

## Module 2: ISO & LOCAL RULES

### Quality

- **90% OF CUSTOMERS WHO ARE DISSATISFIED WITH QUALITY OF A SERVICE / PRODUCT WILL REFRAIN FROM BUYING THE SERVICE / PRODUCT AGAIN**
- EACH OF THESE CUSTOMERS WILL TELL AN AVERAGE OF **10 TO 20** PEOPLE ABOUT HIS DISCONTENT
- **ONLY 4% OF DISSATISFIED CUSTOMERS COMPLAIN ABOUT LACKING QUALITY**

### WHAT IS QUALITY

- **Quality** is how good something is. If the **quality** of a product is high then that means that it is fit for its purpose
- In other words, things that are low **quality** are cheap. **Quality** is understood differently by different people, depending on what they consider **quality** to be
- **QUALITY REMAINS WHEN THE PRICE IS FORGOTTEN ( FREDRICK HENRY ROYCE)**

### CUSTOMERS' POINT OF VIEW

MEETING CUSTOMERS' EXPECTATIONS

**CUSTOMERS ALWAYS COME BACK IF THE QUALITY OF THE SERVICE MEETS THEIR EXPECTATIONS**

### ISO STANDARDS

**<http://www.cdws.travel/diving/rules-regulations>**

- ISO for recreational diving provider 24803
- ISO for snorkeling excursion 13289
- ISO for introductory programs to scuba diver 11121
- ISO for supervised diver 24801-1
- ISO for autonomous diver 24801-2
- ISO for dive leader 24801-3
- ISO for scuba instructor level 1 24802-1
- ISO for scuba instructor level 2 24802-2

## **ISO FOR RECREATIONAL DIVING PROVIDER 24803**

### **Common requirements**

- Minors and vulnerable persons
- Information to be provided
- Introductory information
- Information during service provision
- Risk assessment
- Surface support procedures and related safety provisions
- Roll call
- Activity time
- Vessel operations
- Crewing considerations
- Safety/vessel briefing
- Additional equipment requirements for vessels
- Emergency equipment and procedures
- Emergency equipment
- Emergency procedures
- Diving equipment
- Documentation

### **Environmental considerations**

### **Snorkelling excursions**

### **Introductory dives**

### **Scuba diving training and education**

- General requirements
- Training locations
- Theory teaching facilities
- Open water training sites
- Staff
- Record keeping

### **Organized and guided diving for certified divers**

- Provision of services to groups
- Organized dive
- Guided dive
- Locations
- Staff

## Rental of diving equipment

- Services provided
- Diving equipment
- Staff

## ISO FOR SNORKELING EXCURSIONS 13289

### Prerequisites for participation

#### Minors

The service provider shall ensure that documented parental or legal guardian consent is obtained when the participant is a minor.

#### Health and fitness requirements

The service providers shall inform the participants of the health and fitness considerations associated with snorkeling activities. In particular, they shall be advised about risk factors, including those associated with cardiac diseases, pulmonary diseases and conditions that may lead to a rapid loss of consciousness.

Attention shall be drawn to the risks associated with increased age or decreased fitness levels during physical activity.

Advice given to the participants about controlling these risks shall include the importance of the following:

- informing the service provider of any adverse medical conditions;
- using flotation devices;
- snorkeling with a fit buddy;
- remaining within the immediate vicinity of the snorkeling guide;
- Ending or limiting the activity before becoming tired, cold or unduly stressed.

NOTE 1 It is advisable to include this advice in a documented format to participants, and in their own language. An example document is provided in Annex A.

In any case of doubt, or at the service provider's discretion, the service provider shall refer participants to proper medical resources.

NOTE 2 an example form for medical screening is provided in Annex B.

## **Introductory information**

The service provider shall make available to the participants relevant information in accordance with ISO 24803, prior to the conduct of the snorkeling excursion.

In addition, participants shall be informed that the completion of a snorkeling excursion in accordance with this International Standard does not qualify the participants to snorkel unsupervised.

## **Briefing of participants**

### **General**

The service provider shall provide information on equipment, excursion conduct and safety considerations to participants, as specified in 6.2, 6.3 and 6.4.

### **Equipment**

The service provider shall ensure that participants have appropriate introductory knowledge of the selection (e.g. correct fit), use and, where relevant, sanitization of the following equipment items:

Fins;

Mask;

Snorkel;

Personal flotation device (if appropriate);

Quick release weight system (if appropriate);

Exposure suit (if appropriate).

### **Excursion conduct**

The service provider shall ensure that participants have appropriate introductory knowledge on snorkeling and the snorkeling environment, as follows:

- snorkeling techniques (e.g. equalization of ears and mask, clearing of snorkel);

- emergency and routine hand signals and communications (including emergency recall signal);
- snorkeling buddy system;
- points of interest and environmental considerations;
- Behavior and techniques to avoid disturbing marine life.

### **Safety considerations**

The service provider shall advise participants how to minimize the risk of harm from any of the following hazards that are relevant:

- sunburn;
- heat exhaustion/heat stroke;
- hypothermia;
- dangers associated with surface traffic (e.g. collision, propellers);
- harmful aquatic life;
- getting separated from the snorkeling guide or base station;
- boarding the wrong boat after the excursion;
- exhaustion;
- breath holding hazards (e.g. shallow water blackout, hyperventilation);
- currents;
- Wave action.

### **Requirements for in-water activities**

- During the actual conduct of the excursion, the safe supervision of participants is the responsibility of the snorkeling guide.
- The service provider shall limit the number of participants per snorkeling guide where environmental conditions are less than ideal, e.g. where there is significant water movement.

- The service provider may also use additional aids to improve safety, such as current lines, surface support stations and/or area boundary indicators.
- The service provider shall ensure that during open water excursions, participants are equipped and properly fitted with snorkeling equipment in accordance with 3.9.
- During any open water excursion, snorkeling guides may not engage in any activities other than direct supervision of the participants.
- At least one snorkeling guide shall be present at a snorkeling excursion. Where more than one is present, one of them shall be designated the leading snorkeling guide for that session and shall have overall responsibility for ensuring that the requirements of this International Standard are met.

### Supervision procedures

#### Group assignments

The service providers shall take into consideration the following factors when assigning participants to snorkeling guides:

- size, type and location of the snorkeling site;
- number of participants;
- communication and language considerations;
- participants' snorkeling experience and snorkeling skill level;
- participants' fitness and capabilities;
- skill and availability of support staff;
- available equipment (e.g. radios, tenders, rescue equipment);
- effectiveness of observation, e.g. underwater visibility, or observers' height of eye on a base station;

The service provider shall assign participants into **buddy pairs** for the conduct of the excursion.

The snorkeling guide should advise participants to remain in assigned buddy pairs in the water, and that one of each pair should watch from the surface if the other makes a sub-surface dive.

## **Supervision procedures**

### **Supervision from a base station**

Where supervision is carried out from a base station, the snorkeling guide shall ensure that all participants can be monitored at all times and can be reached rapidly if required. The snorkeling guide shall be in a position to enter the water immediately and to respond to needs of participants in an emergency.

The maximum number of participants that may be supervised by one snorkeling guide from a base station is 20. The total number of participants may be increased if additional snorkeling guides are available to enter the water immediately, so long as a ratio of 1 to 20 participants is not exceeded. This ratio only applies to ideal conditions. If conditions are anything less than ideal, the ratio shall be reduced.

### **In-water supervision**

Where supervision is carried out in water, the snorkeling guide shall ensure that he/she can be easily identified by participants and shall remain close enough to be able to intervene rapidly in the case of an emergency. The maximum number of participants that may be accompanied by one snorkeling guide in the water is 12. This ratio only applies to ideal conditions. If conditions are anything less than ideal, the ratio shall be reduced.

### **Check in/check out procedure**

The snorkeling guide shall account for all participants before and after the snorkeling excursion and shall document the fact that they have returned to the base station.

## **Emergency equipment and procedures**

### **Equipment**

The service provider shall ensure that the following equipment is present at the base station or is carried upon the snorkeling guide's person:

- a first aid kit (including appropriate treatment for stings, bites and grazes inflicted by local marine organisms);
- an emergency oxygen unit with a capacity of delivering at least 15 l/min of pure oxygen for at least 20 min;
- a means of recalling participants (e.g. an alarm, a whistle, air horn or underwater signaling device);
- a watch or other means to measure time;
- means of communicating for assistance (e.g. VHF radio or cell phone);
- Contact information for local emergency medical services.

### **Emergency equipment and procedures**

The following equipment is **RECOMMENDED** for use and may be considered essential, depending on the participants, the environmental conditions and the availability of local emergency medical services:

- floats, marker buoys, flags or means of identifying the snorkelers and/or the excursion area to other craft;
- binoculars;
- polarized sunglasses (for better vision from surface in bright conditions);
- provision to treat thermal imbalances (depending on the climate, this may include the provision of shade or of blankets, for example);
- automated external defibrillator (AED);
- drinking water;
- provision for removing an unresponsive participant from the water;
- navigational aids to establish the approximate position of a lost participant (e.g. GPS unit or marker buoy);
- a surface support vessel;

- propeller guards on boats likely to maneuver while participants are in their vicinity;
- Warnings to other vessels that participants are in the water (e.g. flag ALPHA, relevant lights).

## Procedures

The service provider shall have a prepared emergency plan which shall include the following:

- contact information for local emergency medical and/or rescue services;
- procedures for locating a lost participant;
- procedure for recalling all participants;
- procedures for removing conscious and unconscious casualties from the water;
- Provision for informing a casualty's next of kin of an incident.

### ANNEX A (informative)

#### Example of a medical and responsibility declaration

##### **Risk awareness statement — Recreational snorkelers**

I (*print name*) \_\_\_\_\_

- declare that I have been advised that snorkeling can be a strenuous physical activity and may increase the health and safety risks to me if I am suffering from any of the following:
- **any medical conditions that may be made worse by physical exertion**
- (e.g. heart disease, asthma, some lung complaints)
- **any medical condition that can result in loss of consciousness**

- (e.g. some forms of epilepsy and some diabetic conditions)
- **asthma that can be brought on by cold water or salt water mist**
- I have been advised that snorkeling can be a strenuous physical activity, even in calm water, and that older or unfit persons are at an increased risk due to a higher incidence of medical conditions made worse by physical exertion, such as heart disease and stroke. I have been advised to tell the service provider or snorkeling guide if I have any concerns about my medical condition.
- I have also been advised of the importance of the following
- informing the service provider or snorkeling guide of any adverse medical conditions;
- wearing flotation devices;
- snorkeling with a fit buddy;
- remaining within the immediate vicinity of the snorkeling guide;
- Ending or limiting the activity before becoming tired, cold or unduly stressed.
- Signature \_\_\_\_\_ Date \_\_\_\_\_
- Parent's or guardian's signature for minors  
\_\_\_\_\_
- **It is recommended persons with a medical condition and older persons intending to snorkel should:**
- Snorkel in an area which allows the lookout or snorkeling supervisor to offer closer supervision.
- Wear a flotation device that will support the wearer in a relaxed state.
- Snorkel in a buddy pair.

## **ANNEX B (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 snorkeling and of the conduct required of you during the snorkeling activities.
- You must complete this Medical Statement, which includes the medical history information section, in order to enroll in the snorkeling excursion.
- **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 snorkeling. If any of these conditions apply to you, this does not necessarily disqualify you from snorkeling. 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 initialing 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 snorkeling.

<b>YOU MUST CONSULT A PHYSICIAN IF:</b>	<b>Initials</b>
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	
<b>YOU SHOULD CONSULT A PHYSICIAN IF YOU EVER HAD:</b>	<b>Initials</b>
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	
<b>I AM AWARE THAT I COULD BE UNFIT TO SNORKEL IF I HAVE OR DEVELOP DURING THE COURSE ANY OF THE FOLLOWING CONDITIONS:</b>	<b>Initials</b>
cold, sinusitis, or any breathing problems (e.g. bronchitis, hay fever)	
acute migraine or headache	
any kind of surgery within the last 6 weeks	
under influence of alcohol, drugs or medications effecting the ability to react	
fever, dizziness, nausea, vomiting and diarrhea	
problems equalizing (popping ears)	
acute gastric ulcers	
pregnancy	

## ISO for introductory programs to scuba diver 11121

### Prerequisites for participation

#### **Minors**

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

#### **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.

### Introductory information

Information in accordance with ISO 24803 shall be made available to the participants prior to the program taking place. In addition, participants shall be informed that the completion of a program 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.

The service provider shall provide the following locally relevant information to the client:

1. conditions regarding the responsibilities of each party related to commencement, delivery and termination of the service;
2. the consequences for the service provider and the client if either party should choose to cancel the service;
3. prerequisites and any qualification requirements in order to obtain the service (e.g. medical certification, diver qualifications);

4. equipment requirements;
5. costs;
6. insurance requirements;
7. environmental considerations including recommendations to divers for minimizing their impact on it;
8. Diving-related legislation and legal requirements relevant to the specific kind of service.

### **Knowledge**

### **Equipment**

The program 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.

### **Dive conduct**

The program 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.

### **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.

### **Requirements for in-water activities**

#### **General**

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.

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.

## Shallow water

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.

Participants shall be introduced to and shall be required to demonstrate the scuba skills in accordance with Clause 8.

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.

**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.**

## Open water dive

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

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

For open water dives, the maximum number of participants per level 2 scuba instructors 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.

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.

During an open water dive, the level 2 scuba instructors may delegate responsibility for direct supervision to a dive leader for the purposes of escorting participants during surface excursions and exits.

During open water dives, the level 2 scuba instructors 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 signaling device.

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

During open water dives, participants shall at least be equipped with diving equipment in accordance with 3.8 except that a snorkel and a means to measure depth and time and to safely limit exposure to inert gas are not required.

During any open water dive, scuba instructors shall not engage in any activities other than the direct supervision of the participants.

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 enroll 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 initialing 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.

<b>YOU MUST CONSULT A PHYSICIAN IF:</b>	<b>Initials</b>
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	
<b>YOU SHOULD CONSULT A PHYSICIAN IF YOU EVER HAD:</b>	<b>Initials</b>
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	
<b>I AM AWARE THAT I COULD BE UNFIT TO DIVE IF I HAVE OR DEVELOP DURING THE COURSE ANY OF THE FOLLOWING CONDITIONS:</b>	<b>Initials</b>
cold, sinusitis, or any breathing problems (e.g. bronchitis, hay fever)	
<b>YOU MUST CONSULT A PHYSICIAN IF:</b>	<b>Initials</b>
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 diarrhea	
problems equalizing (popping ears)	
acute gastric ulcers	
pregnancy	

## **ISO FOR SUPERVISED DIVER 24801-1**

Competencies of a recreational scuba diver at level 1 — “Supervised diver”

Prerequisites for training

- General
- Minors
- Health requirements

Introductory information

Required theoretical knowledge

- Equipment
- Physics of diving
- Medical problems related to diving
- Diving environment
- Scuba diver separation procedures
- Use of breathing gases other than air

Required scuba skills

- Confined water scuba skills
- Open water scuba skills

Practical training parameters

Assessment

- Knowledge
- Scuba skills

Annex A (informative) Example for the degree of mastery required for the level 1 scuba diver examination

Annex B (informative) Example of an information sheet for medical screening

## ISO FOR AUTONOMOUS DIVE 24801-2

Competencies of a recreational scuba diver at level 2 - “Autonomous diver”

Prerequisites for training

- General
- Minors
- Health requirements

Introductory information

Required theoretical knowledge

- Equipment
- Physics of diving
- Decompression management
- Dive planning
- Medical problems related to diving
- Psychological problems related to diving
- Dive environment
- Use of breathing gases other than air

Required scuba skills

- Confined water scuba skills
- Open water scuba skills

Practical training parameters

Assessment

- Knowledge
- Scuba skills

Annex A (informative) Example for the degree of mastery required for the level 2 scuba diver examinations

Annex B (informative) Example of an information sheet for medical screening

## **ISO FOR DIVE LEADER 24801-3**

Competencies of a recreational scuba diver at level 3 — “Dive leader”

Prerequisites for training

- General
- Minors
- Health requirements
- Minimum diving experience

Introductory information

Required theoretical knowledge

Personal scuba skills

- Scuba skills
- Deep diving
- Navigation

Leadership skills

- Dive related skills
  - Dive planning and preparation
  - Dive briefing
  - Dive conduct
  - Post-dive procedures
- Diver rescue
- First aid
- Emergency oxygen administration

Practical training parameter

Assessment

- Knowledge
- Scuba skills
- Minimum number of open water dives

Minimum age for leading

Annex A (informative) Example for the degree of mastery required for the level 3 scuba diver examinations

## **ISO FOR SCUBA INSTRUCTOR LEVEL 1 24802-1**

Competencies of a scuba instructor at level 1

Prerequisites

- Practical experience
- Health requirements

Scuba instructor candidate information

Required theoretical knowledge

Theoretical teaching skills

Teaching and supervision of scuba skills

Emergency procedures

- Diver rescue
- First aid
- Oxygen administration

Scuba instructor-trainers

Certification

- Minimum age
- Minimum practical experience
- Theoretical knowledge
- Teaching techniques
- Teaching and supervision of scuba skills
- Supervision and guidance of diving activities
- Emergency procedures

Annex A (informative) Example of assessment of teaching and evaluation competencies when teaching a level 1 scuba diver course

## **ISO FOR SCUBA INSTRUCTOR LEVEL 2 24802-2**

Competencies of a scuba instructor at level 2

Prerequisites

- Practical experience
- Health requirements

Scuba instructor candidate information

Required theoretical knowledge

Personal scuba skills

Theoretical teaching skills

Teaching and supervision of scuba skills

Emergency procedures

- Diver rescue
- First aid
- Oxygen administration

Scuba instructor-trainers

Certification

- Minimum age
- Minimum practical experience
- Theoretical knowledge
- Teaching techniques
- Teaching and supervision of scuba skills
- Supervision and guidance of diving activities
- Emergency procedures

Annex A (informative) Example of assessment of teaching and evaluation competencies when teaching a level 3 scuba diver course

## **LOCAL RULES**

<http://www.cdws.travel/diving/rules-regulations>

- Gloves and Knives
- Ratios
- Technical diving
- Solo diving
- Muck stick
- Depth limits
- Introductory Dives

### **Gloves and Knives**

The official CDWS statement with regards to wearing gloves & carrying dive knives

- Wearing gloves as a thermal protection is not restricted however, touching corals and marine life is strictly prohibited.

Therefore, it is highly recommended not to wear gloves if not needed as a thermal protection.

- Carrying dive knives as a tool is not restricted; the use of dive knives as a signaling device, to cut lines and to free entanglements is allowed; however, it is strictly prohibited to use dive knives as a weapon or to cut, damage, kill, touch or harass marine life.

### **Ratios**

#### **For the diving activities**

CDWS is implementing the World Recreational Scuba Training Council (WRSTC) standards [www.wrstc.com](http://www.wrstc.com) for recreational diving.

This means that you simply use your training agency ratios, procedures, rules, recommendations and standards for your diving activities.

The students to instructor ratio during training courses are specified by the training agencies standards.

For guided dives or organized dives, however, it is not practical to impose a ratio of certified divers to dive leader.

The Manager of the dive operation and the dive pros of a licensed operation are perfectly capable of making the right professional decisions based on the qualification of the diver(s), their proof of experience and how recently they dived, divers' capabilities, the dive location, weather conditions, etc.

### **For snorkeling activities**

Since most of the participants in snorkeling activities won't be qualified skin divers or previously trained for snorkeling; the CDWS regulation - approved by the ministry of Tourism - requires that the maximum number of snorkelers participating in an open water activity is 12 snorkelers to one snorkeling guide. (THIS RATIO IS CALCULATED ACCORDING TO THE BOAT LIST BEFORE DEPARTURE) IF THERE ARE 25 SNORKELING CLIENTS ON BOARD THEN A MINIMUM OF 3 SNORKEL GUIDES WILL BE ON BOARD

Of course, this ratio may be reduced by the operation manager or the snorkeling guide if the sea conditions, location or the abilities of the participants requires modification in order to be on the safe side.

### **Solo diving**

To be allowed to dive solo; a diver has to successfully pass a solo diving training course and earn such a certification from a recognized training agency.

Procedures, rules, recommendations and standards of the training agency will apply for the diving activity.

The Technical Manager and/or at least one of the Instructors of the licensed operation must be certified as a Solo diving Instructor. They are –then- perfectly capable and responsible of making the right professional decisions - to allow divers to SOLO dive - based on their qualifications, proof of experience and how recently they dived, capabilities, the dive location, weather conditions, etc.

General required rules:

- The Solo diver must be familiar with the dive site.
- The maximum depth must NOT exceed the training depth.
- The Solo diver must use a redundant set of equipment (Regulator, computer, mask, gas, Surface Marker Buoy (SMB, torch).
- SMB must be used during ascending; Red if all is ok and a yellow SMB if facing problems.
- Indirect supervision (a safety diver) is required from the boat/shore.
- The solo diver must fill a legal liability for SOLO Diving; it must include clearly that his responsibility covers but not limited to:
  - Dive planning
  - Dive execution
  - Gases analysis
  - Equipment performance and configuration
  - Safety procedures

### **Muck stick**

CDWS statement concerning the use of the Muck Stick, Pointer Stick  
or Lobster Tickle Stick in the Red Sea

The Muck Stick, Pointer Stick or Lobster Tickle Stick is usually made of solid stainless steel or aluminum and is 12 to 18 inches long. Recent reports claim this device is being used - mostly by UW photographers - on coral reefs to stabilize themselves when close to the reef.

CDWS investigation concluded the following:

The use of such rods to touch corals and marine organisms in order to stabilize photographers or divers negatively impacts the reefs, especially if widely used.

Therefore, CDWS strongly forbids scuba divers and photographers to use these sticks in an attempt to promote an eco-friendly marine environment in the Red Sea. The penalty list for environmental violations will apply.

### Depth limits

Since CDWS was created on the 17th of April 2007; it has established a solid plan to improve the quality of services and the service providers.

CDWS has emphasized the implementation of the training agencies standards. All diving operations must comply with the international standards for recreational scuba diving service provider registered as ISO 24803:2007/ EN 14467:2004 in order to obtain a license to operate in Egypt.

As for the maximum depths for recreational diving:

CDWS is implementing the World Recreational Scuba Training Council (WRSTC) standards [www.wrstc.com](http://www.wrstc.com) for recreational diving.

The maximum depth for diving with compressed air is 40 meters (if the training qualifications of the divers allow it)

For Enriched Air diving; the maximum depth is up to a partial pressure of Oxygen (PPO<sub>2</sub>) = 1.4 ATA (maximum depth 40 meters on single tank)

Depth limitations for different activities:

- For Advanced Enriched Air the maximum depth is: 40 meters
- For Decompression Procedures dives (Or equivalent) the maximum depth is: 45 meters
- For Extended Range dives (or equivalent) the maximum depth is: 55 meters
- For Normoxic (or entry level) Trimix the maximum depth is: 60 meters
- For Hypoxic (or advanced) Trimix the maximum depth is: 100meters

NOTE: for all technical diving activities; the maximum PPO<sub>2</sub> for Bottom mix is 1.4 ATA and the maximum PPO<sub>2</sub> for Decompression mix is 1.6 ATA

Warning: CDWS does NOT recommend nor support any recreational technical diving recreational activities deeper than the above mentioned

### depths

For any Technical dives deeper than the above mentioned depths (extreme and/or records) – using open circuits or closed circuit re-breathers – the divers and the technical manager of the Diving center are fully responsible for their activities, their own and other participants' safety.

By all means the following must be prepared, reviewed and approved by the Technical manager of the operation prior to the dive date:

1. Divers training qualifications,
2. Proof of diving experience,
3. The dive plan and the dive gas mixes,
4. The dive location,
5. Proof of support team's training qualifications,
6. List of emergency equipment at the site and the emergency plan,
7. Proof of dive insurance covering the team to planned maximum depth.

Technical diving hosted by recreational diving operation.

The following rules and regulations will apply in case of occasional technical diving activities done by clients, tec. clubs or schools and hosted by a recreational diving operation (safari boat/dive center).

1. The recreational dive operation must employ (or host an external) qualified technical diving instructor during the requested period. He/she must be qualified up to the max operating depth of clients' diving activities.

For example:

- Extended range instructor or equivalent for activities up to 55 MSW.

- TMX instructor or equivalent for activities up to 100 MSW.

Note:

For example, when having a re-breather guest diver the INSTRUCTOR (employed or hosted) must have experience with a re-breather (i.e. user or instructor). This experience does not have to be with the exact type of re-breather used by clients.

2. The technical diving instructor mentioned above must be certified by a recognized training agency (such as; TDI, PADI, IANTD, SSI or NAUI Tec) and has obtained CDWS professional card.

The technical divers are responsible for:

- Creating, reviewing and verifying their dive plans.
- Gas blend checks and verification.

3. The technical diving instructor assigned by the service provider will provide supervision, advice and support during the diving activities, and must verify safety procedures of all the Tec dive activities performed by the clients.

All proper technical diving documents and forms must be prepared and used:

- Divers' registration, liability release and medical statement.
- Tanks and gas mixtures log.

4. Safety briefing must include:

- Local area rules, regulations and hazards.
- Max depth allowed for each level.
- Allowed and restricted/forbidden diving activities.
- Any other rules set by the dive center or local regulations.

5. All rules of organized dives mentioned in ISO 24803/EN 14467 will apply to this case.

6. All gas blends used must be prepared by a certified gas blender or purchased from a certified gas blending center/filling station.

## **Introductory Dives IN OPEN WATER**

- ONLY A LEVEL 2 INSTRUCTOR IS ALLOWED TO CONDUCT THESE DIVES

**MINIMUM AGE FOR ALL SCUBA DIVING PARTICIPANTS IN OPEN WATER IS TEN (10) YEARS**

**MINIMUM AGE FOR ALL SCUBA DIVING PARTICIPANTS IN CONFINED WATER IS EIGHT (8) YEARS**