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Recreational diving services — Requirements for introductory programmes to scuba diving

Services relatifs à la plongée de loisirs — Exigences pour les programmes d'initiation à la plongée subaquatique





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 228, *Tourism and related services*.

This second edition cancels and replaces the first edition (ISO 11121:2009), which has been technically revised.

Introduction

The programme specified in this document is used to introduce a non-diver to recreational scuba diving by means of a supervised, controlled dive experience and to encourage the participant to seek further training.

The introductory diving programme does not result in any qualification, but is experiential in nature; consequently, in-depth knowledge of diving academics and skills is not necessary. Participants are taught only what is required of them to experience scuba diving under direct supervision of a scuba instructor.

Recreational diving services — Requirements for introductory programmes to scuba diving

1 Scope

This document specifies minimum programme content requirements for training organizations for introductory scuba experiences in recreational scuba diving. Under no conditions are these requirements considered to be a standard for the training and qualification of scuba divers.

This document applies to programmes that include participants being taken into an open water environment. It does not apply to programmes that are exclusively conducted in a confined water environment (e.g. swimming pools).

This document also specifies the conditions under which this service is to be provided, which supplement the general requirements for recreational diving services specified in ISO 24803.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 24801-3:2014, Recreational diving services — Requirements for the training of recreational scuba divers — Part 3: Level 3 — Dive leader

ISO 24802-2, Recreational diving services — Requirements for the training of scuba instructors — Part 2: Level 2

ISO 24803, Recreational diving services — Requirements for recreational scuba diving service providers

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at http://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

training organization

entity providing training systems and issuing qualifications for recreational diving, and which is responsible for the implementation and quality management of training

3.2

scuba instructor

individual qualified in accordance with ISO 24802-1 or ISO 24802-2 respectively

3.3

dive leader

individual qualified in accordance with ISO 24801-3

3.4

participant

individual who takes part in a scuba diving experience in open water by making introductory scuba dives, and who does not receive a diving qualification

3.5

confined water

swimming pool with a depth appropriate to the activity or body of water that offers similar conditions with regard to visibility, depth, water movement and access

3.6

open water

body of water significantly larger than a swimming pool offering conditions typical of a natural body of water

3.7

direct supervision

supervision by a scuba instructor or a dive leader of a group of divers in a position allowing rapid intervention on behalf of the diver

3.8

diving equipment

equipment consisting of fins, mask, snorkel, demand regulator, alternative breathing gas system, cylinder, cylinder support system, buoyancy compensator, a quick-release weight system (when weights are needed), submersible pressure gauge, means to measure depth and time and to safely limit exposure to inert gas and diving suit (if appropriate)

Note 1 to entry: A demand regulator can also be referred to as a regulator.

Note 2 to entry: An alternative breathing gas system could range from a simple octopus system to a duplicate breathing system with a separate breathing gas supply.

Note 3 to entry: A submersible pressure gauge can be a breathing gas pressure monitor.

Note 4 to entry: Specific environments or activities can require additional equipment (e.g. an underwater navigational aid, knife/cutting device).

4 Competences

The programme shall ensure that participants are enabled to participate safely in an introductory open water dive under the supervision of a scuba instructor according to ISO 24802-2. At the scuba instructor's discretion, the participant may then take part in subsequent introductory dives in accordance with this document under the direct supervision of a dive leader qualified in accordance with ISO 24801-3:2014, Annex A.

The completion of the programme in accordance with this document does not qualify the participants to procure breathing gas, diving equipment, or any other scuba diving services, nor does it allow the participant to engage in recreational diving without direct supervision by a scuba instructor or a dive leader.

5 Prerequisites for participation

5.1 Minors

Documented parental or legal guardian consent shall be obtained when the participant is a minor.

5.2 Health requirements

Documented evidence that the participant has been medically screened as suitable for recreational diving shall be obtained by means of an appropriate questionnaire or medical examination. In case of doubt, or at the scuba instructor's discretion, participants shall be referred to proper medical resources. If the participant is not examined by a physician, the participant shall be obliged to confirm by signature that he or she has understood the written information given by the scuba instructor on diseases and physical conditions which may pose risks in relation to diving.

NOTE Annex A provides an example of an information sheet for medical screening.

6 Introductory information

Information in accordance with ISO 24803 shall be made available to the participants prior to the programme taking place. In addition, participants shall be informed that the completion of a programme in accordance with this document does not qualify the participants to procure breathing gas, diving equipment or any other scuba diving services, nor does it allow the participant to engage in recreational diving without direct supervision.

7 Knowledge

7.1 Equipment

The programme shall ensure that participants have appropriate introductory knowledge on the use of the following equipment items:

- a) mask;
- b) fins;
- c) buoyancy compensator;
- d) a quick-release weight system (when weights are needed);
- e) demand regulator;
- f) submersible pressure gauge (breathing gas pressure monitor);
- g) alternative breathing gas system.

7.2 Dive conduct

The programme shall ensure that participants have appropriate introductory knowledge on diving and the diving environment, i.e.:

- a) reasons for:
 - not holding one's breath;
 - breathing continuously during the introductory dive;
 - ascending slowly;
- b) equalization techniques,
- c) potential local hazards (e.g. harmful aquatic life);
- d) hand signals;
- e) the necessity for seeking further training and where to obtain it.

8 Scuba skills

The following scuba skills shall be introduced to and demonstrated by participants in shallow water in accordance with 9.2 before proceeding to deeper water:

- a) underwater breathing;
- b) mask clearing;
- c) ear clearing/equalization techniques;
- d) mouthpiece clearing and retrieval.

9 Requirements for in-water activities

9.1 General

- **9.1.1** Activities in shallow water (see 9.2) and open water (see 9.3) may be conducted separately or may be combined into a single session with skills being initially introduced in shallow water before participants are taken into deeper water.
- **9.1.2** The safe supervision of participants is solely the scuba instructor's responsibility. Where environmental conditions are less than ideal (e.g. where underwater visibility is poor or there is significant water movement), the scuba instructor shall limit the number of participants under his/her responsibility. The scuba instructor may also use additional aids to improve safety, e.g. ascent lines, surface support stations or safety scuba divers. Where safety scuba divers are used, they shall have at least a dive leader qualification.

9.2 Shallow water

- **9.2.1** During any in-water activities, a scuba instructor shall be present. All scuba skills shall be directly supervised by a scuba instructor. The scuba instructor shall determine whether the participant's performance is satisfactory in order to proceed to deeper water.
- **9.2.2** Participants shall be introduced to and shall be required to demonstrate the scuba skills in accordance with Clause 8.
- **9.2.3** If these skills are introduced in a swimming pool, the maximum number of participants per scuba instructor shall be eight.

If a natural site is used for shallow water activities, the maximum number of participants shall be four, or when the scuba instructor is assisted by a dive leader, the maximum number of participants shall be six. Additional dive leaders may be used as assistants; however, no additional participants shall be added to the responsibility of the individual scuba instructor.

9.2.4 If shallow water is not available, the instructor may conduct the skills session from a boat, dock or other surface support station in benign conditions by using a device such as a descent line, ladder or platform to control students' depth that shall be within 2 m of the surface.

The ratio shall be 1:1 when using the descent line or ladder option. When the instructor is satisfied with the participants' skills and comfort in shallow water, they can then descend to the deeper phase of the dive.

9.2.5 All scuba skills shall be conducted in daylight conditions.

9.3 Open water dive

9.3.1 Open water scuba dives shall be directly supervised by a scuba instructor in accordance with ISO 24802-2.

NOTE For the purposes of this subclause, a scuba instructor in accordance with ISO 24802-2 is designated as a "level 2 scuba instructor".

- **9.3.2** For open water dives, the maximum number of participants per level 2 scuba instructor shall be four, or when the level 2 scuba instructor is assisted by a dive leader, the maximum number of participants shall be six. The level 2 scuba instructor shall limit the number of students where environmental conditions are less than ideal, e.g. where underwater visibility is poor or where there is significant water movement.
- **9.3.3** All open water dives shall be conducted during daylight conditions, at depths not to exceed 12 m and in water that allows direct vertical access to the surface.
- **9.3.4** During an open water dive, the level 2 scuba instructor may delegate responsibility for direct supervision to a dive leader for the purposes of escorting participants during surface excursions and exits.
- **9.3.5** During open water dives, the level 2 scuba instructor shall at least be equipped with:
- a) diving equipment in accordance with 3.8;
- b) a dive knife/diver's cutting tool;
- c) an emergency signalling device.

NOTE It is considered good practice to use a surface support station with a dive flag if appropriate.

- **9.3.6** During open water dives, participants shall at least be equipped with diving equipment in accordance with <u>3.8</u> except that a snorkel and a means to measure depth and time and to safely limit exposure to inert gas are not required.
- **9.3.7** During any open water dive, scuba instructors shall not engage in any activities other than the direct supervision of the participants.
- **9.3.8** Descents shall be conducted in a controlled manner that allows participants to equalize their air spaces, e.g. descent following the bottom contour; along a descent line; 1:1 instructor/participant ratio.

Annex A

(informative)

Example of an information sheet for medical screening

Medical Statement

This is a statement in which you are informed of some potential risks involved in recreational scuba diving and of the conduct required of you during the recreational scuba training.

You must complete this Medical Statement, which includes the medical-history information section, to enrol in the recreational scuba-training program.

To the Participant:

The purpose of this medical information sheet is to inform you whether you should be examined by a physician before participating in recreational diving training. If any of these conditions apply to you, this does not necessarily disqualify you from recreational scuba diving. It only means that you must seek the advice of a physician.

Please acknowledge that you have read and understood the information provided below by initialling each individual point.

Please be advised that if any of these items apply to you, for your own safety, you must consult a physician prior to participating in recreational scuba diving.

| YOU MUST CONSULT A PHYSICIAN IF: | Initials |
|------------------------------------------------------------------------------------------------------------------|----------|
| you are pregnant or you suspect you may be pregnant | |
| you regularly take medications (with the exception of birth control) | |
| you are over 45 years of age and one or more of the following apply | |
| — you smoke | |
| you have a high cholesterol level | |
| YOU SHOULD CONSULT A PHYSICIAN IF YOU EVER HAD: | Initials |
| Asthma, or wheezing with breathing, or wheezing with exercise | |
| Any form of lung disease | |
| Pneumothorax (collapsed lung) | |
| History of chest surgery | |
| Claustrophobia or agoraphobia (fear of closed or open spaces) | |
| Epilepsy, seizures, convulsions or take medications to prevent them | |
| History of blackouts or fainting (full/partial loss of consciousness) | |
| History of diving accidents or decompression sickness | |
| History of diabetes | |
| History of high blood pressure or take medications to control blood pressure | |
| History of any heart disease | |
| History of ear disease, hearing loss or problems with balance | |
| History of thrombosis or blood clotting | |
| Psychiatric diseases | |
| I AM AWARE THAT I COULD BE UNFIT TO DIVE IF I HAVE OR DEVELOP DURING THE COURSE ANY OF THE FOLLOWING CONDITIONS: | Initials |
| cold, sinusitis, or any breathing problems (e.g. bronchitis, hay fever) | |
| | |

| YOU MUST CONSULT A PHYSICIAN IF: | Initials |
|---------------------------------------------------------------------------------|----------|
| acute migraine or headache | |
| any kind of surgery within the last 6 weeks | |
| under influence of alcohol, drugs or medications affecting the ability to react | |
| fever, dizziness, nausea, vomiting and diarrhoea | |
| problems equalizing (popping ears) | |
| acute gastric ulcers | |
| pregnancy | |

Bibliography

[1] ISO 24802-1, Recreational diving services — Requirements for the training of scuba instructors — Part 1: Level 1

