CMAS DIVEMASTER STANDARD

CMAS

BOARD OF DIRECTORS VISA Nº:

CMAS DIVEMASTER STANDARD

1. AIM OF THE DIVEMASTER TRAINING PROGRAMME

1.1. This training programme aims to introduce a professional level of divemastering knowledge and skills to certified CMAS Three Star Divers which will enable them to lead certified divers on open water dives in a safe manner.

2. CLASSIFICATION

2.1. The CMAS Divemaster Training programme is classified as an entry level leadership diver training programme.

3. Instructor AND ASSISTANT REQUIREMENTS

3.1. The CMAS Divemaster Training programme may be conducted by a minimum of a CMAS Two Star Instructor in active status that complies with the requirements of the national federation.

3.2. The CMAS Two Star Instructor may be assisted by a CMAS One Star Instructor in active status that complies with the requirements of the national federation.

4. COURSE STRUCTURE AND DURATION

4.1. Participants must plan, organize and conduct a minimum two (2) dives safely and competently under the direct supervision of a CMAS Two Star Instructor in active status that complies with the requirements of the national federation.

4.2. All dives must be completed during daylight hours, or under conditions that simulate daylight conditions.

4.3. All open water dives shall be conducted in water that allows direct vertical access to the surface.

4.4. Open water dives therefore shall not be conducted in underwater caves, inside wrecks or below ice.

4.5. CMAS allows Instructors to structure courses according to the number of students participating, their skill level and the diving environment.

5. COMPETENCIES OF A CERTIFIED CMAS DIVEMASTER

A certified CMAS Divemaster is certified:

5.1. To safely and competently plan, organise and conduct open water diving activities and lead other recreational divers in open water on both guided and organised dives.

5.2. To safely and competently plan, organize and conduct dives for all diver levels.

5.3. To safely and competently plan and execute emergency procedures appropriate for the diving environment and activities.

5.4. To safely and competently assist an active CMAS Instructor during approved diving courses provided the activities are similar to the graduate's prior training.

5.5. In order to progress to other levels, it is necessary to complete both theoretical and practical methodology training as per the standards set by the national federation, with the guidance of a minimum Two-Star Instructor.

CMAS DIVEMASTER STANDARD

6. PREREQUISITES FOR PARTICIPATION IN THE TRAINING PROGRAMME

6.1. Minimum age 18.

6.2. Complete the medical history/statement form required by the CMAS Federation prior to participating in any in-water activities. and

6.3. Sign the appropriate Form(s) as required by the National Federation acknowledging and assuming the risks of SCUBA diving prior to participating in any in-water activities.

7. EXPERIENCE / KNOWLEDGE /CERTIFICATION

7.1. Have at least eighty (80) dives in a logbook with at least 10 of these dives shall be as Dive Leader.

7.2. Certified CMAS Three-Star Diver must include verifiable experience in deep diving, navigation,night and biological specialties.

7.3. Provide proof of current CPR, first aid and oxygen administration certification in accordance with the regulations of the National Federation.

8. RATIO PARTICIPANT/ Instructor

SKILLS	MAXIMUM PARTICIPANTS	INSTRUCTOR
THEORY	12	1
OPEN WATER ACTIVITIES	8 12	1 2

9. REQUIREMENTS FOR CERTIFICATION

To be certified as a CMAS Divemaster, the participant shall:

9.1. Successfully complete the theoretical assessment of this standard.

9.2. Demonstrate to an active CMAS Two-Star Instructor the ability to solve in-water and out-of-water diver problems.

9.3. Demonstrate to an active CMAS Two-Star Instructor the ability to plan, organize and conduct open-water diving activities and lead other recreational divers in open-water

9.4. Demonstrate to a CMAS Two Star Instructor the ability to write and implement a rescue plan in a competent manner including a risk analysis specific to the planned dive.

9.5. Demonstrate, to CMAS Two Star Instructor, the ability to prepare, plan, control, lead a group of 8 divers, and solve problems on at least 2 open water dives.

CMAS DIVEMASTER STANDARD

10. REQUIRED THEORETICAL KNOWLEDGE AND DIVING SKILLS

10.1. SYLLABUS REQUIREMENTS

10.1.1. ADMINISTRATION:

- The participants should be informed of the administrative obligations and recommendations of the CMAS and National Federation for CMAS Divemaster.
- The participants should be informed of the regulations relating to the organisation and practice of exploration diving referred to in the standard and/or in specific local laws and regulations and taking into account the insurance and liability of the divemaster.

10.1.2. DIVE PLANNING AND LEADERSHIP KNOWLEDGE:

- The participant shall have a professional level of knowledge and understanding of the dive leadership topics that will allow them to plan, execute and lead all recreational diving levels on open-water dives in all typical conditions encountered in their local environment.
- To plan for and respond to emergencies during such dives serving as an instructional assistant to CMAS Instructors during diver training programme.

10.1.3. THE DIVING ENVIRONMENT :

- The participant shall have appropriate knowledge regarding the aquatic environment and the conservation thereof.

10.1.4. DIVING LOCATION

- The participant shall have a professional level of knowledge of how to select a dive site depending on the level of certification of the divers, the equipment, table, diving computers, the diving experience of the divers and the Divemaster.

10.1.5. SAFETY

- The participant must ensure that the instructions of safety, risk, and regulations given are understood and taken into account during the activity of diving.

11. PRACTICAL TRAINING PARAMETERS

11.1. OPEN WATER SCUBA SKILLS:

- The participant shall demonstrate mastery of the techniques involved in planning and executing deep recreational scuba dives in the local environment.

11.2. SNORKELLING SKILLS:

- Minimum equipment: Mask, fins, snorkel and additional equipment as required.
- 800 metre swim with the mask, snorkel, and fins non-stop without the use of arms in less than 17 minutes.
- 400 metre swim on the surface, non-stop, any stroke, without the use of swimming aids, in less than 10 minutes.

11.2.1. WITH FULL SCUBA DIVING EQUIPMENT:

- In water, transport a simulated tired diver at a quick pace over a distance of 150 m after which the diving casualty will be extracted from the water and first aid will be provided.
- Satisfactorily demonstrate a complete rescue and evacuation scenario for an injured diver.
- Swim a distance of 100 m in full scuba equipment using the snorkel.
- Bring a diver, simulating unconsciousness, up from depth, not greater than 6 m; at the surface and tow the diving casualty for a distance of at least 100 m in less than four (4) minutes.

12. ASSESSMENT

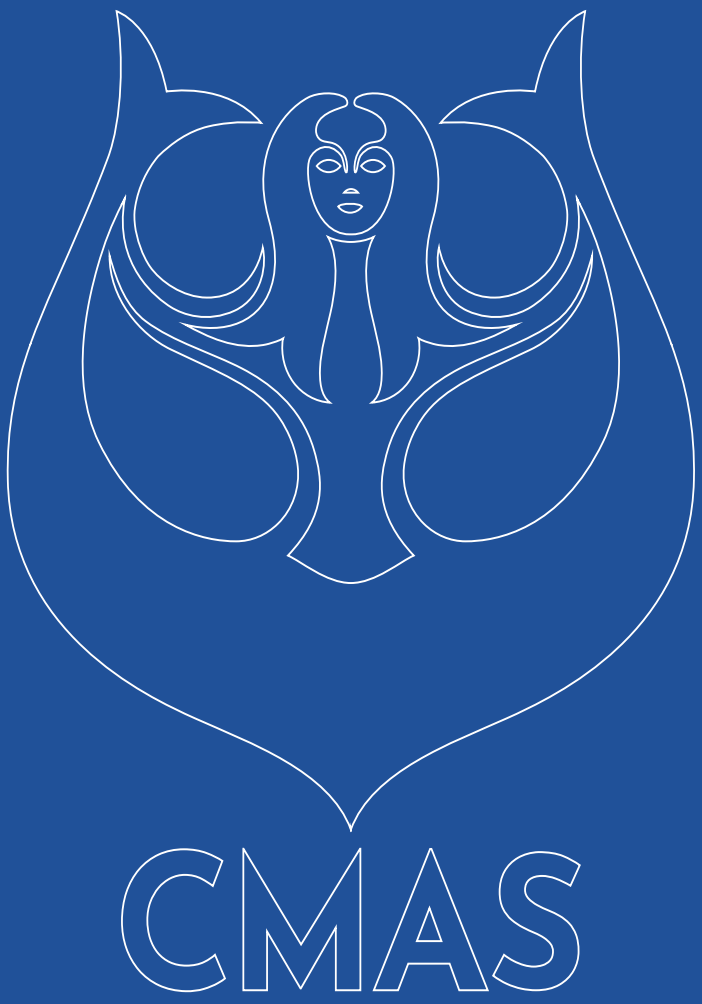
12.1. KNOWLEDGE:

- The participant shall demonstrate to the CMAS Two-Star Instructor knowledge of divemastering by taking and passing an oral and written examination.

13. CERTIFICATION

- Upon successful completion of the training programme, the participant shall be awarded with a CMAS Divemaster C-card.

CMAS TECHNICAL COMMITTEE



DIVEMASTER TRAINING PROGRAMME

DIVEMASTER TRAINING PROGRAMME

GENERAL STRUCTURE OF THE TRAINING
ADMINISTRATION
DIVE PLANNING AND LEADERSHIP KNOWLEDGE
THE DIVING ENVIRONMENT
DIVING PECULIARITIES
ACTIVITY AND SAFETY
PREREQUISITES FOR PARTICIPATION
COMPETENCIES OF A CERTIFIED CMAS DIVEMASTER
PRACTICAL TRAINING PARAMETERS

DIVEMASTER TRAINING PROGRAMME

	THEORETICAL KNOWLEDGE	DESCRIPTION
ADMINISTRATION	The participants should be informed of the administrative conditions and recommendations of the CMAS and national federation for CMAS DiveMaster.	- Standards of supervision for recreational diving - Competencies of the different levels of divers - Mandatory and optional equipment for divers and for the Divemaster - Mandatory equipment at the diving site - Requirements for divers participating in recreational and technical diving using mixtures other than air . Additional qualifications required of the Divemaster to lead these dives. - Must have the knowledge of diffrente target group and their development (children's, seniors and individuals with disabilities).
	Divemaster liability.	- Civil and criminal liability. - Endangerment of others. - Duty of care and results.
	Insurance	- Civil liability for damages to others. - Insurance combined with the National Federation license. - Additional individual insurance.
	Different target groups	- The main physiological, psychomotor and socio-affective characteristics of the different of diffrente target group children's, seniors and individuals with disabilities).
	Medical history/statement form required by the National Federation prior to participating in any in-water activities.	- How to use the Form in the diving environment/ industry

DIVEMASTER TRAINING PROGRAMME

DIVE PLANNING AND LEADERSHIP KNOWLEDGE

THEORETICAL KNOWLEDGE	DESCRIPTION
The participant shall have appropriate knowledge regarding dive planning, the factors that affect dive planning, the dive planning process including the determination of the required gas, emergency planning, briefing and debriefing, group control and recommended safe diving practices.	- Understanding the various factors that can impact a dive plan, such as water conditions, equipment, and dive experience. - **Gas management:** The process of determining the necessary gas, including the use of dive tables or dive computers. - **Dive profile planning**: The process of planning the dive profile, including depth, time, and decompression stops. - Econtingency planning and the importance of having a plan in place for potential issues. - The importance of proper briefing and debriefing to ensure everyone is on the same page and prepared for the dive. - Group control and the importance of communication and organisation during a dive - Recommended safe diving practices, such as proper weighting, buoyancy control, and dive profile management.
Planning group dives	- Take into account the expectations and needs of the divers in accordance with their skill levels.
Set the dive objectives and parameters.	- Provide the profile of depth, duration, and total ascent time. - Specify the area to be explored and the profile of the dive. - Define decompression appropriate to the context (e.g. no-stop diving, limited stop time, etc.) taking into account the different tables and computers used by divers.
Complete the safety relevant documentation form.	- Know how to complete all the safety and briefing forms per the regulations in use.
Introducing the diving site.	- Describe the area(s) to be dived, how to dive there without disturbing the environment, areas of interest, expected diving conditions (visibility, current, etc.), and possible hazards. - On an unfamiliar site, define the type of the information needed, collect it from competent people and then present it to the divers, relying if necessary on the boat skipper or any other person familiar with the site.
Managing Emergencies	- Contingenciesprocedures: Having a clear plan in place for how to handle different types of emergency situations, such as out of air scenarios, equipment malfunctions, and divers lost or separated from the group.

DIVEMASTER TRAINING PROGRAMME

	THEORETICAL KNOWLEDGE	DESCRIPTION
THE DIVING ENVIRONEMENT	The participant must have a professional level of knowledge to of know how to organising the activity of diving, including planning group dives, checking and preparing equipment, assessing the divers' and Divemaster' experience, briefing the divers, supervising and leading the dive, being prepared for contingencies and emergencies procedures, debriefing, and logging a dive.	The participant should have an understanding of the aquatic environment and the impact of diving on it. This includes knowledge of: - **Aquatic life:** Being familiar with the different types of marine animals and plants, their habitats, and behaviors. - **Conservation:** Understanding the importance of protecting and preserving the aquatic environment and the role of divers in this effort. - **Environmental impact:** Being aware of the impact of human activities on the aquatic environment and how diving activities can affect it. - **Marine protected areas**: Knowing about the marine protected areas and the rules and regulations that are in place to protect the marine environment. - **Responsible diving practices:** Understanding the importance of responsible diving practices, such as not touching or disturbing aquatic life, not damaging coral or other living organisms, and proper disposal of trash and other debris. - **Climate change:** Knowing about the impact of climate change on the aquatic environment and the role of divers in mitigating its effect. - **Ecological programs:** Being aware of the different marine conservation programmes and projects, and knowing how to get involved.

DIVEMASTER TRAINING PROGRAMME

	THEORETICAL KNOWLEDGE	DESCRIPTION
DIVE SITE PECULIARITIES	The participant shall have a professional level of knowledge on the selection of a suitable dive site taking into consideration the number and level certification of the divers, the equipment, decompression tools, and the diving experience of divers and the dive Divemasters.	A professional level of knowledge for selecting a dive site would include the ability to evaluate and consider the following factors: - **Number and level certification of the divers:** Taking the number of divers in the group, their level of certifications, experience and level of comfort when choosing a dive site. - **Equipment:** Evaluating the equipment requirements for the dive and ensuring that all divers have the necessary equipment and that it is in a good working condition. - **Decompression tools**: Knowing the type of decompression tools that are available, such as dive computers and dive tables, and how to use them to plan a dive safely. - **Diving experience of divers**: Assessing the diving experience of the group, to ensure that the dive site is suitable for their level of experience. - **Dive site conditions**: Evaluating the current and forecasted conditions at the dive site, including water temperature, visibility, current, and tide, to ensure that they are suitable for the planned dive. - **Dive site regulations**: Knowing the rules and regulations that apply at the dive site, such as dive permits and depth limitations, and ensuring that all divers and Divemasters are familiar with them. - **Emergency plan:** The plan of action to deal with an emergency at the specific dive site, such as emergency communication, evacuation, and first aid in case something goes wrong.
	Analyse the environmental conditions at the dive site and adapt to these changes.	- **Communicating the plan**: Communicating the dive plan to the divers, to ensur that everyone is familiar of both conditions and the plan. - **Making adjustments:** If the conditions change or if a hazard is encountered, the participant should be able to make adjustments to the dive plan, such as altering the dive profile, changing the dive location, or terminating the dive early. - **Communicating changes:** Communicating any changes to the dive plan to the divers, ensuring that everyone is aware of the new plan.

DIVEMASTER TRAINING PROGRAMME

	THEORETICAL KNOWLEDGE	DESCRIPTION
ACTIVITY AND SAFETY	The participant must : • Ensure that the instructions of safety, risk, and regulations are understood. • Be aware of the risks associated with the different practices and the associated prevention procedures. • Monitoring activity and carrying out preventive actions. • Must check the availability and serviceability of the emergency equipment • Know how to react in case of an accident. • Be aware of any local regulations, environmental protection rules and ensure that they are respected.	- Prevention of narcosis. - Shortness of breath. - Prevention of cold. - **Depending on specific local conditions**: night, ice, drift, night, ice, drift and environmental hazards: nets, caves, wrecks, etc. - **Special considerations for different groups**: youth, seniors, medical restrictions, etc. - **Putting safety or security equipement:** a downline,a safety block, signal buoy etc. - Provide information on environmental hazards. - Establishing a contingency plan for desaturation emergencies on site and preparing an emergency protocol. - Be familiar with and check the contents of the first aid kit. - Locate first aid equipment, check its condition and operation, and know how to use it. - Be familiar with the evacuation and emergency organisation plan. - **Be able to take care of diving casualty:** skill acquired by the Oxygen admonistration. - Manage the other groups/people during the care of the diving casualty. - Know how to complete an evacuation form. - Remind divers of the general rules of environmental protection, - Give advice to divers on how to respect what?.

CMAS DIVMASTER BRIEFING CUE CARD

OVERVIEW

1. OBJECTIVE OF THE DIVE

2. DIVE SITE
- Name of Dive Site
- What can you expect to see at dive site?

3. DIVE PROFILE PLAN
- Depth
- Time

4. Buddy Pairs

SAFETY

1. SPECIFIC DIVE RELATED PROBLEMS
- Boat traffic at dive site
- Currents, waves, surf, rips
- Underwater visibility
- Rocks
- Wreckage
- Plant/ animal life
- Any other specific dive related problems

2. BOAT PROCEDURES/ SAFETY
- Stowing equipment
- Launching
- Sandbanks/ waves
- Travelling arrangements
- Beaching/ mooring
- Any other safety aspects

3. CONFIRMATION OF AND POSITION OF EMERGENCY EQUIPMENT
- First-Aid-Kit
- Oxygen Admin Equipment
- Emergency vehicle and key
- Emergency telephone numbers
- Telephone
- Boat radio

EQUIPEMENT

1. PERSONAL EQUIPMENT
- What is needed?
- Pre-dive checks
- Working order of equipment

2. DIVE BUDDY'S EQUIPMENT
- Pre-dive checks
- Familiarity with buddy's equipment

3. OPERATIONAL EQUIPMENTFirst-Aid-Kit
- What is going to be used? (ropes, lines, reels etc.)
- Use of equipment
- Whose responsibility?

CMAS DIVMASTER BRIEFING CUE CARD

EXERCISE

1. DIVE PLAN

- Complete dive profile plan
- Gas plan
- Dive preparation instructions
- Suit-up instructions
- Meeting spot and time
- Method of entering water
- Assembly before submerging
- Descent procedure
- Regrouping after descent
- Plan once submerged
- Dive termination arrangements
- Ascent procedures
- Safety stop/ decompression stop procedures
- Details of exit from the water
- Post dive procedures

2. CONTINGENCY PLAN

- Separation procedures
- Out-of-gas contingencies
- Lost diver procedures
- Diver recall procedures
- Other specific contingency plans relevant to dive

3. EMERGENCY PLAN

- Chain of command
- Responsible person(s) for first aid treatment
- Emergency vehicle driver(s)
- Responsible person(s) for phoning EMS, hospital, DAN etc.
- Responsible person(s) for summoning assistance by boat radio
- Location and access to EMS
- Emergency action plan (i.e. the plan of action in case of emergency)

DISCIPLINE

1. ENVIRONMENTAL AWARENESS

- Local laws and regulations
- Avoid harming environment
- Buoyancy control
- Anything else to avoid harm to the environment

2. DIVE DISCIPLINE

- Importance of sticking to plan
- Buddy contact
- Group contact
- Group contact
- Gas consumption checks etc.

SIGNALS

- Hand signals
- Rope signals
- Torch signals
- Emergency signals
- Radio Procedures

CMAS

BRIEFING SLATE

PRIOR PREPARATION

Before diving, make sure you have all the necessary regulatory requirements (licenses, authorisations, Divemaster, certifications, etc.), administrative requirements (certifications of teams, divers or participants, etc.), if you have the required equipment (personnel and safety, boat, etc.).

Completing in all fields the essential information for the safety of the diving activity.

BREFING	NOTES :
☐ **INTRODUCTION** - Introducing your self and the rest of the team - The boat's skipper and crew - How to identify the team members	
☐ **BOAT** - Name of the boat - Number of divers on board - Location of safety equipment on board - Safety rules on board, entering and leaving the water	
☐ **DIVE SITE** - Name of the dive site	
☐ **ENVIRONMENTAL FACTORS ON SITE** - Surface - Underwater	
☐ **DESCRIPTION OF THE DIVE SITE** - Depths - Bottom type - Reference points - Underwater route - Points of interest (fauna, flora, geology, wreck) - Dangers	
☐ **GROUP MANAGEMENT** - The diving groups position in the water - How to get the attention of the diving groups	
☐ **DIVING PROFILE** (suggested) - Maximum depth - Bottom time - Gas managment - Back (line or boat) - Ascent speed - Safety stop - Maximum dive time	
☐ **REVIEW OF DIVING SIGNS**	
☐ **EMERGENCY PROCEDURES** - Buddy seperation procedure - Low on gas procedures/ Out- of -gas procedures - Diver recall procedures	
☐ **PRE-DIVE CHECK**	

DIVING SAFETY FORM

CMAS

DATE / /

DOCUMENTATION

☐ BOAT DOCUMENTS ☐ LICENSE ☐ DIVEMASTER CERTIFICATIONS

BRIEFING

BOAT		NUMBER OF DIVERS	
SKKIPER / CREW		INSTRUCTOR / D.M	

ENVIRONMENTAL CONSIDERATIONS

WEATHER	TEMP. (ºC)		ALTITUDE (m)		WIND (km/h knots)		CURRENT	
			WAVE (m)		WAVE TIME (s)		WAVES DIRECT	
SEA	HIGH TIDE		m	ENVIRONMENT	SALT, FRESH, CAVE, DAM, RIVER		
	LOW TIDE		m	TIMELINE	EARLY IN THE MORNING	MORNING	AFTERN	NIGHT

UNDERWATER INFORMATION - DIVE 1

SITE NAME			
BOTTOM TYPE		DIVING PROF	Max depth/ Time
WATER TEMP (ºC)		DESCENT PROF	
VISIBILITY		ACCENT PROF	
CURRENT	km/h/Knot/Direction	RESERVE	BAR

UNDERWATER INFORMATION - DIVE 2

SITE NAME			
BOTTOM TYPE		DIVING PROF	Max depth/ Time
WATER TEMP (ºC)		DESCENT PROF	
VISIBILITY		ACCENT PROF	
CURRENT	km/h/Knot/Direction	RESERVE	BAR

RISK ANALYSIS - DIVE 1

RISK ANALYSIS - DIVE 2

GROUP DIVERS - DIVE 1		LEVEL
1		
2		
3		
4		
5		
6		
7		
8		

GROUP DIVERS - DIVE 2		LEVEL
1		
2		
3		
4		
5		
6		
7		
8		

EMERGENCY AND RESCUE PLAN

TEL RESCUE:		HOSPITAL	CONTACT
DIVEMASTER / INSTRUCTOR		HYPERBARIC CHAM	CONTACT
		POLICE EMERGENCY	CONTACT

O2 ADMIN MANAGER	
MAIN EVACUATION POINT	
ALTERNATIVE EVACUATION POINT	

ACCIDENT EVACUATION FORM

INFORMATION FROM THE MEDICAL AND RESCUE TEAM

The person identified on this form may have suffered an injury during a dive, which may be decompression sickness or pulmonary overpressure or other forms related to underwater activity.

YOU MAY NOT BE AWARE OF THIS SPECIFIC PATHOLOGY

FOLLOW THE PROTOCOL REFERRED TO ON THE FRONT OF THIS SHEET UNTIL THE VICTIM ARRIVES AT HOSPITAL.

It is recommended to be oriented to a hyperbaric medical unit. A DOCTOR ON PERMANENT SERVICE WHO IS SPECIALISED IN THESE KINDS OF DIVING ACCIDENTS will help you in the treatment of this patient.

PERSONAL DATA

FULL NAME							
SEXE	MALE		FEMALE		DATE OF BIRTH	/	/
ADRESS							
ZIP CODE		CITY		REGION			

EMERGENCY CONTACT

FULL NAME		RELATIONSHIP		TEL	

SPECIFIC MEDICAL PROBLEMS(ALLERGIES, MEDICATION, ETC.)

DETAILED DESCRIPTION OF OBSERVED SIGNS/SYMPTOMS OVER TIME

TIME	SIGNS/SYMPTOMS	TIME	SIGNS/SYMPTOMS
H		H	
H		H	
H		H	

FIRST AID PROVIDED

TIME	SIGNS/SYMPTOMS	TIME	SIGNS/SYMPTOMS
H		H	
H		H	
H		H	

DIVING PROFILE

DIVE N°1			DIVE N°2			DIVE N°3		
% O_2		PROF. MAX.	S.INTERV	min	% O_2	S.INTERV	min	% O_2
ENTRY	H		ENTRY	H	PROF. MAX.	ENTRY	H	PROF. MAX.
EXIT	H	m	EXIT	H	m	EXIT	H	m
	Depth	Time		Depth	Time		Depth	Time
DEEP STOP 1	m	min	DEEP STOP 1	m	min	DEEP STOP 1	m	min
DEEP STOP 2	m	min	DEEP STOP 2	m	min	DEEP STOP 2	m	min

DIVING ACCIDENT MANAGMENT FLOW CHARTE

In case of accident :

1. **Recording the casualty's diving and decompression data**
2. **Keep the victim's equipment in a safe place.**
3. **Complete and submit the "Diving Accident" form to the authorities.**

FORWARD THIS DIVING ACCIDENT MANAGEMENT FLOW CHARTE AND THE DIVE ACCIDENT FORM WITH MEDICAL AND RESCUE STAFF

Have you breathed any underwater gas mixtures in the last 24 hours?

YES

MILD SYMPTOMS

- Fatigue
- Headache
- Skin rash
- Itchy skin
- Joint pain

NO

SEVERE SYMPTOMS

- Trouble speaking
- Severe fatigue
- Blurred vision
- Dizziness
- Deafness
- Tingling
- Paralysis
- Breathing difficulty
- Pain
- Altered consciousness
- Pulmonal impairement

NO

This is not a diving injury.
Transfer to hospital

YES

NOTE

PROVIDE 02 (100% / 15L/ min.)

IMPROVED?

NO

YES

As soon as possible, place the casualty under medical observation.

YES

1	CARDIO PULMONARY RESUSCITATION (CPR) IF NECESSARY
2	PROVIDING 02 (100% / 15L/ min.)
3	PLACE THE CASUALTY IN THE RECOVERY POSITION EXCEPT WHERE CARDIOPULMONARY ASSISTANCE IS REQUIRED.
4	HYDRATE IF VICTIM IS CONSCIOUS
5	ARRANGE THE IMMEDIATE TRANSFER TO A HOSPITAL