

IMCA Scheme for Recognition of Diver Medic Training

Guidance for Training Establishments



The International Marine Contractors Association (IMCA) is the international trade association representing offshore, marine and underwater engineering companies.

IMCA promotes improvements in quality, health, safety, environmental and technical standards through the publication of information notes, codes of practice and by other appropriate means.

Members are self-regulating through the adoption of IMCA guidelines as appropriate. They commit to act as responsible members by following relevant guidelines and being willing to be audited against compliance with them by their clients.

There are two core activities that relate to all members:

- ◆ Competence & Training
- ◆ Safety, Environment & Legislation

The Association is organised through four distinct divisions, each covering a specific area of members' interests: Diving, Marine, Offshore Survey, Remote Systems & ROV.

There are also five regional sections which facilitate work on issues affecting members in their local geographic area – Asia-Pacific, Central & North America, Europe & Africa, Middle East & India and South America.

IMCA D 020

www.imca-int.com/diving

The information contained herein is given for guidance only and endeavours to reflect best industry practice. For the avoidance of doubt no legal liability shall attach to any guidance and/or recommendation and/or statement herein contained.

IMCA Scheme for Recognition of Diver Medic Training Guidance for Training Establishments

Contents

1.	Introduction.....	1
2.	Application Form.....	3
3.	Letter of Undertaking.....	5
4.	Guidance on Submissions	9
5.	Prospectus	11
	Appendix A Syllabus.....	14
	Appendix B List of Competences	18
7.	Auditing Arrangements.....	21
8.	Auditing Checklist	25
	1 Aspects Included in Audit	26
	2 The Auditing Process	27
	3 Auditing Checklist	28
	3.1 Assessment of Submissions.....	29
	3.2 Course Content and Organisation	34
	3.3 Teaching, Learning and Assessment.....	36
	3.4 Student Progression and Achievement.....	39
	3.5 Student Support and Guidance.....	40
	3.6 Learning Resources.....	42
	3.7 Quality Assurance and Enhancement	45
	Appendix 1 Course Content Checklist	49
	Appendix 2 Classroom Observation Notes	53
	Appendix 3 Report Format	55
	Appendix 4 Typical Schedule for Visit.....	57
9.	Template of IMCA-Recognised Diver Medic Certificate.....	59

Details of the IMCA Scheme for Recognition of Diver Medic Training

Part 1 - Introduction

While offshore diving, there is a requirement that one member of a dive team who is not diving, other than the supervisor, should be trained in advance first aid – generally referred to as a 'diver medic'. Diver medic training requires refresher training at regular (three-yearly) intervals.

In the UK with the introduction of the new Diving at Work Regulations 1997, HSE (the UK Health & Safety Executive) ceased to have statutory responsibility to approve and monitor diver medic training and at that time sought for IMCA to take over this role.

After discussion with training establishments, the HSE and IMCA's medical advisers, IMCA agreed to take on the role of auditing diver medic training establishments to an agreed syllabus and to issue certificates of IMCA Recognition.

This document sets out the arrangements IMCA has put in place to recognise, on an international basis, training establishments offering diver medic training.

Part 2 – Application Form

Part 1 – Organisation applying for IMCA Recognition

Name:

Address:

.....

.....

.....

Contact Name:

Telephone No: Fax No:

E-mail:

Position in organisation:

Part 2 – Details of Training Programme

1. Type of course for which approval is sought:

_____ Full Course _____ Refresher Course

2. Length of Course:

_____ hours (Full Course at least 60 hours; Refresher Course at least 30 hours)

3. Location(s) of Course:

4. Description of type of premises to be used (e.g., training rooms in own establishment, local hospital):

5. Indicate likely source(s) and number of trainees:

6. Give details of :

Size of classes

_____ Full Course _____ Refresher Course

Proposed number of courses per year

_____ Full Course _____ Refresher Course

Part 3 – Training Experience

Give details of your organisation's previous experience of running courses for the diving industry:

Name

Signature Date

Position in organisation

Enclosures

This application must be supported with the following:

1. A signed copy of the *Letter of Undertaking*, which has been sent to you as part of the application pack
2. Two copies of the following:
 - i. *proposed syllabus*
 - ii. *teaching plan*
 - iii. *final assessment/examination plan*
 - iv. *details of proposed trainers/examiners, including names, diving and first aid experience and any other relevant qualifications and training.*

(See enclosed Guidance on Submissions for further details on points i, ii, iii.)

Part 3 – Letter of Undertaking

To Be Signed by Applicants Seeking IMCA Recognition for Diver Medic Training

1. Course and Examination

Courses run by the training establishment will follow these practices.

- a) Courses will conform to the syllabus agreed by IMCA at the time of recognition, subject to any alterations agreed at a later date.
- b) The training establishment will provide adequate space to allow practical work to be undertaken.
- c) The training establishment will provide adequate rooms for practical and theoretical examinations and for waiting areas to ensure that candidates can be examined separately, as appropriate.

2. Syllabus for Diver Medic Training

The syllabus will ensure that trainees are familiar with the following subjects:

- a) The causes, prevention, signs and symptoms, and the management under normal *and hyperbaric* conditions of:
 - i. Bleeding
 - ii. Fractures, sprains and muscle trauma
 - iii. Shock
 - iv. Burns
 - v. Electric shock
 - vi. Asphyxia, pulmonary oedema
 - vii. Respiratory arrest
 - viii. Cardiac arrest
 - ix. Convulsions
 - x. Hypothermia
 - xi. Hyperthermia
- b) The structure and function of the following systems should be described in appropriate detail relevant only to the practical management of the conditions described at 2.a above.
 - i. The musculo-skeletal system
 - ii. The nervous system
 - iii. The heart, blood vessels, circulation and blood
 - iv. The lungs
 - v. The ears, sinuses and vestibular organs

Unnecessary detail in these subjects should be avoided in order that the maximum time can be devoted to practical matters.

- c) The importance of personal hygiene in the management of injuries
- d) The systematic method of examining injured or ill patients including divers
- e) Methods for monitoring vital signs such as pulse, respiratory rate, temperature (including use and reading of low-reading thermometer), blood pressure
- f) Methods of caring for a casualty on site and during transportation
- g) The administration of oxygen.

In addition, Diver Medic Training should provide special training in:

- h) The causes, effects, symptoms, prevention and management of the following conditions:
 - i. Decompression illness including pulmonary barotrauma and gas embolism
 - ii. Squeeze
 - iii. Ear problems – infections, barotrauma, routine hygiene in saturation environments
 - iv. Injuries to skin and eyes
 - v. Near drowning, secondary drowning, vomiting under water
 - vi. Carbon dioxide retention and poisoning
 - vii. Carbon monoxide poisoning
 - viii. Other breathing gas contaminants, e.g. hydrocarbons
 - ix. Oxygen toxicity
 - x. Anoxia and hypoxia
 - xi. Nitrogen narcosis
 - xii. Underwater blast injury
 - xiii. High pressure nervous syndrome (HPNS)
 - xiv. Diving accidents
 - xv. Thermal stress – the effect of cold on divers' performance, hypothermia, hyperthermia
 - xvi. Dental problems – recognition and first aid
 - xvii. Dangerous marine animals – treatment of common injuries
- i) The first-aid equipment available at the site of a diving operation and its care and use
- j) The management of medical emergencies within a diving bell, e.g. ECM
- k) Methods of care for a casualty when transferring from the diving bell to the main chamber
- l) Medical record keeping (including confidentiality) and liaison with medical services/communication with medical personnel, including the use of a suitable aide-memoir for recording and transmitting medical data (e.g. publication DMAC 01)
- m) Use of medical equipment to be held at the site of an offshore diving operation, including the management of common minor illnesses if possible with the scales carried and as described in the publication DMAC 015 (Revision 1)
- n) Use and hazards of the drugs and intravenous fluids carried in the scales defined in publication DMAC 015 (Revision 1)
- o) Practice in the skills of:
 - i. Setting up intravenous infusions
 - ii. Parenteral administration of drugs
 - iii. Suturing
- p) Theoretical teaching of bladder catheterisation
- q) Theoretical teaching and practice where available of:
 - i. Insertion of pleural drain for pneumothorax
 - ii. Airway maintenance (laryngeal mask)
 - iii. Catheterisation.

3. Refresher Training

Refresher Training will take place under the following circumstances.

- a) Provided the certificate has not expired, a diver may re-certify by taking a refresher course.
- b) Diver medic refresher courses should take place over five 6-hour days and the objective should be to produce a Diver Medic who is at least as competent as one who has completed the initial Diver Medic Training Course. Attention should be paid to the requirement to update Diver Medics to allow for advances in diving medicine and/or training.
- c) The candidate should be examined to enable him/her to demonstrate that he/she has achieved the necessary competencies identified for a Diver Medic.

4. Certificates of Qualification

Certificates of qualification as a diver medic will be valid for three years only. A refresher course will be required before re-certification.

Diver Medic certificates issued by the training establishment will state clearly:

- a) The organisation's name,
- b) The name of the person to whom it is issued,
- c) The date the certificate was issued,
- d) The certificate's validity for three years from the date of issue,
- e) The certificate number assigned to each successful candidate.

5. Records

The organisation will retain records of the following information:

- a) Date, time and place of each course
- b) Number of students on each course
- c) Certificates numbers issued on each course
- d) Names of trainers/examiners participating in each course and their qualifications and experience.

The organisation will supply IMCA with the certificate numbers issued and names to whom the certificates were issued for each course run.

6. Trainers and Examiners

The following procedures will be taken in regard to trainers and examinations.

- a) The organisation will use persons to train and examine on courses who have the appropriate experience.
- b) Examinations will be conducted by persons not directly involved in the training.
- c) Trainers and examiners will be made aware that IMCA auditors shall be entitled to observe training or examination during any audit of the establishment.

7. Candidates

In order to obtain a certificate each candidate must be able to demonstrate the competences of a diver medic.

8. Declaration

I, the undersigned, agree that the organisation (on whose behalf I am authorised to act) will abide by the above conditions of IMCA Recognition. I accept that IMCA is entitled to revoke the organisation's Recognition for Diver Medic training where the organisation fails to abide by these conditions.

Name

Signature Date

Position in organisation

Organisation Name

Note: signing this declaration does not necessarily mean that IMCA will Recognise the course or will extend its existing Recognition.

Part 4 – Guidance on Submissions

The information below provides guidance on what is required for the submission of applications for IMCA Recognition for Diver Medic Training.

1. **Proposed Syllabus** for each subject, explaining:
 - a) the **subject** of each lesson, e.g. control of bleeding
 - b) the **aims and objectives** of each lesson, e.g.,
 - ♦ to ensure that the students have a basic understanding of the circulatory system
 - ♦ to know the importance of loss of blood from various types of injuries and illnesses where bleeding occurs, and the first aid measures for dealing with these
 - c) the **methodology**, detailing how the aims and objectives are to be achieved, e.g.,
 - ♦ a 20 minute *video* (specify title) explaining the first aid measures for the loss of blood will be shown and discussed with the candidates
 - ♦ the instructor will then *demonstrate* the first aid measures for the loss of blood
 - ♦ the student will then *practise* the first aid measures for the loss of blood
 - d) a list of the **equipment and learning material** for each lesson
 - e) the **time spent** on ensuring underpinning knowledge, demonstrating and practising, e.g. 10 minute, 1.5 hours, 25 minutes
 - f) **learning outcomes**, e.g. at the end of this lesson students should be able to
2. **Teaching plan**, listing the various lessons to be covered and detailing how the candidates on the Diver Medic Course or Diver Medic Refresher Course will acquire the necessary underpinning knowledge and skills to practice competently and safely.
3. **Final Assessment / Examination Plan**. Full details of how the final assessment is to be conducted should be presented rather than simply stating what the assessment will cover. The assessment plan should include:
 - a) how long the assessment will take;
 - b) how a candidate will be assessed as being competent in carrying out cardio-pulmonary resuscitation (CPR) and what criteria will be used to judge the candidate is competent;
 - c) how a candidate will be assessed in the control of bleeding;
 - d) how a candidate will be assessed in the immobilisation of injured parts etc.;
 - e) if a multiple-choice questionnaire is to be used, how it will be laid out and what the criteria will be for pass or fail.

Part 5 – Prospectus

Background

While working offshore, all divers should be trained in first aid.

There is a requirement for a member of the dive team who is not diving, other than the supervisor, to be trained in advanced first aid – generally referred to as a ‘diver medic’.

In the UK, with the introduction of the new Diving at Work Regulations in 1997, the Health & Safety Executive (HSE) ceased to have the statutory responsibility for approving and monitoring diver medic training, although it retains the responsibility for the certification. **Since HSE has continued its role in the approval of diver medic training, it approached IMCA to set up a scheme to recognise such training.** This prospectus sets out IMCA’s arrangements for IMCA Recognition of Diver Medic Training.

IMCA proposes that its Recognition covers the Diver Medic courses. There is no reason that courses cannot be run where the basic first aid training qualification is awarded as part of a Diver Medic course; however, in the UK, for example, HSE will retain responsibility for the certification of the First Aid part of the course.

The Diver Medic Course

In order to achieve the Diver Medic Training Recognition, IMCA will consider for recognition a single course requiring a total of at least 10 days (60 contact hours) tuition, including examination time.

An example of a syllabus appears in Appendix A.

The Diver Medic current course contents are based on previous HSE requirements, but the relevance of the contents will be regularly audited by IMCA and changes may be made where appropriate.

Format

The course will be competency based. Each module of the course will have clearly identified competencies that may be assessed at various stages. Competencies may be assessed practically, verbally or by questionnaire.

There will be a formal examination at the end of each component of the course.

The method of examination will enable the candidate to demonstrate that he/she has in fact achieved the necessary competencies identified for the course.

Examinations such as multiple choice questionnaires, descriptive essays, practical casualty simulation scenarios or a combination of such will be acceptable.

Training Organisations are to provide a good quality workbook so that the Diver Medic should be able to refer to it for refresher purposes after the course and where necessary during management of a medical problem.

The Diver Medic

The Diver Medic is to be:

- ♦ capable of administering First Aid and emergency treatment and of carrying out the directions of a doctor pending the arrival of more skilled medical aid;

- ◆ capable of communicating understandably by telephone, radio or facsimile with the doctor;
- ◆ familiar with diving procedures and compression chamber operation, and
- ◆ able to assist the diving supervisor with decompression procedures and advising when medical help should be sought.

The Diver Medic must be fit to enter a chamber in an emergency and must hold a valid diver's certificate of medical fitness and maintain a personal logbook in which to keep the certificate and record details of any entry into the compression chamber.

A training establishment is able to take anyone on the course as a student, irrespective of their background and qualifications. However, the establishment must only issue *IMCA-Recognised* certificates to students who meet the following criteria:

- ◆ The student must hold an offshore qualification in diving. This can be an LST, diving supervisor, or diver qualification recognised by IMCA (which is at an offshore grade)
- ◆ The student must hold a valid diving medical as suitable to go under pressure in a chamber. Sports diving or UKOOA medicals are not acceptable.

Certificates for those not meeting the above criteria must not refer to IMCA in any way.

The training establishment is responsible for checking that all students meet the entry requirements before they arrive at the site. This includes checking that the current certificate is within the three-year period for those on refresher courses.

Trainers and Examiners

All trainers and examiners will have a sound knowledge of first aid in the diving environment and the skills to teach. Training organisations are to show that trainers have the necessary experience both of first aid for divers *and* of teaching and assessing. At least one trainer must be a medical practitioner with knowledge and experience of diving emergencies. Where a training establishment intends to rely on one principal lecturer, there should be a clear plan as to what would happen/who would take over if that lecturer was unavailable or was taken ill.

An application to run an IMCA Recognised course should include details of the CV of each trainer and examiner relevant to the purpose of the course.

A doctor experienced in diving medicine must be one of the lecturers on the course. It is suggested that he/she lecture for two half days on the full course and one half day on the refresher course.

Examinations are to be conducted by at least two approved examiners who have not been involved in the training and are completely 'fresh' to the students. The only exception to this will be where the examiner is a doctor who has given lectures, due to the restricted number of doctors available with a diving background. Part of the examination must be conducted by a doctor, or another medical practitioner with knowledge and a great deal of experience of diving emergencies, such as an ambulance service paramedic instructor.

The Training Establishment is to ensure that there are sufficient trainers and examiners to carry out the planned programme. Where a change in a member of training or assessing staff is proposed, the CV of the new applicant should be forwarded to IMCA.

Certificates will be valid for three years.

Training Facilities

The training facilities will allow for adequate space for practical work to be undertaken and for practical and theoretical examinations to be held. The training facilities will be inspected by an IMCA team of auditors.

Students must be given access to a reasonable amount of reference textbooks and material. IMCA does not propose issuing an 'approved list', but it is expected that a variety of hyperbaric medical books and general first aid books would be available.

Record Keeping

Records of students on the course need to be archived and kept for a reasonable time. Since the certificate issued expires after three years, then four years would seem a reasonable retention time.

Monitoring and Quality Control

Training organisations will set up and carry out their own quality assessment programme, keeping a record of the steps they have taken. IMCA will be entitled to assess this record on asking. Training organisations' application should show whether the training organisation is a member of any quality network or quality standard such as BS5750, ISO9000/9001.

IMCA will inform a training organisation in writing if it does not meet the standards set out in this prospectus. In such cases, the training organisation will be given an opportunity to correct the situation. If standards remain unacceptable, IMCA will take steps to remove its Recognition.

Syllabus

1. General Course Guidelines

IMCA-approved training courses must conform to requirements for inspection and course content as set down by IMCA. Any organisation or individual employer may seek approval to train, examine and certify Diver Medics. So long as the general objectives of training are achieved, the design of training courses (e.g., modular courses) is a matter for the organisation or employer concerned. The approval of training and qualifications, however, will depend on the organisation or employer satisfying IMCA of certain criteria, including the following:

- a) The proposed syllabus must include both theoretical and practical work and conform with the guidance in paragraphs 2 and 3 of this Appendix.
- b) In keeping with current good practice in First Aid Training, IMCA Diver Medic courses are to be competence based. It is accepted that at the outset of these new arrangements, immediate provision of competence-based training for the whole syllabus will be a difficult objective to achieve. Training organisations must, however, give a clear indication of a move towards competence-based training from the outset and progression of this principle will be monitored during subsequent IMCA audits. See Appendix B for a list of competences.
- c) Examinations must be conducted by suitably qualified persons (see page 3 of this document) who have not been directly involved in the training of the candidates they examine.
- d) Suitable arrangements must be made for conducting examinations.
- e) The proposed programme of examinations must be appropriate.
- f) Premises and equipment to be used for training and examinations must be suitable.
- g) A suitable limit should be placed on the size of classes to be trained, consistent with the available facilities.

2. Syllabus for Diver Medic Training

The syllabus will ensure that trainees are familiar with the following subjects:

- a) The causes, prevention, signs and symptoms, and the management under normal *and hyperbaric* conditions of:
 - i. Bleeding
 - ii. Fractures, sprains and muscle trauma
 - iii. Shock
 - iv. Burns
 - v. Electric shock
 - vi. Asphyxia, pulmonary oedema
 - vii. Respiratory arrest
 - viii. Cardiac arrest
 - ix. Convulsions
 - x. Hypothermia
 - xi. Hyperthermia
- b) The structure and function of the following systems should be described in appropriate detail relevant only to the practical management of the conditions described at 2.a above.
 - i. The musculo-skeletal system
 - ii. The nervous system
 - iii. The heart, blood vessels, circulation and blood
 - iv. The lungs
 - v. The ears, sinuses and vestibular organs

Unnecessary detail in these subjects should be avoided in order that the maximum time can be devoted to practical matters.
- c) The importance of personal hygiene in the management of injuries
- d) The systematic method of examining injured or ill patients including divers
- e) Methods for monitoring vital signs such as pulse, respiratory rate, temperature (including use and reading of low-reading thermometer), blood pressure
- f) Methods of caring for a casualty on site and during transportation
- g) The administration of oxygen.

In addition, Diver Medic Training should provide special training in:

- h) The causes, effects, symptoms, prevention and management of the following conditions:
 - i. Decompression illness including pulmonary barotrauma and gas embolism
 - ii. Squeeze
 - iii. Ear problems – infections, barotrauma, routine hygiene in saturation environments
 - iv. Injuries to skin and eyes

- v. Near drowning, secondary drowning, vomiting under water
 - vi. Carbon dioxide retention and poisoning
 - vii. Carbon monoxide poisoning
 - viii. Other breathing gas contaminants, e.g. hydrocarbons
 - ix. Oxygen toxicity
 - x. Anoxia and hypoxia
 - xi. Nitrogen narcosis
 - xii. Underwater blast injury
 - xiii. High pressure nervous syndrome (HPNS)
 - xiv. Diving accidents
 - xv. Thermal stress – the effect of cold on divers’ performance, hypothermia, hyperthermia
 - xvi. Dental problems – recognition and first aid
 - xvii. Dangerous marine animals – treatment of common injuries
- i) The first-aid equipment available at the site of a diving operation and its care and use
 - j) The management of medical emergencies within a diving bell, e.g. ECM
 - k) Methods of care for a casualty when transferring from the diving bell to the main chamber
 - l) Medical record keeping (including confidentiality) and liaison with medical services/communication with medical personnel, including the use of a suitable aide-memoir for recording and transmitting medical data (e.g. publication DMAC 01)
 - m) Use of medical equipment to be held at the site of an offshore diving operation, including the management of common minor illnesses if possible with the scales carried and as described in the publication DMAC 015 (Revision 1)
 - n) Use and hazards of the drugs and intravenous fluids carried in the scales defined in publication DMAC 015 (Revision 1)
 - o) Practice in the skills of:
 - i. Setting up intravenous infusions
 - ii. Parenteral administration of drugs
 - iii. Suturing
 - p) Theoretical teaching of bladder catheterisation.
 - q) Theoretical teaching and practice where available of:
 - r) Insertion of pleural drain for pneumothorax
 - s) Airway maintenance (laryngeal mask)
 - t) Catheterisation.

3. Refresher Training

Refresher Training will take place under the following circumstances.

- a) Provided the certificate has not expired, a diver may re-certify by taking a refresher course.
- b) Diver medic refresher courses are expected to take place, as a minimum, over five 6-hour days with objective to produce a Diver Medic who is at least as competent as one who has completed the initial Diver Medic Training Course. Attention should be paid to the requirement to update Diver Medics to allow for advances in diving medicine and/or training.
- c) The candidate must be examined to enable him/her to demonstrate that he/she has achieved the necessary competencies identified for a Diver Medic.

List of Competences

Competence to be Taught	Knowledge	Demonstration and/or Acceptance Criteria
Management of bleeding; fractures, sprains and muscle trauma; shock; burns; electric shock; asphyxia, pulmonary oedema; respiratory arrest; cardiac arrest; convulsions; hypothermia; hyperthermia	Understanding the management of the conditions listed	Assessment during training course plus end-of-course written and oral examination
Understanding the structure and function of: the musculo-skeletal system; nervous system; heart, blood vessels, circulation and blood; lungs; ears, sinuses and vestibular organs	As relevant to the practical management of the conditions listed	Assessment during training course plus end-of-course written and oral examination
Management in a hyperbaric environment	Additional considerations when making advanced first aid and medical interventions at raised environmental pressure	Assessment during training course plus end-of-course written and oral examination
Appropriate use of clean and sterile techniques; understanding of the importance of personal hygiene	Understanding basic principles of infection and inflammation	Assessment during training course plus end-of-course written and oral examination
Ability to gather an accurate medical history and to elicit physical signs (e.g., pulse, respiratory rate, high and low thermometer reading, blood pressure)	How to examine ill or injured divers and communicate findings to a doctor	Assessment during training course plus end-of-course written and oral examination
Methods of handling casualties, including transfer by helicopter; caring for a casualty when transferring from a diving bell to the main living chamber	Minimising the effects of movement upon shock, fractures and other injuries	Assessment during training course plus end-of-course written and oral examination
Administration of oxygen	Use of different oxygen delivery systems at the surface and in the chamber; limits of oxygen use	Assessment during training course plus end-of-course written and oral examination

Competence to be Taught	Knowledge	Demonstration and/or Acceptance Criteria
Management of diver illnesses and accidents	Squeeze; ear problems, barotrauma, infections and need for routine hygiene in saturation; skin and eye injuries; vomiting under water, near-drowning, secondary drowning; CO ₂ retention and poisoning; CO poisoning; other gas contaminants; O ₂ toxicity; anoxia and hypoxia; N ₂ narcosis; underwater blast injury; high pressure nervous syndrome; diving accidents; thermal stress and performance; hypothermia; hyperthermia; recognition and first aid of dental problems; maritime animal injuries	Assessment during training course plus end-of-course written and oral examination
Management of medical emergencies with a diving bell	Recovery procedures and ECM; lost bell emergency procedures; hyperbaric evacuation	Assessment during training course plus end-of-course written and oral examination
Use and maintenance of medical equipment available at the site of a diving operation	As above, plus inventory (DMAC 015), checking in-date compliance, and requisitions	Assessment during training course plus end-of-course written and oral examination
Medical record keeping (including confidentiality)	Record keeping and use of a suitable Aide-Memoir for transferring medical information	Assessment during training course plus end-of-course written and oral examination
The proper use of drugs and intravenous fluids	The use and hazards of drugs and intravenous fluids as carried in accordance with DMAC 015 (Rev 1 or subsequent)	Assessment during training course plus end-of-course written and oral examination
Ability to suture, to set up intravenous infusions and the parenteral administration of drugs	Practice in the technique of suturing, setting up I/V infusions and parenteral administration of drugs	Assessment during training course plus end-of-course written and oral examination
Ability to assist in insertion of pleural drains, catheterisation and in-airway management	Theoretical teaching and, where appropriate, practice in pleurocentesis, catheterisation and airway maintenance (laryngeal mask)	Assessment during training course plus end-of-course written and oral examination

Part 7 – Auditing Arrangements

IMCA requires all training establishments intending to run any course for which they seek IMCA Recognition for Diver Medic Training to submit to an initial (and subsequent periodic) audit for the course(s) by approved IMCA auditors.

1. Audit team

- a) For each type of training course (Diver Medic or Diver Medic Refresher Course), IMCA will appoint a Chief Auditor. This may be someone not currently employed in the diving industry who nevertheless has knowledge of the industry and the requirements of IMCA. The Chief Auditor will normally be assisted by an approved Assessor.
- b) Assessors may either be employed by an IMCA Member Company or come from outside the industry, but will need to have a good knowledge of the industry and the requirements of the IMCA scheme.
- c) Assessors will have specific knowledge of the type of training being given either because they have previously attended such a course or are or have been working with those who have undergone such training.
- d) The IMCA Audit Board (comprising the IMCA Technical Advisor on the Diver Medic Scheme, the Diver Medic Scheme Administrator and the Chairman of the Safety & Medical, Technical and Training Committee of the Diving Division) will be responsible for forwarding names of suitable candidates for Chief Auditors and Assessors to the Diving Division Management Committee for approval.

2. Responsibility of Auditors

- a) The Chief Auditor must ensure that all courses are audited in a fair and equitable fashion. The audit for each training establishment should take place over a similar amount of time and cover the specific areas as detailed by the IMCA Diver Medic Audit Checklist, although there may be occasions – at the Chief Auditor’s discretion – when more time is needed. The Chief Auditor must ensure that all courses are run so as to cover the IMCA Diver Medic Syllabus, and must confirm that all topics are adequately covered by competent teaching staff and that all necessary equipment is provided in cases where practical experience is called for.
- b) In general, other criteria such as classroom facilities need be addressed only where they are clearly inadequate (extremes of temperature, too much noise etc.) and affect the way the course is being conducted.
- c) Following an audit, the Chief Auditor will report to the Audit Board and make a recommendation as to whether the course should receive IMCA Recognition. The Chief Auditor should indicate to the training establishment whether he or she will be recommending IMCA Recognition of the course. In cases where recognition is not recommended, the Chief Auditor should discuss reasons with the Course Director and suggest how improvements could be made. The outcome of any such discussions should form part of the Auditor’s report to the Audit Board.

3. Audit Procedures

- a) The Chief Auditor and the accompanying Assessor will attend a representative selection of lectures and practical demonstrations.
- b) The Auditor and Assessor (to be referred to as Auditors) will take the opportunity to discuss the course with the lecturers (and students where appropriate) in an effort to establish whether the material in the IMCA Diver Medic Syllabus (and Diver Medic Refresher Syllabus) is adequately covered.
- c) Before each audit, the Auditors will be given a copy of the IMCA Audit Checklist, based on the syllabus for the course, with spaces for comments on the quality and perceived adequacy of tuition given. Any comments may be discussed with students and instructors at any time during the audit.

4. Responsibilities of Training Establishments

- a) It will be the responsibility of the training establishment to apply for IMCA Recognition, which will entail an audit. The training establishment will need to apply for re-approval after 3 years, which may entail a re-audit.
- b) Training establishments shall be responsible for ensuring that every assistance is given to the Auditors and that the Auditors are able to attend any lectures or practical demonstrations and look at any documentation relating to the course.
- c) In particular, it is vital that a secure base room is put aside for the use of the Auditors during the visit to be used to interview staff and students as required and for private discussions between the Auditors.
- d) Training establishments shall provide IMCA with full details of the course(s) and instructors, and shall update this information as and when appropriate. If a new instructor is engaged, the training establishment will notify IMCA of the instructor's name, qualifications and experience.
- e) Training establishments will be responsible for setting the examination and assessment programme and for ensuring that there is consistent, impartial and fair assessment of each candidate.
- f) At the end of each course, the training establishment will provide each student with a questionnaire (provided by IMCA, inviting comments on all aspects of the course and tuition), and will return the completed questionnaires to the IMCA Diver Medic Scheme Administrator. The student need not show the completed questionnaire to a member of the training establishment but, in the case of adverse comments being received, IMCA will inform the establishment accordingly. IMCA will preserve the confidentiality of the source of any adverse comments.

5. Procedures

a) **Application**

Application for IMCA Recognition for a course must be made to IMCA, who will send out the application pack. On completion and return of the relevant information, the IMCA Audit Board will arrange for an audit to take place. The audit fee will then be required to be paid.

Establishments will be informed by IMCA as to when any subsequent auditing is to take place. On receipt of this notification, the audit fee shall be sent to the IMCA Scheme Administrator within 14 days. Failure to comply may result in the audit being cancelled and Recognition being withheld.

b) **Fees**

Audit fees will be set by IMCA and may be subject to change as appropriate. Any additional costs arising from travelling and accommodation etc. will be charged to the training establishment after the audit has taken place.

Fees to be paid to the Auditors will be set by IMCA and will be incremented by re-imburement of necessary travelling and accommodation costs etc. Claims for payment of fees to auditors should be made to IMCA as soon as possible after the audit and should be accompanied by receipts in respect of expenses.

c) **IMCA Recognition**

Following each satisfactory audit the training establishment will receive a letter relaying IMCA's Recognition of the course for a period not exceeding three years from the date of the letter.

In the event of IMCA receiving an unsatisfactory report from the Auditors, the training establishment will be notified of the aspects found to be unsatisfactory. It is the responsibility of the training establishment to apply to IMCA for re-audit.

In the case of IMCA receiving unfavourable reports about a certain course (whether from students or from contractors), it may be deemed necessary to order a re-audit on an ad-hoc basis. In this event, the Letter of Recognition may be withdrawn until a satisfactory re-audit takes place.

Part 8 – Auditing Checklist

Index

1. Aspects Included in Audit
2. The Auditing Process
3. Auditing Checklist
 - 3.1 Assessment of Submissions
 - 3.2 Course Content and Organisation
 - 3.3 Teaching, Learning and Assessment
 - 3.4 Student Progression and Achievement
 - 3.5 Student Support and Guidance
 - 3.6 Learning Resources
 - 3.7 Quality Assurance and Enhancement

Appendices

- Appendix A Course Content Checklist
- Appendix B Classroom Observation Notes
- Appendix C Report Format
- Appendix D Typical Schedule for Visit

1. Aspects Included in Audit

There are seven aspects that require at least an overall satisfactory grading during audit to gain IMCA Recognition for each course. An unsatisfactory overall grading for any one or more aspects will result in the requirement for re-auditing of that aspect.

The first aspect, Auditing of Submissions, must be completed satisfactorily for the audit team to progress to the auditing visit itself.

The seven aspects are:

1. Auditing of Submissions
2. Course Content and Organisation
3. Teaching, Learning and Assessment
4. Student Progression and Achievement
5. Student Support and Guidance
6. Learning Resources
7. Quality Assurance and Enhancement

2. The Auditing Process

The following procedures will be followed during the Recognition process:

a) Application

Application for IMCA Recognition for each course must be made to IMCA, who will send out the application pack. On completion and return of the relevant information, the IMCA Audit Board will arrange for the audit to take place. The audit fee will then be required and the establishment will be informed when the submissions will be required and will be given a provisional date for the auditing visit, dependent on successful assessment of the submission. In the event that the submission is unsatisfactory, a request for further information will be made which, when received, must be assessed as satisfactory prior to the confirmation of the date for the auditing visit.

b) Audit Procedures

The Chief Auditor will be accompanied by an Assessor and between them they will attend a representative selection of lectures and practical demonstrations. A typical schedule for a visit is included in Appendix D.

Auditors will take the opportunity to discuss with the lecturers (and students where appropriate) relevant features of the aspects of provision being audited.

Before each audit, the Auditors will be given a copy of the attached Checklist, with spaces for comments on the quality and perceived adequacy of tuition given. Feedback will be given to tutors on completion of each auditing session.

On completion of the audit formal feedback will be given, which will address the seven aspects being audited and the overall grade of each aspect. Substantive positive and negative points that will appear on the final report will be addressed and the overall recommendation of the auditing process will be stated.

It is vital that a secure base room is put aside for the use of the Auditors during the visit. This room will be used to interview staff/students as required and for private discussions between the Auditors.

A final report will be written according to the format enclosed (Appendix C) and submitted to the IMCA Audit Board for consideration before being sent to the institution with either a letter relaying IMCA's Recognition or a recommendation for a further audit of the aspects of provision found to be unsatisfactory.

3. Auditing Checklist

Course Being Audited:

Location of Course:

Date of Audit:

Names of Auditors:

.....

3.1 Assessment of Submissions

- a) Are the staff suitably qualified and experienced to enable them to fulfil their role in the training and assessment process?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) Does the Teaching Plan list the lessons to be covered detailing how the candidates will acquire the necessary underpinning knowledge and skills to practise competently and safely?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- c) Does the Syllabus cover each subject and explain clearly? (Reference should be made to Appendix A, Course Content Checklist.)

- i. the subject of each lesson (e.g., control of bleeding)?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- ii. the aims and objectives of each lesson (e.g., to ensure that the students have a basic understanding of the circulatory system; know the importance of loss of blood from various types of injuries and illnesses where bleeding occurs and the first aid measures for dealing with these)?

Unsatisfactory Satisfactory Good Excellent

Comments:

- iii. the methodology by which the aims and objectives are achieved (e.g., a 20 minute video (title) explaining the subject will be shown and discussed with the students)?

Unsatisfactory Satisfactory Good Excellent

Comments:

- iv. the equipment and learning material for each lesson?

Unsatisfactory Satisfactory Good Excellent

Comments:

v. the time spent on ensuring underpinning knowledge, demonstrating and practising (e.g., 10 mins, 1.5 hours etc.)?

Unsatisfactory Satisfactory Good Excellent

Comments:

vi. learning outcomes (e.g., at the end of this lesson students will be able to)?

Unsatisfactory Satisfactory Good Excellent

Comments:

d) Does the Final Assessment/Examination Plan give full details of how the final assessment is to be conducted and include:

i. how long the assessment will take?

Unsatisfactory Satisfactory Good Excellent

Comments:

- ii. how a candidate will be assessed as being competent in carrying out cardio-pulmonary resuscitation (CPR) and what criteria will be used to judge the candidate is competent?

Unsatisfactory Satisfactory Good Excellent

Comments:

- iii. how a candidate will be assessed in the control of bleeding?

Unsatisfactory Satisfactory Good Excellent

Comments:

- iv. how a candidate will be assessed in the immobilisation of injured parts etc.?

Unsatisfactory Satisfactory Good Excellent

Comments:

- v. if multiple choice questions are to be used, how they will be laid out and what the criteria will be for pass or fail?

Unsatisfactory Satisfactory Good Excellent

Comments:

e) Practical arrangements made for auditing visit

- i. Were the dates of the visit confirmed?
- ii. Was a representative course and teaching session underway?
- iii. Was a base room available at institution?
- iv. Was a schedule of meetings and classroom observations agreed with the institution?
- v. Were the Auditors contacted to set up a visit schedule and discuss practical arrangements?
- vi. Were the auditing fees paid to IMCA?

Overall Conclusion for Assessment of Submissions:

Unsatisfactory Satisfactory Good Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.2 Course Content and Organisation

- a) Are the structure and content of the course consistent with the aims and objectives as set out in the IMCA Diver Medic Training Prospectus?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) Are the intended outcomes of teaching and learning defined clearly and are they understood by both staff and students?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- c) Is there evidence that the content is current and is informed by recent developments and industrial experience?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

Overall Conclusion for this Aspect:

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.3 Teaching, Learning and Assessment

- a) In the context of the aims, and given the student profile, are the structure and range of the programme of activities (teaching, learning and assessment) appropriate?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) What is the overall opinion of the Auditors formed from the observation of teaching and learning activities (as carried out in Appendix B, Classroom Observation Notes) in terms of:

- i. the representativeness of the sample by level, programme, mode, staff group?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- ii. the range of sessions (e.g. lectures, seminars, practicals, tutorials)?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

iii. the number of observations?

Unsatisfactory Satisfactory Good Excellent

Comments:

iv. student participation?

Unsatisfactory Satisfactory Good Excellent

Comments:

v. the standard of teaching/instruction?

Unsatisfactory Satisfactory Good Excellent

Comments:

Overall Conclusion for this Aspect:

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.4 Student Progression and Achievement

- a) Are the student progression rates through the course appropriate to the students' experience and the level of the course?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) Is there sufficient evidence that the students have achieved the intended outcome, including specific skills?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

Overall Conclusion for this Aspect:

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.5 Student Support and Guidance

- a) Are the arrangements for admission to courses effective and are they generally understood by both staff and students?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) Are there appropriate support and guidance for students with difficulties in understanding the assessment procedures or significant elements of the course itself?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- c) Is there guidance for students on the appropriateness of the course and their career prospects and is there ongoing support for students who request it?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

Overall Conclusion for this Aspect:

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.6 Learning Resources

a) Are the learning resources consistent with the aims and objectives of the course in terms of:

i. teaching staff/instructor profile?

Unsatisfactory Satisfactory Good Excellent

Comments:

ii. classroom/workshop facilities?

Unsatisfactory Satisfactory Good Excellent

Comments:

iii. library facilities?

Unsatisfactory Satisfactory Good Excellent

Comments:

iv. practical equipment?

Unsatisfactory Satisfactory Good Excellent

Comments:

v. technical and administrative support?

Unsatisfactory Satisfactory Good Excellent

Comments:

vi. social, dining and recreational accommodation?

Unsatisfactory Satisfactory Good Excellent

Comments:

Overall Conclusion for this Aspect:

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

3.7 Quality Assurance and Enhancement

- a) Are there suitable internal quality assurance processes in place to gauge the success of the course in achieving its aims and objectives?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- b) Is the required correspondence with IMCA (including end-of-course evaluations and certification) efficiently dealt with?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

- c) Is the quality of the course being continuously monitored in terms of:

- i. staff development?

___ Unsatisfactory ___ Satisfactory ___ Good ___ Excellent

Comments:

ii. industrial input?

Unsatisfactory Satisfactory Good Excellent

Comments:

iii. views of students?

Unsatisfactory Satisfactory Good Excellent

Comments:

iv. auditors reports?

Unsatisfactory Satisfactory Good Excellent

Comments:

v. the views of employers and professional bodies?

Unsatisfactory Satisfactory Good Excellent

Comments:

Overall Conclusion for this Aspect:

Unsatisfactory Satisfactory Good Excellent

Comments, outlining, if necessary, areas that require further investigation during a second auditing visit:

If re-submission is required detail the additional information or corrective actions to be taken:

Course Content Checklist

1. Diver Medic Training Course

Does the Diver Medic Course consist of at least 60 contact hours (10 days)?

_____ Yes _____ No

Does the Diver Medic Course include time allocation for each of the following topics:

	Yes	No
a) The structure and function of:		
i. the musculo-skeletal system	<input type="checkbox"/>	<input type="checkbox"/>
ii. the nervous system	<input type="checkbox"/>	<input type="checkbox"/>
iii. the heart, blood vessels, circulation and blood	<input type="checkbox"/>	<input type="checkbox"/>
iv. the lungs	<input type="checkbox"/>	<input type="checkbox"/>
v. the ears, sinuses and vestibular organs	<input type="checkbox"/>	<input type="checkbox"/>
b) The causes, prevention, signs and symptoms and the management under normal and <i>hyperbaric conditions</i> :		
i. bleeding	<input type="checkbox"/>	<input type="checkbox"/>
ii. fractures, sprains and muscle trauma	<input type="checkbox"/>	<input type="checkbox"/>
iii. shock	<input type="checkbox"/>	<input type="checkbox"/>
iv. burns	<input type="checkbox"/>	<input type="checkbox"/>
v. electric shock	<input type="checkbox"/>	<input type="checkbox"/>
vi. asphyxia, pulmonary oedema	<input type="checkbox"/>	<input type="checkbox"/>
vii. respiratory arrest	<input type="checkbox"/>	<input type="checkbox"/>
viii. cardiac arrest	<input type="checkbox"/>	<input type="checkbox"/>
ix. hypothermia	<input type="checkbox"/>	<input type="checkbox"/>
x. hyperthermia	<input type="checkbox"/>	<input type="checkbox"/>
xi. convulsions	<input type="checkbox"/>	<input type="checkbox"/>
c) The importance of personal hygiene in the management of injuries	<input type="checkbox"/>	<input type="checkbox"/>
d) How to systematically examine injured or ill divers	<input type="checkbox"/>	<input type="checkbox"/>
e) How to monitor vital signs such as pulse, respiratory rate, temperature (including use and reading of low-reading thermometer), blood pressure	<input type="checkbox"/>	<input type="checkbox"/>
f) How to care for a casualty on site and during transportation	<input type="checkbox"/>	<input type="checkbox"/>
g) The first aid equipment available at the site of a diving operation, its care and use	<input type="checkbox"/>	<input type="checkbox"/>
h) The causes, effects, symptoms and management of the following conditions:		
i. decompression illness	<input type="checkbox"/>	<input type="checkbox"/>
ii. squeeze	<input type="checkbox"/>	<input type="checkbox"/>
iii. ear problems – infections, barotrauma, routine hygiene in saturation environments	<input type="checkbox"/>	<input type="checkbox"/>
iv. near drowning (both primary and secondary)	<input type="checkbox"/>	<input type="checkbox"/>
v. vomiting under water	<input type="checkbox"/>	<input type="checkbox"/>
vi. carbon dioxide retention	<input type="checkbox"/>	<input type="checkbox"/>
vii. carbon dioxide poisoning	<input type="checkbox"/>	<input type="checkbox"/>
viii. other breathing gas contaminants e.g. hydrocarbon	<input type="checkbox"/>	<input type="checkbox"/>
ix. oxygen toxicity	<input type="checkbox"/>	<input type="checkbox"/>
x. anoxia and hypoxia	<input type="checkbox"/>	<input type="checkbox"/>
xi. nitrogen narcosis	<input type="checkbox"/>	<input type="checkbox"/>

i)	The causes, effect, symptoms and management of underwater blast injuries	<input type="checkbox"/>	<input type="checkbox"/>
j)	The management of medical emergencies within the diving bell	<input type="checkbox"/>	<input type="checkbox"/>
k)	How to care for a casualty when transferring from the diving bell to the main chamber	<input type="checkbox"/>	<input type="checkbox"/>
l)	Explain the causes, effects, symptoms and management of high pressure nervous syndrome (HPNS)	<input type="checkbox"/>	<input type="checkbox"/>
m)	Medical record keeping (including confidentiality) and liaison with medical services and communication with medical personnel, including the use of suitable aide mémoire for recording and transmitting data (e.g., DMAC 01)	<input type="checkbox"/>	<input type="checkbox"/>
n)	Use of medical equipment to be held at the site of an offshore diving operation, including the management of common minor illnesses as described in DMAC 015 (rev 1)	<input type="checkbox"/>	<input type="checkbox"/>
o.	Causes, symptoms and management of thermal stress, including the effect on the divers' performance	<input type="checkbox"/>	<input type="checkbox"/>
p.	Causes, effects and management of diving accidents	<input type="checkbox"/>	<input type="checkbox"/>
q.	Use and hazards of the drugs and intravenous fluids carried in the scales used in DMAC 015	<input type="checkbox"/>	<input type="checkbox"/>
r.	Theoretical teaching of bladder catheterisation	<input type="checkbox"/>	<input type="checkbox"/>
s.	Causes, effects, symptoms, prevention and management of:		
	i. dental problems – recognition and first-aid	<input type="checkbox"/>	<input type="checkbox"/>
	ii. dangerous marine animals – treatment of injuries	<input type="checkbox"/>	<input type="checkbox"/>
t.	Practice in the skills of:		
	i. setting up of intravenous infusions	<input type="checkbox"/>	<input type="checkbox"/>
	ii. parenteral administration of drugs	<input type="checkbox"/>	<input type="checkbox"/>
	iii. suturing	<input type="checkbox"/>	<input type="checkbox"/>
u.	Theoretical teaching & practice, where appropriate, in:		
	i. insertion of pleural drain of pneumothorax	<input type="checkbox"/>	<input type="checkbox"/>
	ii. airway maintenance	<input type="checkbox"/>	<input type="checkbox"/>
	iii. catheterisation	<input type="checkbox"/>	<input type="checkbox"/>
v.	The administration of oxygen	<input type="checkbox"/>	<input type="checkbox"/>

2. Diver Medic Refresher Course

The Diver Medic Refresher Course should produce a Diver Medic who is at least as competent as one who has completed the initial Diver Medic Training Course.

Does the Refresher Course include 30 contact hours (5 days) contact time?

_____ Yes _____ No

Does the Refresher Course include time allocation for the following:

	Yes	No
a. Physical examination of patient	<input type="checkbox"/>	<input type="checkbox"/>
b. Update on the use of aide mémoire and on systems of communication with medical personnel	<input type="checkbox"/>	<input type="checkbox"/>
c. Review of care and management of a casualty	<input type="checkbox"/>	<input type="checkbox"/>
d. Review and update on current aspects of resuscitation, with session on the practical aspects	<input type="checkbox"/>	<input type="checkbox"/>
e. Review and update on practical developments in:		
i. decompression illness	<input type="checkbox"/>	<input type="checkbox"/>
ii. barotrauma	<input type="checkbox"/>	<input type="checkbox"/>
iii. thermal changes in divers	<input type="checkbox"/>	<input type="checkbox"/>
iv. oxygen toxicity	<input type="checkbox"/>	<input type="checkbox"/>
v. diving accidents	<input type="checkbox"/>	<input type="checkbox"/>
f. Review of new techniques	<input type="checkbox"/>	<input type="checkbox"/>
g. Update on the current use of drugs used in the management of accidents and illnesses relevant to diving	<input type="checkbox"/>	<input type="checkbox"/>
h. Practice in the skills of:		
i. therapeutic procedures likely to be needed in the management of illness and accidents associated with divers	<input type="checkbox"/>	<input type="checkbox"/>
ii. methods of measuring and recording the clinical progress of such individuals	<input type="checkbox"/>	<input type="checkbox"/>

Classroom Observation Notes
(for use in observed teaching and learning sessions)

Institution

Subject Module/Course title

Assessor Length of session Hrs

Length of observation Hrs

Number of students present

Level of study

Mode of study ___ FT ___ PT ___ Other

Topic/Title

Type of Activity: Lecture Seminar Workshop Practical Tutorial Other

Which of the learning objectives are relevant to this teaching/learning session?

Teaching What are the particular objectives planned for this session?

Please comment on the effectiveness of each of the following elements and the extent to which the planned objectives are achieved.

Planning

Content

Methods

Pace

Use of Examples

Overall comments:

Student participation: to what extent was student participation intended and how far did it occur as planned; what evidence was there of student engagement with the session; what evident was there of the learning objectives being achieved?

Accommodation and Resources: how effective was use of the room and layout, specialist equipment and material, visual aids, IT, etc.?

Overall Quality of the Session: judgement of the appropriateness of the specific session objectives and their achievement to the overall attainment of objectives

Strengths

Weaknesses

Other Comments

Overall Grade **1** **2** **3** **4**

Grade 1: The session fails to make an acceptable contribution to the attainment of the learning objectives set.

Grade 2: The session makes an acceptable contribution to the attainment of the learning objectives, but significant improvement could be made.

Grade 3: The session makes a substantial contribution to the attainment of the learning objectives, but there is scope for improvement.

Grade 4: The session makes a full contribution to the attainment of the learning objectives.

Report Format

The Final Report, submitted by the Auditors after they have completed their visit, will take the following format.

1. Title Page, stating:
 - i. When?
 - ii. Where?
 - iii. By whom?
2. Index
3. Introduction
 - i. Context (Full Course or Refresher Course)
 - ii. Other courses offered by the institution
 - iii. History of the provision
 - iv. Number of Diver Medic courses/students at the institution
4. Synopsis of the aspects audited, highlighting the strengths and weaknesses
5. Recommendations to the Institution and IMCA

Typical Schedule of Visit

The visit will be over two days and will be scheduled as follows:

Day 1

- 11:00 Auditors arrive, locate base room and have initial meeting to discuss strengths and weaknesses highlighted by the institution's pre-visit submissions.
- 12:00 Meeting with head of institution and staff for lunch.
- 13:00 Auditors' meeting to finalise teaching observation and meetings programme.
- 14:00 Auditors observe teaching and learning sessions.
- 16:00 Auditors meet to discuss findings of the day.

Day 2

- 09:00 Auditors meet with head of institution to arrange further meetings and observations.
- 10:00 Meetings and observations.
- 12:30 Lunch.
- 13:30 Auditors meet to agree preliminary report.
- 15:00 Auditors report to institution staff on the primary findings (strengths and weaknesses of the course and recommendations).
- 16:00 Auditors depart.

NB. Formal feedback on the audit, either relaying IMCA's Recognition or a recommendation for a further audit of the aspects of provision found to be unsatisfactory, will be sent to the training establishment - as set out in paragraph 2.b.

Part 9 – Template of IMCA-Recognised Diver Medic Certificate

CERTIFICATE OF DIVER MEDIC QUALIFICATIONS Recognised by The International Marine Contractors Association

Issued by:

Certificate number:

Date of issue:

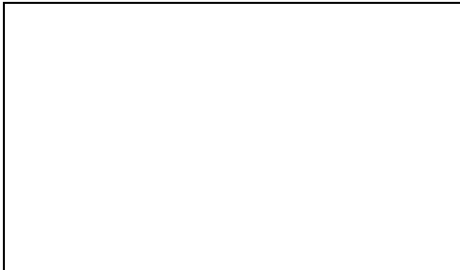
Issued to:

Date of birth:

Date on which certificate ceases to be valid unless further training is undertaken:

Photograph of holder of certificate

Seal of issuing body



(Name in Block Capitals; Title/Position)

Signed: