



**CMAS**

CONFÉDÉRATION MONDIALE  
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION

**CMAS FREE DIVING  
INTERNATIONAL RULES  
DEPTH COMPETITIONS**

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## 1. GENERAL RULES

### 1.1 GENERALITIES

The male pronoun will be used throughout, solely to avoid awkward formulations. All persons participating in a competition, in any role, may be of either sex.

#### 1.1.1 FREE DIVING

The term "Free diving" designates a sporting event in "Apnea" where the athlete holds his breath while keeping his airways below the surface of the water.

#### 1.1.2 COMPETITION, EVENT, ATTEMPT AND PERFORMANCE

**1.1.2.1** The term "Competition" is used to describe a gathering of Free diving competitors and may be divided into several disciplines.

**1.1.2.2** The term "Event" indicates each of the contests making up a competition.

**1.1.2.3** The term "Attempt" designates a single effort of the athlete. For instance, one constant weight dive.

**1.1.2.4** The term "Performance" is the result of the athlete's attempt in depth, measured in meters or feet.

**1.1.2.5** Categories of competition are defined in Championships organization procedures & obligations document on CMAS website and summarized in the next table:

Tier	Competitions
Category A	World championships, Continental championships
Category B	World, Zone and Continental Cups, University Competition (FISU)
Category C	Other International Events

**1.1.2.6** For CMAS A Category Competitions, a technical delegate will be appointed by CMAS with the authority as described in "Procedures of Championships". The competition will be governed by a Chief Judge appointed by CMAS. The Chief judge will be assisted by an Assistant Judge appointed by CMAS and a National Judge responsible for video observation. Other Line judges will be appointed with the Chief judge's approval, according to the needs. In other competitions Category B, C (private, national, international, cups etc.) a Chief Judge with assistants and a video Judge are mandatory.

#### 1.1.3 CATEGORIES

**1.1.3.1** Official competitions are organized for men and/or women.

**1.1.3.2** Categories are defined in function of the competitor's age as defined below:

- "SENIOR" Athletes from 18 to 49 years old.



· “MASTERS” Individual age group: M1 Athletes 50-54, M2 Athletes 55-59, M3 Athletes 60-64, M4 Athletes 65-69, M5 Athletes 70 +

The age of an athlete is obtained by subtracting the year of birth from the year of the season.

**1.1.3.3** Masters athletes may, if they wish, compete in the senior category. If a master athlete improves a masters' record while participating in the senior category this is recognized as a master's record in his related age master category.

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## **1.1.4 DISCIPLINES**

### **1.1.4.1 Constant Weight - CWT**

The Constant Weight CWT is a discipline where the athlete must cover the vertical distance in apnea to the declared depth without any change in his weight during the whole attempt with fins. He is not allowed to pull on the Performance Line. The event takes place in open water (sea or freshwater).

### **1.1.4.2 Constant Weight with Bifins - CWT-BF**

The Constant Weight Bifins is a discipline where the athlete must cover the vertical distance in apnea to the declared depth without any change in his weight during the whole attempt with the use of Bifins only. The competitor is not allowed to pull on the Performance Line. The event takes place in open water (sea or freshwater).

### **1.1.4.3 Constant Weight with no fins - CNF**

The Constant Weight with no fins is a discipline where the athlete must cover the vertical distance in apnea to the declared depth without any change in his weight during the whole attempt without fins. He is not allowed to pull on the Performance Line. The event takes place in open water (sea or freshwater).

### **1.1.4.4 Free Immersion-FIM**

Free Immersion (FIM) is a discipline where the athlete must cover the vertical distance in apnea to a declared depth without fins.

The event takes place in open water (sea or freshwater) and the athlete is allowed to pull on the Performance Line.

### **1.1.4.5 Variable Weight-VWT**

Variable Weight VWT is a discipline where the athlete must cover the vertical distance in apnea to the declared depth with a guided ballast device and return with his own power, leaving the ballast at depth.

The event takes place in open water (sea or freshwater) with use of monofin (VWT-MF), bi-fins (VWT-BF) and without fins (VWT-NF).

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## **1.1.5 COMPETITIONS AND RECORD HOMOLOGATIONS**

**1.1.5.1** Competitions and record homologations are subject to the latest versions of “Procedures of Championships” and “Contract for Record Attempts” documents available on the CMAS website.

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## **1.2 MATERIAL AND SWIMMING STYLE**

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### **1.2.1 USE OF FINS**

**1.2.1.1** The athlete may use a monofin or bifins at CWT

**1.2.1.2** When fins are used, they must be powered only by the muscular power of the athlete, without use of any mechanism, even if the latter is activated by the muscles.

**1.2.1.3** In bi-fins events, it is not only the fins that matter, but also the swimming style: no dolphin kick is allowed except for one (one cycle up and down) in the 3-meter turning zone.

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### **1.2.2 DOLPHIN KICK (IN FREE DIVING)**

**1.2.2.1** A dolphin kick is a motion where the legs are moving up and down together. The up and down motion constitutes one complete cycle.

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### **1.2.3 SWIMMING (IN FREE DIVING)**

**1.2.3.1** Propelling oneself through water using movements of the limbs.

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### **1.2.4 AUTHORIZED MATERIAL**

**1.2.4.1** Mask, goggles, or fluid goggles.

**1.2.4.2** Nose clip.

**1.2.4.3** Diving suit.

**1.2.4.4** Watch/dive computer

**1.2.4.5** A lanyard to be homologated before the attempt by the Judge.

**1.2.4.6** Dive computers/watches: The organization will provide one official depth gauge. It should be placed on the wrist and personal ones can be placed anywhere on the body.

**1.2.4.7** The athletes may use their personal weight system. If a weight is used, the athlete must use it with a quick release system, and it must be worn over his clothing. The athletes are not allowed to have weights hidden under their clothing.

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### **1.2.5 ADVERTISEMENT**

**1.2.5.1** For all competitions and international championships, advertising on the fins and mask is authorized without restriction.



**1.2.5.2** Advertising is also allowed on the clothing, but nevertheless it should be clear that when international championships take place, athletes are obliged to present themselves for ceremonies in the official apparel of their national team.

## 1.3 VIOLATION OF THE RULES

### 1.3.1 PENALTY

**1.3.1.1** Whenever a rule is violated in a way precisely defined in the corresponding articles a general penalty is applied. The general penalty consists of subtracting one meter from the performance realized by the athlete.

**1.3.1.2** In the case of an early turn, a one meter additional penalty is applied for each meter missing from declared depth.

### 1.3.2 VIOLATION OF THE RULES

**1.3.2.1** The violation of rules leads to disqualification from the event unless a general penalty is specified in a corresponding article.

### 1.3.3 USE OF OXYGEN

**1.3.3.1** The use of oxygen is strictly forbidden before the attempt. An athlete who has been declared guilty of the use of oxygen or of a gas mixture with oxygen excess compared to ambient air will be immediately disqualified and will be subject to suspension from participation in the CMAS competitions and championships for a period which will be defined by the Confederation.

**1.3.3.2** The divers who dive beyond -70 meters will have the permission to use the oxygen tank provided by the organizations after the attempt. The use of oxygen is limited to after the performance, at the surface, or maximum -5 meters, for 5 min.

## 1.4 PROTOCOLS

### 1.4.1 START PROTOCOL

**1.4.1.1** The athletes admitted to the competition must be present one hour prior to their top time at the boat or a place defined by the main judge such as in the warm-up area, which is situated near the competition area.

**1.4.1.2** 45 minutes before their start, they must check in to the Warm-up Judge who will inform the Line Judge.

**1.4.1.3** In the period of the last 45 minutes prior his start, the athlete is allowed to go into the water.

**1.4.1.4** The athletes will start every 8 (eight) minutes minimum.

**1.4.1.5** In the case of the existence of several competition lines at the same time, the starts of the attempts must take place at shifted time intervals.

**1.4.1.6** The attempt begins when the starter informs the athlete to go to the starting point. The athlete will have three minutes to prepare himself to start the dive.

**1.4.1.7** He will be reminded of the time by the starter:

- Last 3 minutes / 2 minutes / 1.5 minutes / 1 minute / 30s / 20s / 10s / 5, 4, 3, 2, 1 / Top Time / +10s / +20s / +25, 26, 27, 28, 29, 30.
- The athlete can start from Top Time to +30s (30s window). If the airways are not in the water at the count of +30s, he will be disqualified.

**1.4.1.8** The countdown must be announced in English in international competitions.

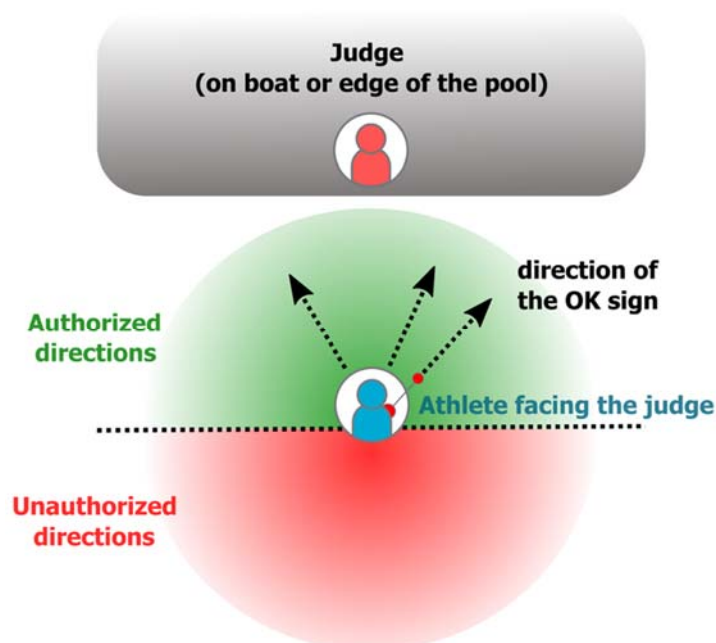
**1.4.1.9** The athlete is not allowed to start before the "Top Time". Violation will lead to disqualification.

**1.4.1.10** The athlete can put his mouth under the water and can exhale or not, several times till Top time.

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## 1.4.2 EXIT/SURFACE PROTOCOL

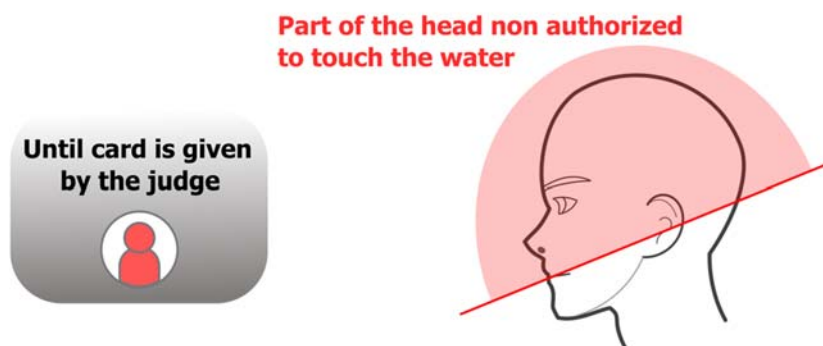
**1.4.2.1** When he is at the surface, during the 20 (twenty) seconds protocol time, beginning after surfacing, the athlete must: complete the Surface Protocol (OK Sign of the conventional underwater activities such as two fingers making a circle) in direction of the Line Judge who will be on the deck of the boat. The position of the athlete toward the judge and the authorised direction of the ok sign are represented in figure 1. The direction of the ok sign is defined by the line drawn between the shoulder and the hand doing the ok sign.



**Figure 1: Position of competitor and judge during surface protocol**



**1.4.2.2** The athlete must stay afloat. He can grab the rope and must keep his head above the water surface. The airways and equivalent level of the sides of the head (roughly around the middle of the ears and continuing a line around the back of the head) must be over the water's surface (see description in figure 2). If there is a wave, the decision is determined by the judge.



**Figure 2: Part of the head staying out of the water during surface protocol**

**1.4.2.3** The judges will be present and give the final decision on the attempt within 3 (three) minutes after the completion of the attempt. If it is technically impossible to reach a decision within three minutes, the Judge may decide to give the decision at the end of the current competition (event), so as not to disrupt the competition's timing.

**1.4.2.4** The athlete can talk during the protocol.

**1.4.2.5** The assistant of the athlete is not allowed to be in the area until the surface protocol is finished.

**1.4.2.6** If the athlete is touched by people from the organization accidentally, the decision on whether this act is help or not, will be made by the Chief Judge.

**1.4.2.7** Video arbitration is mandatory for international championships.

**1.4.2.8** People around must remain calm and silent during the athlete's surface protocol and recovery. In violation of this, the decision is up to the Chief judge, and he can suspend the people/team members from the competition area.

**1.4.2.9** Screaming or any help from the athlete's national delegates, coaches or team members leads to the disqualification of the athlete.

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### **1.4.3 DQ - LOSS OF CONSCIOUSNESS-BLACK OUT (BO)**

**1.4.3.1** The athlete will be disqualified if he cannot complete the Surface Protocol within 20 seconds of surfacing, or if he needs safety intervention before, during, or after 20 seconds of surfacing.

**1.4.3.2** In case of Loss of Consciousness/Black Out at the surface, the athlete will be disqualified and must be examined by the doctor to be able to continue the competition the next day(s).

**1.4.3.3** In case of underwater black out, the athlete will be disqualified, and he will not be allowed to compete the next day. The athlete must be checked and have approval from the doctor to continue the competition.



**1.4.3.4** In case of underwater black out deeper than 15 meters, (the actual depth will be confirmed by the safety who realized the recovery), the athlete will be disqualified and he will not be allowed to dive again in the competition. The athlete must be checked from the doctor to insure if he needs further treatment.

**1.4.3.5** Doctors' approval to continue the competition, is needed for any other kind or problems during or after dive such as lung-trachea squeeze, ear problems and any kind of dysbaric injuries or problems.

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#### **1.4.4 THE CARDS**

The meaning of the cards is as follows:

- If a white card is shown, the performance was in accordance with the competition rules.
- If a yellow card is shown, this means something may have gone wrong - there may be a penalty or DQ issue. The judges have maximum 3 (three) minutes to give the final decision. If these 3 (three) minutes are not enough, the decision can be at the end of the competition.
- If a red card is shown, the performance is not validated (DQ).
- World, Continental, and National records are valid only with white card

### **1.5 MANAGING THE COMPETITION**

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#### **1.5.1 STAGING AND CLASSIFICATION OF THE EVENT**

**1.5.1.1** The start list will be made depending upon competition needs, keeping in mind the environmental conditions, safety recommendations, and media requests. The CMAS delegate, Chief Judge, Safety Chief, and organizer will cooperate to create the start list.

**1.5.1.2** At the time announced at the technical meeting, the athlete must provide the target depth declaration and the total time of his performance. The time is important for the safety of the athlete and the organization of the safety team.

**1.5.1.3** At world and continental competitions, the program of disciplines will be as follows:

- Day 1 Official Training
- Day 2 CWT
- Day 3 FIM
- Day 4 Rest Day - Reserve day for any previous cancelation
- Day 5 CNF
- Day 6 CWT BIFINS
- Reserve day for any previous cancelation

**1.5.1.4** All the competitors will make one attempt. At the end of the event, a classification is established and made public.

**1.5.1.5** In the case of a tie, the athletes will be classified "ex aequo" – sharing the place. If there is an ex-aequo for the first place, two gold medals will be awarded and the third medal will be bronze. No silver medal will be awarded.

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## 1.5.2 PERFORMANCE LINE AND THE LANYARD

**1.5.2.1** The diving Performance Line must be weighted in such a way that it remains as vertical as possible, with sufficient weight to guarantee total stability and verticality in accordance with the conditions of the marine meteorology (such as waves, currents, tides, etc.).

**1.5.2.2** The Performance Line must be marked as follows.

The marking of the performance line will be standardized. Places of the marks, beginning from the bottom:

- At 3 m. one thick mark
- Until 10 m. and at 10 m. one black thin (normal tape thickness) mark
- At 20 m. two black marks
- At 30 m. three black marks
- At 40 m. four black marks
- At 50 m. one thick red mark
- At 60 m. one thick red and one black mark
- And so on and so forth...
- At 100 m. two thick red marks
- At 110 m. two thick red and one black mark
- And so on and so forth...

**1.5.2.3** The turn zone is located three meters above the tag plate and must be materialized on the rope by 10cm long black mark + 40cm unmarked every 50cm (this mark is reproduced six times in the 3m turn zone). Holding and pulling is allowed multiple times in the turn zone.

**1.5.2.4** At the end of the line, before the weight, the line must be equipped with a stopper or something similar to stop the carabiner of the lanyard at 1.0 meter above the bottom plate where the distance markers are attached.

**1.5.2.5** The Performance Line must be positioned according to the depth declared by the athlete. A maximum 1.2-meter (one meter and 20cm) length lanyard is connected to the free diver and at the other end, a large size clip ring that runs along the Performance Line.

**1.5.2.6** The control of the lanyards will be done by the judges before the competition by marking them in an appropriate way (a special tape and/or signature).

**1.5.2.7** If the lanyard is removed for any reason, the athlete is disqualified, except in the case where there is a serious problem with the lanyard. This should be proven beyond all doubt by video recording.

**1.5.2.8** The line is part of a simple mechanical structure (counter ballast) which in case of an accident allows the person to be recovered in a short time and with an adjustable surfacing speed, without the need to use other divers. That system can have a manual or an automatic release mechanism. The order to pull up the line is given by the Safety Chief on indications provided by the cameras, by the safety divers and the chronometric time declared by the athlete.

**1.5.2.9** Another line could be installed near the main line, where a robot or an array of cameras is fixed in such a way as to cover the entire path of the athletes.

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### 1.5.3 DEPTH MARKER

**1.5.3.1** A Depth marker(tag) must be available for each competitor.

**1.5.3.2** The depth marker (to be retrieved by the athlete) will be attached at the bottom of the Performance Line with a cloths peg or connected by Velcro which can be easily ripped by the athlete.

**1.5.3.3** The depth marker must be taken by the athlete from the end of the Performance Line to indicate the distance reached.

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### 1.5.4 ATHLETE'S ASSISTANTS

**1.5.4.1** The athlete can have only one assistant in the warm-up and competition area until the Top time. After the athlete starts the dive, the assistant will leave the competition area but can stay in the warm-up area or within the area that Chief Judge defined in the technical meeting.

**1.5.4.2** If the assistant stays in the competition area, the judge will warn the assistant one time only. If he continues to stay in the competition area this violation leads to a general penalty to the athlete.

**1.5.4.3** Only the Chief Judge can allow the team representative to intervene in case of a technical problem.

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### 1.5.5 PERFORMANCE MEASUREMENT

**1.5.5.1** When the athlete reaches the end of the Performance Line, in the turn zone, he can hold the rope and take the depth marker.

**1.5.5.2** If the athletes recover the depth marker, the final performance is equal to the depth declared.

**1.5.5.3** If the athlete turns earlier than the declared depth, the recorded depth will be the depth of the official depth gauge minus penalties.

**1.5.5.4** In case of failure to recover the depth marker or loss of the depth marker, the depth recorded will be the one shown on the official depth gauge, that the athletes wear on their wrist. The failure to recover the depth marker or the loss of it, will lead to a general penalty.

**1.5.5.5** If the depth reached (DR) is smaller than the depth declared (DD) the performance depth will be given by DR minus (DD-DR). The penalty here is a distance penalty equal to one meter penalty for each missing meter.

Final Performance = Depth Reached – Distance Penalty – General Penalty

*For Example:*

If DD = 100 meters and DR = 90 meters

(DD - DR) is (100 - 90) = 10 meters

Thus, Final performance = 90 - 10 (distance penalty) - 1 (general penalty) = 79 meters

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## **1.5.6 COMMON ISSUES FOR DESCENDING AND ASCENDING**

### **1.5.6.1 Descent**

**1.5.6.2** The athlete's weight may never be abandoned by the athlete during the whole attempt.

**1.5.6.3** The descent is vertical along the Performance Line.

### **1.5.6.4 Ascent**

**1.5.6.5** The ascent starts from the point on the Performance Line where the athlete turns. At the end of the attempt, back on the surface, the athlete must complete the Surface Protocol.

**1.5.6.6** The athlete must not be helped or touched for any reason before he completes the attempt unless he is in difficulty.

**1.5.6.7** Grabbing of the line during the dive is not allowed except in the three-meter turn zone, or in the FIM discipline.

## 2. SPECIFIC RULES FOR EACH DISCIPLINE

### 2.1 CONSTANT WEIGHT

#### 2.1.1 DESCENT

**2.1.1.1** The athlete must descend without holding or pulling the rope except in the 3-meter turn zone.

**2.1.1.2** In an early turn, the athlete can grab and pull the Performance Line just one time.

#### 2.1.2 ASCENT

**2.1.2.1** The athlete must ascend without helping himself by holding or pulling the rope except in the 3 (three) - meter turn zone.

### 2.2 FREE IMMERSION

#### 2.2.1 DESCENT

**2.2.1.1** The athlete may descend with or without holding or pulling the rope.

#### 2.2.2 ASCENT

**2.2.2.1** The athlete may ascend with or without holding or pulling the rope.

### 2.3 VARIABLE WEIGHT

#### 2.3.1 GUIDED BALLAST DEVICE

**2.3.1.1** The Guided Ballast Device is the device used to transport the athlete to the goal depth. This device must attain its downward movement under its own weight. The device must run along the Performance Line. Its design is free, left to the organization and can be released by the athlete during descent.

**2.3.1.2** The guided Ballast device, when reach the target depth, will remain at the bottom and the diver will ascent to surface with monofin (VWT-MF), with bi-fins (VWT-BF) or without fins (VWT-NF). Only at VWT-NF the athletes can grab and pull the rope.

#### 2.3.2 DESCENT

**2.3.2.1** The descent is vertical along the rope with the guided ballast device and that device can be released (abandoned) by the athlete during descent.

**2.3.2.2** The athlete must start the dive while the guided ballast device and his body are partially immersed in the water.

**2.3.2.3** The athlete must descend without holding or pulling the rope.



**2.3.2.4** In this discipline no tag is available so the depth is measured by the pre-measurement of the rope and the official watches on the athlete.

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### **2.3.3 ASCENT**

**2.3.3.1** The ascent starts from the point on the Performance Line where the device reaches the target point.

**2.3.3.2** The athlete may ascend by helping himself by holding or pulling the rope in VWT-NF discipline. In VWT-MF and VWT-BF disciplines he is not allowed to pull and grab the line.

**2.3.3.3** In an early turn, he can grab and pull the Performance Line just one time.

## **2.4 OUTDOOR LINEAR DYNAMIC**

**2.4.1** The event of Linear Dynamic takes place in open water (sea or lake) as a competition but not for WR attempts.

**2.4.2** The event takes place in open water (sea or freshwater) and the use of fins (bi-fins and monofin/bi-fins as separate competitions) or without fins depends on the type of the competition

**2.4.3** There will be two big buoys, one at the start and the other at 50 meters firmly attached at the bottom.

**2.4.4** A line marked every 5 meters will be at the surface connecting the two buoys.

**2.4.5** The athlete must follow a guideline stretched at shallow depth, max at 4 meters depth.

**2.4.6** The athlete must follow the guideline during the attempt from the starting point to the 50 m point turning beyond the vertical line at each turn.

**2.4.7** The distance marker will be at the disposal of each competitor. It will be clothes peg for each athlete to fix the distance marker on the guideline.

**2.4.8** The distance marker must necessarily be fixed by the athlete to the guideline prior to his ascent to indicate the distance reached.

**2.4.9** The distance and the stretch of the line in the depth must be checked from CMAS International judge.

**2.4.10** The CMAS chief judge must be in the water to monitor the dive and the distance.

**2.4.11** Safety divers must be placed every 20 m following the athlete from the surface.

**2.4.12** Start, exit protocol and other details as described in current rules.

**2.4.13** No World, Continental or National records will be validated at Linear DYN.