



CMAAS

CONFÉDÉRATION MONDIALE
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION

Sports Diving

INTERNATIONAL RULES

(Version 2008/00)

TABLE OF CONTENTS

Introduction and Justification.....	3
Proposal an future Goals.....	3
Regulation of the scuba diving sport in swimming pool	
1. Regulation's spirit.....	4
2. Definition.....	4
3. Events.....	4
4. Participation in the competition.....	4
5. Equipment, materials and uniformity.....	4
6. Competition place.....	4
7. Board of Judges.....	5
8. General regulations of the events.....	7
9. Specific regulations of the events.....	8
9.1. Individual events.....	8
I. Trial M 300 metres.....	8
II. Night Diving.....	9
III; Emersion 6 Kg.....	11
9.2. Team events.....	12
I. Obstacle course.....	12
li; Briefing.....	14

INTRODUCTION AND JUSTIFICATION

Human necessity and desire of staying under water has always been a constant feature through history. Recently, science and technical progress have made it easier the development of scuba diving in an unthinkable way, achieving with it many and different functions, such as recreational, sports..., which have supposed a great change.

From the sports diving point of view, diving has currently become an everyday activity and society is aware of its possibilities and importance.

As the result of many factors, such as the development of different new sub aquatic competition disciplines; optimum training for divers at any level; the necessity of promoting sub aquatic activities in interior zones with a difficult access to the sea or with bad weather conditions; the promotion of the federate- and encouraging-aimed activities; ... the Scuba Diving Sport is now a reality in CMAS.

In society in general and in the federation frame in particular, Sub aquatic activities should not stay unaware of concepts such as evolution, diversification, development and modernization; something which can be helped by a new sport sub aquatic discipline, the Scuba Diving sport.

PROPOSALS AND FUTURE GOALS

Making the Scuba Diving competitions known by as many divers as possible in the sphere of CMAS, whatever their level or objectives are, from recreation to competition.

Consolidating a stable circuit of territorial, national or international events, as a new competition discipline of the sub aquatic activities.

Letting the society know the Scuba Diving competitions as a new offer from a dynamic, attractive and in continuous evolution sub aquatic activities, which have a lot to offer.

REGULATIONS OF THE SCUBA DIVING SPORT IN SWIMMING POOL

1 REGULATION'S SPIRIT

The spirit of Scuba Diving sport, through its regulation, aims to achieve the following objectives:

- 1.1 To develop a new competitive sports discipline in the sub aquatic activities, undertaking the evolution and technification of our sport
- 1.2 To boost sub aquatic activities in interior zones, with a difficult access to the sea or with bad weather conditions and in any season of the year, through the practice of Scuba Diving in Swimming Pool.
- 1.3 To generate an optimum and better training for divers, by practising their diving abilities and skills.
- 1.4 To promote the practice of scuba diving activities in swimming pool, acting as an entertainment meeting for federates and sub aquatic activities enthusiasts.

2 DEFINITION

Scuba Diving in Swimming Pool is defined as "the set of individual or group competitive events, which need of a technical, tactical and specific psycho-physical conditions, based on scuba diving abilities, skills and equipment, held in a **permanent and non-fluctuating environment, regulated and institutionalised by the sub aquatic activities**".

It is considered therefore a physical and mental activity, regulated by rules, institutionalised and with the aim of competition, which fulfils the basic requirements of every sport.

3 EVENTS

3.1 Individual Events

- Event M 300 metres.
- Night Diving.
- Emersion 6 Kg.

3.2 Team Events

- Obstacle Course (pairs).
- Briefing (team).

4 PARTICIPATION IN THE COMPETITIONS

4.1 Admission Requirements

To be a scuba diver with a CMAS qualification recognised by National Federation, member of the Sport Committee of CMAS.

4.2 Age of the participants

The minimum age for competition is 16 years (birthday has to be before the competition date).

4.3 Classifications

Classifications are made out taking into account:

- Gender. Two categories are established, male and female.
- Age. Two categories Senior over 18 years old and Junior 16-17 years old (the limit of age is the age of the competitor on January 1 of the year of the championship, athlete will compete in this category until December 31 of the same year).

4.4 Establishment of the classification

The classification is obtained according to:

- Individual Events: Individual classification in each event.
- Team Events: Team classification in each event.

5 EQUIPMENT, MATERIALS AND UNIFORMITY

The equipment and materials to enter the Scuba Diving in Swimming Pool competition are the following:

- Slip-type swimming trunks for men and complete swimming costume for women.
- Scuba diving face masks.
- Snorkel.
- Diving adjustable or non adjustable fins.
- Diving ballast.
- Neoprene or isothermal suit.
- Neoprene socks.
- Stabilizing jackets.
- Regulator.
- Water proof manometer.
- Scuba tank with a volume between 10 and 18 litres.

Optional equipment:

- Watch.
- Diving computer.

is allowed.

6 COMPETITION PLACE

- The conditions that must have the competition place are:
- Type: Heated or open-air pool.
- Length: 50 metres.
- Width: From 21 metres.
- Side walls and depth: Parallel and vertical side walls, a minimum depth of 2, 2 metres.
- Number of lanes: 8, with a lane-width of 2, 5 metres.
- Start podiums: At least in one side of the pool.
- Water temperature: Preferably between 25° C and 27°C.

7 BOARD OF JUDGES..

The Board of Judges is set up by the organizers. It is entirely responsible for the preparation and the staging of the event. Its composition depends on the nature of the competition. The panel sets up as follows:

- one chief judge
- one chief secretary
- one starter
- one pre-start judge
- one chief time-keeper
- one time-keeper per one/two lanes
- finish judges
- two turning judges
- two to eight apnea judges
- one speaker
- one master of ceremonies
- one doctor

7.1 *The Chief Judge*

- He has full control and authority upon all officials. He must approve their assignment and give them the instruction about the particular rules of the championship. He is responsible for technical conditions of the competition and for ensuring compliance with the prevailing safety regulations. His rights and duties are the following:
 - He has the duty to check the entry forms and the starting order
 - He is responsible for appointing the finalists and for the publication of the results
 - He has the duty to enforce CMAS regulations and decisions, and resolve all matters about the actual organization of the competition when the rules do not provide another solution
 - He decides the place of all judges for the perfect staging of the event. He may at any time replace a judge if the original judge does not properly fulfill or is incapable of fulfilling his tasks, or is absent. He can nominate additional judges if he values it necessary
 - The chief judge authorizes the starter to proceed with the start. Beforehand he must make sure that all members of the board of judges are ready
 - Independently from the starter he can decide whether there has been a false start or not
 - He must make sure that the equipment and apparatus necessary for the staging of the event is available in good time
 - The organizer must put a sufficient number of assistants at his disposal so that he can fulfill his tasks without any difficulties.
 - The Chief Judge shall disqualify any diver for any violation of the rules that he personally observes. The Chief Judge may also disqualify any diver for any violation reported to him by other authorised officials. All disqualifications are subject to the decision of the Chief Judge.

7.2 *The chief secretary*

- He prepares all administrative material and the documentation needed for the competitions
- He appoints the deputy secretaries and directs their work
- He must control the withdrawal after the heats or finals
- He is responsible for the handing of the time-keeper's forms to the poolside secretary
- He supervises the work of drafting minutes of the technical commission meetings and of the jury
- He prepares the final protocol of the competitions after they have ended
- With the authorization of the chief judge he gives information on the competitions to the press if there is no special press office.
- He is responsible for the verification of the results of the competition given by the computer or the times and classification given by the chief judge.
- He verifies the results and ratifies new records and inserts them into the protocol
- He must make sure that the decisions of the finishing judge and of the chief judge are inscribed in the official protocol
- He co-ordinates the electronic time-keeping which is operated by qualified technicians
- He controls the official protocol, signs it and passes it on to get the signature by the chief judge
- He transmits to the speaker the results concerning finals and awards ceremonies
- The chief of the result office must give the official protocol and the results to the secretary only after approval by the chief judge.

7.3 *The starter*

- He has complete authority over the divers from the moment the chief judge has handed over the control of the race to him and until the start of the race
- The starter must indicate to the chief judge any diver who delays the start, refuses to respect an order or does not behave correctly during the starting procedure. Only the chief judge can disqualify this diver for unsporting behaviors. This kind of disqualification cannot be considered as a false start
- He has the right to decide whether the start is correct or not, provided that the chief judge is of the same opinion. If he thinks that the start is not proceeding correctly, he must recall the divers
- The starter can anticipate the start when he judges that a diver exaggeratedly delays taking up his starting position
- The position of the starter when he gives the starting signal must be on the side of the pool about five meters from the extremity walls. The time-keepers and all participants should be able to hear him clearly
- He coordinates the evacuation of the pool at the end of each event.

7.4 The pre-start judge

- He must call the participants in due time for each of the events
- He must signal to the chief judge all violations noticed, that are related to the announcement and absence of the called diver
- He must check if the equipment complies with the rules and if the participants are ready to start
- He leads the divers to the starting point.

7.5 The chief of time-keepers

- He assigns the lanes to the time-keepers. There must be one time-keepers per lane. If the automatic timing is not employed, there must be two (2) additional timekeepers. They are responsible for substituting the time-keepers whose stopwatch failed during the event, or who, for any reason, cannot measure the time.
- Together with the time-keepers the chief time-keeper checks and approves the reliability of the stopwatches in use.
- He receives, from all time-keepers, the timing cards, checks the entries and stopwatches if necessary.
- He records and checks the official time of the timing card for each diver.
- He supervises the activity of each time-keeper and takes control times himself. He passes on the times recorded for each swimmer to the pool-side secretary.

7.6 The time-keepers

- They record the times of the divers for whom they are responsible. They use stop watches approved by the chief time-keeper or chief judge
- At the signal for the start the time-keepers start their stopwatches and stop them when the diver has touched the finishing pad. Immediately after the event they must write the time displayed by their stopwatches on the timing card which they hand over to the chief time-keeper. At the same time they show their stopwatches for control
- They must not reset their stopwatches to zero before the chief time-keeper or chief judge tells them "stopwatches to zero"
- They are responsible for the recording of the intermediate times in races of more than 100 meters' distance
- Their task is also to check that the turns and the finish are in accordance with the regulation.

7.7 The finish judges

- There are two or more finishing judges
- They are positioned directly over the finishing line from where they can have at all times a good view of the swimming lane and the finishing line
- They establish the classification of the divers and they hand it over directly to the results office
- They are not allowed to be time-keepers in the same event
- Carry out verification, according to the Regulation of each event
- Disqualify, according to the Regulation of each event
- The finishing judges' decisions take precedence over the classification given by the manual stopwatches only if there are fewer than two digital stopwatches per lane. They cannot be appealed if they are unanimous. If the arrival judges' decisions are not unanimous, it is the chief judge who decides on the placing. The protocol must then bear the mention 'CJD' (chief judge decision) next to the time.

7.8 The turning judges

- They are nominated for each lane by the chief judge
- They must check whether the swimmer has carried out his turn according to the rules
- They must report all violations on their card, sign it, and specifying the event, the number of the lane, and the specific infraction. These cards will be immediately handed to the chief judge.

7.9 The apnea judges

- There are two to eight apnea judges
- They are positioned one for each side of the pool and near underwater objects
- They must check that the rules for event are observed
- Assistants may perform this control
- They must immediately inform the chief judge of all violations of rules on a signed card.
- This card must contain the type of event, heat number and lane number.

7.10 The speaker

- He has the task to call the swimmers and teams and to introduce them to the spectators
- He must announce the results if there is no spectator score board
- He must give information about the competition in order to make the event interesting and he must also announce new records
- He is responsible for the announcement of all disqualifications.

7.11 The master of ceremonies

- The master of ceremonies prepares beforehand the medals, flowers and other awards
- He is in charge of the arrangements of the awards podium, the national anthems, the ceremonies and the flags and organizes the ceremony for the medals presentation
- He calls and gathers the divers, the officials and the carriers of the medals in the appropriate order for the protocol ceremony.

7.12 The doctor

- He's a member of the board of judges.
 - He ensures the supervision of the medical control. The presence of at least one doctor at all events is compulsory
 - He's responsible for all sanitary, hygienic and medical questions (helps in case of danger, assists with the preparation of the time plans, menus, the sanitary control of accommodations, control of the medical health certificates, doping-tests, etc.)
 - Before each competition he must check the functioning of the necessary medical equipment.
 - A medical control can be carried out at any time during the competition.
- Judges' Decision Making: Judges shall make their decision autonomously and independently of each other unless otherwise provided in the CMAS Scuba diving sport Rules.

7.13 Competition Director

- Named from the Organizing Committee.
- He represents the competition organizing committee.
- He's responsible of the organizing and logistic matter during the competition.
- He strictly work with the Chief Judge and "CMAS Judge Delegate"

8 GENERAL REGULATIONS OF THE EVENTS

8.1 Preparation

The organization provides one or more compressors to charge the air tanks. The compressors must be in the installation and charging periods must be established which, depending on the expected needs, are ready for the use by the teams.

The use timetable are previously announced after each team needs are reported. They will not be used out of the established periods. It must indicate the type of connector or the necessity to take adapter

The participants have some time, before the warming-up, for the organization, positioning tests of materials and equipment. The actual time for this will be determined by the organization.

8.2 Warm-Up

In every competition day, the divers will have some time for the warm-up, before the events start.

The actual time is fixed by the organization and it is indicated in the Summary of the Competition Rules. When the warm-up time is over, the Organization will ask the divers to go out of the pool for the beginning of the competition

8.3 Start Order

To determine the start order, pre-start judge will organize a draw and communicate the start order with enough time for the divers to get ready.

In order to determine the start order for each heat the "best time" criterion is followed. Divers with longer times obtained in previous competitions participate in the first heat, and divers with the best times participate in the last heat.

In case of competitors with no record times, pre-start and start judges will organize a draw to determine their star order.

If the competition gathers competitor with and without time records, these will swim in the first heats, after the start order draw. Divers with time records will swim in the following heats, according to the "best record" criteria.

8.4 Pre-Start

Coaches and accompanying persons are not allowed to circulate on the poolside, lest they be excluded from the area reserved to swimmers.

Only the chief judge can allow the coach to intervene in case of a technical problem.

8.5 Start

Start is carried out according to the specific Regulations of each event.

- At the beginning of each event, the chief judge must signal to the divers by "a series of brief whistles", to take off all clothes except for the bathing-suit, to put on the fins. Then, the divers have two (2) minutes to get ready. A large watch is placed on both sides of the swimming pool to be easily visible by the competitors.
- By "a long whistle", made from the chief judge, the divers take position. The divers and the officials are ready for the start. The chief judge gives a signal to the starter, with the arm stretched to indicate that the divers are under the control of the starter. Until the start is given the arm must remain stretched. At the longer whistle of the chief judge the divers get on the starting block. If they wish, the divers may already stand on the starting blocks.
- On the starter's command "take your marks" (or "à vos marques" or "preparados"), the divers will immediately take up a starting position and stand still. The position of the hands is not relevant. When all divers are stationary, the starter will give the starting signal.
- When one or more competitors dive or move before the starting signal will be disqualified. If the starting signal has been given before announcing any disqualification, the race continues and the divers who have anticipated are disqualified at the end.
- If the disqualification is announced before the starting signal then the signal must not be given, the divers who remain in the race are recalled and the starter gives again the starting signal.
- The decisions of the starter or of the chief judge about false starts are definitive.

8.6 Arrival

The arrival is done according to the established in the specific Regulations of each event.

After the complete development of each heat and at the arrival of the last diver (depending on the event) chronometers will stop timing.

8.7 Verifications

When a trial is finished the finish judge will verify the following:

- The equipment of the diver is complete and is in order.
- The pressure gauge indicates more than 50 atmospheres.

Verifications are carried out according to the established in the specific Regulation of each event. Once the verifications are finished, the heat will be given as finished.

8.8 Disqualifications

The general disqualifications that affect all the events are:

- The pressure gauge marks less than 50 atmospheres
- The lost, incomplete or incorrect putting of the diving gear (loss of material, put of fit inadequate form or bad vest...) when finishing the test.

The rest of the disqualifications are made according to the established thing in the Specific Regulation of each event.

9 SPECIFIC REGULATIONS OF THE EVENTS

9.1 Individual Events

I. Trial M 300 metres

M event is a 300 metre-distance time trial in which the next skills are practiced: speed swimming on surface and immersion, apnoea diving, free escape and movements with scuba or heavy equipment.

First Part. 25 metres:

The event starts at the Start judge's signal. The diver jumps into the water with a giant step immersing immediately in the diving area, without doing any movement on the surface.

The participant swims under water to the centre of the pool, without taking out of the water any part of the body or equipment.

Once in the middle of the pool, properly, indicated, it is the place where the stabilizing jacket, the tank and regulator are taken off.

From there, in free escape swims under water without taking out of the water any part of the body or equipment, to touch the opposite side wall of the pool.

Second Part. 75 metres:

The diver emerges and wearing the light equipment and the diving ballast, swims on crawl style till covering 100 metres (25m. 1st part + 75m. 2nd part).

Third Part. 200 metres:

Once the side wall is touched immerses again and in apnoea swims to the centre of the pool, where puts on the heavy or scuba equipment and swims under water 200 metres.

When the set distance is finished, the Judge will stop the chronometer.

Fourth Part. Checking:

Once the heat is finished, the Finish judge checks:

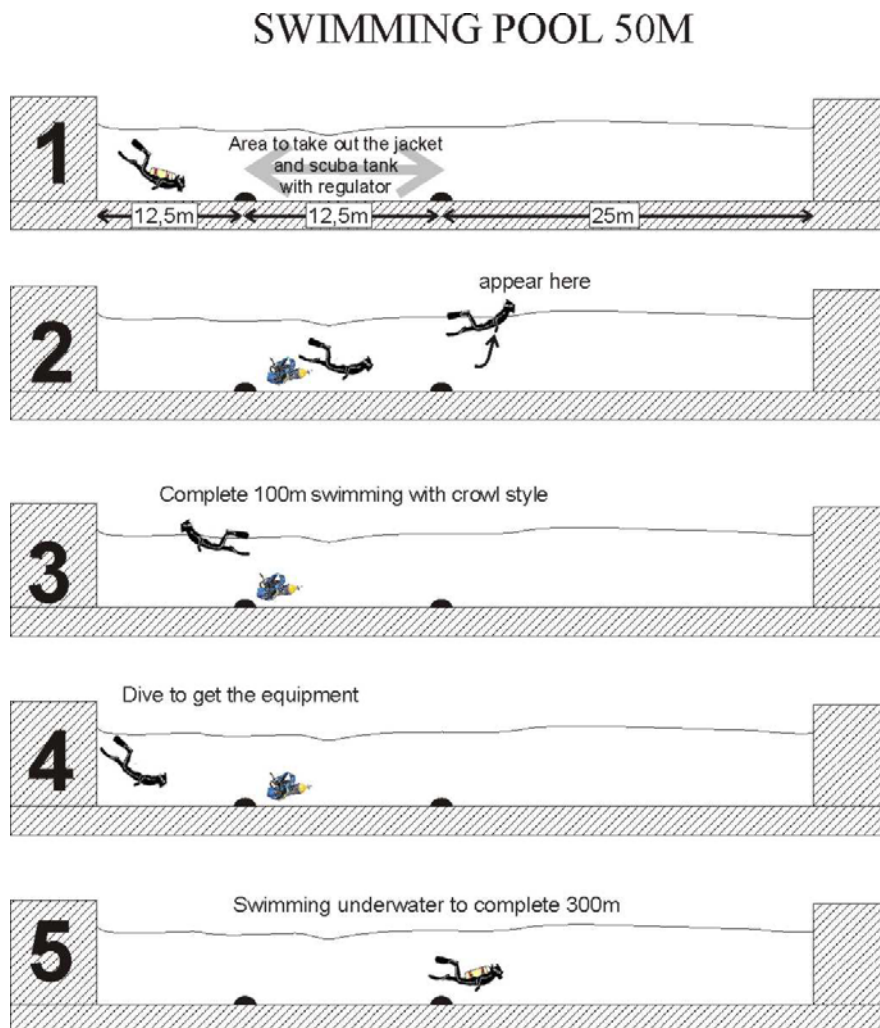
- The full and correct equipment of the diver.
- The manometer marks over 50 atmospheres.

When the Finish judge has checked it all, the Chief judge will give the event as finished.

Disqualifications:

- The diver moves around the surface or does not dive immediately when jumping into the water.
- The diver takes any part of the body or equipment put of the water when swimming under the water.
- The diver does not touch the side walls when turning or arriving.
- The diver occupies the bounds of the adjacent lanes.
- When finishing: The manometer marks less than 50 atmospheres, the loss, incomplete or incorrect adjustment of the diving equipment and material.

Figure 1. The course of "M" Trial



II. Night Diving

Materials

The necessary materials are:

- Opaque sticking plaster to cover the diving mask.
- A dragging rope with a length not over 5 metres.
- A snap ring to tie up the dragging rope.
- A diving bag or similar to collect the elements.

This event is executed in a total lack of vision, and its objective is to find 3 elements situated in the bottom of the pool, in a maximum time of 3 minutes.

First part. Pre-start:

In the pre-start area, the Pre-start judges will check the complete opacity of the diving masks and the length of the dragging rope, always inferior to 5 metres. The diver gets into the water and puts on the opaque mask. He/she waits in the vertex formed by the start sidewall, from where he/she is taken by the Judges to the immersion-emersion buoy.

Second part. Start:

Situated in the immersion buoy and seized to the rope end, the event starts and the Start judge start timing.

Third part. Dragging:

The diver descends to the bottom of the pool, where he/she ties the rope used for the drag.

The diver starts dragging, in a free technique, till finding and collecting the 3 elements. Once finished the dragging, unties and keeps his rope to proceed to emersion.

Fourth part. Emersion:

The diver ascends through the rope of the buoy to the surface, giving the event as finished and stopping the timing when the head appears above the surface. The diver that exceeds 3 minutes is warned by the judge to end up dragging. The judge establishes physical contact with the diver, helps the diver holding the rope, from where emerges. The judge unties and gets back the dragging rope.

Fifth part. Verification:

With the opaque mask off and the recovered elements, the diver goes to the verification area, where the Finish judges will count the elements.

Disqualifications:

- Doing any manoeuvre to get vision.
- Taking any part of the body or equipment out of the water once immersed.
- Not descending or ascending through the buoy rope.
- In the start, emersion and verification phases, not keeping the dragging rope.
- The manometer marks less than 50 atmospheres when finishing.

Punctuation:

Formula for calculating the total score:

Points per collected element + Points per time

CT = PE + PT

Table 1: Points per Collected Elements

COLLECTED ELEMENTS	POINTS
1	180
2	240
3	300

Table 2: Points per Time

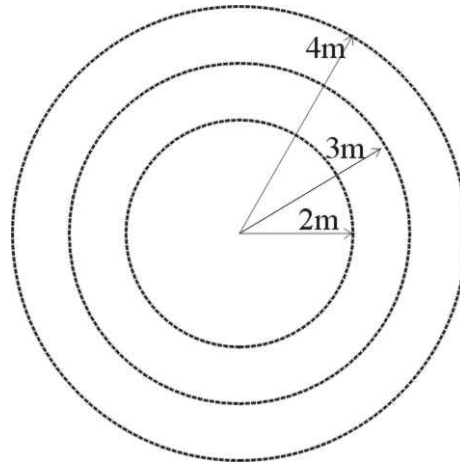
TIME	POINTS	TIME	POINTS	TIME	POINTS	TIME	POINTS
3'00"	180	2'30"	210	2'00"	240	1'30"	270
2'59"	181	2'29"	211	1'59"	241	1'29"	271
2'58"	182	2'28"	212	1'58"	242	1'28"	272
2'57"	183	2'27"	213	1'57"	243	1'27"	273
2'56"	184	2'26"	214	1'56"	244	1'26"	274
2'55"	185	2'25"	215	1'55"	245	1'25"	275
2'54"	186	2'24"	216	1'54"	246	1'24"	276
2'53"	187	2'23"	217	1'53"	247	1'23"	277
2'52"	188	2'22"	218	1'52"	248	1'22"	278
2'51"	189	2'21"	219	1'51"	249	1'21"	279
2'50"	190	2'20"	220	1'50"	250	1'20"	280
2'49"	191	2'19"	221	1'49"	251	1'19"	281
2'48"	192	2'18"	222	1'48"	252	1'18"	282
2'47"	193	2'17"	223	1'47"	253	1'17"	283
2'46"	194	2'16"	224	1'46"	254	1'16"	284
2'45"	195	2'15"	225	1'45"	255	1'15"	285
2'44"	196	2'14"	226	1'44"	256	1'14"	286
2'43"	197	2'13"	227	1'43"	257	1'13"	287
2'42"	198	2'12"	228	1'42"	258	1'12"	288
2'41"	199	2'11"	229	1'41"	259	1'11"	289
2'40"	200	2'10"	230	1'40"	260	1'10"	290
2'39"	201	2'09"	231	1'39"	261	1'09"	291
2'38"	202	2'08"	232	1'38"	262	1'08"	292
2'37"	203	2'07"	233	1'37"	263	1'07"	293
2'36"	204	2'06"	234	1'36"	264	1'06"	294
2'35"	205	2'05"	235	1'35"	265	1'05"	295
2'34"	206	2'04"	236	1'34"	266	1'04"	296
2'33"	207	2'03"	237	1'33"	267	1'03"	297
2'32"	208	2'02"	238	1'32"	268	1'02"	298
2'31"	209	2'01"	239	1'31"	269	1'01"	299
2'30"	210	2'00"	240	1'30"	270	1'00"	300

Observation:

The position of the elements fulfils the following conditions:

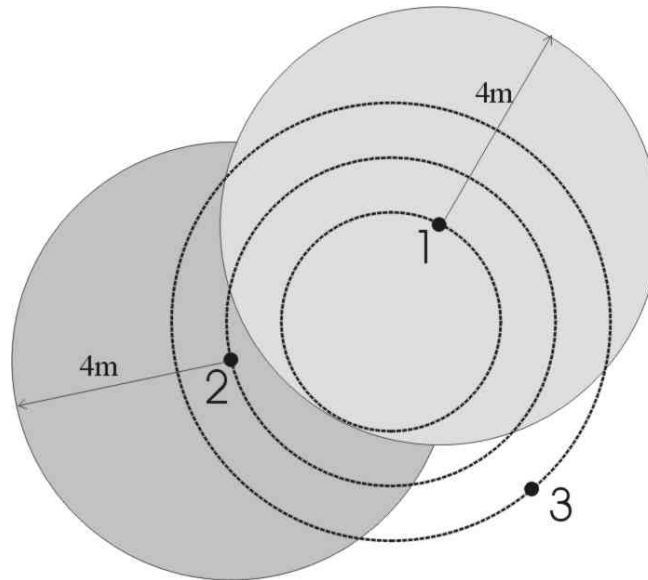
- 1° The elements are arranged to the following distances of the centre: 2, 3 and 4 meters.

Figure 2: Distance from the elements to the epicentre



- 2° The distance between the elements must be equal or superior to 4 meters. The position of the elements is different for each diver but always respecting the prescribed distances.

Figure 3: Distance between the elements.



III. Emersion 6 Kg

Materials

The necessary materials in the Emersion Event are:

- A lifting bag.
- A snap ring to tie up the lifting bag.

Weight lifting through lifting bag in two modes: 6kg.

First part. Pre-start:

The Organization situates, in the bottom of middle part of the pool and in as many lanes as competitors participating in each heat.

In the start zone the judges check that each diver carries the lifting bag that has already passed the organization control.

Second part. Start:

At the start signal, the diver jumps into the water with a giant step immersing immediately in the diving area, without doing any movement on the surface.

Third part. Displacement:

Without making any part of the body or equipment out of the water, the diver swims under water up to the immersed weight.

Fourth part, mooring and emersion:

The diver moors up and emerges the weight through the lifting bag, injecting air from his/her diving suit. For security, the diver does not stay in the vertical of emersion of the weight.

Fifth part. Flotation and verification:

The chronometer is stopped when the upper part of the lifting bag emerges on the surface.

The event is given as finished when the weight emersion and the lifting bag flotation and stability are verified for 15 seconds.

If the diver emerges in the 15 seconds of verification, he/she will not be able to resume the event.

Disqualifications:

- The diver moves around the surface or does not dive immediately when jumping into the water.
- Taking any part of the body or equipment out of the water in the displacement, mooring or emersion phases.
- Occupying the adjacent lane space.
- Using any other method for lifting the weight apart from the lifting bag and the diving suit.
- The lift of the lifting bag without the complete weight.
- The instability of flotation of the bag in the 15 seconds after stopping the chronometer.
- The diver emerges before the lifting bag.
- When finishing: The manometer marks less than 50 atmospheres, the loss, incomplete or incorrect adjustment of the diving equipment and material.

I. Obstacle course

The purpose is to cover a distance of 100m while carrying out certain tasks over a given obstacle course in the minimum time possible. All competitors should use base diving equipment of standard industrial design. Competitions are carried out in standard swimming pools or in sheltered water. The competition is carried out in pairs of divers.

The competition course is the exact route that the competing pair needs to take from start to finish.

Figure 4. Obstacle course map.

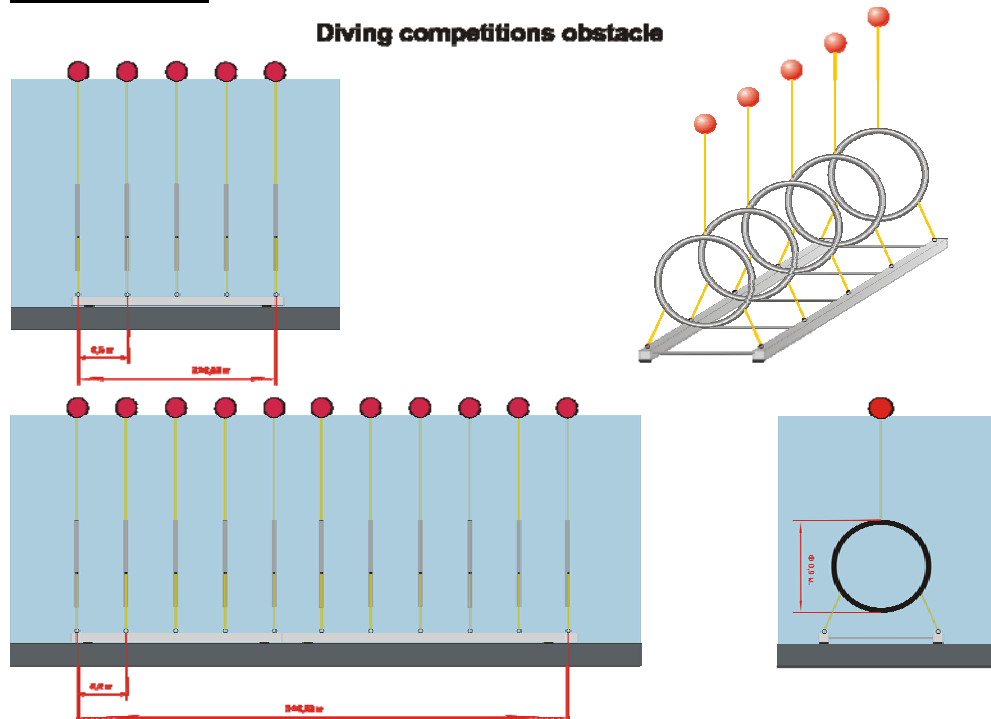
Diving competitions map



First part. Obstacles and sport objects:

Tunnels in lengths of 2 and 5m are formed from hollow aluminum hoops. The diameter of the hoops should be 0.9 + 0.1m. Hoops should be placed in consecutive order at a distance of 0.5m from each other to make up the tunnel. Each hoop is connected by square framework on the bottom by the use of plastic chains. Ball-shaped buoys in diameter of no more than 0.3m are attached to each hoop to ensure it is in mid water. The distance from upper border of tunnel to the surface should be 0.5m.

Figure 5. Tunnels



The finishing gateway is formed by the supporting buoys, connected to an obstacle of a two-meter tunnel (five buoys on each side).

The basket for the mask is a plastic box, of proportions no more than 0.6m x 0.4m x 0.3m. This box should be placed on the bottom; its weight can be increased by the use of lead weights (total 4 kg).

The object being towed is a ball in diameter of 0.45 – 0.55m with negative buoyancy of 1 – 1.5kg, with something to grip it with one hand.

Second part. Position of obstacles and sport objects

- The competition distance for each competing pair occupies two standard lanes in a swimming pool. Surface marking lines are hooked on the end walls of swimming pool so defining the 5m lanes (standard double lane).
- Two tunnels in length of 2m should be placed on the center of each lane with entrance at a distance of 5m from the start.
- Two baskets should be placed at the center of each lane at a distance of 45m from the start.
- One tunnel in length of 5m should be placed at the center of one lane with the entrance at a distance of 65m from the start.
- Object being towed is placed on the bottom in the middle between two lanes at a distance of 73 m from the start.

Third part. Order of covering the competition course

The event starts at the Start judge's signal. The divers jump simultaneously into the water with a giant step immersion immediately in the diving area, without doing any movement on the surface.

The first obstacle is the 2-meter tunnel. Each diver should swim through the tunnel on his/her lane. Penalty times for the mistakes on this part of the distance are appointed in the Table3.

Then the divers should make physical contact and breathe from one tank. They must start breathing from one tank before they cross the 12-metre mark and stop after they cross the 42-metre mark. After this the participants move separately and each of them breaths from their own tanks. Penalty time for the mistakes on this part of the distance is appointed in the Table 3.

Baskets for masks are situated on the 45-metre mark of each lane. Each diver should take off their mask and put it into the basket on his/her lane. Then he/she should swim underwater without mask to 50-metre mark, and then turn make physical contact with a part of the body or the equipment [not the tank] with the extreme end of the pool or the electronic touch pad, then swim back to the basket and pick up the mask.

Penalty time for the mistakes on this part of the distance is appointed in the Table 3.

Before entrance into the 5-metre tunnel each diver should put on mask and clean it of water, and then take off their scuba equipment and keep it in their hands in front him/her. This is the start position for the 5-metre tunnel.

Divers swim through the 5-metre tunnel one after another keeping the scuba in front of him/her. Penalty time for the mistakes on this part of the distance is appointed in the Table 3.

After exit from the 5-metre tunnel divers should put on their scuba equipment and then pick up towing object (this is situated on the bottom at the 73-metre mark) and come to the surface. Divers should cross the 75-metre mark being on the surface and breathing from atmosphere (breathing from the tank is not permitted).

Starting from the 75-metre mark divers should swim on the surface and tow the object together, breathing from atmosphere. Divers should swim between finishing gates. Being on the surface competitors should not touch obstacles, lifting devices and other elements of the pool with any part of the body, equipment and towing object. Penalty time for the mistakes on this part of the distance is appointed in the Table 3.

Time is set (Referees stop chronometers) when one or both of pair of divers touch the extreme end of the pool or the electronic touch pad with their hand on any of their lanes. While finishing both participants should visually be in contact with the towing object.

Once the heat is finished, the Finish judges check:

- The full and correct equipment of the divers.
- The manometer marks over 50 atmospheres.

Fourth part. List of mistakes

Penalty times for the mistakes made over the distance are outlined in Table 3.

Items that not allowed are:

- Using hands for swimming
- Touching with hands on the bottom, lifting devices, marks and the sides of the pool
- Receiving assistance from ones partner.
- Contact with an obstacle, i.e. touching with hands or any part of the body, excluding fins
- Destruction or dislocation of an obstacle. An obstacle is considered dislocated if there was movement of a framework observed on the bottom.
- Mistakes made while crossing the marks
- Breathing from the tank while swimming on the surface
- Mistakes made during tasks

Table 3: Penalties time for mistakes.

MISTAKES MADE OVER THE COURSE	PENALTIES TIME
Using hands for swimming	15
Touching with hands on the bottom, lifting devices, marks and the sides of the pool	5
Receiving assistance from ones partner	10
Contact with an obstacle, i.e. touching with hands or any part of the body, excluding fins	5
Destruction or dislocation of an obstacle.	15
Mistakes made while crossing the marks	10
Breathing from the tank while swimming on the surface	10
Mistakes made during tasks	10

Fifth part, Disqualifications

- False start
- Any swimmer crossing his lane or who hinders another swimmer by any other means will be disqualified. If this behaviour is intentional, the judge must report the matter before the international jury and the national federation of the swimmer.
- If any part of the course is not completed.
- This means that all tasks have to be fully completed by both participants before being deemed successfully finished. If a task is omitted the participant can return to the start of that task and complete it. In this case disqualification will not be awarded.
- Breaking the surface with any part of the body or equipment during the underwater part of the course.
- Receiving assistance on the course from the third party.
- The manometer marks less 50 atmospheres.

The final result is determined according to the rules and totaling of the penalty times.

II. Briefing

It is a chronometer event in which four divers realize several searching and the corresponding annotations in individual notebooks following an order that has been established by the organization.

First part. Pre-Start:

The 4-team divers situate in the four swimming pool corners. They position themselves backwards and backwards falling position.

Just before the start, the Chief Judge communicates to the team Captain the search order and annotations of the event.

Second part. Start:

The start is realized when the Start Judge produces a signal.

After the signal, the 4 divers introduce themselves in the water falling backwards. They sink immediately without displacements.

They go directly to the centre of the swimming pool or to the delimited meeting point where they must arrive simultaneously or wait until everyone is arrived.

Third part. Communication:

In the meeting point, the Team Captain communicates the search and annotation order of the event as the organization has established.

Fourth part. Search and annotations:

Each member localizes four signal-pliers for the annotations in their individual notebooks.

The signal-pliers are distributed around the diagonals of the swimming pool floor. They are separated equally from sinking zone corresponding to the starting point of each diver.

Each diver deals only with the signal-pliers assigned to its half diagonal.

The distribution order is different in each half-diagonal. The signal-pliers have different signals and are together with a numbered piece, so each number corresponds to a signal decided by the organization.

Fifth part. Meeting and Emerge:

Once the annotations are completed, the divers return to the meeting point. The Captain checks the correct annotations of the team mates and decides to emerge the team or to amend any mistakes.

The emerge is as follows:

It is realized on the meeting point. It is indicated by the team captain and is realized simultaneously by the 4 divers.

When the complete and united team emerges on the surface, the event is finished and the time is stopped.

Complete emersion at the moment is considered at which the heads of the divers leave, breaking the surface of the water lamina. The final time is determined by the last emerged diver.

Sixth part. Checking:

At the end, the Finish judges check:

- The full and correct equipment of the divers.
- The manometer marks over 50 atmospheres.
- The annotations in the notebooks within the established order.

If the Finish judge gives its approval then the principal judge gives the event as valid.

Disqualifications:

- To establish a communication between the team members outside of the water.
- To perform displacements on the surface during the sinking moment or not to sink immediately.
- To show up any part of the body or the equipment after the start and before emerge.
- To use communication means different from gestures.
- To move, search a make annotation out of the space limited by the corresponding half-diagonal.
- To emerge in a different way from the established way or in another half-diagonal different from the one at the start.
- The manometer marks less than 50 atmospheres when the event finishes.

Punctuation:

Calculation of the total punctuation.

(Points for precision in the annotations + Points for Time) x Coefficient.

$$PT = (PPM + PT) \times Cf$$

Table 4: Points for precision in the annotations

PRECISION OF ANNOTATIONS	POINTS
16	1.600
15	1.500
14	1.400
13	1.300
12	1.200
11	1.100
10	1.000
9	900
8	800
7	700
6	600
5	500
4	400
3	300
2	200
1	100
0	0

Table 5: Points for Time

Minute	1	2	3	4	5	6	7	8	9	10	11	12
Sec.0	1600	1240	940	700	520	400,0	310	250	190	130	70	10
1	1594	1235	936	697	518	398,5	309	249	189	129	69	9
2	1588	1230	932	694	516	397,0	308	248	188	128	68	8
3	1582	1225	928	691	514	395,5	307	247	187	127	67	7
4	1576	1220	924	688	512	394,0	306	246	186	126	66	6
5	1570	1215	920	685	510	392,5	305	245	185	125	65	5
6	1564	1210	916	682	508	391,0	304	244	184	124	64	4
7	1558	1205	912	679	506	389,5	303	243	183	123	63	3
8	1552	1200	908	676	504	388,0	302	242	182	122	62	2
9	1546	1195	904	673	502	386,5	301	241	181	121	61	1
10	1540	1190	900	670	500	385,0	300	240	180	120	60	0
11	1534	1185	896	667	498	383,5	299	239	179	119	59	
12	1528	1180	892	664	496	382,0	298	238	178	118	58	
13	1522	1175	888	661	494	380,5	297	237	177	117	57	
14	1516	1170	884	658	492	379,0	296	236	176	116	56	
15	1510	1165	880	655	490	377,5	295	235	175	115	55	
16	1504	1160	876	652	488	376,0	294	234	174	114	54	
17	1498	1155	872	649	486	374,5	293	233	173	113	53	
18	1492	1150	868	646	484	373,0	292	232	172	112	52	
19	1486	1145	864	643	482	371,5	291	231	171	111	51	
20	1480	1140	860	640	480	370,0	290	230	170	110	50	
21	1474	1135	856	637	478	368,5	289	229	169	109	49	
22	1468	1130	852	634	476	367,0	288	228	168	108	48	
23	1462	1125	848	631	474	365,5	287	227	167	107	47	
24	1456	1120	844	628	472	364,0	286	226	166	106	46	
25	1450	1115	840	625	470	362,5	285	225	165	105	45	
26	1444	1110	836	622	468	361,0	284	224	164	104	44	
27	1438	1105	832	619	466	359,5	283	223	163	103	43	
28	1432	1100	828	616	464	358,0	282	222	162	102	42	
29	1426	1095	824	613	462	356,5	281	221	161	101	41	
30	1420	1090	820	610	460	355,0	280	220	160	100	40	
31	1414	1085	816	607	458	353,5	279	219	159	99	39	
32	1408	1080	812	604	456	352,0	278	218	158	98	38	
33	1402	1075	808	601	454	350,5	277	217	157	97	37	
34	1396	1070	804	598	452	349,0	276	216	156	96	36	
35	1390	1065	800	595	450	347,5	275	215	155	95	35	
36	1384	1060	796	592	448	346,0	274	214	154	94	34	
37	1378	1055	792	589	446	344,5	273	213	153	93	33	
38	1372	1050	788	586	444	343,0	272	212	152	92	32	
39	1366	1045	784	583	442	341,5	271	211	151	91	31	
40	1360	1040	780	580	440	340,0	270	210	150	90	30	
41	1354	1035	776	577	438	338,5	269	209	149	89	29	
42	1348	1030	772	574	436	337,0	268	208	148	88	28	
43	1342	1025	768	571	434	335,5	267	207	147	87	27	
44	1336	1020	764	568	432	334,0	266	206	146	86	26	
45	1330	1015	760	565	430	332,5	265	205	145	85	25	
46	1324	1010	756	562	428	331,0	264	204	144	84	24	
47	1318	1005	752	559	426	329,5	263	203	143	83	23	
48	1312	1000	748	556	424	328,0	262	202	142	82	22	
49	1306	995	744	553	422	326,5	261	201	141	81	21	
50	1300	990	740	550	420	325,0	260	200	140	80	20	
51	1294	985	736	547	418	323,5	259	199	139	79	19	
52	1288	980	732	544	416	322,0	258	198	138	78	18	
53	1282	975	728	541	414	30,5	257	197	137	77	17	
54	1276	970	724	538	412	319,0	256	196	136	76	16	
55	1270	965	720	535	410	317,5	255	195	135	75	15	
56	1264	960	716	532	408	316,0	254	194	134	74	14	
57	1258	955	712	529	406	314,5	253	193	133	73	13	
58	1252	950	708	526	404	313,0	252	192	132	72	12	
59	1246	945	704	523	402	311,5	251	191	131	71	11	

Table 6: Coefficients

Number of Participants	Coefficients
4	0,75
3	0,30
2	0,15