

Saturation

Saturation Diving - Pre-Mobilisation and readiness gate

BA-SAT-001

Purpose: Completed by the Client Representative with the Client Diving SME before saturation diving commences, to verify that the barriers required by the governing risk assessment for loss of saturation diving support systems are in place.

Frequency: Once per campaign, before diving starts | **Applies to:** Saturation | **Response set:** Yes / Partial / No / N/A, with a note and evidence against each item

Basis: publicly available industry guidance, principally IMCA and IOGP. This framework does not replace the diving contractor's safety management system, the client's own risk assessment, or applicable national legislation. | **Complete online at** barrierassurance.com

#	Question	Guidance and reference	Y / P / N / NA
1	Has the Notification of Diving Operation been issued and a uniquely numbered campaign assurance dossier completed with all actions closed?	The assurance dossier is the key barrier document for a saturation campaign. Refer to the campaign assurance dossier. Ref: IOGP 411; IOGP 431 (worksite representative)	
2	Has the DESIGN audit of the saturation system been confirmed and a current copy obtained?	IMCA D024 for the saturation system, D053 for the hyperbaric reception facility and D063 for the hyperbaric rescue unit life support package. Ref: IMCA D024 (DESIGN, saturation)	
3	Has a FMECA been completed for the diving system, and are the redundancy and back-up power arrangements verified?	Multiple redundancy design philosophy and back-up power generation independent of the vessel, for both the chamber complex and the bell. Ref: IMCA D024 (DESIGN, saturation) · IMCA M103; IMCA D024 · IMCA D024	
4	Has the diving support vessel been verified for client use, with the marine vessel risk assessment actions closed?	Recorded in the client's vessel assurance register. The saturation risk assessment relies directly on the marine vessel barriers. Ref: IMCA M103; IMCA D024	
5	Has the Contractor's Hyperbaric Evacuation Plan been approved, and is it on the vessel?	Approval is a readiness gate item. Refer to the contractor deliverables schedule. Ref: IMCA D052 (hyperbaric evacuation); IOGP 478; IMCA D053, D063 · IMCA D052; IMCA D053; IMCA D063	
6	Has the mating compatibility between the saturation system, the rescue craft and the reception facility been physically verified?	Physically verified and documented. Flange arrangements differ between systems and this cannot be taken from a document. Ref: IMCA D052 (hyperbaric evacuation); IOGP 478; IMCA D053, D063 · IMCA D052; IMCA D053; IMCA D063	
7	Is the rescue craft life support duration sufficient for the recovery vessel transit time?	Compare the calculated duration against a realistic transit, not the best case. Guidance in IOGP 478. Ref: IMCA D052 (hyperbaric evacuation); IOGP 478; IMCA D053, D063 · IMCA D052; IMCA D053; IMCA D063	
8	Have the life support, environmental control and gas management systems been function tested with redundancy proven?	Gas mixing, oxygen and carbon dioxide control, breathing system, back-up scrubbing and back-up battery power. Ref: IMCA D024; IMCA D022 · IMCA D024 · IMCA D022; IMCA D024	
9	Have the chamber fire barriers been verified - flame retardant materials, ignition source control, suppression and chamber atmosphere?	Approved materials list, earthing and anti-static clothing, suppression charged and tested, oxygen content controlled below the flammability threshold. Ref: IMCA D024; IMCA D014	
10	Has the bell recovery capability been verified - primary, secondary and tertiary?	Clump or guide weight secondary recovery and umbilical tertiary recovery, plus the emergency vehicle services connection to the bell stab plate. Ref: IMCA D024 (DESIGN, saturation) · IMCA D024; IMCA D018 · IMCA D024; IMCA D052	
11	Are the bell contingency procedures in place - stabilisation, recovery to deck, return to the saturation system and transfer under pressure?	Verified against the campaign risk assessment and the contractor's lift plans. A bell on deck with no means of transfer under pressure is the scenario these barriers exist to prevent. Ref: IMCA D024; IMCA D052 · IMCA D052; IMCA D053; IMCA D063	
12	Has a pre-deployment survey of the worksite been completed and are the seabed obstructions and mooring proximities known?	Includes the ROV as-found survey, the seabed structure survey plan and the status of the ROV audits. Ref: IMCA D024; IMCA R006 (ROV audit)	

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13	Have the metocean and station keeping limits for bell operations been defined?	Operating limits enforced, with three independent position reference systems maintained and cross-checked. Ref: IMCA M103; IMCA M190	
14	Have the Contractor self-verification plan and the client oversight plan been issued, and has the incident management team been briefed?	The self-verification plan must include a compliance and barrier review every 30 days where the campaign exceeds that duration. Ref: IOGP 411; IOGP 431 (worksite representative)	