

Accredited Diving System Inspector (ADSI) Examinations – Preparatory Information for Candidates

This document provides information to candidates about the structure and format of the IMCA ADSI examinations. It also provides advice to candidates on the material they should study prior to sitting the ADSI examinations.

1 GENERAL

All IMCA examinations are delivered online. The Association uses the TestReach cloud-based application to create, deliver, and mark the examinations. Candidates sit their exams at computer terminals located in professional invigilation centres around the world. This system provides candidates with an accurate, timely, and secure process for taking IMCA examinations – see [Examinations – IMCA \(imca-int.com\)](https://www.imca-int.com) for more information.

Once candidates have been registered for an examination, and in advance of their exam start times, they will be sent an email giving them access to a TestReach practice tutorial and videos, so that they can familiarise themselves with the TestReach application. The tutorial is in the form of a mock exam and is a very simple and informative way of learning how TestReach exams work.

Although the TestReach system is easy and intuitive to use, **candidates are strongly advised to watch the videos and work through the practice tutorial prior to sitting their examinations.** Those who do will be proficient in the use of the TestReach application when they come to sit their examination(s).

During the ADSI examinations, reference material will be provided on screen. The computer screen will be divided into three panels, with the exam questions on top, the possible answers on one side and the reference material on the other. Any of the three panels can be expanded using a zoom-in/out tool.

2 THE ADSI EXAMINATIONS

There are two IMCA ADSI examinations, one for Surface Orientated Diving Systems and one for Saturation Diving Systems. The Surface Orientated Diving Systems examination must be taken before the Saturation Diving Systems examination.

If both surface and saturation ADSI examinations are taken on the same day and the Surface Orientated Diving Systems examination is failed, the result of the Saturation Diving Systems examination will be held back pending a successful re-sit of the Surface Orientated Diving Systems examination.

If the Surface Orientated Diving Systems examination is passed the candidate will be certified as an IMCA Accredited Diving Systems Inspector of Surface Orientated Diving Systems.

If both the Surface Orientated Diving Systems examination and the Saturation Diving Systems examination are passed, the candidate will be certified as an IMCA Accredited Diving Systems Inspector of Surface Orientated and Saturation Diving Systems.

Structure and Content of the ADSI Surface Orientated Diving Systems Examination

The ADSI Surface Orientated Diving Systems examination consists of two sections as follows:

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1. The first section of the examination contains 40 questions covering the following topics: the ADSI Scheme Terms and Conditions; the ADSI Scheme Code of Conduct; the ADSI Scheme Revalidation Requirements; general audit preparation; audit execution; and audit reporting.
2. The second section of the examination is 'open book' and contains 40 questions covering the DESIGN auditing of surface diving systems. These questions will be of a technical nature focused upon the content of Detail Sheets within relevant DESIGN documents. During this section of the examination the relevant DESIGN documents will be made available on screen for candidates to consult as necessary.

Structure and Content of the ADSI Saturation Diving Systems Examination

The ADSI Saturation Diving Systems examination consists of one 'open book' section only. It contains 40 questions covering the DESIGN auditing of saturation diving systems. These questions will be of a technical nature focused upon the content of Detail Sheets within relevant DESIGN documents. During the examination the relevant DESIGN documents will be made available on screen for candidates to consult as necessary.

Candidates are not permitted to use their own reference material for either examination.

The time allowed to sit the ADSI examinations are:

- IMCA ADSI Surface Orientated Diving Systems examination: 2 hours.
- IMCA ADSI Saturation Diving Systems examination: 1 hour.

3 STUDY MATERIAL AND EXAM PREPARATION

Preparation for the first section of the surface ADSI exam is primarily based around the content of the material contained in the following documents:

- IMCA D 011 Rev. 1 Guidance on Auditing of Diving Systems.
- The ADSI scheme Terms & Conditions (included in the application pack sent to all nominees).
- The ADSI scheme Code of Conduct (included in application pack sent to all nominees).
- The ADSI Scheme Revalidation Requirements (included in application pack sent to all nominees).
- The Part 1 Guidance section of the DESIGN documents (which is similar in each DESIGN document).

It is essential that candidates are familiar with all the relevant material the above documents contain prior to the examination. These documents (including the Part 1 *Guidance* section of the DESIGN documents) are **not** provided during the exam.

Important Note

The following DESIGN suite documents are the ones that have been used to compile the technical examination questions for the one 'open book' sections of the ADSI examinations. These are the versions of the DESIGN documents that candidates must be conversant with, and all will remain available throughout 2022.

- IMCA D 018 Rev. 1 Code of practice for the initial and periodic examination, testing and certification of diving plant and equipment.
- IMCA D 023 Rev. 1 Diving Equipment Systems Inspection Guidance Note (DESIGN) for surface orientated (air) diving systems.
- IMCA D 024 Rev. 2 DESIGN for saturation (bell) diving systems.
- IMCA D 037 DESIGN for surface supplied mixed gas diving systems.
- IMCA D 040 Rev. 1 DESIGN for mobile/portable surface supplied systems.

- IMCA D 053 Rev. 0.1 DESIGN for the hyperbaric reception facility (HRF) forming part of a hyperbaric evacuation system (HES).

In preparation for IMCA ADSI examinations, it is recommended that candidates start a programme of disciplined self-study in good time ahead of the exam date.

This is to ensure that candidates have the best chance of passing the exam at the first attempt, but it is also to ensure that every candidate has a thorough understanding of all the documents and procedures that the ADSI role demands.

ADSI candidates who do not prepare adequately may find the exam a challenge to pass, in particular section 1 of the ADSI Surface Orientated Diving Systems examination which is not 'open book'.

4 IMCA ADSI SAMPLE EXAMINATION QUESTIONS

Question from section 1, ADSI Surface Orientated Diving Systems examination:

Which document could be referenced when carrying out an examination/test on Compressors, boosters and filtration units used for gas transfer at both high and low pressure equipment when in service?

Answers: (choose one)

- a) IMCA D 018
- b) DMAC 018
- c) AODC 018
- d) HSE 018

Question from section 2, ADSI Surface Orientated Diving Systems examination:

Which category of competent person can examine/test analysers when in service?

Answers: (choose one)

- a) 1, 2 or 4
- b) 1, 3 or 4
- c) 2, 3 or 4
- d) 1, 2, 3 or 4

Question from ADSI Saturation Diving Systems examination:

The HRU must be marked in accordance with international recommendations. These can be found in:

Answers: (choose one)

- a) IMCA D 017
- b) IMCA D 027
- c) IMCA D 037
- d) IMCA D 047

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