Syllabus Number: 3.B.30 / BOD no 181 (04-18-2013)

CMAS Technical Skills Diver Training Programme
Minimum Training Programme Content

1. Required theoretical knowledge

1.1 **Subject Area 1: Introduction**

1.1.1 The participant shall be provided with all such information, as provided for in Clause 4.2 ofChapter 1 in order to enable him to take an informed decision about his participation in the CMAS Technical Skills Diver Training Programme.

1.1.2 The participant shall be provided with the information about the CMAS as provided for inClause 4.3 of Chapter 1.

1.2 **Subject Area 2: Equipment**

1.2.1 The participant shall have an appropriate knowledge concerning the physicalcharacteristics operating principles, maintenance and use of the following items of specific diving equipment.

1.2.1.1 Specific Equipment

1.2.1.1.1 Dual tanks/cylinders with dual outlet isolator manifold valve for installing two DIN regulators.

1.2.1.1.2 Two sets of regulators, one of the second-stage regulators must be on a 1.5 -2.1 meter hose and the other must be fitted with a necklace. One of the first stages must supply a pressure gauge fitted with a bolt clip and provide inflation for a dry suit (where applicable).

1.2.1.1.3 A rigid back plate of metal construction with minimal padding, held to the diver with nylon webbing. This webbing must support five D-rings.

1.2.1.1.4 An inflatable buoyancy device adaptable to the back plate.Wing size and shape should be appropriate to tank/cylinder size.

1.2.1.1.5 At least one time/depth measuring device.

1.2.1.1.6 Mask and fins: Mask should be low-volume; fins should be rigid, non-split.

1.2.1.1.7 At least one cutting device.

1.2.1.1.8 Wet notes.

1.2.1.1.9 Spool with at least 30m of line.

1.2.1.1.10 An SMB.

1.2.1.1.11 A compass.

1.2.1.1.12 One primary light with Goodman handle.

1.2.1.1.13 Two reserve lights: reserve lights should have a minimum of protrusions and a single attachment at its rear.

Note: Prior to the commencement of class, students should consult with a CMAS representative to verify equipment requirements

1.3 **Subject Area 3: Physics and theory of Technical skills diving**

1.3.1 The participant shall have an appropriate knowledge concerning the physicalprinciples and their application to Technical diving skills equipment and hazards relating to:

1.3.1.1 Buoyancy and trim

1.3.1.2 Streamlining and equipment configuration

1.3.1.3 Propulsion techniques

1.3.1.4 Situational awareness

1.3.1.5 Communication

1.4 **Subject Area 3: Land Drills and topics**

1.4.1 Dive team protocols

1.4.2 S-drill and valve-drill

1.4.3 Equipment fit and function

1.4.4 Propulsion techniques

1.4.5 Pre-dive drills

1.4.6 Surface marker deployment

2 Required SCUBA/in water skills

2.1 Demonstrate ability to swim (in pool) 300 meters in less than ten minutes (10´) without stopping. Demonstrate ability to swim underwater (in pool) 25 meters on breath hold.

2.2 Demonstrate proficiency in safe diving techniques; this would include pre-dive preparations, in water activity, and post-dive assessment.

2.3 Demonstrate awareness of team-member location and a concern for safety, responding quickly to visual cues and dive-partner needs.

2.4 Efficiently and comfortably demonstrate how to donate gas to an out-of-gas diver.

2.5 Comfortably demonstrate at least three propulsion techniques that would be appropriate in delicate and/or silty environments; students should demonstrate a successful backward kick.

2.6 Demonstrate a safe and responsible demeanour throughout all training.

2.7 Demonstrate proficiency in the ability to deploy a surface marker while using a spool

2.8 Demonstrate proficiency in underwater communication including light signals.

2.9 Demonstrate basic equipment proficiency and an understanding of the CMAS equipment configuration.

2.10 Demonstrate a comfortable demeanor while swimming without a mask

2.11 Demonstrate good buoyancy and trim, i.e. approximate reference maximum of 20 degrees off horizontal while remaining within 1meter of a target depth. Frequency of buoyancy variation and the divers control of their buoyancy and trim are important evaluation criteria.

2.12 Demonstrate aptitude in the following open-water skills: mask clearing, mask removal andreplacement, regulator removal and exchange, long-hose deployment.

2.13 Demonstrate safe ascent and descent procedures.

2.14 Demonstrate proficiency in executing a valve drill.

2.15 Demonstrate efficient deployment and stowage of a reserve light.