



# CMAS

CONFÉDÉRATION MONDIALE  
DES ACTIVITÉS SUBAQUATIQUES

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WORLD UNDERWATER FEDERATION

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## CMAS – Underwater Target Shooting

### SUPER BIATHLON RULES

#### 1. SECTION I

##### 1.1 DEFINITIONS

###### 1.1.1 Underwater Target Shooting

Underwater Target Shooting is a sports discipline practiced in a swimming pool by an athlete equipped in compliance with these regulations, and whose autonomy underwater depends exclusively on his capacity to hold his breath.

###### 1.1.2 Age

In order to take part in Underwater Target Shooting competitions competitors must be at least 16 years of age.

### **1.1.3 The Super Biathlon**

1.1.3.1 The Super Biathlon is an individual specialty.

#### **1.1.3.2 Definition**

The Underwater Super Biathlon event consists of completing three return (there and back) courses in apnea in a maximum of 10 minutes, using the same equipment.

On each circuit the athlete fires one shot at a sheet containing five (5) targets. The athlete chooses three (3) of the five (5) targets, firing one shot at each target. The starting point is 15 metres from the firing point.

#### **1.1.3.3 Procedure**

After each shot the athlete returns to the starting point, after having retrieved the spear from the target, reloads his gun, pointing in the direction of the target, and prepares for the next shot.

The stop watch will be stopped after the third shot, when the athlete's head emerges from the water behind the starting point and following the recognised signal.

The athlete must return behind the starting point with all his equipment.

### **1.1.4 Use of masculine pronoun**

In these regulations, all grammatical parts of the text referring to persons use the masculine gender. This is obviously an expedient to simplify comprehension, and it is expressly stated to the reader that references in these regulations apply absolutely independently from the gender of the person, whatever his or her role, who participates in a Precision Shooting event.

### **1.1.5 Violation of the regulations**

The violation of the provisions set forth in these regulations shall cause the application of penalties to the competitor.

### **1.1.6 CMAS Licence**

Each competitor must be in possession of the CMAS sports licence.

## **2. SECTION II**

### **2.1 GENERAL TECHNICAL ASPECTS**

#### **2.1.1 Athlete categories, materials and equipment**

##### **2.1.1.1 Categories**

2.1.1.1.1 Official competitions may be for men and/or for women.

##### **2.1.1.2 Authorised materials**

2.1.1.2.1 During the competition the use of the following equipment is allowed:

fins, mask, snorkel, wetsuit, ballast, gloves, suction cap, replacement gun, replacement spear with line, positioning items.

2.1.1.2.2 No other equipment is allowed.

2.1.1.2.3 The replacement gun shall be used only if the first gun is broken.

2.1.1.2.4 The use of torches is prohibited.

2.1.1.2.5 The use of reel is forbidden.

### 2.1.1.3 **Characteristics of the gun**

2.1.1.3.1 Air and rubber-powered spearguns can be used in the competitions, with spears having a length up to **150 cm**.

2.1.1.3.2 No wooden rubber-powered guns may be used even if they are mass-produced.

2.1.1.3.3 The diameter of the spear must not exceed **8 mm**.

2.1.1.3.4 The tip must have be a truncated cone with the cone having a length of at least **6 mm** and a terminal diameter ranging from a minimum of **3 mm** to a maximum of **4 mm**.

2.1.1.3.5 The spear must be secured to the gun with a line having a minimum thickness of **0.8 mm** and be in excellent condition.

2.1.1.3.6 Guns with elastic lines and the use of one pulley only is allowed.

2.1.1.3.7 The elastic line must measure not less than **1.80 mm** and must be secured to the spear and the gun in such a way as to prevent easy breakage.

2.1.1.3.8 In air guns, to connect the line to the spear and the gun, only mass-produced and not custom built spear guides may be used. Alternatively, spears may be secured using a through hole and without spear guides.

2.1.1.3.9 The regularity of the weapon is checked in advance and may be verified, upon request by the Competition Judge, with a shot in the water.

2.1.1.3.10 The gun must be loaded only with the strength of the arms.

2.1.1.3.11 The gun must be mass-produced for underwater fishing, verifiable and with a recognised brand, not altered or customised. The producer must be officially registered.

The gun may be either assembled or self-contained. With regard to assembled guns, they may have different features compared to models listed in catalogues, provided that they result from industrial mass production of the same brand.

The gun being used, whether power band or pneumatic, shall at any rate not exceed the following standard dimensions:

- maximum all-out length (from the gun's rearmost point near the grip to its foremost point near the head), including any accessories: 1500 mm;
- maximum width, including any accessories: 80 mm;
- maximum height, including any accessories and excluding the grip (handle, trigger and release mechanism): 50 mm
- Overall weight, excluding spear: 1500 g

2.1.1.3.12 All sighting devices, whether mass-produce or custom made, such as bow or rifle laser sights, fixed or adjustable, all optical sighting devices altering the visibility and all modifications to the structure of the gun that may be used as a sighting device are prohibited. Fins, balances, counterweights, spear guides with fins, any support between gun and body or gun and arm as well as custom made anatomical grips are prohibited.

2.1.1.3.13 The spear, line, tip and elastics can be replaced.

## **2.1.2 Competition Zone**

2.1.2.1 The competitions shall take place in a pool with the following characteristics:

2.1.2.1.1 water temperature between 23 C+/5C;

2.1.2.1.2 minimum size of 10.00 x 25.00 metres with minimum depth of 1.80 metres and a maximum of 5.00 metres.

2.1.2.1.3 Eventual exceptions must be authorised by CMAS.

## **2.1.3 Organisation of the Competition Zone**

2.1.3.1 The Competition Zone is divided as follows:

2.1.3.1.1 Safety zone:

the area of water behind the targets and where stopping or transit is absolutely prohibited.

2.1.3.1.2 Competition zone:

the area of water reserved for competitors for undertaking the trial.

2.1.3.1.3 Departure zone:

the area of water located before the competition zone and used by the athletes awaiting their turn in the competition.

2.1.3.1.4 Call zone:

the area of water between the departure zone and the warm-up zone.

2.1.3.1.5 Warm-up zone:

the area of water used by the athletes for pre-competition warm-up.

## 2.1.4 Layout of the Competition Zone.

**A** - Target line

**B** - Shooting line

**C** - Departure line

**D** - Border line of call zone

**E** - Warm-up zone

SPACE **A/B**: 4 METRES

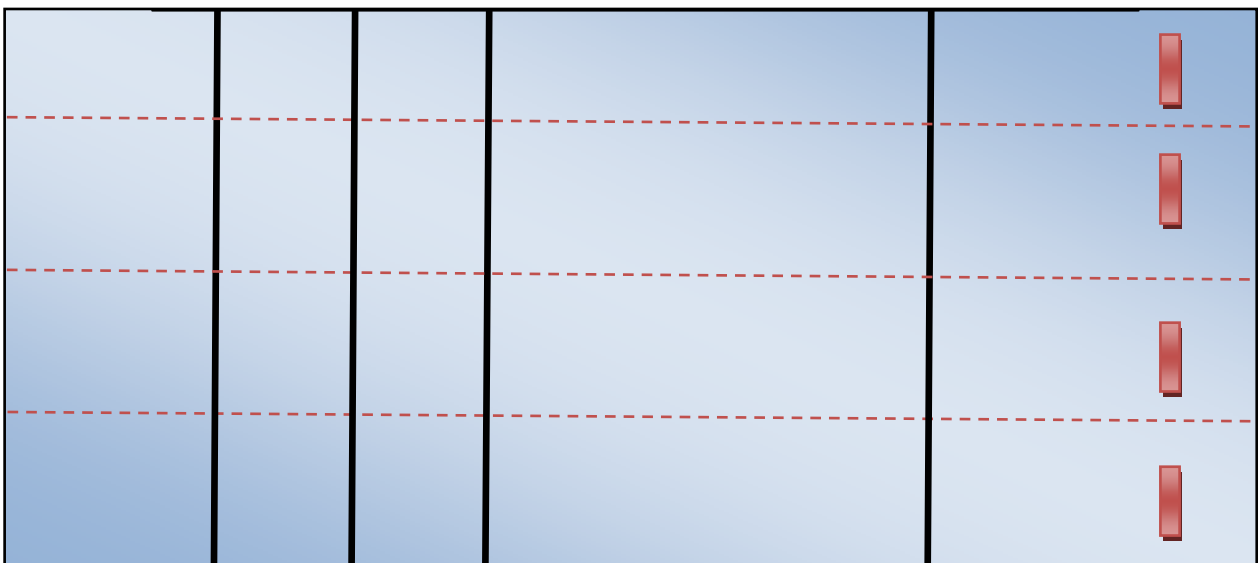
SPACE **B/C**: 15 METRES

SPACE **D/C**: 3 METRES

SPACE **D/E** (Call zone): 3 METRES

SPACE **E/F** (Warm-up zone – Rest of the pool)

**F** ← W.Z. → **E** ← 3 m → **D** ← 3 m → **C** ← 15m → **B** ← 4 m → **A**



## 2.1.5 Prohibitions regarding the Competition Zone

2.1.5.1 The following actions are prohibited:

2.1.5.1.1 loading the gun in any part of the pool except when the trial is performed in the Competition zone;

2.1.5.1.2 entering space A/B;

2.1.5.1.3 entering space C/D during the warm-up phase.

## 2.1.6 Targets

2.1.6.1 The sheet target for the biathlon has a rectangular shape and measures cm. 33 x 35 and with white background, and is placed at a height of 80 cm from the bottom of the pool: this measurement refers to the middle of the target which corresponds to the central point of the 1<sup>st</sup> ring of the central target.

2.1.6.2 The sheet includes five (5) identical targets, each consisting of six (6) concentric circles, divided by a white line between two black circles, and a black line in the other cases, containing the following values.

CENTRAL AXIS	DIAMETER	SCORE	COLOUR
1 <sup>st</sup> Ring	1.2 cm	From 460 to 400 points	White
2 <sup>nd</sup> Ring	3.2 cm	From 390 to 300 points	White
3 <sup>rd</sup> Ring	5.2 cm	From 295 to 250 points	Black
4 <sup>th</sup> Ring	7.2 cm	From 245 to 200 points	Black
5 <sup>th</sup> Ring	9.2 cm	From 195 to 150 points	White
6 <sup>th</sup> Ring	11.2 cm	From 145 to 100 points	White

## 2.1.7 Scores

2.1.7.1 Super Biathlon scoring will be as follows:

Each target hit earns points.

The total score from the targets will be the sum of scores obtained with the three shots.

The final score will be calculated as follows:

Total score from targets – time (in seconds x 2) x 2 – penalties (if any)

Negative scores are not taken into consideration

Example:

Total score from targets:  $450 + 320 + 285 = 1055$

Time: **2m 30s** (150 seconds) x 2 = 300

Score: **1055 - 300 = 755 x 2 = 1510**

1 penalty 100 points: 100

**Final score: 1510 - 100 = 1410**

2.1.7.1.1 The evaluation of every single shot will take place by the use of a special graduated scorecard. The score will be determined by positioning a needle with a diameter of 6.5 mm in the impact hole of every single target, simulating the

impact of the spear, and matching the target with the circular references. The middle of this needle will determine the score to assign to each shot, which will be read directly on the graduated scorecard.

- 2.1.7.1.2 If the middle of the shot is off the graduated scale, the shot will be out. If the point of impact of the spear is not clearly visible on the sheet, thereby preventing the plug from being inserted and the shot from being assessed, then the Competition Judge (or Chief Judge) shall determine directly whether or not the shot is valid.
- 2.1.7.1.3 The evaluation of the targets will take place when all the participants have completed the trial. At the end of each shooting series, the competitors will have one minute to check their shots on the targets. To this end, they are required to leave their rifles behind the starting line and approach the targets without touching them, under penalty of exclusion from competition.
- 2.1.7.1.4 At the end of the evaluation, the sheet with the targets will be made available to the captain of the team or, in his absence, the competitor, who after viewing it in the presence of the Competition Judge, will endorse the result.
- 2.1.7.1.5 In case of a challenge, the captain or athlete are entitled to submit a complaint in the ways and terms set forth in these regulations.

## **2.1.8 Violations and Penalties**

- 2.1.8.1 If the time is exceeded, the worst shot will not count.
- 2.1.8.2 If more than one shot hits the same target, only the shot obtaining the lowest score shall be counted.
- 2.1.8.3 If more than three shots are counted on the target, the score will not include the best additional shot(s).
- 2.1.8.4 If more than 3 shots (releases) are counted, the score will not include the best additional shot(s).
- 2.1.8.5 An athlete who, during the competition, commits a violation of the provisions contained in these regulations shall be subject to penalties according to the seriousness of the violation committed, as stated below:
  - 2.1.8.5.1 Crosses the shooting line with the tip of the spear at the time of shooting.  
Penalty: one hundred (100) points.
  - 2.1.8.5.2 Dives, loads the gun or starts before the departure signal.  
Penalty: relegation to last place with zero points (0).
  - 2.1.8.5.3 To have loaded or tried out the crossbow in zones outside the competition zone.  
Penalty: relegation to last place with zero points (0).

2.1.8.5.4 Loads or tries the competition gun at time other than the trials or own competition.

Penalty: relegation to last place with zero points (0).

2.1.8.5.5 Leaves the loaded gun on the bottom.

Penalty: relegation to last place with zero points (0).

2.1.8.5.6 Ties a knot to connect two parts of line, if the line breaks during the competition.

Penalty: relegation to last place with zero points (0).

2.1.8.5.7 Enters the competition before the other competitors have finished the trial.

Penalty: relegation to last place with zero points (0).

2.1.8.5.8 The judge declares that a gun is irregular.

Penalty: relegation to last place with zero points (0).

2.1.8.5.9 Loading the gun on the surface or in apnea without pointing the tip towards the target.

Penalty: relegation to last place with zero points (0).

2.1.8.5.10 Unsporting behaviour.

Penalty: relegation to last place with zero points (0).

2.1.8.5.11 Returning to the surface with the gun loaded

Penalty: relegation to last place with zero points (0).

2.1.8.5.12 Going over the shooting line with any part of the body.

Penalty: relegation to last place with zero points (0) .

2.1.8.5.13 The competitor, after completing the trial, may collect his equipment only after all the competitors of that round have completed the trial and only after being authorised, otherwise:

Penalty: relegation to last place with zero points (0).

## **2.2 COMPETITION OFFICIALS AND STAFF WITH ASSISTANCE DUTIES**

### **2.2.1 General provisions**

2.2.1.1 The persons who act as competition officials and assistants may not make decisions autonomously but must consult each time with the Competition Judge who is the only person authorised to express the definitive decision.



- 2.2.1.2 The competition officials and assistants are responsible for managing the competition.
- 2.2.1.3 The staff of the competition officials and the assistance personnel are:
- Competition Judge;
  - Director of Competition;
  - Shooting line judge;
  - Judge checking shots and awarding score;
  - Starter;
  - Timers;
  - Competition secretary;
  - Competition physician;
  - Assistants.
- 2.2.1.4 The staff consisting of the Director of Competition, competition officials and the assistance personnel, except for the Competition Judge, are appointed by the organisation.

## **2.2.2 Competition Judge**

- 2.2.2.1 In the World and Continental Championships the Competition Judge is designated by CMAS.
- 2.2.2.2 The Competition Judge exercises control and authority on the staff mentioned in point 2.2.1.3.
- 2.2.2.3 The Competition Judge has the following tasks:
- 2.2.2.3.1 to inspect the facilities where the competition is to take place;
- 2.2.2.3.2 to check the validity of the participants' documents;
- 2.2.2.3.3 to check and approve the registration forms and to establish the order of performance of the trials;
- 2.2.2.3.4 to approve and endorse the ranking before the results are made public.
- 2.2.2.4 The Competition Judge must guarantee compliance with the instructions and solve any problems regarding the organisation of the competitions in cases where the regulations do not provide specific indications.
- 2.2.2.5 He must guarantee, for the correct organisation of the competition, that all the competition officials and assistants necessary for the correct undertaking of the competition are present in the roles and position assigned to them. He may appoint replacements for competition officials who are absent, unable to attend or who are unable to undertake their tasks. Should he deem it necessary, he may appoint additional competition officials.
- 2.2.2.6 He authorises the Starter Judge, in charge of starting, to give the starting signal, after ascertaining that all the persons forming the staff are correctly positioned and ready to perform their tasks.

- 2.2.2.7 He may annul the start of the trial and order a new starting procedure.
- 2.2.2.8 The Competition Judge, in agreement with the Director of Competition, may suspend or annul the competition in cases of force majeure; this faculty may be exercised, by way of example only, for bad weather conditions (if the event takes place in an outdoor pool), or when the facility where the competition takes place no longer appears to comply with the standards required by regulations.
- 2.2.2.9 The Competition Judge apply a penalty on any athlete for any violation or irregularity that he observes personally or which has been referred to him by the other competition officials.

### **2.2.3 Director of Competition**

- 2.2.3.1 The Director of Competition supervises and coordinates all the organisational stages of the competition, with the collaboration, insofar as coming within his jurisdiction, of the competition officials (except the Competition Judge) and of the assistants.

### **2.2.4 Shooting line judge**

- 2.2.4.1 This judge must be positioned on the shooting line, represented by a black line on the bottom and a floating line on the surface.
- 2.2.4.2 The judge checks the shooting line and informs the Competition Judge on:
  - 2.2.4.2.1 the crossing of the shooting line with the tip of the spear or with any part of the body;
  - 2.2.4.2.2 the number of shots, violations of the regulations and unsporting behaviour.

### **2.2.5 Judge for monitoring shots and assigning scores**

- 2.2.5.1 The Judge in charge of the proper conservation of the targets until the end of the competition; views the shots and assigns the score by the use of the graduated scorecard.
- 2.2.5.2 The checking must be conducted out of the water and only the single captains or, in their absence, the athletes may be present for the checking, endorsing the result.

### **2.2.6 Starter**

- 2.2.6.1 The starter has the task of giving the starting signal when the competitors, judges, and timers are at their places.

### **2.2.7 Timers**

- 2.2.7.1 Each trial is timed without interruptions from the start to the end with an accuracy of one tenth of a second.
- 2.2.7.2 For each trial, the time starts when the starter gives the starting signal.

2.2.7.3 The time is stopped when the competitor raises his hand out of the water, beyond the departure line.

2.2.7.4 The time is recorded by the timers in minutes, seconds and tenths of a second.

## **2.2.8 Competition secretary**

2.2.8.1 The Competition Secretary has the task of checking the accuracy of the notes written regarding the results and on the positions communicated by the Competition Judge.

2.2.8.2 Appoints his own assistants and coordinates their work.

2.2.8.3 Prepares all the secretariat material and documents necessary for the competition.

2.2.8.4 Verifies the results, reports new records by inserting them in the record officials' reports. Inserts this documentation in the competition report, making it available to the Competition Judge.

2.2.8.5 Conveys the results on the three top ranking athletes and on the composition of eventual play-offs.

2.2.8.6 The official results and ranking of the athletes must not be communicated by the secretary for their subsequent distribution without first being authorised by the Competition Judge.

2.2.8.7 Prepares the final competition report.

2.2.8.8 When there is a press office, the Competition Secretary may, with the permission of the Director of Competition, communicate information on the competition to the media.

## **2.2.9 Competition physician**

2.2.9.1 The Competition Physician must guarantee first aid measures to persons who have accidents, providing them with the necessary help from the moment when the accident occurs to recovery of healthy conditions at local healthcare facilities.

## **2.2.10 Other assistants**

2.2.10.1 The Organising Committee appoints the other assistants deemed necessary for the competition; these persons are under the authority of the Director of Competition who, together with the Competition Judge, determines the various tasks to be assigned to each of them.

## **2.2.11 Preliminary meeting**

2.2.11.1 The day before the competition, a meeting must be held between:

- the Director of Competition;
- the Competition Judge;
- the Captains;

- the organisation Physician.

2.2.11.2 The purpose of the meeting is to define:

- technical issues;
- times and transportation;
- instructions on the opening and closing ceremonies;
- times and swimming pools reserved to each team;
- safety measures.

2.2.11.3 During the meeting, these rules may not be modified for any reason whatsoever.

## **2.2.12 Jury**

2.2.12.1 The Jury shall consist of five (5) members and two (2) substitutes:

- the Competition Judge acting as President;
- one (1) representative appointed by the organising Federation;
- three (3) representatives appointed by and from among the Captains;
- two (2) substitutes appointed by and from among the Captains.

2.2.12.2 The Jury has the task of examining the complaints received and shall make a decision within one hour from presentation.

2.2.12.3 A complaint can be accepted only if submitted by the team captain or a competitor in the absence of the captain.

2.2.12.4 The complaint must be submitted in writing, in either French, English or Spanish, within the non-renewable term of sixty (60) minutes from the posting of the ranking results.

2.2.12.5 The presentation of the complaint must be accompanied by a caution deposit of 100.00 (one hundred) Euro, which will be returned only if the complaint is accepted by the Jury.

2.2.12.6 The complaint must be made by **Form A** (attached) and presented solely and exclusively to the Competition Judge.

2.2.12.7 The decisions are taken by majority vote, in the presence of at least four members of the Jury.

2.2.12.8 In case of a tie, the President's vote will be decisive.

2.2.12.9 The decisions of the Jury are not subject to appeal unless new elements not considered at the time the complaint is examined should arise.

2.2.12.10 The decision must be communicated immediately to the applicant at the end of the meeting.

2.2.12.11 The Competition Judge shall communicate this decision in writing, using **Form B** (attached).

### **3. SECTION III**

#### **3.1 DRAWS**

3.1.1 The order of departure of the athletes will be decided on the basis of a draw performed by the Competition Judge. This draw must be made in the presence of the Competition officials in charge and the captains of each team present.

#### **3.2 CONDUCTING OF THE COMPETITION**

3.2.1 The competitor is requested by the organisation to prepare his competition position in a maximum time of two (2) minutes, and then must take position behind the departure line and await the starting signal of the trial, which will be given within one (1) minute.

3.2.2 The trial is undertaken with the following phases:

3.2.2.1 When the Director of Competition gives the start, the athlete dives and swims to the shooting line in apnea.

3.2.2.2 He may load the gun either on the surface, while swimming in apnea or in front of the shooting line.

3.2.2.3 If the loading takes place on the surface, this must occur before the competitor crosses the departure line.

3.2.2.4 The athlete must fire holding the gun with one arm and one hand only.

3.2.2.5 After firing, the athlete must swim in apnea back behind the departure line and, after taking at least one breath, will again complete the same run, until the five shots have been completed.

3.2.2.6 The round is completed and the time is stopped when the athlete surfaces with the gun behind the departure line, raising his arm.

#### **3.3 PARTICULAR INCIDENT**

3.3.1 When the competition takes place provision is made for particular incidents. A particular incident during the conducting the competition is defined as the breaking of the gun or problems with the equipment of the organisation or of the competition facilities.

3.3.2 In case of breakage of the gun or the line, the athlete may replace the gun with a replacement gun or with a spear complete with line in excellent condition, while positioned behind the departure line, before the start of the competition.

- 3.3.3** During the operation of changing the weapon, the time count is not interrupted.
- 3.3.4** If the replacement gun or the spear are not positioned behind the departure line the athlete will complete the trial.
- 3.3.5** The replacement gun may be used only if the first gun breaks.
- 3.3.6** The guns replaced are checked by the Competition Judge, and if he does not acknowledge the particular incident, will apply a penalty to the athlete.
- 3.3.7** Competitors during the competition are not allowed to make any type of repairs to the gun or parts of the gun.
- 3.3.8** In case of a particular incident due to problems due to the equipment of the organisation or the competition facilities, the following procedures shall be as follows:
- 3.3.8.1 The athlete must report the particular incident after swimming back behind the departure line in apnea, also without his gun, if is stuck in the target, raising an arm and thus interrupting the time, while the competition of the other athletes duly proceeds.
- 3.3.8.2 Once the cause that has produced the particular incident is removed, the athlete will stay behind the departure line, and will again be given the starting signal after a countdown of 30 seconds.
- 3.3.8.3 When the signal is given, the time will resume and be added to the time already taken, and the athlete can complete the remaining shots.
- 3.3.8.4 Once the last shot has been fired, the athlete will go back behind the departure line and raise an arm to signal the completion of the trial, interrupting the time.

## **3.4 SPECIALTY RANKING - PLAYOFFS**

### **3.4.1 Ranking**

The individual ranking goes from the highest score, the top ranking, to the lowest score, the bottom ranking, after having taken penalties into consideration. Athletes obtaining the same final scores will be tied.

## **4. SECTION IV**

### **4.1 RESPONSIBILITY**

- 4.1.1** The entry form sent by the relevant Federation, signed by its President, shall guarantee that all team members are at least 16 years of age, meet the requirements established for practising underwater activity and are aware of diving safety rules.

- 4.1.2** The organising Federation must guarantee during the competitions the necessary assistance for the proper conducting of the competition, and must ensure that there is a first aid service by competent healthcare personnel authorised for this purpose.
- 4.1.3** The organisers and their representatives and collaborators, and the competition officials and judges shall have no liability for any damage to the equipment of the participants, or for any accidents occurring to the competitors and other participants after their participation in the sports event.