

Summary of IMCA D 024 Document Changes 2021

IMCA D 024 Rev. 2 *DESIGN for saturation (bell) diving systems* was published in July 2014. The latest revision of IMCA D 024 has now been published (Rev. 3). This Information Note summarises the changes that were made during the Rev. 2 to Rev. 3 update process.

Table 1 – Summary of Changes Made to IMCA D 024 During 2021 DESIGN Revision

	Location of Items in IMCA D 024 Rev. 2 Edition	Summary of Changes Made for IMCA D 024 Rev. 3 Edition	Reason
1.	IMCA D 024; Section 1 <i>General Safety</i> ; Item 2 <i>System Assessment</i>	The System Assessment has been split into two parts: ♦ 2A <i>Diving System Assessment – General</i>; and ♦ 2B <i>Diving System Assessment – Automated Control Systems</i>. The text of the 2A assessment has been revised to read: “A systematic assessment of the diving system should be available to demonstrate that the equipment provided for the diving operation is both adequate and fit for its intended use. This assessment must include an FME(C)A.” The 2B assessment is new and requires: ♦ 2B1 - Identification of Automated Control Systems. ♦ 2B2 - Categorisation of Automated Control Systems. ♦ 2B3 - Assessment of Safety Critical Automated Control Systems. Guidance on satisfying the IMCA DESIGN requirements for the systematic assessment of control systems in automated diving plant and equipment is contained in IMCA D 069.	1. To ensure that appropriate systematic assessments of saturation diving systems are undertaken and made available. 2. To ensure that appropriate systematic assessments of automated control systems in saturation diving systems are undertaken and made available.
2.	IMCA D 024; Section 1 <i>General Safety</i> ; Item 7.6 <i>Electrical Testing Note</i> : This change affects all electrical and component testing requirements in IMCA D 024. Identical changes elsewhere in the document are not listed in this summary.	Text revised to read: “Visual examination, function test (including protective devices) plus continuity and resistance tests of all cables and electrical equipment within the last 6 months OR in accordance with a detailed electrical testing schedule prepared by a competent person”.	3. To allow companies with modern complex diving systems to create their own electrical testing procedures and methodologies in line with the recommendations of competent persons.

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	Location of Items in IMCA D 024 Rev. 2 Edition	Summary of Changes Made for IMCA D 024 Rev. 3 Edition	Reason
3.	IMCA D 024; Section 1 <i>General Safety</i> ; Item 7.7 <i>Emergency Power Testing</i> Note: This change affects all emergency power testing requirements in IMCA D 024.	Text revised to read: “A test should have been carried out within the last 12 months to demonstrate the functioning and adequacy of emergency electrical power supplies.” Updated to align with the revised IMCA D 018, Detail Sheet 37.	To ensure the functioning and adequacy of emergency electrical power supplies.
4.	IMCA D 024; Section 1 <i>General Safety</i> ; Item 7.8 <i>UPS Testing</i> Note: This change affects all UPS testing requirements in IMCA D 024.	Text revised to read: “UPS Testing – Where a UPS is fitted, a test should have been carried out within the last 12 months to check power continues to be supplied in normal circumstances, through bypassing the UPS, in the event of a UPS failure, and that the visual and/or audio indication of such failure functions correctly.” Updated to align with the revised IMCA D 018, Detail Sheet 37.	1. To ensure there is a visual and/or audio indication if the UPS fails; and 2. To ensure the normal supply is maintained in the event of UPS failure.
5.	IMCA D 024; Section 2 <i>Dive Control</i> ; Item 2.5 <i>Recording</i>	Text revised to read: “A recording system must be fitted to record all primary communications between divers and supervisor. There should be a means of playing back the recording after the dive in order to check satisfactory quality. Note: This requirement does not apply to secondary communications systems such as through water comms or sound powered phone systems.”	To clarify that this requirement applies only to primary communications systems between divers and supervisors.
6.	IMCA D 024; Section 2 <i>Dive Control</i> ; Item 6.2 <i>Reclaim</i>	Text revised to read: “There must be a carbon dioxide analyser with audible and visible high-level alarm fitted to the downstream side of the diver reclaim gas processing facility (this may be before the volume tank/storage bank). The adjustment of gas sample flow rate must not affect any other analyser fitted.”	To clarify the positioning of CO ₂ analysers in reclaim systems.
7.	IMCA D 024; Section 2 <i>Dive Control</i> ; Item 7.12 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
8.	IMCA D 024; Section 2 <i>Dive Control</i> ; Item 8 <i>Pipework and Valves</i>	Title revised to read: “Pipework Systems, Valves, Regulators and Relevant Fittings.”	To provide a fuller description of the item contents.
9.	IMCA D 024; Section 2 <i>Dive Control</i> ; Item 9.5 <i>Electrical Testing</i>	Text revised to read: “Visual examination, function test (including protective devices) plus continuity and resistance tests of all cables and electrical	To allow companies with modern complex diving systems to create their own electrical testing procedures and

	Location of Items in IMCA D 024 Rev. 2 Edition	Summary of Changes Made for IMCA D 024 Rev. 3 Edition	Reason
	Note: This change affects all electrical and component testing requirements in IMCA D 024 . Identical changes elsewhere in the document are not listed in this summary.	equipment within the last 6 months OR in accordance with a detailed electrical testing schedule prepared by a competent person”.	methodologies in line with the recommendations of competent persons.
10.	IMCA D 024 ; Section 2 – <i>Dive Control</i> ; Item 9.6 <i>Emergency Power Testing</i> Note: This change affects all emergency power testing requirements in IMCA D 024 .	Text revised to read only: “A test should have been carried out within the last 12 months to demonstrate the functioning and adequacy of emergency electrical power supplies.” Updated to align with the revised IMCA D 018 , Detail Sheet 37.	To ensure the functioning and adequacy of emergency electrical power supplies.
11.	IMCA D 024 ; Section 2 – <i>Dive Control</i> ; Item 9.7 <i>UPS Testing</i> Note: This change affects all UPS testing requirements in IMCA D 024 .	Text revised to read: “UPS Testing – Where a UPS is fitted, a test should have been carried out within the last 12 months to check power continues to be supplied in normal circumstances, through bypassing the UPS, in the event of a UPS failure, and that the visual and/or audio indication of such failure functions correctly.” Updated to align with the revised IMCA D 018 , Detail Sheet 37.	1. To ensure there is a visual and/or audio indication if the UPS fails; and 2. To ensure the normal supply is maintained in the event of UPS failure.
12.	IMCA D 024 ; Section 2 <i>Dive Control</i> ; Item 12.1 <i>Breathing Apparatus – Provision</i>	Text revised to include a requirement for emergency breathing apparatus cylinders (umbilical supplied or self-contained) to be of suitable capacity and endurance.	Storage cylinders or self-contained breathing apparatus (SCBA) sets must have the capacity and endurance required should they be needed in an emergency.
13.	IMCA D 024 ; Section 2 <i>Dive Control</i> ; Item 12.2 <i>Breathing Apparatus – Umbilical Supply</i>	Text revised to read: “If emergency air for the supervisor (and winch operator if relevant) is umbilical supplied, it should be fed from cylinder stored compressed air. The cylinder stored compressed air source for the umbilical supplied surface breathing apparatus should be separate to compressed air sources intended for the use of divers. SCBA with suitable capacity and endurance should also be available to allow escape.”	It would be very difficult to ensure that in an emergency situation (e.g. during a fire or H ₂ S alert) the air intake for a compressor providing umbilical supplied emergency air will always be situated in a contaminant free zone.
14.	IMCA D 024 ; Section 3 <i>Surface Compression Chamber</i> ; Item 2.5 <i>Viewport Testing</i>	Text revised to read: “Relevant pressure testing of the viewport should be in accordance with the design standard of the chamber and/or a suitable viewport manufacturing code such as ASME PVHO-1.”	To provide clarity on viewport pressure testing requirements.
15.	IMCA D 024 ; Section 3 <i>Surface Compression</i>	The chamber paintwork and corrosion requirements have been split into two separate line items: <i>Paintwork</i> and <i>Corrosion</i> .	To provide greater clarity on chamber paintwork and corrosion requirements.

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	<i>Chamber; Item 5.1 Paintwork</i> Note: This change affects all chamber paintwork/corrosion requirements in IMCA D 024. Identical changes elsewhere in the document (including for the diving bell) are not listed in this summary.	The paintwork requirement has been changed from a 'Need A' to a 'Need B.' The text of the two requirements in the separate line items read: 5.1 "Paintwork should be in good condition." 5.2 "The chamber should be free from serious corrosion."	
16.	IMCA D 024 ; Section 3 <i>Surface Compression Chamber; Item 6.35 Gauge Calibration</i>	Text revised to include the following note: "Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person."	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
17.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System (LARS); Item 1.2 Weight</i>	Text revised to include the following notes: Note 1: For the purpose of this calculation the weight of a fully kitted diver is considered to be 150 kg. Note 2: For classed diving systems the class society may specify a different diver weight	To provide a specific weight to be used for calculating the weight of a fully manned and equipped bell.
18.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System; Items 2.14 & 2.15 Winch Testing.</i>	Updated to align with the revised IMCA D 018 , Detail Sheet 22.1.	To maintain the consistency of IMCA guidance and reduce the need for overload testing.
19.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery; Item 3.3 Lubrication.</i>	Text revised to read: "From the time the wire rope is taken into service (i.e. fitted to the winch) it should be pressure lubricated every 6 months, at least from the bell back to the maximum depth of immersion in the period. If it has been laid up for a substantial period, then it should have been pressure lubricated before lay-up. Contractors should follow the wire rope manufacturer's recommendations and have a documented maintenance regime and wire rope policy in place."	To clarify the requirements for all bell wire rope lubrication.
20.	IMCA D 024 ; Section 4 <i>Diver Launch and Recovery System (LARS); Items 3.4 to 3.9 Wire Testing.</i>	Updated to align with the guidance contained in IMCA LR 001/IMCA HSSE 022/IMCA M 194 , and IMCA D 018 , Detail Sheet 29.1.	To maintain the consistency of IMCA guidance and remove the need for overload testing following re-termination.
21.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System; Items 4.17 & 4.18, Winch Testing.</i>	Updated to align with the revised IMCA D 018 , Detail Sheet 22.1.	To maintain the consistency of IMCA guidance and reduce the need for overload testing.

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22.	IMCA D 024 ; Section 4 <i>Diver Launch and Recovery System (LARS)</i> ; Items 4.22 to 4.27 <i>Wire Testing</i> .	Updated to align with the guidance contained in IMCA LR 001/IMCA HSSE 022/IMCA M 194 , and IMCA D 018 , Detail Sheet 29.1.	To maintain the consistency of IMCA guidance and remove the need for overload testing following re-termination.
23.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System (LARS)</i> ; Item 14.1 <i>Breathing Apparatus – Provision</i>	Text revised to include a requirement for emergency breathing apparatus cylinders (umbilical supplied or self-contained) to be of suitable capacity and endurance.	Storage cylinders or self-contained breathing apparatus (SCBA) sets must have the capacity and endurance required should they be needed in an emergency.
24.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System (LARS)</i> ; Item 14.2 <i>Breathing Apparatus – Umbilical Supply</i>	Text revised to read: “If emergency air for the winch driver and moonpool team is umbilical supplied, it should be fed from cylinder stored compressed air. The cylinder stored compressed air source for the umbilical supplied surface breathing apparatus should be separate to compressed air sources intended for the use of divers. SCBA with suitable capacity and endurance should also be available to allow escape.”	It would be very difficult to ensure that in an emergency situation (e.g. during a fire or H ₂ S alert) the air intake for a compressor providing umbilical supplied emergency air will always be situated in a contaminant free zone.
25.	IMCA D 024 ; Section 4 <i>Bell Launch and Recovery System</i> ; Items 18.2 & 18.3 <i>Overall Testing</i> .	Updated to align with the revised IMCA D 018 , Detail Sheet 22.1.	To maintain the consistency of IMCA guidance and reduce the need for overload testing.
26.	IMCA D 024 ; Section 5 <i>Diving Bell</i> ; Item 2.5 <i>Viewport Testing</i>	Text revised to read: “Relevant pressure testing of the viewport should be in accordance with the design standard of the bell and/or a suitable viewport manufacturing code such as ASME PVHO-1.”	To provide clarity on viewport pressure testing requirements.
27.	IMCA D 024 ; Section 5 <i>Diving Bell</i> ; Item 6.28 <i>Gas Supplies</i>	Text revised to add the qualification “... to the degree that the diver’s safety is impaired.”	Should a diver’s supply line fail, no matter the arrangement adopted, it may still be possible to detect some slight degree of “interference” for another diver.
28.	IMCA D 024 ; Section 5 <i>Diving Bell</i> ; Item 6.29 <i>Alarm</i>	Text of Item 6.29 revised to read: “There should be an alarm fitted to alert the bellman if the diver(s) supply switches over to the onboard gas. This may be an audible or visual alarm.”	To specify the nature of the alarm.
29.	IMCA D 024 ; Section 5 <i>Diving Bell</i> ; Item 6.30 <i>Blow-down</i>	Text of item 6.30 revised to read: “The bell diving supervisor should have the ability to take control of the bell blow-down in an emergency without relying on intervention from the occupants of the bell e.g. through the use of an over-pressure valve within the blow-down line or through the provision of a second blow-down line.”	In normal circumstances many contractors prefer control of the bell blow-down to reside with the bellman. This change is intended to ensure that the diving supervisor can take control of the bell blow-down if required e.g. should the occupant(s) of the bell become incapacitated.

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30.	IMCA D 024 ; Section 5 <i>Diving Bell</i> ; Item 6.44 <i>Diver Recovery</i>	Updated to align with the revised IMCA D 018 , Detail Sheet 36. Items 6.44 to 6.49 now include added requirements for a Diver Rescue Recovery System and for testing of the system.	To clarify the requirements for Diver Rescue Recovery Systems and the testing of such systems.
31.	IMCA D 024 ; Section 6 <i>Life Support Control</i> ; Item 3.12 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
32.	IMCA D 024 ; Section 6 <i>Life Support Control</i> ; Item 4 <i>Pipework and Valves</i>	Title revised to read: “Pipework Systems, Valves, Regulators and Relevant Fittings.”	To provide a fuller description of the item contents.
33.	IMCA D 024 ; Section 6 <i>Life Support Control</i> ; Item 8.1 <i>Breathing Apparatus – Provision</i>	Text revised to include a requirement for emergency breathing apparatus cylinders (umbilical supplied or self-contained) to be of suitable capacity and endurance.	Storage cylinders or self-contained breathing apparatus (SCBA) sets must have the capacity and endurance required should they be needed in an emergency.
34.	IMCA D 024 ; Section 6 <i>Life Support Control</i> ; Item 8.2 <i>Breathing Apparatus – Umbilical Supply</i>	Text revised to read: “If emergency air for the life support personnel is umbilical supplied, it should be fed from cylinder stored compressed air. The cylinder stored compressed air source for the umbilical supplied surface breathing apparatus should be separate to compressed air sources intended for the use of divers. SCBA with suitable capacity and endurance should also be available to allow escape.”	It would be very difficult to ensure that in an emergency situation (e.g. during a fire or H ₂ S alert) the air intake for a compressor providing umbilical supplied emergency air will always be situated in a contaminant free zone.
35.	IMCA D 024 ; Section 10 <i>Divers’ Personal Equipment</i> ; Note and Items 1, 1.7 & 1.8	Text of Note revised to read: “Note: This section covers primary breathing systems e.g. helmets, bandmasks and full-face masks; open circuit bail-out systems (including first-stage regulators), rebreathers as a primary or bail-out system, and cylinders taken under water, but does not include supply systems pipework or other items such as suits, gloves etc. which should meet normal standards for personal protective equipment.” Title of Item 1 revised to read: “Personal Breathing Apparatus (used under water).” Description of Items 1.7 and 1.8 revised to read: “Personal Breathing Apparatus Testing.”	To cover all divers’ personal breathing apparatus including first stage regulators and rebreathers.

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36.	IMCA D 024; Section 11 <i>Compressors, Pumps, Etc.</i> Item 6.3 <i>Receiver Testing</i>	Updated to align with the revised IMCA D 018, Detail Sheet 26.	To maintain the consistency of IMCA guidance and reduce the need for overpressure testing.
37.	IMCA D 024; Section 11 <i>Compressors, Pumps, Etc.</i> Item 6.3 <i>Air/Gas Receivers</i>	New requirements for interlocks and interlock pipework testing introduced for receivers directly linked to PVHOs (Items 6.4 to 6.7).	To prevent injury from receivers that require opening as part of their operation and are directly linked to PVHOs.
38.	IMCA D 024; Section 12 <i>High Pressure Gas Storage; Item 2.11 Lifting Equipment (Quad Slings etc.) Testing</i>	Text revised to read: “Load test at 1.5 times maximum SWL in the last 12 months or carry out alternative examination/testing as required by the competent person”	To clarify that if the load test at 1.5 times maximum SWL option is selected, it is the load test that should have been carried out in the last 12 months. If the alternative examination/testing as required by the competent person option is adopted, the periodicity of any examinations or tests will be set by the competent person.
39.	IMCA D 024; Section 13 <i>Diver Gas Reclaim; Item 9.3 Carbon Dioxide</i>	Text revised to read: “There must be a carbon dioxide analyser with audible and visible high-level alarm fitted to the downstream side of the diver reclaim gas processing facility (this may be before the volume tank/storage bank). The adjustment of gas sample flow rate must not affect any other analyser fitted. Note: This is also referred to in Section 2, paragraph 6.2”.	To clarify the positioning of CO ₂ analysers in reclaim systems.
40.	IMCA D 024; Section 13 <i>Diver Gas Reclaim; Item 10 Pipework and Valves</i>	Title revised to read: “Pipework Systems, Valves, Regulators and Relevant Fittings.”	To provide a fuller description of the item contents.
41.	IMCA D 024; Section 14 <i>Chamber Gas Reclaim and Purification; Item 4 Pipework and Valves</i>	Title revised to read: “Pipework Systems, Valves, Regulators and Relevant Fittings.”	To provide a fuller description of the item contents.
42.	IMCA D 024; Section 15.1 – <i>General – HES System; Item 2 Hyperbaric Evacuation System Assessment</i>	The Hyperbaric Evacuation System Assessment has been split into two parts: ◆ 2A <i>Hyperbaric Evacuation System Assessment – General</i>; and ◆ 2B <i>Hyperbaric Evacuation System Assessment – Automated Control Systems</i>. The text of the 2A assessment has been revised to read: “A systematic assessment of the hyperbaric evacuation system should be available to demonstrate that the equipment provided for the diving operation is both adequate and fit for its intended use. This assessment must include an FME(C)A.” The 2B assessment is new and requires:	1. To ensure that appropriate systematic assessments of hyperbaric evacuation systems are undertaken and made available. 2. To ensure that appropriate systematic assessments of automated control systems in hyperbaric evacuation systems are undertaken and made available.

	Location of Items in IMCA D 024 Rev. 2 Edition	Summary of Changes Made for IMCA D 024 Rev. 3 Edition	Reason
		◆ 2B1 - Identification of Automated Control Systems. ◆ 2B2 - Categorisation of Automated Control Systems. ◆ 2B3 - Assessment of Safety Critical Automated Control Systems. Guidance on satisfying the IMCA DESIGN requirements for the systematic assessment of control systems in automated diving plant and equipment is contained in IMCA D 069.	
43.	IMCA D 024; Section 15.1 – <i>General – HES System</i>; Item 7 <i>Electrical Power</i>; 7.5 <i>Emergency Power Testing</i> Note: This change affects all emergency power testing requirements in IMCA D 024.	Text revised to read only: “A test should have been carried out within the last 12 months to demonstrate the functioning and adequacy of emergency electrical power supplies.” Updated to align with the revised IMCA D 018, Detail Sheet 37.	To ensure the functioning and adequacy of emergency electrical power supplies.
44.	IMCA D 024; Section 15.1 – <i>General – HES System</i>; Item 7 <i>Electrical Power</i>; 7.6 <i>UPS Testing</i> Note: This change affects all UPS testing requirements in IMCA D 024.	Text revised to read: “UPS Testing – Where a UPS is fitted, a test should have been carried out within the last 12 months to check power continues to be supplied in normal circumstances, through bypassing the UPS, in the event of a UPS failure, and that the visual and/or audio indication of such failure functions correctly.” Updated to align with the revised IMCA D 018, Detail Sheet 37.	1. To ensure there is a visual and/or audio indication if the UPS fails; and 2. To ensure the normal supply is maintained in the event of UPS failure.
45.	IMCA D 024; Section 15.2 – <i>HRU Interface with Dive System</i>; Item 5.25 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
46.	IMCA D 024; Section 15.2 – <i>HRU Interface with Dive System</i>; Item 6.5 <i>Viewport Testing</i>	Text revised to read: “Relevant pressure testing of the viewport should be in accordance with the design standard of the chamber and/or a suitable viewport manufacturing code such as ASME PVHO-1.”	To provide clarity on viewport pressure testing requirements.
47.	IMCA D 024; Section 15.3 – <i>Hyperbaric Rescue Unit (HRU)</i>; Item 3.5 <i>Viewport Testing</i>	Text revised to read: “Relevant pressure testing of the viewport should be in accordance with the design standard of the chamber and/or a suitable viewport manufacturing code such as ASME PVHO-1.”	To provide clarity on viewport pressure testing requirements.
48.	IMCA D 024; Section 15.3 <i>Hyperbaric Rescue Unit</i>	New item (entitled ‘Redundancy’) introduced to clarify that the system comprising the LSP and the HRU should have sufficient backup for	General clarification.

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	(HRU); new Item following item 6.40.	heating and cooling arrangements to ensure the safety of the divers. The new requirement makes clear that this can be achieved in a number of ways provided all life support safety critical elements are identified in the diving contractor's Hyperbaric Evacuation Plan (HEP) and a suitable level of life support redundancy/backup is always made available.	
49.	IMCA D 024 ; Section 15.3 – <i>Hyperbaric Rescue Unit (HRU)</i> ; Item 6.57 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
50.	IMCA D 024 ; Section 15.3 <i>Hyperbaric Rescue Unit (HRU)</i> ; Item 7A.15 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
51.	IMCA D 024 ; Section 15.3 <i>Hyperbaric Rescue Unit (HRU)</i> ; Item 7B.21 <i>Gauge Calibration</i>	Text revised to include the following note: “Note: The frequency and nature of the calibration of pressure sensors and gauges integral to automated functions may be defined in a scheme prepared by a competent person.”	To allow companies with modern complex diving systems to define the frequency and nature of the calibration of pressure sensors and gauges integral to automated functions in line with the recommendations of competent persons.
52.	IMCA D 024 ; Section 15.3 <i>Hyperbaric Rescue Unit (HRU)</i> ; Item 8.7 <i>Batteries - Venting</i>	Description for Item 8.7 revised to read: “Battery compartment ventilation.” Prevention of explosions during battery charging in relation to diving systems (IMCA D 055) referenced in description. Text of Item 8.7 requirement revised to read: “When batteries are charged inside the non-pressurised section of an HRU, the battery compartment must be ventilated to the open atmosphere outside the HRU. A safe fan (brushless type) or other appropriate means of venting the battery compartment should be used in such a way that the battery compartment atmosphere is expelled externally, while fresh air enters by another route. It may be possible to configure a system such that a negative pressure is maintained in	To strengthen the battery box venting system alarm arrangement.

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		the battery compartments. All ventilation systems should be active whenever the batteries are charged.”	
53.	IMCA D 024 ; Section 15.3 <i>Hyperbaric Rescue Unit (HRU)</i> ; Item 14.9 <i>Mating Trials</i>	First line of requirement text modified to read: “Actual mating trials should have taken place with the intended HRF design.”	To align with the wording in Section 5.6 of IMCA D 052 and maintain the consistency of IMCA guidance
54.	IMCA D 024 ; Section 16 <i>Life Support Package (LSP)</i>	Section 16 removed in its entirety and transferred to a stand-alone DESIGN document entitled, DESIGN for Hyperbaric Rescue Unit (HRU) Life Support Packages (LSPs) (IMCA D 063)	LSPs are not normally co-located with the rest of the saturation diving system. It is therefore more practical to make the old IMCA D 024 , Section 16 available to DESIGN auditors as a stand-alone document.
55.	IMCA D 024 ; <i>Cylinder Testing</i> . Note: This change affects certain cylinder testing requirements throughout IMCA D 024 .	To revise cylinder 2 yearly testing periodicities to 2½ years and 4 yearly testing periodicities to 5 years.	To align with recognised international standards.
56.	IMCA D 024 – all sections and items referencing IMCA D 018 Detail Sheets 24.1 and 24.2.	Validity period of gas leak tests at maximum working pressure of gas-only systems changed from 2 years to 2.5 years where appropriate.	To align with the IMCA D 018 chamber pressure testing regime (Detail Sheets 25.1 & 26).

For more information, please contact Bryan.McGlinicy@imca-int.com.