laying equipment?	No	10%		32	3
S8.3	Is there a record of load monitoring and alarm system testing?	No	10%		32	3
S8.6	Is there documented evidence that shows local emergency stops for the laying system are regularly tested?	No	7%		32	2
S8.7	Are all the lay system operational procedures and maintenance manuals available on board?	No	7%		32	2
S8.8	Are all the components of the lay system included in the vessel's planned maintenance system?	No	7%		33	2
S8.9	Are hang-off platforms and other lay system platforms in good order?	No	3%		34	1
S9	**Autonomous underwater vehicle (AUV) and remotely operated vehicles (ROV)**					
S9.17	Has the ROV spread been subject to an independent audit under IMCA R006 or a similar scheme?	No	23%		74	17
S9.14	Is all lifting equipment operated safely and are all safety measures in place?	No	13%		74	9
S9.4	Are deck and bulkhead safety/warning markings for AUV/ROV plant and equipment deployment/recovery in place?	No	8%		74	6

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S9.3	Is there sufficient specialist safety equipment available in accordance with the risk assessment requirements?	No	5%		74	4
S9.7	Is there a man overboard alert procedure and/or system for the slipway/working deck/LARS deck?	No	5%		74	4
S9.11	Are guardrails fitted appropriately on the ROV working deck?	No	5%		74	4
S9.2	Does the risk assessment include all relevant AUV/ROV plant and equipment systems carried on board including new/recently installed systems?	No	4%		74	3
S9.5	Is there CCTV surveillance available on the bridge of the working deck/slipway/LARS area?	No	4%		74	3
S9.16	Are electrical safety measures and procedures in place for all AUV/ROV systems?	No	4%		74	3
S9.6	Is there a remote video link from the ROV operating station to other relevant control stations such as dive control and bridge?	No	3%		74	2
S9.8	Is there adequate man overboard life-saving equipment fitted and operational?	No	3%	High	74	2
S9.12	Is there adequate provision for working at height on the AUV/ROV working deck?	No	3%		74	2
S9.13	Is there adequate provision for firefighting on the AUV/ROV working deck?	No	3%		74	2
S9.18	Are emergency measures and procedures in place for all AUV/ROV systems?	No	3%		74	2
S9.1	Is a risk assessment procedure available for launch and recovery of the AUV/ROV system?	No	1%		74	1
S9.9	Are communications fitted and available between bridge and working deck?	No	1%		74	1
S9.10	Are communications fitted and available between other relevant control stations (dive survey) and working deck?	No	1%		74	1
S9.15	Is documentation available for all AUV/ROV systems?	No	1%		75	1
S9.19	Are procedures for dealing with hazardous substances available for those used in AUV/ROV systems?	No	1%		76	1
S9.20	Are there adequate arrangements for preventing any hydraulic oil leakages from entering the sea?	No	1%		77	1
S9.21	Are MARPOL instructions and spillage cleaning equipment available for all AUV/ROV systems?	No	1%		78	1
S10	**Helicopter operations**					0
S10.3	Is the helideck appropriately certified and approved?	No	16%	High	139	22
S10.6	Are all personnel required for helideck operations trained in accordance with relevant requirements?	No	9%		139	12

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S10.5	Is the helideck firefighting equipment available for immediate use and free of defects?	No	7%	High	139	10
S10.4	Are helideck markings and identification panels/signs in good condition not obscured by paraphernalia and subject to a maintenance plan?	No	4%		139	5
S10.9	Is there a list of helicopter types which can be operated from the vessel's helideck?	No	3%		139	4
S10.11	If a heli-fuel skid is fitted is it certified for use?	No	2%		139	3
S10.1	Are procedures for helicopter operations available on board?	No	1%	High	139	2
S10.8	Are procedures in place for the completion of preparations for helicopter flying operations?	No	1%		139	2
S10.2	Are procedures for helicopter emergencies available on board?	No	1%	High	139	1
S10.7	Are procedures in place for the safe embarkation/disembarkation of passengers?	No	1%		139	1
S11	**Accommodation vessels**					
S11.8	Is there an FMEA to cover the gangway system?	No	11%	High	55	6
S11.4	Is a fixed fire alarm and sprinkler system fitted in the accommodation areas?	No	9%	High	55	5
S11.1	Is the gangway and/or boat landing monitored and operated by appropriately certified marine personnel during personnel transfer operations?	No	2%		55	1
S11.2	Are personnel appropriately briefed in the vessel's safety and personnel safety during personnel transfer operations?	No	2%		55	1
S11.7	Is there a person on board identified as being in charge of personnel welfare?	No	2%		55	1
S12	**Jack-up vessels**					
S12.4	Do the longitudinal and transverse inclinometers have a valid calibration certificate?	No	19%		42	8
S12.2	Does the vessel have a MODU/MOU certificate?	No	14%		42	6
S12.3	Are the leg height marks (if fitted) clearly visible from a designated point on the vessel?	No	10%		42	4
S12.5	Has/have the jacking engineer(s) received formal training in jack-up operations including fundamentals of jack-up soil conditions?	No	7%		42	3
S12.13	Does the vessel have documented emergency procedures route and site contingency plans and a site-specific emergency response plan?	No	5%		42	2

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S12.10	Does the vessel have the appropriate site data for the working location?	No	2%	High	42	1
S13	**Heavy lift vessels**					
S13.11	Is there an FMEA to cover the ballast and bilge system?	No	12%		65	8
S13.4	Are the draught gauges operational and certificated?	No	6%		65	4
S13.6	Are there documented training and exercises (normal and emergency) covering stability issues with respect to the heavy lift operation?	No	6%		65	4
S13.9	Is there a procedure to record lightship additions and does this refer to the impact on stability?	No	6%		65	4
S13.8	On semi-submersible and submersible vessels are all watertight doors hatches and other openings in working order?	No	3%		65	2
S13.1	Does the vessel have a training and operation scheme for the ballast control console?	No	2%		65	1
S13.3	Is there a working and calibrated inclinometer available at the ballast control console?	No	2%		65	1
S13.7	Are the crane alarm systems operational and tested regularly?	No	2%	High	65	1
S15	**Barges (non-self-propelled)**					
S15.4	Is there an emergency anchor available?	No	8%		24	2
S15.1	Is the main towing bridle including chains/wires/shackles/Smit brackets and recovery winch certificated and in satisfactory condition?	No	4%		24	1
S15.8	Is the deck equipment/machinery (if fitted) in a satisfactory condition?	No	4%		24	1
S16	**Gravel discharge, dredgers and trenching**					
S16.3	Is cargo handling/specialist equipment and ship fittings in good working order?	No	6%		54	3
S16.4	Does the vessel have structured competence and currency training for the relevant specialist operations?	No	6%		54	3
S16.9	Can draught marks be seen?	No	4%		54	2
S16.1	Are there documented operational and safety procedures for all relevant discharging dredging and trenching operations?	No	2%		54	1
S16.5	Does the vessel have a copy of the class-approved cargo operations manual on board?	No	2%		54	1

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S19	**Walk to work**					
S19.2	Has regular testing of the FMEA been undertaken and all findings closed out?	No	21%		57	12
S19.1	Does the walk to work system have an FMEA?	No	19%	High	57	11
S19.11	Is there evidence of the conduct of W2W system emergency response drills covering different possible scenarios?	No	18%		57	10
S19.9	Is the W2W system included in the vessel operator's safety management system (SMS) from an emergency preparedness perspective?	No	11%	High	57	6
S19.3	Is there a dedicated and backup system for communication between the gangway and key areas for example bridge and engine room?	No	9%		57	5
S19.7	Is there a walk to work operations manual in place?	No	9%		57	5
S19.4	For permanent installations are the walk to work systems integrated into the vessel's planned maintenance system?	No	7%		57	4
S19.6	Are there critical spares held on board for the walk to work system?	No	7%		57	4
S19.8	Are logs maintained during W2W operations to record events?	No	5%		57	3
S19.12	Is there evidence of specific crew training and competence on the normal and emergency use of the W2W system?	No	5%		57	3
S19.5	For mobile systems are there critical maintenance routines in place?	No	2%		57	1
S19.13	Is there a proactive system in place to report record and learn from W2W related incidents/events?	No	2%		57	1
S20	**Hybrid battery systems for DP vessels**					
S20.6	Have the crew attended a type-specific course for the operation and maintenance of the hybrid system fitted?	No	45%		38	17
S20.7	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?	No	32%		38	12
S20.16	Is there evidence of conducting hybrid battery system emergency response drills covering different possible scenarios?	No	21%		38	8
S20.9	Are spares held on board for the hybrid battery system?	No	16%		38	6

Question	Answer Type	%	Risk	Total Reports	No. of vessels
S20.13 Do the ASOG CAM and TAM modes address hybrid DP operations?	No	13%		38	5
S20.8 Are maintenance routines in place for hybrid battery systems?	No	8%		38	3
S20.5 Has all associated DP documentation on board been updated to include the hybrid battery system?	No	5%		38	2
S20.10 Is a hybrid battery system operations manual in place?	No	5%		38	2
S20.11 Are records of battery history maintained?	No	5%		38	2
S20.12 Is adequate signage on display?	No	3%	High	38	1
S20.14 Are regular hybrid battery system endurance tests carried out and documented?	No	3%		38	1

Appendix 2 – Full Results of eMISW Findings Analysis

Question		Answer Type	%	Risk	Total Reports	No. of vessels
2	**Certificates and publications**					
2.1	Is the vessel clear of conditions of class port/flag state and any safety related memoranda?	No	6%	Other	1000	55
2.3	Are all statutory certificates issued by RO or flag state valid and in date?	No	6%	Other	1000	55
2.4	Does the vessel carry valid certificates of insurance?	No	2%	Other	1000	22
2.2	Is the vessel free from any pending conditions of class or pending class memoranda?	No	1%	Other	1000	12
2.5	If the vessel is required to carry IMDG cargo is a valid document of compliance for carriage of dangerous goods on board?	No	1%	Other	1000	9
3	**Inspection**					
3.2	Has the vessel a copy of the latest eCMID Small Vessel inspection (formerly eMISW) on board?	No	4%	Other	1000	43
4	**Logbooks**					
4.1	Does the vessel have appropriate logbook(s) (e.g. official/deck/radio/engine)?	No	5%	Other	1000	45
5	**Weather-tight integrity**					
5.10	Is the vessel clear of any evidence of water leaking into the below decks?	No	24%	Other	1000	235
5.6	Are all weathertight closures to ventilators in full working order?	No	3%	Other	1000	28
5.2	Are doors located on or above the weather deck which give access to spaces below weather-tight and able to be operated from either side?	No	3%	Other	1000	26
5.1	Is it possible to secure all openings to prevent the ingress of water whilst at sea?	No	2%	Other	1000	20
5.4	Are blanks available for securing in place in the event of breakage of a skylight?	No	1%	Other	1000	14
5.7	Does the hull and structure of the vessel appear in a good state of repair?	No	1%	Other	1000	12
5.5	Can all opening port-lights be effectively secured?	No	1%	Other	1000	6
5.3	If there are any opening skylights fitted can they be effectively secured from either side?	No	1%	Other	1000	5
5.9	Are sea inlets and discharges below the waterline fitted with a seacock or other effective means of closure?	No	0%	Other	1000	2
5.11	If the vessel has a self-righting capability are all safety criteria being met?	No	0%	Other	1000	2

Question		Answer Type	%	Risk	Total Reports	No. of vessels
5.8	When a deck is fitted with bulwarks such that water may be trapped are there effective draining ports?	No	0%	Other	1000	1
6	**Machinery and electrical**					
6.6	Are the machinery spaces free from fuel or oil leaks?	Yes	26%	Other	1000	255
6.7	Are the bilges empty and free from oil residue?	No	6%	Other	1000	63
6.22	Is the engine room free from untreated hazards?	No	6%	Other	1000	56
6.23	Does the vessel have a planned maintenance system in place covering critical equipment and spares?	No	5%	Other	1000	51
6.1	Are engine/generator machinery and spaces clean and well maintained?	No	3%	Other	1000	31
6.13	Is there adequate and appropriate PPE for personnel checking/maintaining the batteries (e.g. face shields rubber gloves)?	No	3%	Other	1000	26
6.5	Is there a safe means of isolating the fuel supply in the event of an emergency?	No	2%	Other	1000	21
6.18	Is an operating bilge alarm fitted in watertight spaces containing machinery or in cargo holds?	No	2%	Other	1000	21
6.4	Are there means available to effectively control fuel spillages or leaks from permanent or temporary equipment?	No	2%	Other	1000	20
6.15	If steering by remote control are there effective means of emergency steering?	No	2%	Other	1000	20
6.21	Are maintenance records available for the onboard equipment?	No	2%	Other	1000	20
6.17	Is at least one bilge pump available for duty in an emergency?	No	2%	Other	1000	19
6.24	Is the external fuel transfer system in a well maintained and operational condition?	No	2%	Other	1000	19
6.10	Are electrical systems protected from water?	No	2%	Other	1000	18
6.20	Are adequate tools and the manufacturers recommended emergency spares available for the machinery?	No	2%	Other	1000	18
6.16	Are there two fully working bilge pumps?	No	1%	Other	1000	13
6.9	Are there safe means of isolating electrical supplies?	No	1%	Other	1000	12
6.8	When batteries are the sole means of starting the propulsion engine are there at least two sets of batteries available?	No	1%	Other	1000	11
6.19	Are operating manuals available for the machinery?	No	1%	Other	1000	10

Question		Answer Type	%	Risk	Total Reports	No. of vessels
6.14	Is effective emergency lighting provided to allow escape from below/under-deck/after deck to allow essential activities to be conducted?	No	1%	Other	1000	9
6.3	Are vent pipes for fuel and lube oil tanks fitted with a flame or spark arrestor?	No	1%	Other	1000	8
6.12	Are all batteries secured firmly to prevent movement?	No	1%	Other	1000	6
6.11	Are battery spaces adequately ventilated?	No	0%	Other	1000	4
6.2	Are vent pipes for fuel tanks protected against water ingress by a goose neck or other efficient means?	No	0%	Other	1000	2
7	**Stability**					
7.3	Are any stability records available to show the effects of adding or removing loads on the vessel?	No	3%	Other	1000	25
7.1	If required does the vessel have an approved stability information booklet on board?	No	2%	Other	1000	21
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 vessels stability?	No	1%	Other	1000	8
7.4	Are the crew familiar with the stability issues with regards to winches and lifting operations?	No	1%	Other	1000	6
8	**Freeboard**					
8.1	If required by flag state is the vessel marked with a deck line and freeboard mark?	No	2%	Other	1000	15
8.2	If the vessel is not marked with a deck line and freeboard mark has the safe maximum draught been determined?	No	1%	Other	1000	6
9	**Escape**					
9.2	Are means of escape clearly marked and the escape route adequately illuminated?	No	5%	Other	1000	54
9.3	If there are not at least two means of escape are there fire detectors fitted in the space?	No	1%	Other	1000	9
9.1	Are there at least two means of escape from any occupied space?	No	1%	Other	1000	6
10	**Fire**					
10.4	Is a working emergency fire pump available outside the machinery space?	No	4%	Other	1000	36
10.1	Are fire detectors and fire call points where fitted in working order?	No	2%	Other	1000	24
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?	No	2%	Other	1000	23

Question		Answer Type	%	Risk	Total Reports	No. of vessels
10.8	Is there a fixed firefighting system for the engine room?	No	2%	Other	1000	20
10.5	If fitted can fire hose(s) deliver a jet of water to any part of the vessel?	No	2%	Other	1000	19
10.3	Is/are the vessel's fire pump(s) working and available?	No	1%	Other	1000	13
10.9	Is there a fire blanket in the galley/pantry/cooking area?	No	1%	Other	1000	13
10.6	If available does the jet/spray nozzle work properly on the fire hose?	No	1%	Other	1000	9
10.10	Do crew members know how to operate firefighting equipment?	No	1%	Other	1000	7
10.2	If no fire detectors are fitted are adequate procedures in place to detect smoke or fire?	No	1%	Other	1000	5
11	**Radio**					
11.8	Are cards available giving a clear summary of the radio telephone distress urgency and safety procedures?	No	5%	Other	1000	54
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?	No	4%	Other	1000	35
11.9	Are there clear instructions for the operation of the hand held VHF radios?	No	4%	Other	1000	35
11.4	Is an emergency position indicating radio beacon (EPIRB) fitted and is the hydrostatic release unit (HRU) fitted correctly?	No	3%	Other	1000	25
11.11	Are sealed spare batteries for the handheld VHF radio(s) available and charged?	No	3%	Other	1000	25
11.1	Is the radio equipment in good working order?	No	2%	Other	1000	23
11.10	Are the batteries for the radio station in good working condition and securely stowed?	No	2%	Other	1000	16
11.5	Is a search and rescue transponder (SART) fitted?	No	1%	Other	1000	13
11.6	Is a NAVTEX receiver fitted?	No	1%	Other	1000	12
11.7	Are the required crew members with an approved certificate for operation of the radio equipment on board?	No	1%	Other	1000	10
11.3	Is the crew familiar with the correct operation of the radio equipment?	No	1%	Other	1000	7
12	**Navigation equipment**					
12.4	Is the magnetic compass in working order?	No	6%	Other	1000	56
12.8	Are approved current corrected charts available?	No	5%	Other	1000	54
12.9	Are relevant publications on board? Are current tide tables available?	No	4%	Other	1000	41

Question		Answer Type	%	Risk	Total Reports	No. of vessels
12.12	Is there a working fixed or portable searchlight for a vessel that may operate in darkness?	No	4%	Other	1000	39
12.3	Are navigational day shapes available?	No	3%	Other	1000	34
12.1	Are navigation lights in good working order?	No	3%	Other	1000	30
12.10	Is an efficient waterproof signalling lamp suitable for Morse signalling provided?	No	3%	Other	1000	28
12.6	Is there means of measuring the speed through the water and/or distance covered?	No	2%	Other	1000	21
12.7	If an echo sounder is fitted is it in working order?	No	1%	Other	1000	12
12.13	Does the vessel have an anchor as required by relevant regulations and sufficient anchor cable for the proposed area of operation?	No	1%	Other	1000	12
12.2	Is there a means of making an efficient sound signal?	No	1%	Other	1000	10
12.11	Is an efficient radar reflector fitted?	No	1%	Other	1000	8
13	**Navigation**					
13.2	Is a comprehensive passage plan available for the current voyage and does it cover the full voyage from berth to berth?	No	5%	Other	1000	45
13.1	Is the vessel provided with operator policy statements instructions and procedures with regard to safe navigation?	No	3%	Other	1000	25
13.3	Does the vessel have written procedures for entry into a 500-metre zone?	No	1%	Other	1000	12
13.4	Are up-to-date navigation warnings and weather forecasts available?	No	0%	Other	1000	4
14	**Accommodation**					
14.12	Are there potable water testing routines that include legionella testing?	No	7%	Other	1000	69
14.13	Is there a bunk or cot for all those that will be on board?	No	1%	Other	1000	10
14.10	Is there adequate electric lighting?	No	1%	Other	1000	8
14.8	Are there adequate means for the safe storage and handling of food supplies including frozen and chilled where required?	No	1%	Other	1000	7
14.1	Is all heavy equipment in the accommodation secured?	No	1%	Other	1000	6

Question		Answer Type	%	Risk	Total Reports	No. of vessels
14.9	Is there adequate ventilation to all accommodation spaces including air conditioning and/or sufficient means of heating if appropriate?	No	1%	Other	1000	5
14.2	Is there an efficient working ventilation system for confined spaces that may be entered by personnel?	No	0%	Other	1000	4
14.4	If a pantry or tea and coffee making facilities are provided is/are the area(s) clean and appropriate for safe use?	No	0%	Other	1000	3
14.5	Are there adequate toilet facilities for the proposed passengers?	No	0%	Other	1000	3
14.7	Is there a galley/pantry/cooking area with adequate means for preparing food a stove for cooking and a sink?	No	0%	Other	1000	3
14.3	Are there adequate stowage facilities for personal effects/luggage for the passengers when embarked?	No	0%	Other	1000	2
14.11	Is there an adequate supply of fresh drinking water?	No	0%	Other	1000	2
15	**Safety of personnel**					
15.12	Are there at least two safety harnesses on board and additional harnesses for all those required to work on deck?	No	6%	Other	1000	63
15.21	Is a record of emergency training drills and exercises maintained?	No	5%	Other	1000	53
15.9	Are enclosed spaces and controls for entry defined on board?	No	5%	Other	1000	52
15.8	Is a permit to work (PTW) system in use on board?	No	4%	Other	1000	43
15.24	Are procedures for control stowage and handling of chemicals and flammable/combustible materials in place and being consistently applied?	No	4%	Other	1000	42
15.2	Is there a safe means of access to and from the vessel?	No	4%	Other	1000	38
15.4	Is there evidence of compliance with the company's HSE management system?	No	4%	Other	1000	35
15.20	Are formal written emergency procedures provided for man-overboard collision emergency towing grounding fire explosion gas or toxic vapour release?	No	3%	Other	1000	34
15.5	Are risk assessments conducted on board where necessary?	No	3%	Other	1000	33
15.23	Are adequate and valid medical stores provided?	No	3%	Other	1000	33
15.25	Is there an asbestos management system?	No	3%	Other	1000	32
15.16	Have measures been taken to prevent personnel being exposed to noise levels that exceed 80dB (A)?	No	3%	Other	1000	31

Question		Answer Type	%	Risk	Total Reports	No. of vessels
15.19	Is there a bridging document or equivalent between vessel owners and external companies for contractors' employees working on board to ensure responsibilities for health and safety are clearly defined and safety management systems aligned?	No	3%	Other	1000	28
15.22	Is there an up to-date onshore/offshore emergency response plan/manual?	No	3%	Other	1000	28
15.26	Does the safety management system address hazards associated with slips, trips and falls as well as other risks?	No	3%	Other	1000	28
15.18	Are personnel visiting the vessel given an appropriate safety briefing?	No	3%	Other	1000	27
15.13	Is the surface of the working deck non-slip?	No	2%	Other	1000	23
15.10	Are procedures used for carrying out hot work on the vessel?	No	2%	Other	1000	22
15.15	If the mean seawater temperature is 15 °C or less is there an approved survival suit for each person on board?	No	2%	Other	1000	22
15.17	Is a safety briefing/induction given to all personnel who embark on a voyage covering such items as use of life jackets and procedures to be followed in the case of an emergency?	No	2%	Other	1000	21
15.3	Is there a procedure for the transfer of personnel to and from an offshore structure and other vessels?	No	2%	Other	1000	18
15.11	Are there adequate guardrails around the deck?	No	1%	Other	1000	14
15.6	Does the safety management system address regulatory requirements and industry guidance?	No	1%	Other	1000	11
15.1	Does the crew have access to and use appropriate personal protective safety equipment?	No	1%	Other	1000	7
15.14	Are personnel provided with protective clothing appropriate to the prevailing air and sea temperatures?	No	1%	Other	1000	5
16	**Crane**					
16.1	Is there a valid test certificate for the crane if fitted?	No	4%	Other	1000	43
16.4	Does the company have a lifting equipment management system in place?	No	4%	Other	991	42
16.2	Is the crane wire appropriately rated for the crane's safe working load (SWL) rating plate?	No	2%	Other	1000	19
16.3	Is there a competent crane operator on board?	No	1%	Other	1000	12
17	**Manning**					
17.7	Do critical personnel (e.g. captain chief officer and chief engineer) complete a handover period including familiarisation appropriate to their position?	No	4%	Other	1000	37

Question		Answer Type	%	Risk	Total Reports	No. of vessels
17.2	Is the manning in compliance with vessel's Minimum Safe Manning Certificate or otherwise as required as per flag state requirements?	No	3%	Other	1000	28
17.8	Are periods of crew hours of work and rest recorded?	No	3%	Other	1000	27
17.1	Does the crew have valid certificates of competency as required including flag state endorsements if applicable?	No	2%	Other	1000	18
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?	No	1%	Other	1000	9
17.9	Is there a maximum contract duration for officers/crew?	No	1%	Other	1000	9
17.6	Are the crew members able to satisfactorily demonstrate operation of life saving appliances and fire-fighting equipment?	No	1%	Other	1000	7
17.4	Is there at least one person on board who holds an approved medical first aid certificate?	No	1%	Other	1000	5
17.3	Is there a person on board familiar with the operation and maintenance of the main propulsion machinery?	No		Other	1000	1
18	**Reporting**					
18.2	Is there evidence of near misses being reported, investigated and followed up?	No	4%	Other	1000	39
18.1	Are accidents and incidents investigated and reported in accordance with relevant flag state and/or coastal state and operator's requirements?	No	2%	Other	1000	16
19	**Clean seas**					
19.3	Is a garbage management plan in place and is an associated garbage record book maintained?	No	3%	Other	1000	28
19.6	If applicable is the Oil Record Logbook being properly maintained both at sea and in port?	No	2%	Other	991	18
19.2	Are arrangements in place for the retention of garbage on board?	No	2%	Other	1000	16
19.5	Are arrangements in place for the prevention of discharge of oil/oil-contaminated water overboard?	No	2%	Other	1000	16
19.1	Are adequate arrangements in place to prevent the discharge of sewage in prohibited areas?	No	1%	Other	1000	11
19.4	Are arrangements in place for the handling and recording of oily wastes?	No	1%	Other	1000	8
20	**Life saving appliances**					
20.11	Is there a training manual for use of life saving appliances (LSAs)?	No	8%	Other	1000	83

Question		Answer Type	%	Risk	Total Reports	No. of vessels
20.2	Are the number and type of life buoys as required and are they in satisfactory condition?	No	7%	Other	1000	65
20.9	Are life-saving signal tables available?	No	5%	Other	1000	49
20.3	Is there an approved life jacket for every person carried on the vessel?	No	3%	Other	1000	29
20.7	Is there a thermal protective aid for every person carried on the workboat?	No	3%	Other	1000	28
20.4	Are there the required number and type of pyrotechnic distress signals on board the workboat?	No	3%	Other	1000	25
20.12	Are there instructions for onboard maintenance of the LSA?	No	2%	Other	1000	21
20.8	Are there effective means to recover a person from the water?	No	2%	Other	1000	20
20.1	Is/are there a life raft(s) on board sufficient for the proposed maximum POB?	No	2%	Other	1000	19
20.6	Is effective emergency lighting provided to illuminate man-overboard (MOB) rescue equipment and recovery area?	No	1%	Other	1000	14
20.5	Is effective emergency lighting provided to illuminate survival craft launching and embarkation areas?	No	1%	Other	1000	13
20.10	Is there a means of sounding a general alarm in the event of an emergency?	No	1%	Other	1000	5
21	**Mooring and berthing**					
21.2	Is there a sufficient number of mooring lines in good condition?	No	1%	Other	1000	12
21.1	Are there adequate mooring points on the vessel?	No	1%	Other	1000	9
21.4	Is adequate fendering available?	No	1%	Other	1000	9
21.3	Are mooring winches and fairleads in good condition?	No	1%	Other	1000	5
22	**Vessel and cyber security**					
22.4	Does the vessel have a cyber security management system and/or a cyber security plan?	No	7%	Other	1000	65
22.6	Are there formal interfacing procedures and protocols in place for visitors, technicians, port officials, etc. to use their equipment on board?	No	4%	Other	1000	41
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?	No	4%	Other	1000	41
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?	No	2%	Other	1000	22

Question		Answer Type	%	Risk	Total Reports	No. of vessels
22.3	Does the vessel have specific port security procedures covering visitors, storing, and vessel gangway watchkeeping requirements?	No	2%	Other	1000	16
22.5	Is connection of personal IT devices such as phones, tablets, and laptops to the ship's network controlled?	No	1%	Other	1000	8
22.8	Are there measures to ensure the integrity of electronic chart display systems if fitted?	No	1%	Other	1000	5
S1	**Dynamic positioning**					
S1.2	Have DP trials been carried out within the past 12 months and is there a copy of the trials report on board?	No	33%	Other	15	5
S1.11	Do the key DP personnel take part in onboard training and drills involving various DP scenarios?	No	33%	Other	15	5
S1.3	Have the DP annual trials been witnessed by an IMCA Accredited DP Practitioner?	No	20%	Other	15	3
S1.8	Does the vessel have on board a DP operations manual?	No		Other	15	
S1.10	Do the DP operators have the appropriate DP qualification?	No	20%	Other	15	3
S1.12	Does the vessel have a DP incident log?	No		Other	15	
S1.13	Is the DP equipment contained in a planned maintenance system?	No	13%	Other	15	2
S1.15	Are activity specific operating guidelines in place and available?	No		Other	15	
S1.1	Is the vessels DP class notation free from any class-imposed restrictions?	No	7%	Other	15	1
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?	No	7%	Other	15	1
S1.6	Does the vessel have on board a copy of the most recent vessel DP failure modes and effects analysis (FMEA)?	No	7%	Other	15	1
S1.7	Does the vessel have appropriate DP checklists?	No	7%	Other	15	1
S1.16	Does the vessel have a DP data log?	No	7%	Other	15	1
S2	**Towing**					
S2.7	Does the master have a tug CoC or a towage endorsement?	No	11%	Other	124	13
S2.6	Is there a towing operations manual and does it reference vessel stability?	No	7%	Other	124	8
S2.5	Is there a safe method to release the towing rope?	No	6%	Other	124	7
S2.2	Is the towing equipment certified?	No	4%	Other	124	5

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S2.9	Does the vessel have emergency towing procedures?	No	4%	Other	124	5
S2.10	Does the vessel have a valid bollard pull test certificate?	No	4%	Other	124	5
S2.4	Has a risk assessment for towing operations been made?	No	3%	Other	124	4
S2.11	Is there a system to prevent girding/girting?	No	2%	Other	124	3
S2.3	Are there protected areas provided for crew working on the stern during a towing operation?	No	2%	Other	124	2
S2.1	Is there a suitable towage point arrangement on the workboat allowing it to carry out towing operations safely?	No	1%	Other	124	1
S2.8	Are the crew familiar with the vessels towing procedures?	No	1%	Other	124	1
S3	**Diving**					
S3.1	Does the vessel have a procedure for the secure mooring and recovery of moorings?	No	7%	Other	27	2
S3.2	Does the vessel have procedures for the safe use of engines and DP (if fitted)?	No	7%	Other	27	2
S3.3	Does the vessel have a planned procedure for the recovery of a diver?	No	7%	Other	27	2
S3.7	Does the vessel have emergency procedures for diver decompression illness?	No	7%	Other	27	2
S3.8	Does the vessel carry a first aid kit and an oxygen administration set?	No	4%	Other	27	1
S4	**Anchor handling**					
S4.2	Are the anchor handling equipment maintenance records up to date?	No	4%	Other	48	2
S4.3	Is the anchor handling deck area clearly visible from the bridge or covered by CCTV?	No	2%	Other	48	1
S4.4	Is the deck area sheathing free from any significant damage?	No	2%	Other	48	1
S4.5	Are there protected areas provided for crew working on the stern?	No	2%	Other	48	1
S5	**Barges (non-self-propelled)**					
S5.6	Do navigation lights and shapes meet local and COLREG requirements?	No	19%	Other	16	3
S5.5	Is adequate fendering available and in a satisfactory condition?	No	13%	Other	16	2
S5.1	Is the main towing bridle including chains/wires/shackles/Smit brackets and recovery winch certificated and in satisfactory condition?	No	6%	Other	16	1
S5.2	Is emergency towing apparatus/equipment certificated and in a satisfactory condition?	No	6%	Other	16	1

Question		Answer Type	%	Risk	Total Reports	No. of vessels
S5.3	Is there an emergency recovery system available for the tow?	No	6%	Other	16	1
S5.4	Is towing gear included in a planned maintenance system?	No	6%	Other	16	1
S5.7	Is the deck equipment/machinery (if fitted) in a satisfactory condition?	No	6%	Other	16	1
S6	**High Speed Craft Code compliance**					
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?	No	4%	Other	118	5
S6.1	Does the vessel hold a valid safety certificate for the HS-OSC code?	No	3%	Other	118	3
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?	No	3%	Other	118	3
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 as are adequately shielded, isolated or otherwise protected?	No	3%	Other	118	3
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?	No	2%	Other	118	2
S6.9	Is the vessel's operations manual available and valid?	No	2%	Other	118	2
S6.6	Are at least two crew members trained in crowd control?	No	1%	Other	118	1
S6.7	Does the vessel have an ECDIS and are crew trained in its use?	No	1%	Other	118	1
S6.8	Do the officers having an operational role on board hold a "type rating certificate" issued by the administration as per the HSC code section 18.3.3	No	1%	Other	118	1
S6.13	Are the crew able to show the evacuation procedure and competently walk through a mass evacuation drill?	No	1%	Other	118	1
S9	**Battery propulsion systems for non-DP vessels**					
S9.13	Is there evidence of hybrid battery system emergency response drills covering different possible scenarios being conducted?	No	12%	Other	17	2
S9.4	Have the crew attended a type-specific course for the operation and maintenance of the hybrid propulsion system fitted?	No	6%	Other	17	1
S9.5	Have the crew undertaken approved training in battery and stored energy maintenance?	No	6%	Other	17	1