STANDARDS AND PROCEDURES

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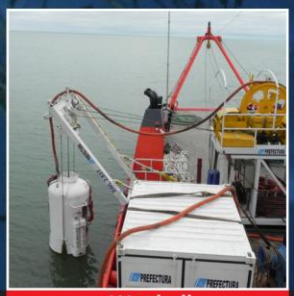

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iDSA

International Diving Schools Association

NOTICE

This is an Interim version of the standards for the benefit of all members and applicants for membership. It will be replaced by a professionally compiled version mid 2014.

For further information please E-Mail the Administrator at info@idsaworldwide.org

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International Diving Schools Association

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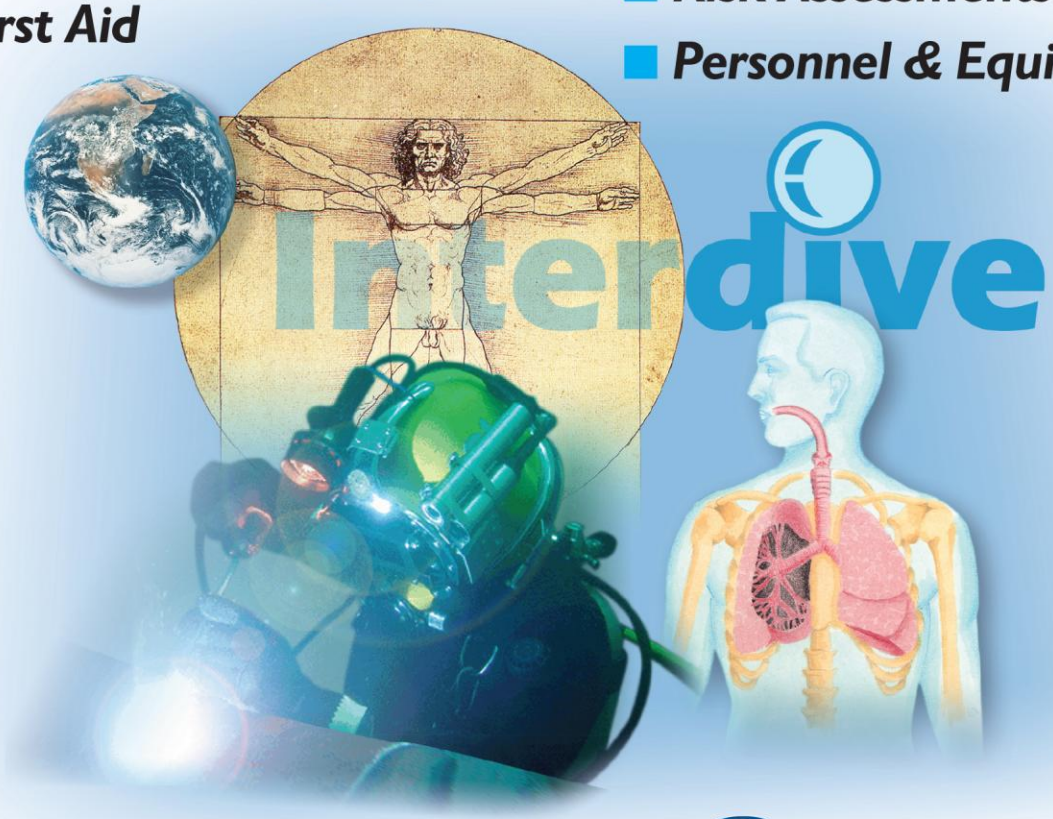

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IDSA is the only independant International organisation for schools which train professional divers & related personnel.

Established in 1982, it is unique in providing services which satisfy the needs of all categories of divers: Offshore, Inshore and Inland. It is not only concerned with standards, it also serves as a valuable forum for the regular interchange of news & views between members, many of whom are the only Commercial School in their country.

Members of the association are teaching competences to the standards required by the diving industry guidelines & codes of practice for both inshore & offshore diving. These also cover the requirements of different national regulations in all professional diving categories.

There are more than 60 members of the Association worldwide who, to date, have trained thousands of working divers.

This document sets out the standards & procedures taught by the members of the Association. It comes in an adaptable format to allow the latest developments in the diving industry to be quickly & easily incorporated.

INTERNATIONAL DIVING SCHOOLS ASSOCIATION

STANDARDS & PROCEDURES

CONTENTS

iDSA

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SUMMARY of CONTENTS

LIST of EFFECTIVE PAGES

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USER NOTES

(i) Pages are numbered sequentially straight through the document.
(ii) The footer of all original pages is marked ‘Original’ and their date of origin is 14 April 2014
(iii) Changes to the original pages will be circulated to all holders of the loose leaf document by E Mail, and a list will be maintained in the Publications section of the Association’s website www.idsaworldwide.org. The footer of all pages affected by the change will be altered to include the change number and date.
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RECORD OF CHANGES

Note: The date of the original pages of this document is 14 April 2014

Change Number	Date of		Sections affected	Comment
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CHAPTER 2: THE IDSA DIVER TRAINING STANDARDS

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CHAPTER ONE: THE ASSOCIATION

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1.1 BACKGROUND

The Association was established in 1982 at the Annual Conference of the American Association of Diving Contractors in New Orleans, with the aims set out in the Constitution - Appendices A1 & 2

Since that time, the Association has grown and matured, and now the membership comprises Military, State Owned, and Private Schools, which generally exist separately but can, in some countries, be found in combination.

The IDSA Programme is one of equivalence. Its purpose is to provide a framework against which the Diver Training Standards of all countries may be equated. In countries where there is a Formal Diver Training Programme, IDSA recognised schools will issue both the IDSA Qualification Card as well; as their National Qualification Card. In countries where there is no formal programme, the IDSA Standards may be accepted Nationally. The Association maintains a 'Table of Equivalence' – see Appendix B – which allows all sections of the Industry, Client, Contractor, Government department or whoever, in whatever country, to determine the competence of a diver on completion of his training immediately, without reference to other complex documents.

It is considered that these International Standards will contribute to

- Equating Standards across the World
- Providing Guidance to Organisations setting standards for the first time.
- Improving Safety
- Providing Contractors with a direct input to the Diver Training Syllabus
- Enabling Contractors to bid across National Borders on a more even playing field
- Improving the quality of Diver education.
- Providing Divers with greater Job Opportunities
- Facilitating the movement of divers between Countries - although short courses concerning environmental, procedural and cultural differences may still be required.

The recognition of IDSA Cards will be a matter for individual Countries, and the Association does not intend to conflict with either National Standards or Legislation.

The Association is concerned to provide a service which will satisfy the needs of all groups of divers, Offshore, Inshore, Inland or wherever. It is not just concerned with standards; it also serves as a valuable forum for the interchange of News & Views between members, many of whom are the only Commercial School in their Country. Current routes for this interchange are the Newsletter - published in January and July, the IDSA Website www.idsaworld.org the Annual meeting in September/October, and various and many forms of contact between members and the Executive Board.

In line with its aims IDSA seeks to co-operate with other International organisations such as the International Marine Contractors Association (IMCA), the Association of Diving Contractors International (ADCI), the European Diving Technology Committee (EDTC), and others. Representatives of these organisations are welcome to attend meetings and contact is maintained with them.

1.2 INTRODUCTION

The IDSA Standards & Procedures contain the Rules and Guidance necessary for the Associations Diver Training Certification Programme, they consist of 4 Chapters which are:

Chapter 1 The Association
Chapter 2 The IDSA Diver Training Standards
Chapter 3 The IDSA Diver Training Code of Practice
Chapter 4 Training Administration

1.2 INTRODUCTION (Continued)

The contents of these chapters may be summarised as follows:

CHAPTER 1 The Association

This chapter gives the background of the Association together with details 5 types of Membership, they are described fully in the next section, but in brief are:

FULL	This type of membership is divided into 2 categories:	
	Full Member (Diver Training)	Commercial Schools who wish to issue IDSA Diving Qualification cards.
	Full Member (Specialist Diving)	Commercial Schools who teach diving specialist qualifications but do not train divers.
ASSOCIATE	Commercial Schools who are either considering Full Membership or who wish to be associated with the work of the Association.	
AFFILIATE	Government departments, Diving Contractors Suppliers, Manufacturers and other Organisations concerned with or interested in the work of the Association.	
INDUSTRIAL	Government departments, Diving Contractors Suppliers, Manufacturers and other Organisations who wish to show their support for the work of the Association in the form of Sponsorship.	
RECIPROCAL	An exchange of Membership with Organisations whose aims are similar to those of IDSA, and from which both sides can benefit	

It contains the application procedures for all types of membership, and includes the auditing process necessary for all Full Members Diver Training, the issue of Qualification Cards.

CHAPTER 2 The IDSA Diver Training Standards

Full details of the IDSA Standards which are set out so that they may be used as student records, they are:

Level 1: Commercial SCUBA Diver
Level 2: Surface Supplied Inshore Air Diver
Level 3: Surface Supplied Offshore Air Diver
Level 4: Closed Bell/Mixed Gas Diver

CHAPTER 3 The IDSA Diver Training Code of Practice

The Operational Diving and training policies and procedures which Schools are expected to follow during practical operations, including, safety, emergency and familiarisation drills, Task training, Risk assessment and Plant and equipment maintenance.

CHAPTER 4 Training Administration

Course programmes, records and methods of competence assessment are described. Standard programmes are shown, and the assessment of experience is covered in detail, as well routines for dealing with appeals and complaints.

2.1 GENERAL

The IDSA Diver Training Standards have been created from the consensus view of the many members of the Association, with the intention of providing students on graduation with a consistent International level of competence no matter where they were trained. The intention is that they are competent to work in any part of the World, subject to any special training which may be necessary for environmental conditions or the use of specialised equipment. This will mean that some sections of the Standards may require the use of procedures and equipment which are rarely used locally.

Any Diving School or similar organisation, whether Private, State Owned or Military, which teaches Diver or Specialist Diving Training Courses, may apply for Full Membership of the Association following the procedure in Section 2.2.

An annual subscription (1 January to 31 December) is payable by all members, the amount is set at an annual meeting and published on the Associations Website – Membership section.

2.2 FULL MEMBERSHIP – DIVER TRAINING

Full Members (Diver Training) are those who, after successful completion of both a paper and an on-site audit by IDSA, (See Section 3) are authorised to issue IDSA Diver Qualification Cards to the level of training audited. They also have the right to vote

Full Members Schools, once accepted, are listed in a 'Table of Equivalence' (Appendix B) which shows their accepted IDSA Level of Training and their National Equivalent. It is circulated by Memo to all Members of the Association and shown on the IDSA Website, both updated as necessary.

The application procedure is as follows:

(a) The applicant requests an application form (See Appendix 1) from the Administrator. The form is then E-mailed in 'Word' format so that it can be completed by computer in that format.

(b) The applicant completes the Application form making sure that the information is in accordance with the policies and procedures contained in Chapters 3 & 4, these chapters also contain information and Guidance on the completion of the form. It is then forwarded to the Administrator.

(c) Applications are considered in their own right, no information from any previous audit can be assumed - even if the information has not changed, it must be included in a new application.

(d) The Application is then subject to a paper audit carried out by the Administrator in consultation with the Executive Board and the applicant as necessary.

(e) Once the paper audit is completed successfully, arrangements are made by the administrator for an on-site audit – see Section 3.2 for details.

Note: The on-site audit is an essential part of the acceptance process, its purpose is to ensure that diving procedures, records, methods of assessment, equipment etc are standardised in order to maintain the highest possible consistent level of Competence and Safety between schools.

(f) Arrangements for the on-site Audit will not begin until all the necessary documentation is in place, this is to ensure that the possibility of failure is minimised. The failure of an audit will not only delay the eligibility of the school to issue IDSA Diver Qualification Cards (IDQC's) but may also require a follow up audit visit with all its additional expense.

(g) Once the on-site audit has been completed successfully the applicant will be accepted as a Full Member and receive the necessary documentation.

(h) Thereafter the School will be subject to a recertification Audit every 5 years following the procedure in Section 3.3

2.3 FULL MEMBERSHIP - SPECIALIST TRAINING

Specialist Training Schools are those which teach standards approved by a National or Industrial Organisation which is acceptable to IDSA - A list is maintained on the IDSA Website – see note 2 of the Membership Section. As Full Members they have the right to vote.

If the Administration considers that the Application does not meet the Conditions of Acceptance as set out in Section 2.3.2, it will be returned to the organisation with a request for clarification.

Once the documentation is in order it will be circulated to the Executive Board for consideration.

If the Board considers that the Application is not acceptable, it will be returned to the Applicant together with the reason(s) for the decision.

In order to become a Full Member Specialist Training, the School should complete the relevant Application form (Appendix C3) and forward it to the Secretariat.

2.4 ASSOCIATE MEMBERSHIP

This type of membership is open to Schools who are either considering Full Membership or who wish to be associated with the work of the Association. In order to become an Associate member, the School should complete the relevant Application form (Appendix C4) and forward it to the Secretariat.

2.5 AFFILIATE MEMBERSHIP

This type of membership is open to Government Departments, Diving Contractors and other Organisations concerned with or interested in the work of the Association. In order to become an Affiliate member the organisation should complete the relevant Application form (Appendix C5) and forward it to the Secretariat

2.6 INDUSTRIAL MEMBERSHIP

This type of membership is available to Clients, Diving Contractors, Suppliers, Manufacturers and other relevant organisations who wish to show their support for the work of the Association in the form of Sponsorship.

In order to become an Industrial member the organisation should complete the relevant Application form (Appendix C6) and forward it to the Secretariat.

The Annual Subscription for this type of Membership is voluntary and negotiated between the sponsor and the executive board of IDSA."

2.7 RECIPROCAL MEMBERSHIP

An exchange of Membership with Organisations whose aims are similar to those of IDSA, and from which both sides can benefit. This type of Membership is agreed by an exchange of letter, and the annual subscription is waived

3.1 GENERAL

As mentioned in section 2.2 the purpose of the on-site audits is both to verify the content of the Application Form (Appendix C1), and to ensure that all the facilities, equipment and staff of the school are sufficient not only to support the IDSA courses, but also any other courses which are planned to take place at the same time.

Subsequent to the initial audit, all schools will undergo a re-certification audit every 5 years. The Administrator will maintain an Audit Programme, and will contact schools a minimum of 3 months in advance and arrange a specific date. The Application and Report Form (Appendix C1) must be completed and returned to the Administration at least 3 weeks before the agreed Audit date.

Apart from the Initial and Re-certification audits, a Special Audit may be necessary at any time in the event of a major change of circumstances e.g. change of ownership, or in the case of a serious complaint or major non-compliance. Such audits will be authorised by the Executive Board.

3.1.1 COSTS OF AUDIT

All the costs of the Audit including the auditors' fees are the responsibility of the School. The expected Auditors' fees must be paid in advance once the audit date has been agreed. The remainder: travel accommodation and any other costs etc will be invoiced on completion of the audit.

The costs of audit will comprise all charges for travel and accommodation not paid directly by the school plus the auditors' fees. The auditors' fees will be based on a daily rate set at the annual meeting. The length of the audit - which will determine the total fee - will depend on several factors:

- The modules requested
- The geographical location of the School's Dive Sites (see section 3.1.7.3)
- The layout of the School facilities
- The availability of records (see section 3.1.8.1)

Generally speaking a Level 1 audit will take 1 or 2 days, a Level 2 will take 2 or 3 days, Level 3, 3 or 4 days, and Level 4, 4 or 5 days

3.1.2 AUDITORS

In order to ensure the impartiality and consistency of the audit process, two auditors will be appointed for all Audits, one of whom will be nominated as the lead auditor.

A central list of IDSA Auditors is to be maintained at the IDSA Secretariat. Auditors located as near to the school geographically as possible will normally be selected in order to minimise travel costs.

3.1.3 QUALIFICATIONS OF AUDITORS

The combined experience of the two auditors - who should individually have at least 10 years experience in the Industry - should conform to the following criteria:

a) They should not have any current commercial, financial or any other connections with the School being audited or any other IDSA School, nor should they have worked or held office at the School being audited at any time.
b) Hold, or have held a Commercial Diving Qualification appropriate to the course being audited.
c) Hold an educational qualification, or have had responsibility for diver training or have had at least 4 years experience of teaching organising and managing a Commercial or Military Diving School
d) Have worked on Diving Projects, either Offshore or Inshore or a combination of both, appropriate to the modules being taught.
e) Have an adequate working knowledge of the English Language.
f) Be of good standing in the Diving Industry, and hold suitable and acceptable alternative experience at the discretion of the Executive Board.
g) All IDSA auditors will be approved by the Executive Board.
h) Auditors should have had formal audit training either 'in-house' or external.

3,1,4 ARRANGEMENTS FOR AUDIT

a) MANAGEMENT

All audits will be managed by the IDSA Administration which will liaise with Schools and the Auditors in order to ensure that audits are carried out in accordance with the application procedure in Section 2.2 and the remainder of this section.

On-site audits may only be carried out when an IDSA course is in progress, unless the Executive Board have authorised alternatives.

b) AUDIT WINDOWS

All audits will normally be planned to take place at the relevant interval from the date of the last audit report. However, there are a number of factors which may affect this intention - for example, course cancellation, a change in the periodicity of courses etc. If it is not possible to arrange the audit within a window 3 months either side of the planned date, the Secretariat must inform the Executive Board who will decide the action to be taken.

c) REMOTE DIVE SITES

Some schools have a remote dive site(s) which is several hours travelling time from the main base, and which is only used for particular sections of the course. In these cases the Initial Audit must visit all locations. In situations where this is either impracticable or causes severe difficulty the Administration will refer the matter to the Executive Board.

Re-certification audits should be arranged so that remote locations are visited alternately when a course is in progress.

3.1.5 DOCUMENTS

a) AVAILABILITY DURING THE AUDIT

The Administration is to ensure that all the necessary documentation has been received from the School before an Audit date is arranged.

Schools must ensure that the following documentation, plus any other which is relevant, is readily available to the auditors when required from the time they arrive on site:

- Application Form
- Previous audit report forms
- Training Manual or Equivalent
- Maintenance Schedules
- All Student Logbooks for the current course
- Student Records
- Staff records
- Proof of Insurance

b) ARCHIVES

Audit reports and accompanying documentation are to be retained in the IDSA Database indefinitely. Schools are to retain all records for a minimum of 6 yea

c) PUBLICITY

Comments contained in an audit report may not be used for publicity by the School, without the express permission of the Executive Board

3.2 THE PROCEDURE FOR AN INITIAL AUDIT

Once the paper audit has been completed, that is, the Application Form (Appendix C1) has been accepted. The Executive Board will appoint two auditors to carry out the on-site audit, and the Administrator will then arrange a suitable date with the School and Auditors.

The School's application form together with all accompanying documentation and any relevant correspondence will be forwarded to the Auditors at least three weeks before the audit start date.

At the end of the audit the Lead Auditor makes his report by typing his comment in each section of the Application form as appropriate. It should then be sent to the Administrator by E Mail or Courier with all supporting documentation and photographs

If the Audit Report recommends that the School is accepted as a full member of IDSA, the Administrator will send an invoice for the Annual subscription. Once the invoice has been paid, a Wall Certificate will be issued - signed by the Administrator - and the School may request the issue of IDQC's in accordance with the procedure in Section 4.for the modules approved by the Audit.

If there are minor non compliances - see 'Definitions – see Chapter 3 of the Standards & procedures) - the procedure in section 3.4.1 is to be followed and if there are major non compliances, section 3.4.2. If the non compliances are closed out within the requisite time period the procedure for acceptance as a Full Member in the paragraph above may be followed.

In the event of a major non compliance(s) – Section 3.4.2, the audit is to be terminated, and re-scheduled when the non compliance(s) has been rectified.

3.3 THE PROCEDURE FOR A RE-CERTIFICATION AUDIT

Every 5 years, from the date of their Initial Audit, the Administrator will contact the school and arrange a suitable date for the re-certification audit – which must be when a course is taking place – the school must then complete Appendix C1 (The combined Application and Audit Report Form) and forward it to the administrator to arrive at least 4 weeks before the audit is due to take place.

Two Auditors will then be appointed by the Executive Board. The Administrator is to ensure that the Auditors receive Appendix C1 and all accompanying documentation at least 3 weeks before the audit date.

At the end of the audit the Lead Auditor is to complete to forward the Audit Report and all supporting documentation to the IDSA Administration. If the report is satisfactory no further action is required. If there are minor non compliances the procedure in section 3.4.1 is to be followed, and if there are major non compliances section 3.4.2.

3.4 NON-COMPLIANCES

3.4.1 MINOR NON-COMPLIANCES

A 'Minor Non Compliance' is defined as:

A small error in procedure which is readily corrected e.g. unsuitable equipment which can easily be replaced: incorrect record keeping which can be rectified simply, generally the rectification of minor deficiencies or improvements to the overall efficiency of the training programme.

a) The time allowed to correct minor non-compliances will normally be 3 months from the date of the audit report. If there are circumstances which make it reasonable to extend this period, the Auditors are to make a recommendation to the Executive Board, whose decision will be final.

b) Once the School has corrected the non-compliances, it is to forward evidence i.e. documentation, photographs or other material demonstrating the corrections which have been made, to the Secretariat.

3.4.1 MINOR NON-COMPLIANCES (Continued)

c) If there is no recommendation for an extension and the non-compliances are not closed after three months, the membership of the School will revert to Associate ,and the right to issue IDQC's will be withdrawn and the Administrator will inform the School accordingly.

d) All the relevant documentation will then be forwarded to the Executive Board which will decide on any further action to be taken.

3.4.2 MAJOR NON COMPLIANCES

A 'Major Non Compliance' is defined as:

An unsafe procedure: badly maintained equipment: insufficient equipment: the inadequacy of a facility: the incompetence of a member of staff or his/her lack of training, or any other matter which threatens the safety and/or the fundamental integrity of the course.

e) If in the view of the auditors the non-compliances are of such a nature that they threaten safety and/or the fundamental integrity of the course, the Lead Auditor must inform the school that it's approval to teach IDSA courses is suspended. He must also inform the Administrator immediately detailing the reasons for the major non-compliance(s).

f) The school then has 3 months in which to correct the major - and minor - non-compliance(s) contained in the audit report.

g) If the School is able to provide the Secretariat with evidence that it has closed out the major non compliances, a follow up audit will be arranged which will be carried out by one of the original auditors.

h) If the follow up audit reveals minor non-compliances, these may be dealt with as in Section 3.4.1 and the suspension lifted once they have been closed out.

i) If a major non-compliance remains the School's approval will be withdrawn permanently and it will be reverted to Associate Membership. In order to regain Full Membership the school will then have to undergo an Initial Audit in accordance with Section 3.2.

3.5 GUIDANCE to AUDITORS

3.5.1 General

(a) Detailed guidance is given in Chapters 3 & 4.

(b) During their visit Auditors should make contact with as many members of staff who are involved in the IDSA Course(s)as possible and establish that they have a reasonable knowledge of the training standards as it applies to them.

(c) Should the Auditors disagree the reasons for their disagreement together with the Audit Report are to be forwarded to the Administrator for consideration by the Executive Board, who will make the appropriate decision.

3.6 STUDENT QUESTIONNAIRES

The IDSA Secretariat will also carry out a random mailshot of an appropriate form (see Appendix D) to students from time to time, as a quality check.

4.1 GENERAL

An IDSA Diver Qualification Card (IDQC) is issued to students who graduate successfully. It supplements the National Qualification but does not replace it. It may stand alone if there is no National Qualification or it may be issued in conjunction with the National Certificate or it may be adopted as the National Qualification.

IDQC's are issued centrally by the Administration, and are requested by Full Member schools for their graduates using the relevant form in the Appendix 'E' series. They will normally be issued on graduation - Section 4.2. However, if this has not been possible the relevant procedures are shown in Section 4.3, and additionally they may be issued to divers who complete an experience assessment successfully.

In addition to the Qualification card all successful students are given a laminated 'A6' size Information Card (as shown in the 'Publications' section of the IDSA Web site). It summarises the minimum level of diving competence and the tools training experience they have gained on course, so that an employer will know what he can expect from a successful student on leaving course.

The form must be typed up in 'Word', scanned and E mailed to the Administration as an attachment, still in 'Word' format. A separate passport type photograph showing the face of each student against a plain background must also be attached in 'jpg' format without any overtyping of the name or reference number - image size: height 7.6 and width 5.7 cm. Each photograph should clearly relate to the Student by name and/or reference number.

The IDQC's will then be processed and posted back to the school together with an Information Card - The Administration is responsible for the management of a Database containing the details of all IDQC's issued. Organisations wishing to verify a card may do so at any time – preferably by E Mail.

The credit card size IDQC will contain the following information plus a photograph of the student:-

IDSA Level	School	Date of Issue
Last Name	First Name	Date of Assessment/Graduation
Date of Birth	IDSA Card Number	

Authorising Signature of the Administrator or his authorised deputy.

The language used for either a course or assessment is that of the Country in which the School is located unless otherwise stated on the IDQC.

The cost of the IDQC's will be set at IDSA Annual Meetings to cover the expense of their issue, and make a contribution to the overall cost of administration.

Graduates from non-IDSA Schools, and divers who are experienced but hold no qualification may obtain an IDSA Qualification after successful completion of a Competence assessment following the procedure in Chapter 4 Section 2 of the Standards and Procedures.

In cases where a course or assessment is funded by one organisation, the address of the organisation is acceptable for all divers listed on the Qualification Card Request.

4.2 ON GRADUATION

The IDQC request form – Appendix E1 - should be sent to the Secretariat as soon as possible after completion of a course, or 1 month before it is due to complete if it is intended to award the cards on the final day.

Payment of the certificate charges (calculated at the latest rates) for the total number of students on the form must be arranged at the same time as Appendix E1 and the photographs are mailed. Student cards will not be processed until payment has been received.

The Secretariat will allocate a unique serial number for each card, and arrange for the cards to be processed, signed by the Administrator and returned to the School for issue to the students.

If the IDQC's are received before the end of a course, and a student is then not eligible to receive one through failure, back classing, Medical or any other reason, the Secretariat should be informed as soon as possible and the Database will be adjusted accordingly. The card must be returned to the Secretariat for destruction, even if the student is expected to return for a subsequent course.

4.3 CERTIFICATION FOR DIVERS WHO DID NOT RECEIVE A QUALIFICATION CARD ON GRADUATION.

Divers who did not receive a card on graduation from a Full Member School for one of the following reasons:

- Graduation was from a Full Member school and an IDQC was not issued.
- Graduation was before the School became a Full Member
- It was not issued on Graduation and the School has since closed
- The necessary bottom times were not achieved at the School.

Should follow the relevant procedure in the sections which follow.

Note A Qualification Card may only be issued if the syllabus at the time of graduation was equivalent to the one subsequently approved by IDSA.

4.3.1 Graduation was from a Full Member School and an IDQC was not issued

Divers should apply for a card to the Full Member School at which they qualified. The School should then verify the request, and forward it to the Secretariat following the procedure in section 4.2 above, but using the form in Appendix E2. The Secretariat will then arrange for the issue of the IDQC's.

4.3.2 Graduation was before the School became a Full Member

Divers who graduated from a school before it became a Full Member are eligible to receive a Qualification Card, provided the syllabus at the time of graduation was equivalent to the one subsequently approved by IDSA**.** They should apply for a card to the School at which they qualified. The School should then verify the request, and forward it to the Secretariat following the procedure in section 4.2 above, but using the form in Appendix E2. The Secretariat will then arrange for the issue of the issue of the IDQC's.

4.3.3 DQC not issued on Graduation, and the School has since closed

A diver wishing to obtain an IDQC subsequent to qualification, from a School which was an IDSA member but which has since closed or discontinued membership, should apply direct to the IDSA Secretariat enclosing a copy of the original qualification certificate from the school.

4.4 AFTER SUCCESSFUL COMPLETION OF AN EXPERIENCE ASSESSMENT

On completion of a Competence assessment the School or Lead assessor must follow the procedure set out in Chapter 4 Section 3.

4.5 THE REPLACEMENT OF CARDS

If a card is lost damaged or stolen after issue and needs to be replaced the following procedure is to be followed:

(a) The diver should write to the school which issued the card and giving full details of the reason for replacement – if the Administration receive a request for a replacement card it will be referred to the issuing school

(b) If the issuing school considers the replacement is justified it will then request the Administration to replace the card using form at Appendix D2.

(c) The Administration will verify that the card and issue a replacement subject to the advance payment of the latest fee set at an Annual Meeting. A replacement card will be marked (Dup) after the Qualification

APPENDIX A1 – THE CONSTITUTION

The Constitution has been drawn up in accordance with Dutch Law (Ref: KvK:27199463) [1]

Article 1: NAME AND SEAT

1. The Association bears the name of International Diving Schools Association, in short 'IDSA'.
2. It has its seat in Delft, the Netherlands, and has been established for an indefinite period.

Article 2: LEGAL STATUS

The IDSA is an incorporated Association under Articles 1-63 of Book II of the Civil Code of the Netherlands.

Article 3: PURPOSE

1. The IDSA aims to:

   1.1. Work towards common International Standards of Training.
   1.2. Improve standards of Safety and Quality at Commercial Diver Training Schools.

2. It shall seek to achieve its aim by, but not limited to:

   2.1. Providing an effective means of communication between schools.
   2.2. Providing a common and collective voice to government agencies and Industry related Organisations on any matter affecting members.
   2.3. Promoting any activity, idea or subject which may improve the international operations of the Association.
   2.4. Co-operating on matters which may improve placement opportunities for graduates from member schools.

Article 4: MEMBERSHIP

1. There shall be 3 Classes of membership:

   1.1. FULL
   Schools which meet the Conditions of Acceptance in at least one of the Diving Categories set by the Association, and who may issue Diver Training Certificates.

   1.2. ASSOCIATE
   Schools who wish to be associated with the work of the Association, but who either do not wish, or are not eligible to issue IDSA Certificates.

   1.3. AFFILIATE
   Relevant Government Departments, Diving Contractors and other Organisations concerned with or interested in the work of the Association

2. Any School/Organisation may apply for membership by following the procedure set out in Section 2 of the Association's Standards and Procedures. The Executive Board decides on admission. If the Executive Board decides not to admit a School the General Meeting may overrule the Executive Board and decide to admit the School.
3. Membership is individual and therefore not transferable.
4. A member unable to be present at a meeting may appoint either an alternate or a proxy by giving notice in writing to the secretary.

[1] This Constitution should be read in conjunction with the Rules and Regulations as set out in Appendix A2

Article 5: SUSPENSION of MEMBERSHIP

1. The Executive Board has the power to suspend a School's membership for a period of no longer than two months, whenever a member or one or more of its representatives is acting contrary to his obligations of membership or through his conduct or behaviour has damaged the interests of the Association in a major way.
2. The suspended member has the right to appeal to the General Meeting after receipt of notification of the suspension.
3. During the period of suspension the rights of membership cannot be exercised.

Article 6: TERMINATION of MEMBERSHIP

1. The membership ends through:
   1.1. resignation;
   1.2. the Association giving notice of cancellation of membership;
   1.3. expulsion of a member by the Association;
   1.4. in the case of a full member, if the Contract with the Association is broken.

2. A member can only be expelled because of conduct contrary to the bylaws, rules or regulations of the Association or because of conduct causing an unreasonable disadvantage to the Association.
3. Expulsion is initiated by the Executive Board which without any delay will notify the member, advising him of the reason(s) for expulsion.
4. The expelled person has the right to appeal to the General Meeting within one month after receipt of notification of expulsion. During the term of appeal and pending appeal the member is suspended.
5. There must be at least a two/third majority of the number of validly cast votes in favour of expulsion for the appeal to fail.
6. A further reason for expulsion may be absence or not attending three meetings in a row without notification.

Article 7: The ASSOCIATION YEAR

1. The Association's year is equal to a calendar year.
2. The financial year is equal to a calendar year.

Article 8: FINANCE

1. The Association's funds consist of:
   1.1. fees and other contributions by the members;
   1.2. donations and grants from governments, the industry and other organisations, for unspecified or specific purposes;
   1.3. other income.

2. The Executive Board has the power to accept or reject funds.
3. The Association Accounts are to be kept by the Treasurer

Article 9: OBLIGATIONS

1. Any member is obliged:
   1.1. to uphold the bylaws and rules and regulations of the Association as well as the decisions of the bodies of the Association;
   1.2. not to unreasonably damage the Association's interests;
   1.3. to accept all obligations stemming from the membership of the Association or accepted by the Association on behalf of its members.

2. The Association cannot accept any obligations, unless the Executive Board has been granted permission to do so by the General Meeting.

Article 10: EXECUTIVE BOARD

1. Apart from the initial Executive Board which was appointed by deed, the Executive Board is elected by Full Members at the General Meeting.
2. The Executive Board consists of a Chairman, an Honorary Secretary and an Honorary Treasurer.
3. The Chairman will be elected biannually by the General Meeting with the Secretary and the Treasurer being elected on the alternate years.
4. The General Meeting may suspend a member of the Executive Board when and if the General Meeting deems this necessary. A two/third majority of the number of validly cast votes is needed to do so.
5. Membership of the Executive Board will end through:
   5.1. decease of the member;
   5.2. written resignation;
   5.3. expulsion.

6. Should for any reason the Executive Board lack one or more members, the remaining members or member will constitute a lawfully appointed Executive Board.
7. All members are eligible for re-election.

Article 11: TASKS OF THE EXECUTIVE BOARD

1. The Executive Board shall manage the funds and other possessions of the Association and ensure that the Association operates in accordance with the bylaws and any rules and regulations.
2. It will meet as determined by the Chairman.
3. For decisions of the Executive Board to be valid, there must be a quorum of two members present.
4. The Executive Board may ask advice of and grant commissions to organisations operating in fields similar to the Association's.
5. The Executive Board may invite representatives of government and science to attend its meetings as observers.
6. The Executive Board will inform the members on a regular basis of ongoing matters.
7. The task and competence of the Executive Board may be specified by rules and regulations.

Article 12: THE ADMINISTRATOR

1. The Executive Board shall appoint an Administrator, who under its responsibility carries out the decisions made at the General Meetings.
2. The Administrator shall manage the day to day running of the Association as set out in the Standards and Procedures.
3. The Administrator attends the meetings of the Executive Board and acts as Minute Secretary.
4. The task and competence of the Administrator may be specified by rules and regulations.

Article 13: REPRESENTATION

Two members of the Executive Board, one of whom must be the Chairman or the Treasurer, represent the Association in Law.

Article 14: COMMITTEES

1. The Executive Board may under its responsibility form Committees on various subjects both from members and from other persons.
2. Institution and composition as well as tasks and competence of these committees will be regulated by rules to be defined by the Executive Board, as far as possible after agreement with the General Meeting.

Article 15: The GENERAL MEETING

Within 6 months after the end of any calendar year a General Meeting will be held. In this meeting the Executive Board will present its yearly report and will render account of policy, providing all the necessary documents.

1. The General Meeting will appoint annually an Audit Committee of at least two members, who shall not be members of the Executive Board, to examine the accounts of the actual i.e. last year. The Committee will report to the General Meeting. In case special accounting expertise should be required the Committee may avail itself of expert assistance.
2. The Treasurer supported by the other members of the Executive Board will provide the Auditing Committee with all information requested and show the Committee bank statements, cash and other valuables, as well as accounts and documents pertaining to the Association if so required by the Committee.
3. The General Meeting by its approval of the Auditing Committee's report will discharge the Executive Board of liability.
4. Should approval of the accounts be refused, the General Meeting will appoint another Committee composed of at least three members that shall re-examine the accounts. This Committee has the same powers as the first Committee. Within a month after its appointment this Committee will report, either verbally or in writing, to the General Meeting. In case approval of the accounts still is refused, the General Meeting may take all measures considered to be required in the interest of the Association.

Article 16: CALLING a GENERAL MEETING

1. The General Meetings will be called by the Executive Board. There must be at least two months between convocation and meeting. The convocation will be in writing and will be sent to all members.
2. Apart from the meeting as referred to in article 15, General meetings may be held as often as the Executive Board deems necessary and whenever it is requested in writing, stating the subjects to be discussed, by at least such a number of members as is qualified to cast at least a tenth of the votes in the General Meeting.
3. Upon receipt of a request according to para 2 the Executive Board is required to call a General Meeting to be held within four weeks. Should the Executive Board not call a meeting within two weeks upon receipt of such a request the petitioners may call a meeting in the same way the Executive Board calls the General Meeting.

Article 17: ATTENDANCE at a GENERAL MEETING

1. All members have the right to attend the General Meeting but only Full members shall have one vote in this meeting.
2. A unanimous vote of all members, even cast outside an official General Meeting, will be a valid decision of the General Meeting, providing the Executive Board is notified. Such a decision will be registered in the minute book by the secretary and will be announced at the next General Meeting.
3. Voting on issues will be by show of hands or by postal ballot. The acceptance of proposals by acclamation is allowed, provided acclamation is proposed by the Chairman.
4. On all proposals concerning issues the decision will be made by a simple majority of votes, unless the bylaws demand otherwise. The Chairman shall not normally vote, but in case the votes are equally divided he/she shall have the casting vote.
5. When voting on persons the person gaining a simple majority of votes is chosen. In the case of no person reaching this majority a second vote will take place between those persons that have gained the highest number of votes and the person reaching the majority in this second vote is chosen. Whenever in the second voting the votes are equally divided, the case will be decided by lot. In the case of this article only validly cast votes are taken into account i.e. abstentions will not be counted.
6. A member who is not able to attend the General Meeting, may vote by proxy (letter, E-mail or fax) or delegate to another Full Member, provided in any case notification is received by the Secretary, before a meeting.
7. A decision is made if and when the Chairman during the meeting declares it to be made. If however the Chairman's announcement of the decision is challenged straightaway a new vote will be held if and when the majority of those present so desire, or in case the original vote was not by call or in writing, if and when any person, present and having the right to vote, so desire. The Executive Board is qualified to invite persons or bodies to attend a Chapter or the whole of the General Meeting as an observer without the right to vote.

Article 18 – CONDUCT of MEETINGS

1. The Chairman of the Executive Board chairs the General meetings. If he is unable to carry out this duty he will appoint a Deputy in good time
2. The Executive Board must ensure that Minutes are taken of the matters discussed in the General Meeting

Article 19 - Change of Bylaws

1. A change of bylaws can only be made upon decision of the General Meeting, called stating a change of bylaws will be proposed. There must be at least two months between convocation and meeting.
2. The person or persons calling a General Meeting in which a change of bylaws is proposed will, at least five days before the day of meeting deposit a written copy of the Changes, proposed in such a way that this copy will be easily available for perusal by all members until the end of the day of the meeting.
3. A change of bylaws can only be decided upon by a General Meeting in which at least two-thirds of the members are present or represented and can only be decided by a two-thirds majority of validly cast votes.

Article 20 – UNANIMOUS CHANGE of BYLAWS

Article 18 will not be applicable to a decision to change the bylaws if and when all members are present or represented at the General Meeting and the decision to change the bylaws is taken unanimously.

Article 21 – EFFECTING a CHANGE of BYLAWS

1. The change of bylaws will only take effect after a deed is drawn up by a Notary Public.
2. The Executive Board is held to deposit a copy of the deed of change and of the new bylaws at the Chamber of Commerce under whose jurisdiction the Association resides.

Article 22 - DISSOLUTION AND SETTLEMENT

1. Besides the cases stated in article 50, Book 2 of the Civil Law Code of the Netherlands the Association will be dissolved by a decision of the General Meeting to do so, in which at least two thirds of the members are present or represented and can only be decided by a two-third majority of validly cast votes.
2. If and when the quorum is not reached a decision to dissolve the Association can be made in a second meeting to be held at least eight days and at most thirty days after the first meeting regardless of the number of members present at the first meeting. At this second meeting a two-third majority of the number of validly cast votes is needed to decide to dissolve the Association.
3. The proposal to dissolve the Association must be announced in the convocation to the meetings as described in para 1 of this article. There must be at least two months between convocation and meeting.
4. If and when upon decision to dissolve the Association there are no persons appointed to do so the Executive Board will dissolve the Association.
5. Should a credit balance exist then this will be applied to a purpose similar to the Association's at the discretion of the General Meeting.
6. After dissolution the Association will continue to exist in so far as this is required to dispose of its funds. During this period bylaws and rules will be applicable as far as possible; in all correspondence and announcements by the Association the phrase "in dissolution" will be added to the Association's name.

Article 23 - RULES AND REGULATIONS

1. In its "Rules and Regulations" the General Meeting may set rules for membership, amount of membership dues and entrance contribution, the task of the Executive Board, the meetings, the manner of voting and all other subjects which it may deem necessary.
2. Change of rules and regulations may be made by a decision of the General Meeting, following a proposal by either the Executive Board or by a Full Member, supported by at least a third of the Full Members of the Association, submitted in writing.
3. The rules and regulations shall contain no articles deviating from law or bylaws, unless deviation from law or bylaws is expressly allowed.

Article 24 - FINAL CLAUSE

Any case not decided upon by law and bylaws will be decided upon by the General Meeting.

APPENDIX A2 – THE RULES AND REGULATIONS

These Rules and Regulations agreed at an Annual Meeting under article 23 of the Constitution refine the Constitution in order to maintain its relevance to the current requirements of the Association.

In these Rules and Regulations the articles of the constitution are amended as shown.

RR1: MEMBERSHIP - ARTICLE 4

1. There shall be 5 Types of membership:

1.1 FULL

This type of membership is divided into 2 categories:

Full Member (Diver Training)	Commercial Schools who wish to issue IDSA Diving Qualification cards.
Full Member (Specialist Diving)	Commercial Schools who teach diving specialist qualifications but do not train divers.

1.2 ASSOCIATE

Schools who are either considering Full Membership or who wish to be associated with the work of the Association.

1.3 AFFILIATE

Government Departments, Diving Contractors and other Organisations concerned with or interested in the work of the Association.

1.4 INDUSTRIAL

Clients, Diving Contractors and other relevant organisations who wish to demonstrate their support for the work of the Association financially or otherwise.

1.5 RECIPROCAL

An exchange of Membership with Organisations whose aims are similar to those of IDSA, and from which both sides can benefit

RR2: THE EXECUTIVE BOARD - ARTICLE 10

1. The Chairman may only hold continuous office for 3 terms that is, 6 years

2. Membership of the Executive Board is open to all – whether members of the Association or not – provided they are proposed and seconded in writing by members before the beginning of a general/annual meeting. Only Full Members may vote on their election.

APPENDIX A2 – THE RULES AND REGULATIONS

RR3: THE ADMINISTRATOR – Article 12

1. The Administrator's terms of reference are to:

   (a) Implement the directives and policies agreed at Annual Meetings, and the Instructions of the Executive Board.
   (b) Manage the IDSA Secretariat and Database
   (c) Responsible for the running of the day to day finances.
   (d) Implement the Certification Procedures in accordance with the Administrative Procedures ; keep the Database, records and files as appropriate.
   (e) Keep the Executive Board informed of any matters of significance which may affect the affairs of the Association
   (f) Promote the activities of the Association as widely as possible
   (g) Liaise with government, industrial and other organisations as may be necessary
   (h) Represent the Association at meetings etc as directed by the Executive Board
   (i) Report to the Annual Meeting on the work of the past year and plans for the next

2. The expenses of the Administrator will be covered as shown in the accounts

RR4: COMMITTEES - ARTICLE 14

In accordance with this article, an Election Committee may be established with the following Terms of Reference:

(a) A minimum of two full members General Meeting (GM) are either elected or freely designated to stand on that committee. (acclamation)
(b) The task of the committee is to organise the annual or bi-annual election of the board members as set out in the Constitution of the Association.
(c) The Committee collects the names of old or new candidates at least two months before the Annual meeting and ensures that the election is organised properly. Proxy's must be sent to the Administrator before the beginning of an Annual Meeting
(d) The Election Committee may propose amendments subject to their acceptance by the Membership by a postal or E Mail vote

RR5: THE GENERAL MEETING - ARTICLE 15

The General Meeting will be held annually. In this meeting the Executive Board will present its yearly report and will render account of policy, providing all the necessary documents.

RR6: ATTENDANCE AT A GENERAL MEETING - ARTICLE 17

A Quorum, that is the number of voting members who must vote (by mail or by acclamation) in order for a proposal to be carried, is defined as 50% of the voting members. If the votes for and against a motion are equal the Chairman will have the casting vote

APPENDIX B – The TABLE of EQUIVALENCE

#COUNTRY/SCHOOL	**IDSA LEVEL 1** Commercial SCUBA Diver	**IDSA LEVEL 2** Surface Supplied Inshore Air Diver	**IDSA LEVEL 3** Surface Supplied Offshore Air Diver	**IDSA LEVEL 4** Closed Bell Mixed Gas Diver
AUSTRALIA				
Equivalent National Standard See Note 4	Part 1		Part 3	Part 4
BELGIUM / SYNTRA				
IDSA Level; taught	Combined with Level 2 See Note 1	YES		
Equivalent National Standard		OOW - SYNTRA		
BELGIUM / CFPME				
IDSA Level; taught	Combined with Level 2 See Note 1	YES		
Equivalent National Standard		OTS - CFPME		
CANADA				
Equivalent National Standard See Note 4	Unrestricted SCUBA	Unrestricted SCUBA **Plus** Restricted Surface Supplied Diver	Unrestricted Surface Supplied Diver to 50m + Unrestricted SCUBA	Bell Diver
DENMARK / Royal Danish Navy Diving School				
IDSA Level; taught	YES	Combined with Level 3 See Note 1	YES	
Equivalent National Standard	National SCUBA Diver		Surface Supplied Diver to 50m	
FINLAND/Luksia				
IDSA Level; taught	Combined with Level 2 See Note 1	YES		
Equivalent National Standard	National SCUBA Diver	National Surface Supply Diver – 50m		
FRANCE				
Equivalent National Standard	Class 1 Mention A or B	Class 1 Mention A	Class 2 Mention A	Class 3 Mention A
INDIA / The YAK Diving Academy				
IDSA Level; taught	Combined with Level 3 See Note 1	Combined with Level 3 See Note 1	YES	
ITALY / CEDIFOP				
IDSA Level; taught	Combined with Level 2 See Note 1	YES		
MOROCCO/Centre Mediterranean de Plongee Professionalle (CMPP)				
IDSA Level; taught	Combined with Level 3 See Note 1	Combined with Level 3 See Note 1	YES	
Equivalent National Standard	Class 1 Mention A or B	Class 1 Mention A	Class 2 Mention A	
NETHERLANDS / The National Diving Centre				
IDSA Level; taught	Combined with Level 3 See Note 1	Combined with Level 3 See Note 1	YES	
Equivalent National Standard	Certificate A		Certificate B	
NEW ZEALAND				
Equivalent National Standard See Note 4	Part 1		Part 3	Part 4
NORWAY/ Norwegian Commercial Diving School (NYD)				
IDSA Level; taught	YES	Combined with Level 3 See Note 1	YES	
Equivalent National Standard	Labour Inspection Authority (LIA) Level A Inshore SCUBA		Petroleum Safety Authority (PSA) Part 1: Surface orientated Diver North Sea Offshore LIA Level B: Surface Orientated Diver Inshore	NPD Bell Diver

APPENDIX B – The TABLE of EQUIVALENCE

#COUNTRY/SCHOOL	**IDSA LEVEL 1** Commercial SCUBA Diver	**IDSA LEVEL 2** Surface Supplied Inshore Air Diver	**IDSA LEVEL 3** Surface Supplied Offshore Air Diver	**IDSA LEVEL 4** Closed Bell Mixed Gas Diver
SOUTH AFRICA				
Equivalent National Standard See Note 4	Class 4	Class 3	Class 2	Class 1
SPAIN				
IDSA Level; taught	YES	YES	YES	
Equivalent National Standard	Bussejador Petita Profundidat 30m		Bussejador Mitjana Profundidat SSD 60m & Wet Bell	
SWEDEN/Farjenas Diving School				
IDSA Level; taught	YES	YES		
Equivalent National Standard	Diver Certificate A	Diver Certificate B	Diver Certificate C Wet Bell 60m	
SWEDEN/Armed Forces Diving & Naval medicine Centre				
IDSA Level; taught	Combined with Level 2 See Note 1	YES		
Equivalent National Standard	Diver Certificate A	Diver Certificate B	Diver Certificate C Wet Bell 60m	
UK – PRE APRIL 1998				
Equivalent National Standard See Note 3	HSE Part 4	HSE Part 3 **Plus** Task Training module	HSE Part 1	HSE Part 2
UK – Post April 1998				
Equivalent National Standard See Note 3	HSE SCUBA	HSE SCUBA **Plus** HSE Surface Supply **Plus** Tools Training module.	HSE SCUBA **Plus** HSE Surface Supply **Plus** Tools Training module **Plus** Surface Supplied Top Up	HSE Closed Bell
USA / Divers Academy				
IDSA Level; taught See Note 2				
Equivalent National Standard		American National Standard for Divers - ANSI/ACDE-01-2009 (USA)		
USA / Ocean Corporation				
IDSA Level; taught See Note 2				
Equivalent National Standard		American National Standard for Divers - ANSI/ACDE-01-2009 (USA)		

Notes**:**

1. Not taught as a separate course.
2. Currently the Training Programmes of the members of the Association of Commercial Diving Educators (ACDE) meet the ANSI Standards, and students are eligible for IDSA certification once they have achieved the necessary authenticated in-water experience.
3. The Task Training Module must cover the requirements for Task Training contained in the IDSA Level 2 Standard.
4. Subject to confirmation
5. Generally the high standards cover all those below, i.e. the award of IDSA Level 3 is conditional upon the diver having qualified Levels 1 & 2 previously.

APPENDIX C1 – FULL MEMBER APPLICATION FORM

NAME of SCHOOL:

CONTACT:

POSTAL ADDRESS:

Contact Telephone Number: Mobile:

E-Mail: Web:

PURPOSE OF THIS FORM					
	Initial Application	Date		Comment on Initial Application	Date
	Recertification	Date		Comment on Re-certification.	Date

IMPORTANT:

Please read the following notes and the relevant sections of Chapters 2, 3 and 4 of these Standards and Procedures before starting to complete this application.

1. This form is used for both an initial membership application and before each re-certification audit. Having been completed by the school, the auditors then record their comment on the same form.

2. The form will be treated as confidential by the Executive Board, Administration, Auditors and any other authorised person(s).

3. It is designed to be completed on computer in **'Word'** format **- not by hand** – so that extending the sections and subsections, or attaching information is simplified, and comments can be added readily. Where there are tables they should be extended as necessary in the same format. Notes may be deleted in order to make the document easier to use & more readable.

   Entries should be made in **BLUE PRINT** so that they are easily distinguished.

   The form may be downloaded from the Association's Website www.idsaworldwide.org in PDF format but Schools considering and is also available on CD from the Administrator in 'Word' format at info@idsaworldwide.org.

4. Where there is an option to answer a question YES or NO the relevant documentation must be available at the beginning of the on-site audit.

5. It is essential that the school creates its own Company 'Training Manual' either in one comprehensive document, or as a series of individual booklets or leaflets kept together in one cover. The document, in whatever form, should contain instructions to all staff concerning the procedures necessary for the safe and efficient running of the School, for example: diving operations, actions in the event of an emergency, training records, methods of assessment, administration etc.

6. The Training Manual and all accompanying documentation **must** be written or translated into English. Relevant Chapters of Brochures or other similar material should also be translated if necessary.

7. The form need only be completed for the modules it is proposed to teach. If a School is already accepted to teach, for example Modules A & B, and wishes to teach module C, only the sections which are concerned with Module C need be completed

APPENDIX C1 – FULL MEMBER APPLICATION FORM

Notes (continued):

8. Wherever possible and especially when a description of equipment or facilities is required, colour digital photographs should be used.

9. If clarification or further information is required, contact the Administrator by E Mail at info@idsaworldwide.org.

10. If this application form with its accompanying documentation is not suitable for transmission by E Mail, it should be forwarded by secure post, Courier or other suitable means.

Contents

APPENDIX C1 - FULL MEMBER APPLICATION FORM

1. GENERAL

1.1. ADMINISTRATIVE DETAILS

1.1.1. Name of Owners

1.1.2. Type of Funding

For example Private, Non Profit, Military or other.

1.1.3. Name of the Person Directly Responsible for the Management of the School.

1.2. MISSION STATEMENT

Note:

Some basic guidelines when writing a mission statement:

- A mission statement should say who your company is, what you do, what you stand for and why you do it.
- An effective mission statement is best developed with input by all the members of an organization.
- The best mission statements tend to be 3-4 sentences long.
- Avoid saying how great you are, what great quality and what great service you provide.
- Examine other company's mission statements, but make certain your statement is you and not some other company. That is why you should not copy a statement.
- Make sure you believe in your mission statement, if you don't your customers will soon realize it.

1.3. IDSA MODULES REQUESTED (TICK AS NECESSARY)

A	Preparatory		**D**	Offshore Surface Supply	
B	Commercial SCUBA		**E**	Closed Bell/Mixed Gas	
C	Inshore Surface Supply				

1.4. ANNUAL TRAINING PROGRAMME

Assuming that your audit is satisfactory, attach your monthly plan for all the courses – IDSA or non IDSA - you propose to teach for the 6 months subsequent to the audit date.

1.5. OTHER APPROVALS

(a) If you are already approved to teach Commercial/Industrial Diving Standards by a Formal Government or Industrial Organisation, please enclose the Certificate which gives this approval.

(b) It is confirmed that this school has not been expelled from a National or Industrial organisation, and conforms fully with all relevant National and Local Government Regulations.

YES/NO

APPENDIX C1 - FULL MEMBER APPLICATION FORM

1.6. INSURANCE

Do the Policies held conform to the requirements of National Legislation?

YES/NO

Note:

The School must hold insurance policies both which comply with National Regulations, and at a minimum ensure that they will pay for any successful claim against the School for accident, negligence or whatever to:

- A member of staff - Often known as 'Employers Liability'
- A member of the public or a student (Third Party or Public Liability)

It is also recommended that the School has all it's equipment and facilities insured against damage, theft, fire, etc, and be able to pay compensation to the students, if necessary, should a course be delayed or cancelled for one of these reasons.

1.7. STUDENTS: DOMESTIC ARRANGEMENTS

Give details of the arrangements made for feeding and accommodating your students.

1.8. STAFF

1.8.1. Instructional Staff

List the names of your Instructors and their qualifications in this table, and attach their CV's at the end of this document as Appendices. All Instructors, Full or Part Time should be listed.

NAME	**QUALIFICATIONS & SPECIALIST SUBJECTS**
SENIOR - Those who may act as Supervisors	
ASSISTANT	
SPECIALIST	

1.8.2. Maintenance Staff

Name	Role and any relevant Qualification

APPENDIX C1 - FULL MEMBER APPLICATION FORM

1.8.3. Support Staff

A list of all supporting staff Secretarial, Boatmen etc, other than Instructors and maintainers

Name	Role and any relevant Qualification(s)

1.9. STAFF TRAINING

Give details of any staff training carried out in the year before the date of this application, and any planned for the year after.

2. OPERATIONAL

2.1. SITE DESCRIPTION (Including all Diving Areas and Shore Diving Stations)

Attach a map, plan or sketch - preferably to scale - of the geographical location of the school, showing diving areas including training tanks , pools or pontoons which are used, the depths available, and the number of permanent diving stations available at each. Distant areas should also be described, and their position illustrated.

The location of Administration Office(s), Maintenance areas, Medical and First Aid Posts and any other relevant facilities should also be shown.

APPENDIX C1 - FULL MEMBER APPLICATION FORM

2.2 DIVING PLATFORMS: Boats, Small Craft, Barges, Pontoons, Piers

Complete the following form for each Diving Platform which will be used during an IDSA course, and attach a sketch(s) and/or photographs showing the layout of equipment during a diving operation whether permanently fitted, or fitted only when an operation is in progress, for each one.

NAME	
Maximum number of personnel – crew, divers, passengers - which can be carried :	
Is this Platform owned or hired by the School? In either case, the same information is required.	**YES/NO**
Do local/National regulations require it to be licensed to operate commercially and to carry out Diving Operations. If **YES** the auditors will require to check the relevant licence/certificate during the on-site audit. If **NO** see the note at the end of this section.	**YES/NO**
Description:	
Beam:	
Draft:	
Overall Length:	
Use:	
Radio equipment fitted:	
Number of Lifejackets:	
Carrying capacity of Life rafts (if fitted):	
First Aid equipment carried during a Diving operation:	

Note: If neither National nor Local Regulations do not require a floating platform to be licenced, explain the steps which have been taken to ensure that the platform(s) is safe and seaworthy. For example:

a) What was the date of the last hull inspection, and what was the method used?
b) What date was the hull last antifouled?
(c) Confirmation that the additional diving personnel and equipment do not adversely affect stability
(d) What fire fighting equipment is carried and/or what system is fitted?
(e) Is there adequate provision for the safe stowage of fuel?
(f) How many students, Instructional staff and crew can the vessel/platform carry?
(g) If students and instructional staff are accommodated overnight, what are the arrangements for sleeping, eating and hygiene?
(h) Who is authorised and qualified to act as the Skipper or Coxswain?
(i) Who is authorised to act as crew?
(j) What are the limiting environmental factors?

APPENDIX C1 - FULL MEMBER APPLICATION FORM

2.3. DIVING AND SAFETY EQUIPMENT

The facilities staff and equipment must be sufficient for the maximum number of students shown in section 3.4.1, and that the minimum number is sufficient to run diving operations safely. The equipment listed in column 1 of the tables in this section is the minimum considered necessary under any circumstances.

The school may possess, or have formal hire/lease arrangements for the dive sites, premises, equipment, and training facilities described in this section. They must meet all National, State and Local rules and Regulations, and the relevant documentation – test and inspection certificates must ne available during the on-site audit.

Outline specifications for significant items of equipment are given in Chapter 3 Section 2.

2.3.1. General

Type of Equipment	Description	Number Held
First Aid Sets: There should be a minimum of one per diving station. -		
Oxygen Administration Sets: There should be a minimum of one per diving station.		
Air Purity Testing system - A minimum of 1		

2.3.2. Module B

Indicate the number you hold and where appropriate a brief description of the following:

Type of Equipment		Description	Number Held
Diving Suits: One for each student up to the maximum number for the course	Dry		
	Wet		
Suit Inflation System: One for each student up to the maximum number for the course			
Complete Sets of SCUBA: One for each student up to the maximum number for the course	Regulator & contents gauge		
	Back Pack & cylinder		
	Reserve System		
	Buoyancy Compensator		
	Lightweight harness		
	Weightbelt & weights		
	Diving Knife		
	Half Mask		
	Hood		
	Fins		
Full Face Masks	- If it is planned to dive 2 students at a time, the minimum number should be 2 masks for the students, + 1 for the student Stand-By diver, a total of 3. The staff Stand-By diver may wear a Bandmask, and it is recommended that an additional one is held against breakdown or maintenance.		

APPENDIX C1 - FULL MEMBER APPLICATION FORM

2.3.2. Module B (Continued)

Type of Equipment		Description	Number Held
Lifelines with Communications	2 x the number of divers expected to be in the water at one time		
Communication Boxes	A minimum of 3, unless part of the Dive Control panels.		
Hand Tools	Fr example: Hacksaws, chisels, lump hammers, spanners etc		
Lifting Bags	Between 100 & 140 Kgs lifting capacity.		

2.3.3 Module C

Type of Equipment		Description	Number Held
Surface Supply Dive Stations. A Shed, Shack or Cabin suited to the environment and the location, containing:	Diving Panel(s) fitted to take 2 divers and a Stand-B y		
	Comms for 2 divers and a Stand-By - may be built in to the Diving Panel		
	3 umbilicals 1½ x the maximum expected diving depth, consisting of: • Air Hose • Pneumo Hose • Lifeline (if necessary) • Comms Line •		
	Comms to the working deck		
	Comms with base, radio or otherwise.		
	Hanging fittings for umbilicals		
	Desk adjacent to Diving Panels with space for Panel Operator to keep dive records etc, without leaving the panel		
	Main air Supply to panel(s)- sited so that the noise does not affect diving operations		
	Reserve air supply to panel(s)- usually HP		

APPENDIX C1 - FULL MEMBER APPLICATION FORM

2.3.3. Module C (Continued)

Type of Equipment		Description	Number Held
Band Masks: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance			
Helmets:	Free Flow: Minimum 2		
	Demand: Minimum 2		
1 Helmet mounted video camera system			
Harnesses + sufficient weights	Heavyweight: 3		
	Jacket: 3		
Bail out Cylinders: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance			
Lifting Bags: Of between 1000 & 1400 Kgs capacity			
Power Tools	Air		
	Hydraulic		
Airlifts			
Low Pressure Water Jetting Equipment			
Underwater Cutting Equipment			
Underwater Welding Equipment			
A Diving Basket			
A Two compartment Recompression Chamber – see Chapter 3 Section 3 **Note:** If not owned by the school, full details of the chamber, its location and availability to the school must be given			

2.3.4 Module D

Type of Equipment	Description	Number Held
A Wet or Open Bell – See Chapter 3, Section 1.5		
Hot Water Suits: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance – See Chapter 3, Section 1.6		

2.3.5 Module E

IN PREPARATION

2.3.6 Additional Equipment (Optional)

Any Specialist Equipment not required by the IDSA Standards.

APPENDIX C1 - FULL MEMBER APPLICATION FORM

2.4. PLANT

List the HP Compressors, LP compressors, Generators, Tool compressors, Hydraulic power Packs etc **NOT** associated with specific Dive Stations.

2.5. MAINTENANCE SCHEDULE

(a) Does your maintenance schedule include a list of all the diving equipment which requires to be tested under your National Regulations?

YES/NO

(b) Please give the reference numbers of the National Regulations (Diving or otherwise) which cover the maintenance and testing of your diving equipment

(c) Attach examples of:

- A page from your Maintenance schedule - See example in Chapter 3 Section 5
- A defect or work sheet

(d) What Air Purity Standard is used?

Note: If there is no National Air Purity Standard, British Standard EN12021should be used, which is:

- Oil 0.5 mg/m
- CO_2 500 ppm
- CO 3 ppm
- Water 25-50 mg/m^3 - See standard

APPENDIX C1 - FULL MEMBER APPLICATION FORM

ADMINISTRATIVE - See Chapter 4 Section 1 Sub-section 1.4

2.6. DOCUMENTATION

Both the following documents may consist of one comprehensive book or a series of individual booklets/leaflets. They should be attached to this application, or sent separately by Courier or post.

3.1.1. The Operational Procedures

The Operations Manual should contain the School's instructions to all staff concerning the routine and emergency procedures necessary for the safe and efficient running of the school's administration and training programmes.

3.1.2. The Training Manual

The Training Manual should contain notes and guidance on all the theoretical practical knowledge required by the relevant IDSA Syllabus.

3.2 TRAINING PROGRAMME(S)

3.2.1 Courses Leading to an IDSA Qualification

List the details in this table:

Course Name and/or Number	IDSA Modules Covered	How will the modules be taught? See Note	Planned Duration (in weeks	Maximum Students per class	Minimum Students per class

Note: Will the IDSA modules be taught:

(a) Separately.
(b) Integrated into one course
(c) Integrated with a non-IDSA course. an existing non IDSA course

3.2.2 Detailed Programmes

Attach detailed training programmes, as described in Chapter 4, Section 1, Sub-section 1.4

How many contact week hours do you plan for each day?

How many days do you plan to work each week?

3.2.3 Entry Criteria

Give a detailed list of the Entry Criteria for each course.

3.2.4 Other diving related courses taught

Give details of any other Diver related courses

APPENDIX C1 - FULL MEMBER APPLICATION FORM

3.3 DIVE RECORDS

Give details of the Procedures used to record dives on site, and how they are transferred to the course record:

3.4 PERSONAL DIVING LOGBOOKS

Confirm that all students maintain personal diving Logbooks

Note: *They will be checked during audit*

3.5 COURSE RECORDS

Give full details of all course records maintained for IDSA Courses

3.6 STUDENT ASSESSMENTS

Give details of the methods used both to assess all practical tasks and drills and theoretical knowledge.

3.7 CLASSROOMS

Give details of the classrooms, i.e. the number they will seat and the standard and/or specialist training aids they contain.

3.8 TRAINING AIDS

Give details of:

- The Manual and/or Handouts plus any other materials which will be issued to students
- Training Aids available other than those fitted in the Classroom(s) - for example Resuscitation Manikins/Dummies.

3.9 APPEALS & COMPLAINTS

Give details of your policy for dealing with appeals and complaints.

4. ADDITIONAL COMMENT

Describe any operation, facility or other detail not covered in the preceding sections

APPENDIX C1 - FULL MEMBER APPLICATION FORM

5. TERMS of ACCEPTANCE

I confirm that it is the wish of my organisation to become/remain (delete as appropriate) a Full Member (Diver Training) of IDSA.

Once accepted as a Full Member, I hereby agree on behalf of my organisation to conform to the requirements of the IDSA Diver Training Programme, in particular to:

(a) Notify the Administration of any significant changes e.g. Ownership. Key staff, Major items of equipment, course programmes, facilities or of any other change which may be relevant, as they occur.
(b) Issue all students who successfully complete an IDSA course with an IDSA Diver Qualification Card (IDQC)
(c) Maintain the facilities, equipment and staff, necessary to teach the Detailed Programme(s) approved during Audit
(d) Maintain a Training & Operations Manual as approved during audit and ensure that it is kept up to date and issued to all relevant staff
(e) Pay the annual subscription as set at the Annual Meeting . subject to the following conditions:

(i) The subscription is paid on 1 January each year.

(ii) If the subscription is not paid by 31 March a surcharge of 50% will be applied. If it is not paid by 30 June membership will lapse, and the right to vote and issue qualification cards will be withdrawn.

(iii) Membership will also be withdrawn if, in the opinion of the Executive Board, the school has contravened the IDSA Standards and Procedures.

I certify that the information contained in this Application is correct

Signature of the person named in Paragraph 1.1.4 of this application as being responsible for the management of the School

Signature Date:

Name (Please Print)

Company Stamp

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

Name of School:

Date(s) of Audit:

INTRODUCTION

(a) The purpose of the on-site audit is to verify the content of the Full Members Application Form, ensure that all the facilities, equipment and staff of the school are sufficient not only to support the IDSA courses, but also any other courses which are planned to take place at the same time.

(b) During their visit Auditors should make contact with as many members of staff who are involved in the IDSA Course(s) as possible and establish that they have a reasonable knowledge of the training standards as it applies to them.

(c) Should the Auditors disagree, the reasons for their disagreement together with the Audit Report are to be forwarded to the Administrator for consideration by the Executive Board, who will make the appropriate decision

The following table contains notes which are designed to assist auditors and to ensure consistency between audits. The section numbers refer to those used in the 'Full Member Application Form - Appendix C1'.

1.	**GENERAL**
1.1	**ADMINISTRATIVE DETAILS** Confirm they are as shown in Appendix C1.
1.2	**MISSION STATEMENT** Is it appropriate?
1.3	**MODULES REQUESTED**: Confirm
1.4	**ANNUAL TRAINING PROGRAMME** Is it suitable?
1.5	**OTHER APPROVALS** Confirm that the Approvals listed are still in place, and if so, that they are in-date and do not conflict with the IDSA Programme(s).

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

1.6	**INSURANCE** Sight the insurance document(s) and check that the cover is sufficient, and up to date
1.7	**STUDENTS: DOMESTIC ARRANGEMENTS** Confirm that the arrangements are satisfactory.
1.8	**STAFF** In each category, spot check the documentation which supports any qualifications claimed. Confirm the lists, and note any changes
1.9	**STAFF TRAINING** Discuss programme and its suitability
2.	**OPERATIONAL**
2.1	**SITE DESCRIPTION (Including Diving Areas and Shore Diving Stations)** Visit all the areas and stations and check that the descriptions given are correct. Note any Changes

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

2.2 **DIVING PLATFORMS**

Visit all available vessels and check that Boats and Barges conform to National Regulations. If there are no National Regulations for the platforms concerned confirm that the steps taken to make the vessel safe and seaworthy are adequate

2.3 **DIVING & SAFETY EQUIPMENT**

Confirm that the facilities staff and equipment are sufficient for the maximum number of students planned at any one time, and that the minimum number is sufficient to run diving operations safely Spot check the equipment listed in the Application.

2.4 **PLANT**

2.4.1 **HP CHARGING SYSTEM(S)**

- Are there any changes to the application
- Relate 1 system to the maintenance schedule/record and confirm that the requisite maintenance details and test records are correctly entered.
- Check that the test dates shown on at least 4 storage and/or Diving Cylinders conform to those shown on the maintenance schedule
- Check that filters have been changed in accordance with the manufacturer's Instructions, and that air purity tests have been carried out.

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

2.4.2 **LP SUPPLY SYSTEMS(S)**

- Are there any changes to the application
- Relate 1 system to the maintenance schedule/record and confirm that the requisite maintenance details and test records are correctly entered.
- Check that the test dates shown on the LP Receivers or Storage Cylinders conform to those shown on the maintenance schedule
- Check that filters have been changed in accordance with the manufacturers Instructions

2.4.3 **OTHER PLANT**

Changes and/or comment only.

2.5 **MAINTENANCE SCHEDULE**

Confirm that:

- The Maintenance system lists all relevant equipment, is well kept
- The procedure for controlling the maintenance and breakdown repair of equipment is in place and up to date.
- The Workshop is clean and tidy
- There is sufficient space for equipment to be ventilated as necessary, and that there is sufficient space for it to be stored without distortion.
- Air purity tests have been carried out correctly and recorded

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

3. ADMINISTRATIVE

3.1 DOCUMENTATION

3.1.1 The Operational Procedures

Check that the Procedures have been circulated to all relevant staff and spot check that copies are amended up to date.

Confirm that the procedures/instructions given in the document(s) are being followed

3.1.2 The TRAINING MANUAL

Check that the Manual is given to all students and held by all Instructors and other relevant personnel.

3.2 TRAINING PROGRAMMES

- Confirm that the detailed programme etc for the course in progress is as submitted in Appendix C1. Note any changes which it has been necessary to make.
- Check that the programme for the week of the audit fits in with the overall programme submitted with Appendix C1.
- Note the course or courses in progress

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

3.3	**DIVE RECORD SHEET** Check that they are completed accurately and legibly, and that students are receiving the information for their Logbooks quickly. Ensure that the record sheets are up to date and either transferred to a computer programme if one is being used or that there is a methodical system for storing them on paper. Spot check that the records for previous courses – whether on paper on computer – are easily retrievable.
3.4	**PERSONAL DIVING LOGBOOKS** All logbooks should be available and at least 2 should be checked against both the Daily Dive Record Sheets and the course record
3.5	**COURSE RECORDS** Check that they are being kept in accordance with the instructions contained in the training manual
3.6	**STUDENT ASSESSMENT** Check that they are being carried out in accordance with the instructions contained in the training manual.

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

3.7	**CLASSROOMS** Classrooms should be clean and tidy. As a minimum they should be equipped with a seat and desk or equivalent for the maximum number of students expected in any one course, blackboards/whiteboards, audio-visual equipment and adequate lighting, so as to provide a satisfactory student learning environment
3.8	**TRAINING AIDS** Ensure that they are adequate, properly used and in good condition
3.9	**APPEALS & COMPLAINTS** Check any past appeals or complaints and confirm that they were dealt with in accordance with the Instructions in the Training manual.
3.10	**CLASSROOM INSTRUCTION** At least one lecture must be observed, and relevant points noted, for example: Instructor delivery, Training Aids used, student participation etc
3.11	**DIVES OBSERVED** At least one complete dive should be observed in order to check that it is being conducted in accordance with the relevant procedures – Section 3.1.1

APPENDIX C2 – AUDITORS CHECK LIST & REPORT

4. SUMMARY	
4.1 **OVERALL COMMENT** Comment on any information given in the Application Form as necessary	
4.2 **NON COMPLIANCES**	
CONCLUSION	
Lead Auditor	**Auditor**
Name (Please Print	Name (Please Print
Signature	Signature
DATE	
On behalf of the School	
Name (Please Print	
Signature	
DATE	

APPENDIX C3 – FULL MEMBER (SPECIALIST TRAINING) APPLICATION FORM

NAME of SCHOOL:

CONTACT:

ADDRESS:

Telephone Number:

E-Mail: Web:

Notes:

IMPORTANT: PLEASE READ BEFORE STARTING TO COMPLETE THIS APPLICATION

1. When completed this form will be treated as confidential by the Executive Board, Administration, and any other authorised person(s).
2. It is designed to be completed on computer (Not by hand) by extending the sections and subsections, or attaching the necessary information and referencing it to them. Where there are tables they should be extended as necessary in the same format.
3. The form may be obtained from the Administrator at info@idsaworldwide.org.
4. It is strongly recommended that the school creates its own Company Training Manual containing Programmes, all procedures, and other relevant material.
5. Wherever possible and especially when a description of equipment or facilities is required, digital photographs should be used.
6. If clarification or further information is required, contact the Administrator by E Mail as above

Contents

APPENDIX C3 – FULL MEMBER (SPECIALIST TRAINING) APPLICATION FORM

1. GENERAL

1.1 ADMINISTRATIVE DETAILS

1.1.2. Name of Owners

1.1.3 Type of Funding

For example Private, Non Profit, Military or whatever.

1.1.4 Name of the Person Directly Responsible for the Management of the School.

1.2 MISSION STATEMENT

1.3 SPECIALIST COURSES

List the Specialist Courses currently taught under the following headings:

Name of Course	Certification	Duration	Authority giving Approval (See Note)	Comment

Notes:

1. In order to become a Full Member - Specialist Training, a School must teach one of the courses which has been accepted by the membership. They are listed on the Association's Website, and are available from the Administrator.

2. A complete set of the documentation from the authority approving the courses taught by the School, must be enclosed with this application.

1.4 OTHER COURSES

List any other courses run at the School not listed in Section 1.3 above.

1.5 INSURANCE

Give details of the Insurance Policies held, and confirm that they meet the requirements of National Legislation.

1.6 DOMESTIC ARRANGEMENTS

Give details of the arrangements made for feeding and accommodating your students.

APPENDIX C3 – FULL MEMBER (SPECIALIST TRAINING) APPLICATION FORM

2 TRAINING FACILITIES

2.1 SITE DESCRIPTION

Attach a plan showing the layout of the Training Facilities used.

2.2. INSTRUCTORS

Please list the names of your Instructors here and their qualifications . They may be Full or Chapter Time as may be required

NAME	QUALIFICATIONS & SPECIALIST SUBJECTS

2.3 CLASSROOMS

Give details of the classrooms, i.e. the number they will seat and the standard and/or specialist training aids they contain.

3. GUIDANCE to STAFF

Confirm that the school has written and maintains a Manual or other document(s) setting out the procedures necessary for the safe and efficient running of the relevant Specialist course(s), tailored to it's location, equipment, staff and any other relevant matter.

4. MAINTENANCE

Give outline details of the maintenance schedule(s) used for the specialist training equipment listed in Sections 2.3 and 2.4 above.

5. ADDITIONAL COMMENT

Describe any operation, facility or other detail not covered in the preceding sections.

APPENDIX C3 – FULL MEMBER (SPECIALIST TRAINING) APPLICATION FORM

6. ACCEPTANCE

I confirm that it is the wish of my organisation to become a Full Member (Specialist Training) of IDSA.

Once accepted as a Full Member (Specialist Training), I hereby agree on behalf of my organisation to abide by the Constitution of IDSA and to comply with the Association's Standards and Procedures as they may apply, and to:

- Notify the Administration of any significant changes as they occur e.g. Ownership. Key staff, Major items of equipment, course programmes, facilities or of any other change which may be relevant to the schools location, environment, equipment, staff and all other relevant matters.
- Pay the annual subscription as set at the Annual Meeting. subject to the following conditions:

  (i) The subscription is due on 1 January each year.

  (ii) If the subscription is not paid by 31 March a surcharge of 50% will be applied. If it is not paid by 30 June membership will lapse, and the right to vote and issue qualification cards will be withdrawn.

  (iii) Membership will also be withdrawn if, in the opinion of the Executive Board a member does not comply with either the Constitution or the Association's Standards and Procedures

I certify that the information contained in this Application is correct and that this organisation has not been expelled from a National Federation, Association, or Governing Body, and conforms fully with all relevant National and Local Government Regulations.

Signature of the person named in Paragraph 1.1.4 of this application as being responsible for the management of the School.

Signature: Date:

Name (Please Print)

APPENDIX C4 – ASSOCIATE MEMBERSHIP APPLICATION FORM

1. NAME OF SCHOOL

ADDRESS:

TELEPHONE Number: FAX Number:

E-Mail:

Web Site:

2. NAME OF OWNER(S):

3. NAME of the person directly responsible for the Management of the Centre

4. WHAT TRAINING PROGRAMMES ARE TAUGHT NOW?

(Attach extra sheets, or a copy of your brochure as necessary)

5. MARKETING

I agree to ensure that:

- When I use the IDSA Logo, it is always accompanied by the words 'Associate Member', together with the reference number of the School.
- Neither the IDSA Logo or any mention of IDSA is made on any certificate that I issue.
- Nothing in any advertisement, publication, certificate or any other of my literature states or implies that any of my courses are either approved by IDSA or equivalent to an IDSA Qualification.

Signed: Date:
Name (Please Print)

Note: The annual subscription for Associate Membership is as shown in the Membership Section of the IDSA Website: www.idsaworldwide.org

APPENDIX C5 – AFFILIATE MEMBER APPLICATION FORM

1. NAME OF INSTITUTION/ORGANISATION

ADDRESS:

TELEPHONE Number: Mobile :

E-Mail:

Web Site:

2. NAME OF OWNER(S):

3. NAME OF CONTACT

4. A BRIEF DESCRIPTION of the WORK of the INSTITUTION/ORGANISATION

5. MARKETING

I agree to ensure that:

- When I use the IDSA Logo, it is always accompanied by the words 'Affiliate Member', together with the reference number of the School.
- Neither the IDSA Logo nor any mention of IDSA is made on any certificate that I issue.
- Nothing in any advertisement, publication, certificate or any other of my literature states or implies that any of my courses are either approved by IDSA or equivalent to an IDSA Qualification.

Signed: Date:
Name (Please Print)

Note: The annual subscription for Affiliate Membership is as shown in the Membership Section of the IDSA Website: www.idsaworldwide.org

APPENDIX C6 – INDUSTRIAL MEMBERSHIP APPLICATION FORM

1. NAME OF INSTITUTION/ORGANISATION

   ADDRESS:

   TELEPHONE Number: FAX Number:

   E-Mail:

   Web Site:

2. NAME OF OWNER(S):

3. NAME OF CONTACT

4. A BRIEF DESCRIPTION of the WORK of the INSTITUTION/ORGANISATION

Signed: Date:
Name (Please Print)

Note:

This type of membership is available to Clients, Diving Contractors, Suppliers, Manufacturers and other relevant organisations who wish to show their support for the work of the Association in the form of Sponsorship.

The Annual Subscription is voluntary and negotiated between the sponsor and the executive board of IDSA."

APPENDIX D – STUDENT QUESTIONNAIRE

As a means of ensuring that the quality, safety and educational standards of IDSA Member Schools meet those of the Association, this form is sent out at random to students who qualify. It would therefore be much appreciated if you would complete this form and return it:

By E Mail to the Administrator at info@idsaworldwide.org

Or by post to at the following address ;-

The Administrator
International Diving Schools Association (IDSA)
47 Faubourg de la Madeleine
56140 Malestroit
France

For Office Use

Name of School		
Name/Serial Number of the Course Taken		
Start Date:	End Date:	
Duration		

Please update the following personal information as necessary

Reliable Postal address		
E Mail		
Mobile		

APPENDIX D – STUDENT QUESTIONNAIRE

Please answer the following questions

What was the name of the Instructor predominantly concerned with your Training?	
How many students were there in your Class?	
Did you take a Theory Exam? If so, what percentage did you achieve and what was your position in Class.	
Was the quality of Instruction	Excellent/Good/Average/Poor
Was the quality of equipment	Excellent/Good/Average/Poor
Were the classroom facilities	Excellent/Good/Average/Poor
Was the condition of the dive boat(s)	Excellent/Good/Average/Poor
Were standards of Safety	Excellent/Good/Average/Poor
Did you achieve and log the in-water times appropriate to the IDSA Standard you were trained for?	
If the Centre was residential:	
Was the condition of your room	Excellent/Good/Average/Poor
Was Service	Excellent/Good/Average/Poor
Was the quality of Food	Excellent/Good/Average/Poor
Other Comment	

I certify that my answers to the above questions are fair and correct.

Signed

APPENDIX E1 – QUALIFICATION CARD REQUEST ON GRADUATION

SCHOOL: Reference No

ADDRESS:

Course serial No :	Start Date	End Date/Date of Graduation

Circle modules gained	A	B	C	D	E

This is to certify that the student(s) listed on the attached sheet(s) have completed the Modules which have been circled, and may be awarded the IDSA Qualification as indicated below:

SIGNED NAME (Print)

DATE

IDSA QUALIFICATIONS

IDSA LEVEL 1: Commercial SCUBA Diver (Modules A+B)	
IDSA LEVEL 2: Surface Supplied Inshore Air Diver (Modules A+B+C)	
IDSA LEVEL 3: Surface Supplied Offshore Air Diver (Modules A+B+C+D)	
IDSA LEVEL 4: Closed Bell/Mixed Gas Diver (Modules A+B+C+D+E or A+C+D+E)	

For use by School	For Use by Secretariat		
Date forwarded to IDSA Secretariat	Date received at IDSA Secretariat	Card Order Number	Date of Issue (See note)
Date IDQC's received			

Notes:

1. The date of Issue is normally the date of Graduation.
2. A separate form should be used for each course.

APPENDIX E1 – QUALIFICATION CARD REQUEST ON GRADUATION

SCHOOL REFERENCE NO: FF…

Last Name First Name(s)	Address	Date of Birth	M/F	Nationality	Student Ref Number	IDSA Card no

Note: If a reference number is allocated to student photographs, it should be noted in the Column: 'Student Ref No'.

APPENDIX E2 – QUALIFICATION CARD REQUEST AFTER GRADUATION

(REFERENCE: SECTION 4.3)

SCHOOL: **REFERENCE NO ;**

This is to request that the divers listed on the attached sheet(s) may be issued with the IDSA Qualification indicated below, because:

Either They were not issued with an IDQC on graduation for one of the reasons described below (tick table as appropriate)

TABLE A (Tick as appropriate)

Graduated from a Full Member School and a card was not issued	
Graduation was before the School became a Full Member	
Card not issued on graduation and the School has since closed	
Card not issued on Graduation because of insufficient bottom time	

Or

There is a valid reason for the issue of a replacement card – for example verified lost or stolen	

TABLE B (Tick as appropriate)

IDSA LEVEL 1: Commercial SCUBA Diver (Modules A+B)	
IDSA LEVEL 2: Surface Supplied Inshore Air Diver (Modules A+B+C)	
IDSA LEVEL 3: Surface Supplied Offshore Air Diver (Modules A+B+C+D)	
IDSA LEVEL 4: Closed Bell/Mixed Gas Diver (Modules A+B+C+D+E	

SIGNED NAME (Please print)

DATE

For use by School	For Use by Secretariat		
Date forwarded to IDSA Secretariat	Date received at IDSA Secretariat	Card Order Number	Date of Issue (See note 1)
Date IDQC's received			

Notes:-

1. The date of Issue will be the date this form is received at the Secretariat.
2. The attached form is designed to allow divers who graduated on different dates, and at different IDSA Levels to be listed at the same time.
3.

APPENDIX E2 – QUALIFICATION CARD REQUEST AFTER GRADUATION

SCHOOL REFERENCE NO: FF…

Last Name First Name (s)	**M/F**	**Address**	**School Ref No**	**IDSA Card No**
Date of Birth:		Nationality:		
Date of Graduation		IDSA Level		
Last Name First Name (s)	**M/F**	**Address**	**School Ref No**	**IDSA Card No**
Date of Birth:		Nationality:		
Date of Graduation		IDSA Level		
Last Name First Name (s)	**M/F**	**Address**	**School Ref No**	**IDSA Card No**
Date of Birth:		Nationality:		
Date of Graduation		IDSA Level		
Last Name First Name (s)	**M/F**	**Address**	**School Ref No**	**IDSA Card No**
Date of Birth:		Nationality:		
Date of Graduation		IDSA Level		

APPENDIX E3 – QUALIFICATION CARD REQUEST AFTER AN EXPERIENCE ASSESSMENT

(Reference: Chapter 3 Section 3. which gives details of the documents which MUST accompany this request)

SCHOOL: **REFERENCE NO**

ADDRESS:

This is to certify that:

(a) The student(s) listed on the attached sheet have completed an Assessment of their competence and may be awarded the IDSA Qualification indicated below.

(b) If other than English the language used for the Assessment was……..

SIGNED NAME

DATE

IDSA QUALIFICATION

IDSA LEVEL 1: **Commercial SCUBA Diver** **(Modules A+B)**	
IDSA LEVEL 2: **Surface Supplied Inshore Air Diver** **(Modules A+B+C)**	
IDSA LEVEL 3: **Surface Supplied Offshore Air Diver** **(Modules A+B+C+D)**	
IDSA LEVEL 4: **Closed Bell/Mixed Gas Diver** **(Modules A+B+C+D+E or A+C+D+E)**	

For use by School	For Use by Secretariat		
Date forwarded to IDSA Secretariat	Date received at IDSA Secretariat	Card Order Number	Date of Issue (See note 1)
Date IDQC's received			

Notes
:

1. The Date of Graduation is the date the Assessment is successfully completed.
2. The Date if Issue is the date this form is received by the administration.
3. A separate form should be used for each assessment

APPENDIX E3 – QUALIFICATION CARD REQUEST AFTER AN EXPERIENCE ASSESSMENT

SCHOOL REFERENCE NO: FF…

Last Name First Names	Address	Date of Birth	M/F	Nationality	School Ref Number	IDSA Card no

Note: When using E Mail, if a reference number is allocated to student photographs, it should be noted in the Column: 'School Ref No

INTERNATIONAL DIVING SCHOOLS ASSOCIATION
STANDARDS & PROCEDURES

CHAPTER TWO: DIVER TRAINING STANDARDS

International Diving Schools Association
47 Faubourg de la Madeleine
56140 Malestroit
Brittany, France

Phone : +33 (0)2 9773 7261
E Mail : info@idsaworldwide.org

REGIONAL CENTER
FOR DIVERS TRAINING AND UNDERWATER DEMINING

SCOPE OF ACTIVITIES:

- Training for all categories of divers and other employees for underwater demining and other specialties in the area of professional-commercial diving in accordance with RCUD and IDSA Standards;
- Organization and performance of underwater demining in the vicinity of coasts and sea roads important for security of population and industry with the use of human and technical resources which our Center possesses;
- Realization of the projects related to security of the water resources: seas, lakes and rivers;
- Support to the development of national, regional and local capacities on identification, development and implementation of the projects related to underwater demining and removal of the explosive ordinances and obstacles under the water.

Adress: Obala bb, 85343 Bijela, Montenegro
Phone: +382 31 683 477
Fax: +382 31 683 375
Mail: rcud@t-com.me
Web: www.rcud.co.me

CONTENTS

1.1 INTRODUCTION

The Association was formed in 1982 as a result of a meeting between Schools attending the American Diving Contractors Conference in New Orleans. The aims of the Association were then, and are now to:

- Work towards common International Standards of Training.
- Improve the quality of commercial diving education.
- Provide a means of effective communication between schools.
- Work towards improved standards of safety, emergency drills and procedures.
- Provide a common and collective voice to Government & Industry on any matter affecting members.
- Co-operate on matters which may improve placement opportunities for graduates.
- Promote any activity, idea or subject which may improve the international operations of the Association.

The Association is concerned with all divers - Offshore, Inshore and Inland - and their training, as well as specialist non diving qualifications e.g. Supervisor, Diver Medic or DMT, LST etc. It has already established International Diver Training Standards based on the consensus opinion of its many members, and which are contained in this booklet, Specialist Qualifications are under consideration.

The Standards provide both a yardstick for those responsible for either administering existing National Standards or creating new ones, and a guide for Clients, Diving Contractors and Divers themselves. It is considered that the introduction of these Internationally agreed diver training standards will:

- Improve Safety
- Provide Contractors with a direct input to the Diver Training Syllabus.
- Enable Contractors to bid across National Borders on a more even playing field
- Improve Diver quality
- Provide Divers with greater Job Opportunities

The programme is not intended to conflict with either National Diving Standards or Legislation. Some governments have, and will continue to set their own National diver training requirements. The IDSA Programme system provides a means of equating National Standards by maintaining a Table of Equivalence – published separately.

1.2 A SUMMARY of the DIVER TRAINING STANDARDS

The IDSA Diver Training Standards are based on a modular approach. Each Standard, or Level of Competence, is made up from a combination of modules – see Tables 1 & 2. The modules may be taught in two ways:

Either: Combined as an integrated course

Modules may be combined to run a course leading to one of the IDSA Levels, for example, if modules A & B are combined, successful students would be eligible to receive the IDSA Level 1 (SCUBA) qualification.

Or: Individually

Courses may be run covering the requirements of one module only, e.g. a course may be run to the syllabus of Module ‘C’ for divers wishing to progress from Level 1 to Level 2.

TABLE 1: The IDSA DIVER TRAINING MODULES			
	MODULE TYPE	**DETAIL**	
A	Preparatory	Diving principles and theory common to both SCUBA and Surface Supply. Must be combined with either the SCUBA or Surface Supply Modules.	Theory only
B	Commercial SCUBA Diver	Training and assessment in the use of SCUBA and simple work tasks.	30msw
C	Surface Supplied Inshore Air Diver	Training and assessment in the use of Surface Orientated Air Diving Equipment and common inland/inshore work tasks.	30msw
D	Surface Supplied Offshore Air Diver	Training and assessment in air diving operations using an open (wet) bell acting as Bellman and Diver and using a Hot Water suit.	50msw
E	Closed Bell/ Mixed Gas	Training and assessment in the use and operation of a closed bell - acting as Bellman and Diver using the appropriate breathing gas mixture.	100m

TABLE 2: The IDSA DIVER TRAINING STANDARDS - DEFINITIONS LEVELS 1,2,3 AND 4			
IDSA STANDARDS	**MADE UP of MODULES**	**DETAIL**	**Note 1**
IDSA Level 1 (Commercial SCUBA Diver)	**A + B**	Competent to dive safely using open circuit self-contained air breathing equipment. Has a working knowledge of the following tasks: Elementary rigging, the Use of Lifting Bags, Diver Search Techniques, the Use of Hand Tools and Visual Inspection - see Note 2.	30msw
IDSA Level 2 Surface Supplied Inshore Air Diver	**A + B + C**	Competent to dive safely both inland & inshore using open circuit self-contained air breathing equipment and surface orientated air diving equipment. Has a working knowledge of the Level 1 tasks plus Chamber Operations, the use of Power Tools, thermal Arc Cutting equipment, Wet Welding, Air Lifts and Jetting equipment, simple Underwater Construction tasks - see Note 2. The principles of the following subjects are also taught, but in-water experience is not mandatory -Bolt Guns, Explosives,, Diving in Polluted Waters.	30msw
IDSA Level 3 Surface Supplied Offshore Air Diver	**A + B+ C + D**	Competent to dive inland, inshore & offshore using, open circuit self-contained air breathing equipment, surface orientated air diving equipment, and from an open bell. Able to use a hot-water suit. Has a working knowledge of the work tasks listed in Levels 1 & 2.	50msw
IDSA Level 4 (Closed Bell/Mixed Gas Diver)	**A + C + D + E**	Competent to take Chapter in closed bell operations, acting as Bellman and Diver, using the appropriate breathing gas mixture.	100msw

NOTES to Tables 1 & 2:

1 **DEPTH LIMITS** The depths shown in the right hand column of the tables above are those which a diver is competent to achieve on successful completion of training. He/she may go deeper with further experience and/or training as assessed by a Diving Contractor and allowed by National Legislation.

2 **TASK TRAINING:** The Task training will provide the trainee with a general appreciation of the techniques and problems involved in carrying out the specified underwater work. For the diver to be considered a competent worker it will generally be necessary for **further specialist training to be undertaken**, e.g for cutting, welding, explosives, NDT and offshore air diving.

1.3 MINIMUM BOTTOM TIMES

TABLE 3: MINIMUM BOTTOM TIMES REQUIRED DURING AN IDSA TRAINING COURSE

IDSA QUALIFICATION		Equipment	Depth in Metres of Sea Water	Total Bottom Time (Mins)	Minimum Number of Dives
IDSA LEVEL 1		**SCUBA**	0 to 19	500	15
COMMERCIAL SCUBA DIVER		**SCUBA**	20 to 30 – See Note 1	150	5
			TOTALS	650	20
TOTAL BOTTOM TIME LEVEL 1 = 650 Minutes					
Note 1: At least 2 dives must be to the maximum depth of 30m.					
IDSA LEVEL 2	**LEVEL 1**	**SSDE**	0 to 19	950 – See note 2	18
SURFACE SUPPLIED	**PLUS**	**SSDE**	20 to 30 – See Note 3	200	4
INSHORE AIR DIVER			TOTALS	1150	22
TOTAL BOTTOM TIME LEVEL 2 = LEVEL 1 (650 Minutes) + LEVEL 2 (1150 minutes) = 1800 minutes					
Note 2: The duration of one dive must be for 180 minutes ± 10%.					
Note 3: At least 2 dives must be to the maximum depth of 30m**.**					
IDSA LEVEL 3	**LEVEL 2 PLUS**	**Wet Bell**	0 to 29	150	5
SURFACE SUPPLIED		**SSDE**	30 to 39	160	5
OFFSHORE AIR DIVER		**SSDE**	40 to 50 – See Note 5	150	5
			TOTALS	460	15
TOTAL BOTTOM TIME LEVEL 3 = LEVEL 2 (1800 Minutes) + LEVEL 3 460 MINUTES) = 2260 minutes					
Note 4: The Hot Water suit training may take place during either Surface 0rientated or Wet Bell Dives. Each diver must make at least 3 dives of minimum duration 30 minutes using a Hot Water suit.					
Note 5: At least 2 dives must be made to the maximum depth of 50 metres.					

IDSA LEVEL 4 CLOSED BELL/MIXED GAS DIVER **Note** No specific bottom times are set for this standard.	**LEVEL 3 PLUS**	Divers must demonstrate their competence to dive in open water as a diver, rescue diver and bellman by completing: (a) 24 bell lockouts as a diver (b) 24 bell lockouts acting as bellman (c) 5 simulated rescues of an incapacitated diver (d) 12 bell runs from deck chamber to deck chamber with full transfer under pressure. (e) Four chamber pressurisation and TUP checks (f) Four pre-dive bell checks (g) Safely and competently three bell bounce dives to depths of 55, 75 and 100 msw respectively. (h) A saturation dive from a living depth greater than 50 msw from which the student must complete two bell runs to a depth greater than 50 msw. The lockout for these bell runs should be at least 15 minutes for each diver on each occasion. (See Note). A simulated incapacitated diver rescue should be made during one lockout.

1.4. LEVELS of KNOWLEDGE

1.4.1. GENERAL

The contents of each section aim to develop a degree of competence in a particular aspect of diving or to develop a familiarity with a piece of equipment or a procedure. Students should be able to demonstrate their acquired knowledge by performance or be able to explain and/or describe specific procedures in accordance with the requirements of the module.

All candidates should meet the same standards regardless of disability or language. No allowances should be made.

The need for safe working practices should be particularly stressed as part of the training, along with the necessity to work as part of a team.

1.4.2 Description of Levels

The levels of knowledge required by the diver are defined as follows:

Level A: Is practically competent in, and has a thorough theoretical knowledge of the subject.

Level B: Is practically competent to perform an operation under supervision, and has the appropriate theoretical knowledge (Level C below).

Level C: Has the appropriate theoretical knowledge of the subject, subdivided as follows:

C Plus	(C+)	Has a thorough knowledge
C	(C)	Has an understanding of
C Minus	(C-)	Is familiar with

1.5. METHODS of ASSESSMENT

Methods of Assessment may be shown by the following abbreviations:

CA	Continuous Assessment throughout the course
IO	Instructor Observation
IW	Instructor Observation in-water
OP	Oral/Practical session
PD	Practical ‘dry’ assessment
PW	Practical in-water assessment
WE	Written exam

1.6 The LAYOUT of MODULES in these STANDARDS

1.6.1 Module Designation Letters

Each Module is prefixed by a designation letter:

A. Preparatory
B. Commercial SCUBA
C. surface Supplied Inshore Air
D. Surface Supplied Offshore Air
E. Closed Bell/Mixed Gas

1.6.2 Sections & Sub-Sections

The modules are divided into sections each concerned with a specific subject or topic, and its associated reference number, for example:

A1 THE HISTORY OF DIVING
A2 DIVING PHYSICS
A3 DIVING PHYSIOLOGY
And so on

Each subject may then be divided into subsections as necessary.

1.6.3 Column Headings

Each module page is divided in to 5 columns.

(i)	(ii)	(iii)	(iv)	(v)
A2: DIVING PHYSICS Understand the properties of liquids and gases, the behaviour of light and sound and the principles of buoyancy as they affect the diver and diving operations, by explaining:				
(a)	The relationship between pressure and volume (Boyle's Law) and being able to calculate the volume changes with changing depths.	C+		
(b)	The relationship between volume and temperature (Charles' Law), and being able to calculate the pressure changes with changes in temperature.	C+		
(c)	Etc			

Column (i): The IDSA Sub section reference. For example a subsection in the Diving Physics section of the Preparatory Module (as shown above) would be denoted as A2 (a), (b) as required. One in the SCUBA Module B as B5 (d) etc.

Column (ii): The Aim summarises the overall training requirements for the section. Each Aim is written as though it was pre-fixed by the words "A diver MUST be able to…."

Column (iii): The Level of Knowledge (LoK).

The 'Level of Knowledge' is described in Section 3.2. and indicates to the Instructor the knowledge level at which each sub section should be taught.

Columns (iv) & (v) Have a number of possible uses – See chapter 4 section 1.4.

MODULE A - PREPARATORY

TRAINING DEFINITION

On successful completion of the Preparatory Training Module the diver will have the theoretical knowledge necessary to understand the principles of safe diving which are common to both SCUBA and Surface Supplied operations.

Note: `This module is NOT a Standard in its own right.

It must be combined as shown:

With Module B	for the IDSA Level 1	Commercial SCUBA Standard
With Modules B & C	for the IDSA Level 2	Surface Supplied Inshore Air Standard
With Modules B, C & D	for the IDSA Level 3	Surface Supplied Offshore Air Standard
With Modules C, D & E	for the IDSA Level 4	Closed Bell/Mixed Gas Standard

ENTRY REQUIREMENTS

All trainees should:

- be competent swimmers (e.g. Be able to swim 200 metres in a diving suit weighted to neutral buoyancy).
- be able to add, subtract, multiply and divide whole numbers, decimals or fractions, calculate percentages.
- transpose and solve simple formulae e.g. Gas Laws.
- be able to understand and make written and verbal communications and communicate easily with others. This is particularly important where trainees are of different nationalities.
- be willing/able to work as Chapter of a team.

Note:

It is strongly recommended that all entrants complete an Aptitude Test successfully - preferably in Open Water - before being accepted on course.

MODULE A - PREPARATORY

CONTENTS

MODULE A - PREPARATORY

A1: THE HISTORY OF DIVING

Describe the origins and development of the major items of diving equipment and significant diving techniques, for example:

(a)	Diving Suits	C-		
(b)	Open & closed circuit self contained equipment	C-		
(c)	Diving Helmets and masks	C-		
(d)	Decompression Procedures	C-		
(e)	Saturation Diving	C-		

A2: DIVING PHYSICS

Understand the properties of liquids and gases, the behaviour of light and sound and the principles of buoyancy as they affect the diver and diving operations, by explaining:

(a)	The relationship between pressure and volume (Boyle's Law) and being able to calculate the volume changes with changing depths.	C+		
(b)	The relationship between volume and temperature (Charles' Law), and being able to calculate pressure or volume changes with changes in temperature.	C+		
(c)	The partial pressure of gases (Dalton's Law), and being able to calculate the parrial pressure of gasses at different depths.	C+		
(d)	The solubility of gases in solution (Henry's Law), and the need for decompression.	C+		
(e)	i. The principles of buoyancy (Archimedes' Principle). ii. The calculation of the buoyancy of an object, particularly with regard to the use of lifting/buoyancy bags. iii. The difference in buoyancy between salt and fresh water.	C+		
(f)	The behaviour of light in water - refraction and turbidity.	C+		
(g)	The behaviour of sound in water - directionality and speed.	C+		
(h)	The imperial and metric systems of measurement, and being able to convert from one system to the other.	C+		

MODULE A - PREPARATORY

A3: DIVING PHYSIOLOGY

Aim To understand the Structure and Function of the Human Body by :

(a)	Describing he Musculo/skeletal systems	C-		
(b)	Describing the Nervous system	C		
(c)	Describing the Circulatory system	C		
(d)	1.2.1.a.1.1.1.1 Describing the Respiratory system	C		
(e)	Explaining the function of the ears, sinuses and vestibular organs	C+		
(f)	Explaining the effects of pressure on the body, and how it causes or relates to diving related illnesses	C+		

A4: DIVING FIRST AID

Aim: Communicate with a medically trained person in the event of an injury or diving illness relating to himself or another diver, to render simple First Aid and to recognise the symptoms of diving related conditions in himself and others.

NOTES:

1. Many Countries have well established National and Private First Aid Courses, which cover some or all Chapters of this section. These courses may be taken into account when planning the training programme but, when they are, schools should ensure that all objectives have been taught, and if not include them in their training programme.
2. Where the Level of Knowledge is marked ***** it is recommended that a practical assessment is designed to check the students competence in all these subjects at the relevant level.

Sub Section: A$.1 General

Aim **Explain the general principles of First Aid at a dive site.**

(a)	The principles of First Aid	C+		
(b)	The First Aid equipment generally available at a dive site	C+		
(c)	The principle causes of Respiratory and Cardiac Arrest	C+		
(d)	The care of a casualty on site.	C		

Sub Section: A4.2 Cardio Pulmonary Resuscitation

Aim: Explain and demonstrate practically:

(a)	Expired Air Resuscitation	A		
(b)	The administration of Oxygen	A		

MODULE A - PREPARATORY

A4: DIVING FIRST AID (Continued)

Sub Section: A4.3 Non Diving Related Illnesses:

Aim: Understand the causes, be able to recognize the signs & symptoms, and be able to provide First Aid for the following Non Diving Related Illnesses, maintaining acceptable standards of hygiene and using the standard First Aid Equipment provided at a Dive Site.

(a)	Bleeding	B Note 2		
(b)	Fractures, sprains and muscle trauma	B Note 2		
(c)	Shock	C+		
(d)	Burns	C		
(e)	Electrocution	C		

Sub Section: A4.4 Diving Related Illnesses:

Aim: Understand the causes, be able to recognize the signs & symptoms, and be able to provide First Aid for the following Diving Related Illnesses, maintaining acceptable standards of hygiene and using the standard First Aid Equipment provided at a Dive Site.

(a)	Decompression sickness and pulmonary barotraumas	C+		
(b)	Ear problems	C+		
(c)	Drowning : vomiting underwater	C+		
(d)	Carbon dioxide poisoning	C+		
(e)	Carbon monoxide poisoning	C+		
(f)	Oxygen toxicity	C+		
(g)	Anoxia and hypoxia	C+		
(h)	Nitrogen narcosis	C+		
(i)	Hypothermia and Hyperthermia	C+		
(j)	Hyperventilation	C		

MODULE A - PREPARATORY

A5: STANDARD DECOMPRESSION TABLES

Aim : To understand the need for standard & nitrox surface air decompression tables and the procedures used, and to be aware that there are a variety of tables and of the need for therapeutic tables and their use.

(a)	Understand that there are a variety of decompression tables available, and that they each have their own procedure and rules which govern their use.	C		
(b)	Is able to use the Schools tables to calculate the decompression required for single and multiple dives, and: i. Make allowances for environmental conditions and stress. ii. Take the corrective action which is applied for deviation from the decompression schedule.	C+		
(c)	Understands the reasons for, and procedures associated with, therapeutic treatments.	C		

A6: DIVER COMMUNICATION SYSTEMS

Aim: Understand the principles and use of all current diver communication systems.

(a)	The meaning and use of current Hand and Lifeline Signals. Note : It is recommended that the 'LINE' signals shown in CHAPTER 3 are used whenever possible.	C+		
(b)	The principles and use of Hardwire communications and the associated voice procedures, including the phonetic alphabet.	C+		
(c)	The principles of Through Water communication equipment and its limitations.	C-		

MODULE A - PREPARATORY

A7: UNDERWATER HAZARDS

Aim : To identify possible Hazards and be aware of the precautions needed to prevent or avoid them, by understanding:

(a)	The principles of Risk Assessment, and be able to carry one out.	B		
(b)	The possible trapping hazards for divers: • Gates, sluices and culverts • Intakes and outfalls • Marine piers and jetties • Others particular to the locality of the School	C		
(c)	The precautions to be taken when diving around hazards, for e.g: • Taking in to account accelerated waterflow and pressure differentials • Keeping the lifeline free from snagging • Retracing the life line when returning to the surface • Entering a wreck or confined space	C		
(d)	That no lifting operation other than that connected to the dive takes place on a diving site	C		
(e)	The lights, flags and shape signals which warn other vessels of diving operations	C		
(f)	The problems associated with tying off to structures	C		
(g)	The hazards which exist when diving in the vicinity of: • Impressed current cathodic protection • Propellers and thrusters • Subsea electrical units • Dangerous Marine Life • Sonar transmissions • Nets and Cages • Diving from DP Vessels • In the vicinity of shipping • In or near wrecks	C		
(h)	That a diving operation must be authorized by the person having control of the dive site i.e. Harbour Master, OIM, Master of Vessel etc.	C		

A8: AIR DIVING OPERATIONS

Aim: To understand the uses and limitations of compression chambers, and be familiar with their layout and functions, by describing:

(a)	The advantages and disadvantages of using single compartment chambers, particularly those which are available for the transfer of divers under pressure	C-		
(b)	The uses and limitations of two compartment chambers with a maximum depth rating of 60 metres	C		
(c)	The layout of a typical two compartment Chamber	C		

MODULE A - PREPARATORY

A9: UNDERWATER WORK

Aim: To demonstrate his knowledge of simple underwater work tasks

Sub Section A9.1 - Rigging

Aim: Demonstrate an elementary knowledge of rigging practices and safety procedures, by:

(a)	Tying the following knots (See examples at Appendix 3: • Reef Knot • Bowline • Clove Hitch • Round Turn & 2 half hitches • Sheet Bend • Rolling Hitch	A		
(b)	Understanding: i. The definition of, methods available to calculate the safe working loads, breaking strains etc of rigging equipment and 'mechanical advantage'. ii. The principles for the safe handling and operational use of cordage, wire, ropes, shackles, slings, blocks and tackles, chain hoists, winches on the surface and underwater. iii. The need for maintenance and testing.	C		

Sub Section: A9-2 Diver Search Methods

(a)	Describing the principles and limitations of at least 3 different types of diver seabed searches.	C+		

a)

Sub Section: A9.3 Visual Inspection techniques

(a)	Describing the following Inspection techniques: • Visual • Still Photographic • Video • Non destructive testing	C c)		
(b)	Understanding the principles of writing and illustrating a simple report.	C		

Sub Section A9.4 The Use of Lifting Bags

(a)	Understanding the operational and safety procedures for the use of lifting bags.	C		

d)

Sub Section: A9.5 Hand Tools

(a)	Understanding the use and safety requirements for hand tools, the need for pre and post dive checks and user maintenance.	C		

MODULE A - PREPARATORY

A10: PLANT and EQUIPMENT

Aim: Demonstrate his knowledge of diving plant and equipment by:

Sub Section: A10.1 - describing the principles of operation and safety requirements for:				
(a)	Personal Equipment	C		
(b)	HP and LP compressors	C-		
Sub Section: A10.2 - Describing the regulations associated with the:				
(a)	Use and marking of High Pressure Air Cylinders	C		
(b)	Handling of Oxygen under pressure	C		

A11: MAINTENANCE AND REPAIR

Aim: Understand the procedures used in the maintenance of Diving Plant & equipment, by:

(a)	Describing the need and function of planned maintenance schedules	C		
(b)	Describing the need for and use of Pre & Post dive Checks	C		
(c)	Understanding the relevant national regulations	C-		

MODULE A - PREPARATORY

A12: SEAMANSHIP

Have sufficient knowledge of seamanship to act as a crewman in a small craft or Harbour/Coastal diving vessel, by:-

NOTE: Many Countries have well established Centres which run Boat Handling Courses to recognised National Commercial or Recreational Standards. These courses may cover some or all Chapters of this section, and may be taken into account when planning the training programme, but, when they are, schools should ensure that all objectives have been taught, and if not, include them in the programme.

Sub Section: A12.1 - TIDES

Aim: Understanding the influence of Tides on diving operations by:

(a)	Being able to use tide tables and charts to determine tidal strength, height and direction, and the depth of water	B		

Sub Section: A12.2 - Chartwork and Navigation

Aim: Understanding the use of charts and elementary navigation as they affect diving operations, by:

(a)	Being able to interpret a chart as necessary for Harbour/Coastal dives	B		
(b)	Describing principles of Harbour/Coastal Navigation	B		

Sub Section: A12.3 - Small Boat Handling

Aim: Understanding the methods of handling of Small Craft and the duties of the crew in a Harbour/Coastal Diving Vessel, by:

(a)	Describing the principles of handling a small boat in Open Water and in Harbour to carry out the following manoeuvres. • Coming alongside • Picking up a mooring • Picking up a Diver • Launching, starting/stopping	C		
(b)	Preparing a small boat for work with all safety and other necessary equipment.	C		
(c)	Describing the handling of wires and ropes and other duties required by a crewman of a Harbour/Coastal Diving Vessel.	C		

A13: LEGISLATION

Aim: To understand the National and other Regulations of the Country in which training is being carried out:

(a)	As they are directly concerned with the diver as an individual.	C+		
(b)	As they affect diving operations.	C-		

NOTE**:** If no National Standards exist, the School must specify the standard of another Country which is used and taught during the course, and which must be specified in the Divers Logbook

MODULE B – COMMERCIAL SCUBA

IDSA LEVEL 1 – COMMERCIAL SCUBA DIVER

To obtain the IDSA Level 1 (SCUBA Diver) Training Qualification this module MUST follow or be combined with Module A.

TRAINING DEFINITION

On successful completion of modules A & B a diver may be awarded the IDSA Level 1 Qualification, and will be competent to dive safely using open circuit self-contained air breathing equipment to a depth of 30 metres, and have a working knowledge of the following tasks :

- Elementary rigging
- The Use of Lifting Bags
- Diver Search Techniques
- The Use of Hand Tools
- Visual Inspection

Notes:

1. The Task training will provide the trainee with a general appreciation of the techniques and problems involved in carrying out the specified underwater work. For the diver to be considered a competent worker it will generally be necessary for **further specialist training to be undertaken**.

2. Successful students are competent to dive to the depth shown. They may go deeper with further experience and/or training as assessed by a Diving Contractor and allowed by National Legislation.

3. In order to attend an IDSA Diver Training course a student MUST hold a certificate stating that he has undergone a medical **examination** and been found fit to dive by a doctor authorized to carry out the medical examination of commercial divers. This Certificate MUST be obtained before training commences, and its expiry date must be after the end date of the course.

CONTENTS

MODULE B – COMMERCIAL SCUBA

B1: PRACTICAL DIVING

Aim: Demonstrate his competence to dive in Open Water using SCUBA to a maximum depth of 30m, by:

(a)	Understanding SCUBA safety and operating procedures		C+		
(b)	Diving safely and competently on air to a depth of 30 metres, having gained the following experience:		A		

Depth in Metres of Sea Water (msw)	Total Bottom Time (Mins)	Minimum Number of Dives
0 to 20	500	15
20 to 30	150	5

Notes:

1. Divers must be working or carrying out training drills during all dives.
2. Deeper dive times may be counted towards shallow minute requirements.
3. Dry Compression Chamber dives may not be included in these times.
4. At least **80**% of the dives must be carried out in open water.
5. Some students may require more than the minimum times before they can be considered competent.
6. Students who complete course without achieving the bottom times/depth required by IDSA will be issued with a non-IDSA card from the School. They may be issued with an IDSA Qualification card once their current employer has confirmed the evidence for the bottom time/depth they are lacking within 2 years from the date of course completion. This evidence may be either on-the-job experience – fully documented and certified in their Log Book, or on successful completion of an appropriate module at an IDSA Approved School.

(bb)	Completing at least 2 dives to the maximum depth of 30msw	A		
(c)	Being able to follow the procedures necessary to carry out in-water stops for a simulated dive of 25 minutes at 30 msw.	A		
(d)	Being able to use basic diving equipment e.g. half mask, fins, weight belt, dry or wet suit, suit inflation, knife, compass etc.	A		
(e)	Being able to use a Full face mask with an oral/nasal mask or mouthpiece.	A		
(f)	Operating the reserve system appropriate to the equipment in use.	A		
(g)	Using float lines and diver marker floats.	A		
(h)	Diving in nil visibility.	A		
(i)	Diving in mid water in moderate currents (about 0.5 knots).	A		
(j)	Diving in varying bottom conditions e.g. weed, mud, sand, shingle.	A		
(k)	Using the diving suit suitable for the environment i.e. temperature and depth, Including the use of suit inflation	A		
(l)	Using at least 2 devices to adjust buoyancy as required e.g. Suit inflation, BC.	A		
(m)	Clearing ears on descent as necessary.	A		

MODULE B – COMMERCIAL SCUBA

B1: PRACTICAL DIVING (Continued)				
(n)	Ascending at the predetermined rate, breathing correctly.	A		
(o)	Entering and leaving the water safely in different situations.	A		
(p)	Dressing and undressing in his/her personal diving equipment.	A		
(q)	Being familiar with: • The operation of closed and semi-closed circuit breathing equipment using oxygen, enriched air or other gas mixtures. • The safety procedures used, and the potential hazards associated with the use of these techniques during SCUBA operations.	C-		
(r)	Maintaining a personal Logbook.	A		

B2: SURFACE PROCEDURES

Aim: Demonstrate his competence to act as a member of the surface team by:

(a)	Assisting a diver to dress and undress in his personal diving equipment.	A		
(b)	Understanding the responsibilities of, and carrying out the duties of a Diver's tender/linesman, including the use of common diver communication systems.	A		
(c)	Carrying out pre-dive equipment checks.	A		
(d)	Carrying out post-dive equipment checks.	A		
(e)	Inspecting and maintaining personal diving equipment and reporting defects.	A		

B3: AIR DIVING CHAMBER OPERATIONS

Aim To complete a chamber dive to at least 30msw successfully, and understand the duties of a chamber attendant by:

(a)	Diving to at least 30msw in a 2 compartment chamber and successfully completing a simple comprehension test while at the maximum depth.	A		
(b)	Describing and performing the duties of a chamber attendant.	B		

B4: UNDERWATER EMERGENCIES

Aim: Understand and carry out the procedures necessary to deal with an emergency, both as a diver and as a member of the diving team:

Note: Team training drills should include the simulated rescue of an unconscious diver

Sub Section: B4.1 As a Diver he must be able to:				
(a)	Shed weights, use Suit Inflation and operate a BC, understanding the limitations of these actions and any resulting dangers.	A		
(b)	Carry out the correct remedial actions in the event of loss of either his breathing supply or communications, or both.	A		
(c)	Understand the necessary remedial action(s), their limitations and any resulting dangers as a result of a severed or trapped lifeline.	C+		
(d)	Understands the principles and dangers of Free Ascent	C+		
Sub Section: B4.2 As the In-Water Stand By Diver he must be able to:				
(a)	Reach his Buddy diver in an emergency.	A		
(b)	Carry out rescue/emergency procedures according to the equipment, environment and the emergency situation.	A		
(c)	Recover the distressed diver to the surface and assist in his recovery.	A		
Sub Section: B4.3 As the Surface Stand By Diver he must be able to:				
(a)	Dress in the appropriate state of readiness, according to the dive site and environmental conditions.	A		
(b)	Enter the water promptly as authorised by the Supervisor.	A		
(c)	Follow a lifeline to the distressed diver.	A		
(d)	Carry out rescue/emergency procedures according to the equipment, environment and the emergency situation.	A		
(e)	Recover the distressed diver to the diving platform.	A		
Sub Section: B4.4 As a member of the Surface Team he must be able to:				
(a)	Assist in the recovery of a distressed diver from the water.	A		
(b)	Enter the water when authorised to assist with recovery.	A		
(c)	Assist with the removal of clothing and First Aid as may be appropriate.	A		

MODULE B – COMMERCIAL SCUBA

B5: COMMUNICATION SYSTEMS

Use all current diver communication systems as they apply to SCUBA Operations, safely and efficiently, by sending and receiving:

(a)	Hand Signals.	A		
(b)	Lifeline Signals.	A		
(c)	Messages using recognised communication procedures via a hard wire communication system.	A		
(d)	And by: Understanding the use of recognised communication procedures via a through-water communication system.	C		

B6: UNDERWATER WORK

Aim: Demonstrate his ability to carry out simple work tasks safely and efficiently by:

In all areas of work the trainee should be aware of statutory testing and examination requirements for lifting equipment – including Safe Working Loads and their significance.

Sub Section B6.1 : Rigging

(a)	Tying the following knots underwater: Reef Knot Rolling Hitch	Bowline Sheet Bend	Clove Hitch Round Turn & 2 x ½ hitches	A	

Sub Section B6.2 : Diver Search Methods

(a)	Finding an object using two different types of seabed search – one in nil visibility.	A		

Sub Section: B6.3 Visual Inspection Techniques

(a)	Producing a report based on a simple underwater inspection, measurement, or survey task. Note: These reports must be retained with the course records for one year	A		

Sub Section: B6.4 The Use of Lifting Bags

(a)	Using a lifting bag to move an object weighing at least 100Kg in water.	A		

Sub Section: B6.5 Hand Tools

(a)	Completing a range of underwater tasks safely using at least 2 different hand tools.	A		

MODULE B – COMMERCIAL SCUBA

B7: PLANT & EQUIPMENT

Aim: Understand the function and operation of SCUBA Equipment and of low and high pressure compressors, and be able to charge all types of diving cylinder either directly from a compressor or from a High Pressure air bank (Cascade system). by:

Sub Section: B7.1 SCUBA Equipment				
(a)	Explaining the function and operation of current SCUBA equipment.	C+		
Sub Section: B7.2 High & Low Pressure Compressors				
(a)	Carrying out pre-dive checks, starting procedures and running checks on compressors using either electrical or diesel prime movers.	B		
(b)	Carrying out post-dive checks and stopping procedures on compressors using either electrical or diesel prime movers.	B		
(c)	An Air purity/quality test in accordance with National Standards.	B		
e) **Sub Section: B7.3 Cylinders**				
(a)	Charging HP cylinders by decanting (cascading) from a bank of HP cylinders	A		
(b)	Charging HP cylinders directly from an HP Compressor	A		

B8: MAINTENANCE AND REPAIR

Aim: Understand and carry out the User Maintenance of:

(a)	Diving suits	B		
(b)	Personal equipment	B		
(c)	Diver Communication Equipment	B		
(d)	LP and HP compressors and air filters	B		

MODULE B – COMMERCIAL SCUBA

B9: LEGISLATION

Aim: Understand the National and relevant local Regulations of the Country in which training is being carried out, as they are relevant to SCUBA Diving Operations, by:

(a)	Describing: i. The responsibilities of the Client, Contractor, Supervisor, diver and any other personnel who may be concerned with a diving operation. ii. The conduct of SCUBA diving operations. iii. Planning and Risk Assessment. iv. The composition of diving teams. v. The requirement for divers personal logbooks, operation logs and other relevant documentation. vi. The requirement for a compression chamber. vii. The operation, maintenance and safety requirements for diving plant and equipment. viii. The medical and training requirements for diving personnel.	C		

Note: If no National Standards exist, the School must state the standard which is used and taught during the course, and which must be specified in the Divers Logbook

MODULE C – SURFACE SUPPLIED INSHORE AIR

IDSA LEVEL 2 - SURFACE SUPPLIED INSHORE AIR DIVER

To obtain the IDSA Level 2 (Surface Supplied Inshore Air Diver) Training Qualification this module **MUST** follow or be combined with Modules A and B.

On successful completion of modules A, B and C a diver may be awarded the IDSA Level 2 Qualification, and will be:

Competent to dive safely both inland & inshore using both open circuit self-contained air breathing equipment and surface supplied air diving equipment to a depth of 30 metres, and have a working knowledge of the following tasks:

- Elementary Rigging
- The Use of Lifting Bags
- Diver Search Techniques
- The use of Power Tools
- Thermal Arc Cutting equipment
- Wet Welding
- The Use of Hand Tools
- Visual Inspection
- Chamber Operations
- Simple Underwater Construction tasks
- Air Lifts and Jetting equipment

The principles and of the following subjects are also taught, but in-water experience is not mandatory:
Bolt Guns, Explosives, and Diving in Polluted Waters.

Notes

1. The Task training will provide the trainee with a general appreciation of the techniques and problems involved in carrying out the specified underwater work. For the diver to be considered a competent worker it will generally be necessary for **further specialist training to be undertaken**.

2. Successful students are competent to dive to the depth shown. They may go deeper with further experience and/or training as assessed by a Diving Contractor and allowed by National Legislation.

3. In order to attend an IDSA Diver Training course a student MUST hold a certificate stating that he has undergone a medical **examination** and been found fit to dive by a doctor authorized to carry out the medical examination of commercial divers. This Certificate MUST be obtained before training commences, and its expiry date must be after the end date of the course.

4. Items marked with a star (*****) and hatched /////////// are also included in Module B, and need not be repeated by a diver holding the IDSA Level 1 qualification.

CONTENTS

MODULE C – SURFACE SUPPLIED INSHORE AIR

C1: PRACTICAL DIVING

Demonstrate his competence to dive in Open Water using two different sets of commonly used Surface Supplied Equipment to a maximum depth of 30msw, by:

(a)	Understanding • Standard surface supply safety and operating procedures • Surface decompression procedures	C+		
(b)	Diving safely and competently on air to a depth of 30 metres, having gained the following experience: Depth in Metres of Sea Water (msw) / Total Bottom Time (Mins) / Minimum Number of Dives 0 to 20 / 950 / 12 20 to 30 / 200 / 6 Notes: 1. Divers must be working or carrying out drills during all dives. 2. Deeper dive times may be counted towards shallow minute requirements. 3. Dry Compression Chamber dives may not be included in these times. 4. At least 80% of the dives must be carried out in open water. 5. Some students may require more than these minimum times before they can be considered competent. 6. Students who graduate without achieving the bottom times required by IDSA will either be issued with a National Qualification card or a card from the School. They may be issued with an IDSA Qualification card once they have provided evidence for the bottom time they are lacking. This evidence may be either on-the-job experience – fully documented and certified in their Log Book, or successful completion of an appropriate module at an IDSA Approved School.	A		
(bb)	Completing at least 2 dives to the maximum depth of 30m	A		
(c)	Following the procedures necessary to carry out in-water stops for a simulated dive of 25 minutes at 30 metres.	A		
(cc)	Completing at least one dive for a bottom time of 180 minutes ± 10%.	A		
(d)	Carry out the Full Surface decompression procedure for a simulated dive of 50 minutes at 30 msw, using air and oxygen.	A		
(e)	Being able to use a Full face mask, Bandmask, Demand and Freeflow Helmets.	A		
(f)	Diving in nil visibility.	A		
(g)	Diving in mid water in moderate currents (about 0.5 knots).	A		
(h)	Diving in varying bottom conditions.	A		
(i)	Using the diving suit suitable for the environment i.e. temperature and depth - Including the use of suit inflation.	A		
(j)	Clearing ears on descent as necessary.	A		
(k)	Ascending at the predetermined rate, breathing correctly.	A		

C1: PRACTICAL DIVING (Continued)				
(l)	Entering and leaving the water safely in different situations.	*A*		
(m)	Dressing and undressing in his/her personal diving equipment.	*A*		
(n)*	• The operation of closed and semi-closed circuit breathing equipment using oxygen, enriched air or other gas mixtures. • The safety procedures used, and the potential hazards associated with the use of these techniques during SCUBA operations.	*C-*		
(o)*	Maintaining a personal Logbook.	*A*		

C2: SURFACE PROCEDURES

Aim: Demonstrate his competence to act as a member of the surface team by:

(a)	Assisting a diver to dress and undress in his personal diving equipment.	A		
(b)	Understanding the responsibilities, and carrying out the duties of a Diver's tender/linesman.	A		
(c)	Acting as a Panel Operator.	A		
(d)	Carrying out pre-dive equipment checks.	A		
(e)	Carrying out post-dive equipment checks.	A		
(f)	Inspecting and maintaining personal diving equipment and reporting defects .	A		

C3: SURFACE DECOMPRESSION TABLES

Aim: Understand the use of Surface Decompression Tables, by:

Note: See Sub section C1 (d)

(a)	Being able to use Surface Decompression Tables, and calculate the decompression stops required for single and multiple dives from the Tables generally used by the Training Organisation.	B		

C4: AIR CHAMBER OPERATIONS

Aim: Understand the Safety procedures and be able to operate a two compartment Chamber under supervision, by

(a)	Knowing the safety procedures which apply to the operation of a two compartment Chamber.	C		
(b)*	Carrying out a Chamber dive to 40msw and successfully complete a simple comprehension test while at the maximum depth.	A		
(c)	Operating a two compartment chamber during routine diving operations under supervision.	A		

C5: UNDERWATER EMERGENCIES

Aim: Understand and carry out the procedures necessary to deal with emergencies, both as a diver and a member of the surface team:

Note: Team training drills should include the simulated rescue of an unconscious diver.

Sub Section: C5.1 As a Diver:

(a)	Being able to shed weights and use Suit Inflation understanding the limitations of these actions and any resulting dangers.	A		
(b)	Being able to carry out the correct remedial action in the event of loss of either his breathing supply or communications, or both	A		
(c)	Understanding the necessary remedial action(s), their limitations and any resulting dangers as a result of a severed or trapped umbilical, or a broken faceplate	C+		
(d)*	Understanding the principles of Free Ascent	C+		

Sub Section: C5.2 As the In-Water Stand By Diver:

(a)	Reaching his Buddy diver in an emergency.	A		
(b)	Carrying out rescue/emergency procedures according to the equipment, environment and the emergency situation.	A		
(c)	Recovering the distressed diver to the diving platform.	A		

Sub Section C5.3	**As the Surface Stand By Diver:**			
(a)	Dressing in the appropriate state of readiness, according to the dive site and environmental conditions.	A		
(b)	Entering the water promptly as authorised by the Supervisor.	A		
(c)	Following the umbilical to the distressed diver.	A		
(d)	Carrying out rescue/emergency procedures according to the equipment, environment and the emergency situation.	A		
(e)	Recovering the distressed diver to the diving platform.	A		
Sub Section C5.4	**As a member of the Surface Team:-**			
(a)	Assisting in the recovery of a distressed diver from the water.	A		
(b)	Entering the water promptly when authorised to assist with recovery.	A		
(c)	Assisting with the removal of clothing and First Aid as may be appropriate.	A		

C6: COMMUNICATION SYSTEMS

Aim: Use all current diver communication systems as they apply to Surface Supplied Operations safely and efficiently, by sending and receiving:

(a)	Lifeline Signals.	A		
(b)	Hard wire communications as a diver, panel operator and tender.	A		
(c)	Surface Crane Signals.	B		

C7: UNDERWATER WORK

Demonstrate his ability to understand and carry out underwater work tasks using tools and equipment currently in use by:

In all areas of work the trainee should be aware of statutory testing and examination requirements for lifting equipment – including Safe Working Loads and their significance.

Sub Section: C7.1 Rigging				
(a)	Tying the following knots underwater: Reef Knot Bowline Clove Hitch Rolling Hitch Sheet Bend Round Turn & 2 x ½ hitches	A		
Sub Section: C7.2 Diver Search Methods				
(a)	Finding an object using two 2 different types of diver seabed search, one in nil visibility).	A		
Sub Section: C7.3 Visual Inspection & Survey Techniques				
(a)	Producing a report based on a simple underwater visual inspection, measurement or survey task, including the use of a still camera	A		
(b)	Carry out a simple survey task using a helmet mounted video camera	A		
Sub Section: C7.4 The Use of Lifting Bags				
(a)	Carrying out a simple task using a lifting bag to move an object weighing at least 400Kgs in water.	A		
Sub Section: C7.5 The Use of Hand Tools				
(a)	Complete a range of underwater tasks safely and efficiently using hand tools.	A		

C7: UNDERWATER WORK (Continued)				
Sub Section: C7.6 Power Tools				
(a)	Understanding the use of and safety requirements for pneumatic and hydraulic power tools, the need for pre and post dive checks and user maintenance.	C		
(b)	Complete a range of underwater tasks safely & efficiently using both pneumatic & hydraulic tools	A		
(c)	Complete at least one task at a depth greater than 10msw using a Power Tool.	A		
Sub Section: C7.7 Water and airlifts, Jetting Equipment				
(a)	Understanding the operational and safety procedures, and user maintenance required when using ;: • HP Waterjets, • LP waterjets with & without grit entrainment • Airlifts • Waterlifts • The need for pre and post-dive checks and user maintenance	C		
(b)	Carrying out a simple task using an LP waterjet.	A		
(c)	Carrying out a simple task using an airlift.	A		
Sub Section: C7.8 Bolt Guns				
(a)	Understands the principles of operation, safety procedures for their use	C		
Sub Section: C7.9 Cutting Equipment				
(a)	Understanding: • The principles of operation of thermal oxy-arc cutting equipment and the necessary safety precautions. • The need for pre and post-dive checks and user maintenance.	C+		
(b)	Using thermal arc cutting equipment safely and efficiently to carry out a simple work task underwater.	A		

C7: UNDERWATER WORK (Continued)				
Sub Section C7.10: Welding Equipment				
(a)	Understanding: • The principles of operation of underwater dry and wet underwater welding equipment and the necessary safety precautions. • The need for pre and post-dive checks and user maintenance.	C		
(b)	Use Wet Welding equipment safely to carry out a simple weld.	A		
Sub Section C7.11: Underwater Explosives				
(a)	Understanding: • The types of explosives available for underwater use and the various types of firing circuits, and the precautions which should be followed for their safe handling and use. • The operational uses of explosives underwater.	C-		
Sub Section: C7.12 Underwater Construction Techniques				
(a)	Understanding: • The principles of construction methods used underwater including concreting, use of formwork and casting frames (shuttering), grouting and sand bagging. • The interpretation of engineering drawings relating to simple underwater construction tasks.	C		
(b)	Being able to work as a diver in a team engaged on a simple underwater construction task.	A		
Sub Section C7.13: Polluted Waters				
(a)	Understands the risks of diving in polluted waters and the procedures and equipment required to prevent them.	C		

C8: PLANT & EQUIPMENT

Understand the function and operation of the Surface Supplied Equipment and of low and high pressure compressors, and be able to charge all types of diving cylinder either directly from a compressor or from a High Pressure air bank (Cascade system). by:

Sub Section C8.1: Surface Supplied Equipment				
(a)	Explaining the function and operation of current Surface Supplied Helmets and Masks, Diving Panels and other equipment associated with a Surface Supplied System.	B		
Sub Section: C8.2 Low and High Pressure compressors				
(a)*	Carrying out pre-dive checks and starting procedures with either electrical or Diesel prime movers.	B		
(b)*	Carrying out post-dive checks and stopping procedures with either electrical or Diesel prime movers.	B		
(c)*	Carrying out an air purity/quality test in accordance with National Standards.	B		
Sub Section C8.3: Cylinders				
(a)*	Decanting from a bank of HP cylinders.	A		
(b)*	Directly from an HP Compressor.	A		
Sub section C8.4: Surface Supplied Systems				
(a)	Explaining the layout of a currently used Surface Supplied System and the function and operation of it's components, and the safety features associated with it.	C		

C9: MAINTENANCE AND REPAIR

Aim ; Carry out User Maintenance on the following items of equipment:

(a)	Surface Supply Panels.	B		
(b)	Demand and Free Flow Helmets.	B		
(c)	2 Compartment Air Chamber.	B		
(d)	Umbilicals.	B		
(e)*	Diver Communication Equipment.	B		
(f)*	Is able to carry out User Maintenance on Diving suits.	B		
(g)*	Is able to carry out user maintenance of LP and HP compressors and air filters.	B		

C10: LEGISLATION

Understand the National and relevant local Regulations of the Country in which training is being carried out, as they are relevant to Surface Supplied Diving Operations, by:

	Describing: i. The responsibilities of the Client, Contractor, Supervisor, diver and any other personnel who may be concerned with a diving operation. ii. The conduct of Surface Supplied diving operations. iii. Planning and Risk Assessment. iv. The composition of diving teams. v. The requirement for divers personal logbooks, operation logs and other relevant documentation. vi. The requirement for a compression chamber. vii. The operation, maintenance and safety requirements for diving plant and equipment. viii. The medical and training requirements for diving personnel.	C		

NOTE**:** If no National Standards exist, the School must specify the standard of another Country which is used and taught during the course, and which must be specified in the Divers Logbook.

MODULE D – SURFACE SUPPLIED OFFSHORE AIR

IDSA LEVEL 3 - SURFACE SUPPLIED OFFSHORE AIR DIVER

To obtain the IDSA Level 3 (Surface Supplied Offshore Air Diver) Training Qualification this module **MUST** follow or be combined with Modules A, B & C.

On successful completion of modules A, B, C and D a diver may be awarded the IDSA Level 3 Qualification, and will be:

Competent to dive inland, inshore & offshore using open circuit self-contained air breathing equipment, surface orientated air diving equipment, and from an open bell to a depth of 50 metres. He will be able to use a hot-water suit, and will have a working knowledge of the following tasks:

- Elementary Rigging
- The Use of Lifting Bags
- Diver Search Techniques
- The use of Power Tools,
- Thermal Arc Cutting equipment
- The Use of Hand Tools
- Visual Inspection
- Chamber Operations
- Simple Underwater Construction tasks
- Air Lifts and Jetting equipment

The principles of the following subjects are also taught, but in-water experience is not mandatory:
Bolt Guns, Explosives, Wet Welding and Diving in Polluted Waters.

Notes

1. The Task training will provide the trainee with a general appreciation of the techniques and problems involved in carrying out the specified underwater work. For the diver to be considered a competent worker it will generally be necessary for **further specialist training to be undertaken**.

2. Successful students are competent to dive to the depth shown. They may go deeper with further experience and/or training as assessed by a Diving Contractor and allowed by National Legislation

3. In order to attend an IDSA Diver Training course a student MUST hold a certificate stating that he has undergone a medical **examination** and been found fit to dive by a doctor authorized to carry out the medical examination of commercial divers. This Certificate MUST be obtained before training commences, and its expiry date must be after the end date of the course.

CONTENTS

MODULE D – SURFACE SUPPLIED OFFSHORE AIR

D1: PRACTICAL DIVING

Aim: **Demonstrate his competence to dive using current surface supplied equipment:**

1. **To a maximum depth of 20m from a Wet or Open Bell.**
2. **To a maximum depth of 50msw using surface orientated equipment.**

By:

Sub Section: D1.1 Open or Wet Bell

(a)	Understanding Open Bell safety and operating procedures.				C+	
(b)	Diving safely and competently from a Wet or Open Bell, having gained the following experience:				A	
	Depth in Metres of Sea water (msw)	Total Bottom Time (Mins)	Minimum Number of Dives			
	0 to 30	150	5			
	Notes: 1. Divers must be working or carrying out drills during all dives. 2. Deeper dive times may be counted towards shallow minute requirements. 3. All dives must be carried out in open water. 4. Some students may require more than these minimum times before they can be considered competent. 5. Students who graduate without achieving the bottom times required by IDSA will either be issued with a National Qualification card or a card from the School. They may be issued with an IDSA Qualification card once they have provided evidence for the bottom time they are lacking. This evidence may be either on-the-job experience – fully documented and certified in their Log Book, or successful completion of an appropriate module at an IDSA Approved School.					
(c)	Act as a Divers Attendant (Bellman) in the Bell during an Open Bell diving operation.				A	
(d)	Act as the Surface Orientated Stand By Diver during an Open Bell diving operation.				A	

D1	PRACTICAL DIVING (Continued)				
Sub Section: D1.2 Deep Surface Supply					
(a)	Understanding the limitations of diving to 50 metres and the additional procedures required by:			C+	
(b)	Demonstrating his competence to dive in surface orientated equipment by diving safely and competently on air to a maximum depth of 50 metres, having gained the following experience:			A	
	Depth in Metres of Sea water (msw)	Total Bottom Time (Mins)	Minimum Number of Dives		
	30 to 40	150	5		
	40 to 50	160	5		
(c)	Carry out one dive in excess of 35 metres using a power tool			A	
(d)	Completing at least 2 dives to the maximum depth of 50msw			A	
	Notes: As in section D1.1 (b) above.				

Sub Section: D1.3 Hot Water Systems					
(a)	Understand the operating and safety procedures necessary for diving in a Hot Water suit.			*C+*	
(b)	Dive safely and competently in a Hot water suit:			A	
	Depth in Metres of Sea water (msw)	Total Bottom Time (Mins)	Minimum Number of Dives		
	0 to 20	90	3		
	Note: The Hot Water suit training may take place during either surface orientated or Wet Bell Dives. Each diver must make at least 3 dives of minimum duration 30 minutes using a Hot Water suit.				
©	Act as the panel operator during a Hot Water suit diving operation			*B*	
Sub Section: D1.4 Diving from Dynamically Positioned Vessels .					
(a)	Understand the hazards associated with and the precautions to be taken when diving from a dynamically positioned Diving Support Vessel.			C	

MODULE D – SURFACE SUPPLIED OFFSHORE AIR

D2: SURFACE PROCEDURES

Aim: **Demonstrate his competence to act as a member of the surface team by:**

Sub Section: D2.1 Open or Wet bell System

(a)	Acting as the Panel operator during an Open Bell operation.	A		
(b)	Carrying out Pre and Post Dive Checks on an Open Bell System.	A		
©	Understanding: The use of hydraulic winches, air motors etc used in deploying an Open Bell.	B		

Sub Section: D2.2 Hot Water System

(a)	Acting as the Panel operator during a Hot Water Dive.	A		
(a)	Carrying out Pre and Post Dive Checks on a Hot Water System.	A		

D3: UNDERWATER EMERGENCIES

Aim: Take the appropriate action in the event of an emergency or equipment failure as a member of the diving team (except the Supervisor), by:

Sub Section: D3.1 Diver Rescue

Carry out the simulated rescue of an unconscious diver from an open bell including emergency first aid in the bell.

(a)	As a diver.	A		
(b)	As the divers attendant in the Bell (Bellman).	A		
©	As the panel operator.	A		
(d)	As the surface stand by diver.	A		

D3: UNDERWATER EMERGENCIES (Continued)

Sub Section: D3.2 Equipment Failure:

Aim: Complete drills which demonstrate the ability to deal with the following failures when using an open bell

(a)	Loss of Communications.	A		
(b)	Loss of Breathing Supply.	A		
©	Loss of both Communications and Breathing Supply.	A		
(d)	Loss of power to the Bell lifting system.	A		

D4: PLANT AND EQUIPMENT

Aim: Understand the function and operation of open bell and hot water systems, by:

Sub Section: D4.1 Open Bell System

(a)	Explaining the layout of a currently used open bell system and the function and operation of it's components.	C		

Sub Section: D4.2 Hot Water System

(a)	Explaining the layout of a currently used hot water system and the function and operation of it's components.	C		

D5: LEGISLATION

Understand the National and relevant local Regulations of the Country in which training is being carried out, as they are relevant to Deep Offshore & Inshore Surface Supplied Diving Operations, by:

	Describing: i. The responsibilities of the Client, Contractor, Supervisor, diver and any other personnel who may be concerned with a diving operation. ii. The conduct of Deep Surface Supplied diving operations. iii. Planning and Risk Assessment. iv. The composition of diving teams. v. The requirement for divers personal logbooks, operation logs and other relevant documentation. vi. The requirement for a compression chamber. vii. The operation, maintenance and safety requirements for diving plant and equipment. viii. The medical and training requirements for diving personnel.	C		

NOTE**:** If no National Standards exist, the School must specify the regulations of another Country which is used and taught during the course, and which must be specified in the Divers Logbook.

MODULE E – CLOSED BALL/MIXED GAS

IDSA LEVEL 4 – CLOSED BELL/MIXED GAS DIVER

To obtain the IDSA Level 4 (Closed Bell/Mixed Gas Diver) Training Qualification this module **MUST** follow or be combined with Modules A, C and D.

On successful completion of modules A, C, D and E a diver may be awarded the IDSA Level 4 Qualification, and will be competent to:

Take part in closed bell operations, acting as Bellman and Diver, using the appropriate breathing gas mixture to a depth of 100m.

ENTRY REQUIREMENTS

1. Hold the IDSA Level 3 qualification.

2. Since gaining the IDSA Level 3 qualification or equivalent the diver must have completed at least 50 dives for a minimum bottom time of 50 hours.

Notes

a. All of the dives must be conducted in surface supplied equipment and in open water, i.e. not in compression chambers, pools or tanks.

b. No dive to 6 metres or shallower is to count either as one of the dives or towards the total dive time.

c. A minimum of 10 of the dives to have required a minimum decompression time of 15 minutes. Only decompression as required by the decompression table being used is to be counted. i.e. non mandatory safety stops are not to be counted as Chapter of the 15 minutes.

d. Only bottom time is to be counted towards the 50 hours, i.e. ascent and decompression stop times are not to be included.

e. No dive shorter than 15 minutes bottom time is to be counted.

f. For a dive where the bottom time is longer than 2 hours only 2 hours is to be counted.

MODULE E – CLOSED BALL/MIXED GAS

CONTENTS

MODULE E – CLOSED BALL/MIXED GAS

E1: DIVING THEORY – PROPERTIES OF LIQUIDS AND GASES

Aim: Explain the practical application of the following to mixed gas bell diving operations ;

(a)	• the relationship between pressure and volume (Boyle's Law) • the relationship between volume and temperature (Charles' Law) • partial pressure of gases (Dalton's Law) • solubility of gases (Henry's Law) • factors affecting buoyancy (Archimedes' Principle)	B		

E2: DECK C0MPRESSION CHAMBER OPERATIONS

Aim: Understand the function, procedures and safety checks, required to operate a Deck Decompression Chamber, by:

Sub Section: E2.1 Built-in breathing and over board gas dump systems				
(a)	Explaining the working of the systems.	B		
(b)	Carrying out all procedures to ensure correct function and user maintenance.	A		
Sub Section: E2.2 Gas systems to the chamber				
(a)	Explaining the purpose and operation of the system including all component Chapters.	B		
(b)	Carrying out user maintenance.	A		
Sub Section: E2.3 Gas monitoring				
(a)	Explaining the operational control of gas (quality) monitoring on receipt and in use.	B		
(b)	Explaining the principles and use of carbon dioxide and oxygen monitors.	B		
©	Accurately calibrating monitors and interpret readings under working conditions.	A		
(d)	Explaining the principles and operation of environmental control units in relation to compression chambers.	B		
(e)	Explaining the methods of making up different gas mixtures.	B		
(f)	Analysing pure and mixed gases.	B		

DECK C0MPRESSION CHAMBER OPERATIONS (Continued)				
Sub Section: E2.4 Carbon Dioxide absorption				
(a)	Explaining the principles of CO2 scrubber systems	B		
(b)	Checking the function of the system and perform user maintenance	A		
Sub Section: E2.5 Impurities in gas systems				
(a)	Explaining the effects of impurities in: • the environment of a diving system. • a diver's breather gas.	B		
(b)	Describing the possible points of contamination.	B		
Sub Section: E2.6 Oxygen cleanliness				
(a)	Explaining the effects of high pressure oxygen supply in contact with combustible material.	B		
(b)	Explaining the procedures necessary to prevent accidental contamination of oxygen.	B		
©	Explaining the effect of oil and grease in high pressure oxygen systems.	A		
Sub Section: E2.7 Cleaning of gas systems				
(a)	Explaining the need for strict observance of gas handling rules;	B		
(b)	Explaining the procedures and correct methods of cleaning to ensure that gas supply is not contaminated.	B		
Sub Section: E2.8 Operate the built-in breathing system (BIBS)				
(a)	Selecting the correct gas for the particular operation.	A		
(b)	Supplying the gas from the control panel to the built-in breathing system.	B		
©	Explaining the need for and the operation of the back pressure regulator protection.	B		
Sub Section: E2.9 Monitor chamber operations				
(a)	Monitoring the chamber for depth, temperature, humidity, oxygen and carbon dioxide levels during the diving operation.	B		
(b)	Explaining the normal maximum and minimum permissible limits of oxygen and carbon dioxide.	C		

E2 DECK C0MPRESSION CHAMBER OPERATIONS (Continued)				
Sub Section: E2.10 Fire fighting equipment				
(a)	Explaining the use of equipment required for fire fighting in a bell diving system and the necessary pre- and post-dive checks and safety precautions.	B		
(b)	Carrying out a chamber evacuation and isolation procedure and explain the role of the surface team.	A		
Sub Section: E2.11 Safety Checks				
(a)	Explaining the need for pre – and post-dive checks and user maintenance of a compression chamber.	C		
(b)	Carrying out for pre and post-dive checks and user maintenance of a compression chamber.	B		
Sub Section ; E2.12 Sanitary arrangements				
(a)	Explaining the importance of personal hygiene especially under hyperbaric conditions.	B		
(b)	Explaining the working and the necessary safety features of a hyperbaric sanitary system; operate it under working conditions.	A		
Sub Section: E2.13 Medical lock				
(a)	Explaining the operation and safety features of a medical lock.	A		
(b)	Operating a medical lock on a pressurised diving system.	A		
Sub Section: E2.14 Communications				
(a)	Operating primary and standby communications systems using a helium unscrambler;	A		
(b)	Carrying out emergency communication procedures.	A		
Sub Section: E2.15 Emergency procedures				
	Explaining the possible emergencies which may occur in chambers and the procedures to be followed	A		
Sub Section: E2.16 Compression and Decompression				
(a)	Operating a diving system under supervision; explain abort procedures and when they would be used.	B		
(b)	Following compression and decompression schedules under supervision.	B		

MODULE E – CLOSED BALL/MIXED GAS

E2 DECK C0MPRESSION CHAMBER OPERATIONS (Continued**)**				
Sub Section: E2.17 Dive Log				
(a)	Maintaining an accurate record throughout bounce and saturation dives.	A		
Sub section: E2.18 Surface team				
(a)	Acting as an effective member of a surface support team.	A		
Sub Section: E2.19 Full diving operation				
(a)	Act as an effective member of a diving team.	A		
Sub Section: E2.20 Diving Tables				
	Understand the use of Mixed Gas Diving Tables and Therapeutic Schedules.	B		

E3 BELL DIVING OPERATIONS **Aim:** Act safely and competently both as a Diver, Bellman and Rescue diver during Closed Bell/Mixed Gas Operations, by:				
Sub Section: E3.1 Familiarisation Training				
(a)	Completing the following Training:- 1. This training must be given at shallow depths. The instructor must be in the bell until satisfied that the trainee can act safely and competently as a bellman and as a lockout diver. The trainee must complete the following minimum number of training dives in water 5-10 msw deep: • 24 bell lockouts as a diver. • 24 bell runs acting as bellman. • 5 simulated rescues of an incapacitated diver. • 12 bell runs from deck chamber to deck chamber with full transfer under pressure. 2. The first two bell lockouts at least should be completed with the instructor in the bell and may be made from 'deck to deck' without 'transfer under pressure' (TUP). All subsequent bell runs should be made using full TUP procedures. 3. A simulated simultaneous gas loss and communication failure.	A		

E3 BELL DIVING OPERATIONS (Continued)				
Sub Section: E3.2 Practical Diving				
(a)	A diver must demonstrate his competence to dive in open water as a diver, rescue diver and bellman by completing the following dives: 1. Four chamber pressurisation and TUP checks. 2. Four pre-dive bell checks. 3. Safely and competently three bell bounce dives to depths of 55, 75 and 100 msw respectively. 4. A saturation dive from a living depth greater than 50 metres from which the student must complete two bell runs to a depth greater than 50 msw. The lockout for these bell runs should be at least 15 minutes for each diver on each occasion. (See Notes). A simulated incapacitated diver rescue should be made during one lockout. **Notes** (i) The first 2 bell lockouts at least should be completed with the Instructor in the bell and may be made from 'deck to deck' without 'transfer under pressure ' (TUP). All subsequent bell runs should be made using full TUP procedures. (ii) The trainee diver may only make one lockout from the bell at any one depth during each bell run. However, the diver and bellman may change round so that each carries out one lockout at a particular depth. Further lockouts may be made on the same bell run provided the depth of the bell is changed and the full bottom door routine completed.	A		
Sub Section: E3.3 Hyperbaric monitors				
(a)	Explaining the principles of carbon dioxide and oxygen analysers.	B		
(b)	Using carbon dioxide and oxygen analysers under working conditions.	A		
Sub Section: E3.4 Bell Gas Systems				
(a)	Explaining the purpose and operation of the systems and all component Chapters.	B		
(b)	Putting diving gases on line to the diving bell and the diving breathing apparatus.	A		

E3 BELL DIVING OPERATIONS (Continued)				
Sub Section: E3.5 Bell Scrubber System				
(a)	Explaining the need for CO_2 extraction and how the scrubber system works;	B		
(b)	Carrying out canister replacement and user maintenance.	A		
Sub Section: E3.6 Heating Systems				
(a)	Explaining the need for and operation of heating systems.	B		
(b)	Explaining the action to be taken if a failure occurs in the heating system.	A		
Sub Section: E3.7 Communications				
(a)	Using main and back-up through water communications systems during bounce and saturation diving operations.	A		
Sub Section: E3.8 Emergency recovery of bell				
(a)	Explaining the various (secondary) recovery methods in common use.	A		
(b)	Explaining the purpose and methods of bell ballasting and ballast release systems.	A		
(c)	Explaining the procedures for slipping ballast in emergencies and the associated dangers.	A		
Sub Section: E3.9 The Bell Handling System				
(a)	Describing the working of the handling system and operate it.	A		
(b)	Explaining the safety precautions and back-up facilities available in case of main power system failure.	A		
(c)	Explaining and operating bell-mating interlock systems including procedures for connecting/disconnecting the mating trunk.	A		
Sub Section: E3.10 Safety Checks				
(a)	Explaining the need for pre and post-dive checks of the diving bell using a checklist.	B		
(b)	Carrying out pre and post-dive checks of the diving bell using a checklist.	A		
(d)	Explaining the action to be taken by the divers in a lost bell and by the surface team.	C		
(e)	Explaining how a wet transfer is achieved in cases where a bell is lost.	C		

E3 BELL DIVING OPERATIONS (Continued)				
Sub Section: E3.11 Emergency Routines				
(a)	Demonstrating emergency routines including the rescue of an incapacitated diver and the use of BIBS in a contaminated atmosphere.	A		
(b)	Explaining the preparation and operation of a hyperbaric lifeboat and evacuation by a diving bell.	C		
(c)	Explaining how and when a bell might be lost, the relocation procedure to be followed and various methods of bell recovery.	C		
Sub Section: E3.12 Breathing gas recovery systems				
(a)	Explaining and being familiar with the principles of such systems, their limitations and the action to be taken in the event of equipment failure.	B		
(b)	Being familiar with the potential hazards of such equipment including it's use with oxy-helium gas mixtures.	C		
Sub Section: E3.13 Survival Equipment				
(a)	Explaining the principles of and demonstrate the use of bell survival equipment.	C		
(b)	Practicing donning survival equipment.	B		
Sub Section: E3.14 Dynamically positioned vessel				
(a)	Explaining the principles of operation and potential hazards associated with diving from dynamically positioned diving support vessels.	B		
Sub Section: E3.15 Surface Team				
(a)	Acting as an effective member of the surface team in support of bell diving and transfer under pressure procedures.	A		

MODULE E – CLOSED BALL/MIXED GAS

E4 DIVING MEDICINE

Aim: Understand the additional effects of diving in excess of 50 meters using mixed gas, by:

Sub Section: E4.1 Diving related illnesses				
(a)	Understanding the physiology of HNS and HPNS.	C		
(b)	Knowing the signs and symptoms of Decompression Illness in saturation.	C		
Sub Section: E4.2 First Aid during closed bell operations				
f) a)	Understanding the administration of First Aid in Bell and Chamber.	B		

E5: LEGISLATION

Understand the National and relevant local Regulations of the Country in which training is being carried out, as they are relevant to Closed bell/Mixed Gas Diving Operations, by:

	Describing: i. The responsibilities of the Client, Contractor, Supervisor, diver and any other personnel who may be concerned with a diving operation. ii. The conduct of Surface Supplied diving operations. iii. Planning and Risk Assessment. iv. The composition of diving teams. v. The requirement for divers personal logbooks, operation logs and other relevant documentation vi. The requirement for a compression chamber. vii. The operation, maintenance and safety requirements for diving plant and equipment. viii. The medical and training requirements for diving personnel.	C		

NOTE**:** If no National Standards exist, the School must specify the standard of another Country which is used and taught during the course, and which must be specified in the Divers Logbook.

INTERNATIONAL DIVING SCHOOLS ASSOCIATION
STANDARDS & PROCEDURES

CHAPTER THREE: IDSA DIVER TRAINING CODE OF PRACTICE

International Diving Schools Association
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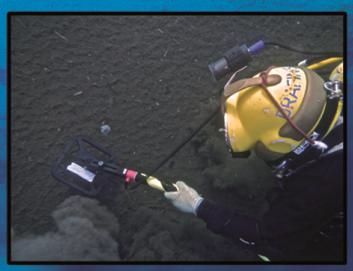
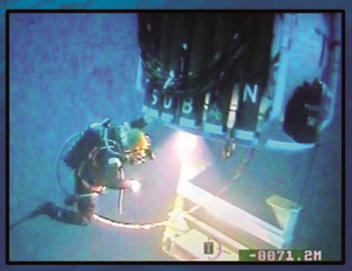
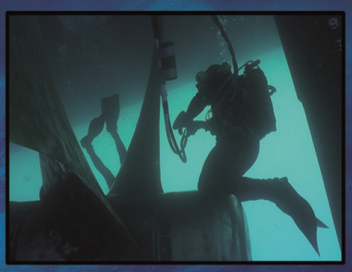
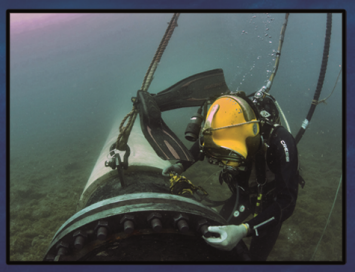
UNDERWATER TECHNOLOGY









- AIR DIVING
- SATURATION DIVING
- IN WATER SURVEY
- PIPELINES CONSTRUCTION & LAYING
- NDT
- MINE CLEARANCE

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CONTENTS

INTRODUCTION

General

This Chapter outlines the operational procedures, equipment, staff, and other facilities which are required for Diver Training Operations run by Full IDSA Members. These requirements are not exhaustive, and may be modified to take into account the staff, equipment, geographical location, dive sites and other facilities for the school concerned, where necessary with an appropriate Risk Assessment and the approval of the IDSA executive board. They are essential reading for schools considering an application for Full Membership (Diver Training), and relevant sections should be included in their documentation.

The document is formatted with the intention that members can easily refer to IDSA standards and procedures in the form of an Approved Code of Practice. Subjects are listed in Alphabetical order. A description of the (minimum) equipment specification and/or implementation is given.

The policy of the Association is that training operations should be carried out in accordance with the current best working practices in the industry.

Training Covered by the Code

This code is intended as a guide for IDSA approved training providers (or those wishing to obtain approval) teaching any of the following courses; Level 1 (Commercial SCUBA); Level 2 (Surface Supplied Inshore Air Diver); Level 3 (Surface Supplied Offshore Air Diver) and Level 4 (Closed Bell Mixed Gas Diver).

National Regulations, Standards, Codes and Guidelines

In countries where there are National Diving Regulations or Standards and there is a conflict between them and those of IDSA , the National requirements will take precedence unless during the initial audit an IDSA requirement is considered safer or more stringent..

Diving Schools Manuals and Procedures

IDSA Member training providers must follow these ACoPs and this document gives guidelines on the type and content of the diving schools manuals and procedures to be followed under the terms of approval. Further information or clarification can be obtained by contacting the secretary.

Updating Arrangements

This document is intended as a dynamic document and as such, can be updated whenever new techniques or revised procedures are required in the commercial diver-training field.

THIS CHAPTER IS ARRANGED ALPHABETICALLY

A

"A" Frames & Handling Systems
See Launch & Recovery Systems

Abrasive Cutting Discs
Discs exposed to seawater can degrade to a point of shattering so should not be returned to store after such exposure.

Accidents (Diving) actions

- Take appropriate immediate action as necessary to save life or stabilise the situation.
- Inform the base by whatever communication system is appropriate including the nature of the accident and symptoms exhibited. (If necessary complete a DMAC accident report).
- Base will then prepare to receive the casualty and alert the designated re-compression chamber if DCI involved.
- Transport the patient to Base (or recompression facility if appropriate) as soon as possible, informing the Base of departure time so that the appropriate reception arrangements can be made.

Accident and Incident Reporting and Investigation
All accidents and incidents must be reported using acceptable reporting forms. Onsite personnel may conduct initial investigations but it is essential that the Diving Safety Manager/Responsible person on-shore is informed as soon as possible and that he promptly follows the IDSA accident reporting procedure. More senior and specialised investigating personnel may also be required.

Fatal and serious accidents are to be reported to the appropriate authorities as soon as possible. The Diving Supervisor is responsible for ensuring compliance with this requirement. See also **Fatal accident.**
It is important that personnel understand the importance of reporting all accidents and incidents since, apart from the obvious, accidents and incident data is also used for improving data in Quantitative/Qualitative Risk Assessment (QRA).

Diving supervisors are required to complete a diving accident report form in its entirety at the first available opportunity. Onsite documentation should include acceptable diving accident and incident report form.

Accidents (Non-Diving)
Action in the event of a non-diving related accident or incident;

(a) Appropriate first aid action.
(b) Inform the Base of the situation by whatever communication system is appropriate.
(c) Base will make appropriate arrangements for the provision of an ambulance or other need.
(d) If the patient can be moved, transport him/her to the Base as soon as possible.

If the patient cannot be moved, make him as comfortable as possible. A nominated responsible person at the Base will make arrangements for immediate medical consultation by radio/phone and then to transport medical personnel and supplies as soon as possible

Accident reporting
The procedure for reporting Accidents and Incidents should be documented. When both National Regulations or any impending legal action allow, the IDSA Secretariat must be informed in order that any lessons learnt may be passed on to Association Members. The standard "DMAC accident report form" is recommended.

ACOP
Approved code of practice – the standard procedures recommended in the industry to ensure safe diving procedures & best practices are followed by members.

Adverse weather conditions
See Weather

AED Accelerated Emergency Decompression from Saturation
Instances have occurred in the past where saturation divers living under pressure needed to be brought to the surface urgently (faster than standard decompression tables) due to a serious emergency (such as fire on the vessel). These situations should be planned for as part of the Emergency & Contingency plan. DMAC gives guidance on AED and it is recommended members conducting saturation diver training follow these guidelines.

Air Purity Testing
The test equipment must be capable of analysing breathing air samples to an IDSA recognised standard (see Diving Procedures following)

Airlifts
Airlifts should be low-pressure devices usually fitted with a supply shut off valve within easy reach of the diver and a finger guard over the suction inlet. Suitable training must be given before underwater use.

Air supply failure
See Breathing supply failure

Air tools
Surface or underwater tools operated by air pressure. These should be well maintained, normally oil lubricated. Suitable training must be given before underwater use.

Alcohol
The action to be taken by Instructors if they consider a student may be under the influence of alcohol (or non approved drugs) which may affect the safety of himself or other students must be documented in the members Diving Training Procedures Manual.

Analysers (Oxygen; CO_2)
They should be able to indicate appropriate levels of Oxygen or CO_2 appropriate to the type of equipment. These may be either colour indicator tubes (Colorimetric) or Electrical analysers.

Atmospheric Diving suit
A tethered one man submersible in which the operators arms or arms and legs, move inside
articulated joints to provide the effort to carry out the underwater task. As the operator is not subject to a pressure greater than 100 millibars above atmospheric pressure, this is classed as manned Intervention

B

Bailout cylinders
They should of suitable material, size, shape, volume and pressure rating for the type of diving operation. It is recommended that they be colour coded to indicate the type of breathing mixture (see Colour codes); that the working pressure be shown clearly on the cylinder and the test date highlighted.

Valves may be either “A” Clamp or DIN (DIN preferred).

No diver is to enter the water unless his/her bail out cylinder contains sufficient air to reach the surface from the maximum expected diving depth in a controlled ascent, and then to remain on the surface long enough to be recovered in the conditions prevailing on the dive site.

Bailout cylinders should be filled with a breathable air or gas mixture appropriate to the type of dive. (See also DMAC PPO2 in mixed gas bailouts)

Bailout First Stage Regulators & Hoses
All bailout cylinder first stage regulators must be fitted with a suitable pressure relief valve when used with Bandmasks or Helmets in order to protect the bailout hose.
Hoses should be of suitable material, internal diameter to allow sufficient flow in emergency, and suitable pressure rating.

Basket (Diving stage) - (See also Launch & Recovery Systems)
Diver stages should have the following characteristics;

(a) Winch should be "man-riding" approved with automatic braking system
(b) Winch drum wire guard fitted
(c) Large enough for two divers
(d) Main lift wire should be non-rotating (i.e. braided cable) rated 8 x SWL attached to suitable lifting point (Visually safe eye preferred)
(e) SWL marked on stage and winch
(f) Secondary means of recovery (Guide wire system etc) to lift stage back to surface
(g) Overhead protection
(h) Prevented from spinning & tipping
(i) A gate or chain to prevent the divers falling out
(j) Inboard hand holds
(k) An on-board HP air cylinder colour coded with 1st stage regulator fitted with 2LP outlets (1 x 2nd stage hose/DV & Half mask & 2nd with needle valve + semi-rigid hose capable of inserting under neck dam)
(l) Depth gauge
(m) Fixed spare divers knife
(n) Suitable attachment point inside stage for unconscious diver
(o) 2 x Hand lamps if night diving
(p) Optional seats (2) for divers; Optional tool box below seat
(q) Appropriate test certificates in dateIf diving "mid-water" suitable device to prevent stage dropping to seabed (i.e. deeper than air diving range) if main cable/guide wire breakage

Bell (Closed)
A pressure vessel for human occupancy, which is used to transport divers under pressure either to or from the underwater work site.
Also called closed diving bell or submersible decompression chamber (SDC). These are used for Bounce & Saturation diving where the divers TUP (Transfer under Pressure) to the deck decompression chamber complex. Closed bells have suitable man ways (doors) to enable pressure to be maintained inside the bell after pressurisation and equalisation with the surrounding water enabling the diver/s to exit/enter the bell. One diver (the bellman) always remains in the bell (except in a diver rescue situation).

Bell (Wet/Open)
See Wet Bell

Bell relocation device (Transponder)
An IMO standard re-location transponder 37 kHz is fitted to all Closed (TUP) Bells.

Bend
See DCI

BIBS (Built in Breathing System)
Oxygen clean BIB system – 1 per diver + 1 spare in each DDC compartment.

Bottom Times
The following table gives a guide to maximum bottom time for various dive techniques;

Maximum bottom time limitations for surface decompression (SD), in-water decompression and transfer under pressure (TUP) decompression diving

Depth		Bottom Time Limits (minutes) See note	
Metres	Feet	TUP	Surface & in-water decompression
0-12	0-40	240	240
15	50	240	180
18	60	180	120
21	70	180	90
24	80	180	70
27	90	130	60
30	100	110	50
33	110	95	40
36	120	85	35
39	130	75	30
42	140	65	30
45	150	60	25
48	160	55	25
51	170	50	20

Note Bottom time is the total elapsed time from when the diver is first exposed to a pressure greater than atmospheric, i.e. (a) when leaving the surface with an open device; (b) on the start if pressurisation when a closed device is employed in the observation mode, to the time (next whole minute) that the diver begins decompression (measured in minutes).

Breathing Apparatus (Smoke Sets)
Where dive control is containerised, a suitable BA should be available for the occupant/s with communications to the DDC. The BA can be HP cylinder or LP supply from dedicated HP storage cylinder/s.

Breathing Mixture Supply
These must be of suitable Oxygen content, purity, pressure and quantity so as not to endanger the user.

Breathing supply failure
Terminate the dive and recover all divers. Diving can be resumed only when the primary air supply is back on line.

Breathing and Reserve Gas Supply
There must always be a suitable & sufficient quantity of reserve breathing air or gas supply. This may be stored in HP cylinders or provided by an LP compressor on a totally independent power source to the primary breathing supply (i.e if primary air is from a diesel driven compressor, then the reserve supply should be from an electrical or vice versa.

Burst Discs
These may be fitted to some manufacturers' cylinder pillar valves & are protection devises designed to "Blow out" if cylinder is over pressurised.

C

CCTV (Diver) systems
The CCTV should provide a clear picture to surface monitor/s for the supervisor together with voice communications. At least one diver in the water should have an operational Helmet Mounted camera system when using a helmet. Preferably, all helmet divers should have them.

Cessation of diving
Authority for any member of staff or a student to stop a dive in order to prevent an accident must be documented and staff aware. Authority for the Senior Instructor to terminate a dive if he considers that the weather may affect the safety of diving operations, he may terminate them either temporarily or for the day as he sees fit
accordance with recommended practices such as IMCA guidelines. Copies of test certificates, where applicable, must be maintained on the worksite and contractors base and made available for inspection by appropriate personnel and diving team.

Chambers (Recompression/Decompression/Therapeutic) Availability
See also DDC

(i) Commercial SCUBA Operations (Level 1)
For all dives a two person two compartment chamber should be within 2 hours travelling time from the dive site.

(ii) Surface Supplied Diving Operations. (Levels 2 & 3)
For dives less than 10 metres, a fully operational two person two compartment chamber should be within 2 hours travelling time from the dive site

For all other dives either a fully operational two person two compartment chamber or a two man one compartment chamber which can be mated with the nearest therapeutic chamber, should be on-site.

NOTES

(a) If the therapeutic chamber at (i) or (ii) above is not owned or rented by the School, then evidence must be provided that the School has a written, in-date agreement with the designated chamber owner/operator and that the chamber is operational and available during diver training.

(b) In the case of (ii) above, evidence must be provided to show that the School on-site chamber has been mated to the designated therapeutic chamber – for example a documented TUP drill.

(c) The use of a two man one compartment chambers – should be used for transfer only

Certification (Plant & Equipment)
All plant & equipment used in diving operations must have been examined and/or tested in accordance with the PMS

Certificate
A document that confirms that a particular test or examination has been carried out or witnessed at an identified time on a specific piece of equipment or system by a competent person.

Chain Lever Hoists
This equipment must always be maintained in good condition and operated by trained personnel. Suitable risk assessments must be made prior to deployment.

Checklists
Documented Pre & Post dive Check lists must always be used and signed off by the Diving Supervisor. Checklists can be completed by trainees under supervision until considered competent.

Classification
A diving system built in accordance with a classification society's own rules, can, at the owner's request, be assigned a class

Closed Diving Bells
See bell

Closed Diving Bell, Wet Bell, Diving Basket and Clumpweight Lift Wires
Lifting wires for "man-riding": equipment must be suitable with appropriate SWL & BS, well maintained and regularly tested in accordance with current ACoPs. A test certificate must be issued and available for inspection on the worksite and contractors base.

Clump weights (Guide weights)
These should be of suitable size, shape, material to prevent the Diver stage/Wet bell/Closed bell from spinning as well as provide a secondary means of recovery.

Colour Coding of Gas Storage Cylinders
(see Marking & Colour coding)

Company medical adviser
A nominated diving medical specialist appointed by a diving contractor to provide specialist advice

Compasses
SCUBA divers should be trained in the use of compasses. They should be clearly legible and sufficiently accurate to indicate directions to the diver.

Competent
Having sufficient training or experience (or a combination of both) to be capable of carrying out a task safely and efficiently.

Compressed Air or Oxy-Nitrogen Mixtures
When breathing air, Nitrox or other mixed gases at elevated pressures there may be a risk of Oxygen toxicity, Nitrogen Narcosis or DCI. The diving plan should therefore stipulate the mixture to be used (i.e. Air, Nitrox, Mixed gas) and especially so deeper than 50 msw /165 fsw (Heliox or Tri-mix mixtures). When breathing Nitrox the PPO_2 should not exceed 1.4 ba/ata.

Compressors; Boost pumps; Suppressors
All personnel involved in direct diving training should be familiar with the correct operation of compressors and related equipment. They should be of suitable flow, pressure and volume to provide acceptable breathing air, gas or tool supplies as appropriate to the task. Filtration equipment must be fitted for breathing air compressors.

Communications failure (Diver/Surface)
Terminate dive, and recover all divers, no further dive is to take place until satisfactory communications have been re-established.

Communications failure (Diving platform/Base)
Diving may continue provided the safety boat is operational and the sea state is suitable for a rapid transit of a casualty to base. Every effort must be made to re-establish communications as soon as possible.

Communication systems (Diver & Through Water; Deck; Recording; Other)
Hard wire or through water communication (TWC) systems should provide a clearly audible breathing pattern and voice communication. Recordings are preferred and required for Wet Bell or Closed Bell diving training. They can be retained for 24 hrs following completion of diving and if no incident arising may be overwritten during the following dives.

Containers (Dive control; Saturation control; Plant & Equipment)
Modern diving plant and equipment is often “Containerised” for ease of mobilisation/demobilisation to/from worksites or vessel etc. This also makes for ease of maintenance and operation of equipment. Where containerised control rooms are utilised, they should be of suitable fireproof material, size, shape, design and construction appropriate for the type of diving operation and fitted with Breathing Apparatus in the event of a fire, smoke or contaminated atmosphere.

Contents of Gas Mixes
See Breathing Mixture Supply

Contingency plans
Contingency plans must always be written and provided both on the worksirte as well as contractors base. These must be available for inspection by appropriate personnel and made familiar to all members of the diving team. Where appropriate, suitable drills should be performed and logged in order to ensure personnel are familiar with the various procedures

Country variations
The information contained in the IDSA Code of Practice & Equipment specifications document applies to all diving methods, SCUBA, Surface Supply; Diving Stage; Wet (Open) Bell and Closed Bell diver training run by full members. These requirements are not exhaustive, and may be modified to take into account the staff, equipment, geographical location, dive sites and other facilities for the school concerned, with appropriate documentation & risk assessments and PRIOR AGREEMENT WITH IDSA MANAGEMENT BOARD.

Cranes & lifting
Care must always be taken when cranes or lifting devices are used in conjunction with underwater operations. These should be suitable for the task required; tested (in-date) and in good condition. Suitable risk assessments must be made prior to deployment.

Currents (water)
Guidelines give maximum levels for diving in water currents in varying situations (nominally 1.5 knots but this may depend on the diving technique & other variables). Tide meters can be used to measure the current accurately.

Cutting (Disc)
See Abrasive-cutting discs.

Cutting (Thermal Arc)
Underwater thermal arc equipment must always be maintained in good condition and operated by trained personnel. Suitable risk assessments must be made prior to deployment.

Cylinders Used Under Water
Must be regularly inspected & tested in accordance with current ACoPs. A test certificate must be issued and available for inspection on the worksite and contractors base.

D

Decompression
A technique whereby personnel who have been under pressure (in the water or DDC) can be bought back to the surface (atmospheric pressure) using appropriate decompression or therapeutic tables without compromising their health or risk of DCI.

Decompression Illness (DCI)
Suitable facilities (see Chambers) & contingency plans must be written and familiar to all team members. Treatment of diver/s with DCI will be under the control of the Diving Supervisor with guidance (as required) from a Diving Doctor (by telephone, radio, on-site or whatever suitable means agreed).

Decompression Tables
The Table/s to be used should be documented and available on every work site.
Emergency tables should be laminated and in every Closed Bell.

Deck Decompression Chamber (DDC)
A pressure vessel for human occupancy which does not go underwater and may be used as a living chamber during saturation diving, diver decompression or treatment of decompression illness (DCI). Sometimes called a compression chamber, recompression chamber, deck chamber or surface compression chamber. Usually with 2 compartments, an “Inner Lock” and an “Outer or Entry Lock”. Often fitted with a Medical lock (through which articles can be transferred in/out of the DDC without the need to decompress/recompress the whole chamber); lighting, communications, 1 or more bunks/seats; BIB system; Oxygen analysis; Viewports; Pressurisation/ventilation control systems; Hyperbaric fire extinguisher; First aid kit; Heating system (if appropriate to the location) and other controls/gauges in order to maintain the atmosphere. (Medical locks are not often fitted to DDCs in the GOM).

Depth gauges (Divers)
They must be accurate & clearly readable to the diver

Depth gauges (Pneumo, Panel, Chamber, Bell)
These must meet the IDSA accuracy requirements and be examined, maintained and tested (where required) in accordance with the PMS. Life support gauges (Pneumos, Chamber, Bell) are normally tested every 6 months by a competent person and results recorded in the PMS as well as on a "Test certificate" (retained in the file). The gauge will have a "Sticker" applied too the face indicating the date of test and testers initials. They should also be marked in order to identify them in the PMS.

Diver
The diver must at all times check his own equipment before use. Report any defects to the diving supervisor immediately. Follow the diving supervisors' instructions. Descend and ascend at correct rates. Use voice communication (if provided) or line signals (as appropriate) clearly. Be aware of any underwater dangers, hazards and (if using) the position and status of his umbilical. Always consider his safety and risk to others in the water or on deck.

Divers - Formally Trained Inexperienced
Once a trainee diver has qualified he must be considered as an inexperienced diver and work/tasks etc. not be given to him/her until considered competent to undertake such work/tasks. Trainee divers cannot be used as paid or unpaid commercial divers until they hold a recognised diving qualification/certificate.

Diver Heating
Diver heating systems should be capable of supplying hot water at a flow rate and temperature appropriate to the type of dive and depth/duration. Backup heating should be considered (such as storage reservoir or 2nd machine).

Diver Medic
A Diver Medic qualification should be held by at least one member of staff at each diving site

Diver Monitoring
When using SDDE equipment, suitable means must be available to monitor the divers breathing & communications. Hat mounted cameras are preferred when using helmets. An ROV may also be of value in monitoring the diver/s

Divers Out of Closed Bell
Divers working from a closed bell must be in communication at all times with the diving supervisor. A "Round Robin" system may be used where the Bellman may also hear the communications between the diver/s and Supervisor.

Diving & ROV operations
Where both diving and ROV operations are used simultaneously, divers must enter the water after the ROV is launched and leave the water before the ROV is recovered. During combined operations the Diving Supervisor has overall control and the ROV supervisor should take instructions from him in the interest of diver safety.

Diving Baskets
See Launch & Recovery Systems

Diving Control Panel

A diving control panel for SSDE or Closed Bell diving will consist of at least the following;

- Independent primary breathing supplies inlet to each diver, pressure gauge & isolating valve/s
- Independent secondary breathing supplies inlet to each diver, pressure gauge & isolating valve/s
- An in-date calibrated pneumo gauge for each diver
- Pressure reducers & gauges where HP supplies are used
- Emergency breathing supply / crossover valve/s
- Communication system (often separate)
- Hat mounted or hand held CCTV monitors

Diving Emergencies
In the event of a diving emergency it must be clearly understood by all persons that the responsibility for managing the situation falls on Diving Supervisor.

The Diving Supervisors first and ultimate responsibility is to ensure the health and safety of the stricken diver. The Diving Supervisor is to conduct all actions to secure this objective as his primary goal. In such cases the Diving Supervisor is to be given time to get the situation under control before conducting any other actions. Only when this has been established shall other actions be taken. This may result in the Diving Safety/Operations Manager experiencing slight delays in being informed and being appraised throughout the operation. Such information transfer delays must be justified, where necessary, by the Diving Supervisor.
It is important that the Diving Safety Manager/Operations Manager be informed at the first available opportunity.

Diving Operations Log
The diving operations log is a document, which records details of the diving training or other work and forms a legal document. It should be signed by the Diving Supervisor at the end of each day/shift as appropriate.

Diving plan
A plan prepared for each dive or series of dives to brief the dive team about the work to be undertaken including the necessary safety precautions

Diving Record Sheet
Each dive station must maintain an accurate record of the dive on an IDSA acceptable format.. This will give various details of the personnel, equipment, training etc. for each dive. These records must be retained for subsequent inspection by IDSA auditors.

Diving Supervisor
He should be suitable qualified & experienced in the techniques being used. He is responsible for the safety of all divers under his control whether in the water or on deck. IDSA has acceptable qualifications/experience requirements. A list of Instructors authorised to act as Supervisors together with other training staff and their duties must be documented

Divers' Personal Logbooks
All divers, supervisors, LST's, ALST, Technicians must keep an IDSA recognised logbook up to date detailing their activities, training, experience and other relevant matters as required by law or IDSA ACoPs.

Diving Project Plan
A diving project plan is a detail of the diving operation and should be documented & agreed by all parties before diving commences. The information available at a diving site should include mobilisation and demobilisation plans, the diving technique/procedures to be used & step-by-step diver work procedures, identification of hazards and control and contingency procedures for any foreseeable emergency

Diving School
A training provider approved by IDSA to train commercial divers and/or related personnel to the syllabi & standards required.

Diving Supervisor
See responsibility of Diving Supervisor

Diving system
The whole plant and ancillary equipment required for the conduct of diving operations

Doctors
Only qualified doctors with diving medicine training, knowledge and/or experience are acceptable to IDSA as expert medical advice providers.

Dry suits
These should be of appropriate material, in good condition and tested for leaks at least 3 monthly in accordance with the PMS.

Duration of Bell Runs, Lockouts & Saturation exposures
These should follow current ACoPs and under training be normally less than current standard times.

Duties, Roles and Responsibilities
See responsibilities

Dynamic Positioning (DP)
IDSA training does not normally conduct diving operations from dynamically positioned (DP) vessels however in the event that such diving is undertaken (Closed Bell diver training for example) it is important to note that diving from DP vessels, especially surface diving operations, requires special care and supervision. In these circumstances only Diving Supervisors and Shift Supervisors with previous DP diving experience will undertake such operations. The experience level will be assessed on an individual basis by the companies Diving Safety Manager.

The Master and Watch keeping Officer (DPO) of DP diving vessels are to hold a recognised, valid & approved dynamic positioned vessel watch keeper's qualification.

Drugs
Instructors must be informed by students of any prescribed drugs they may be required to use prior to any diving operation.
The action to be taken by Instructors must be documented if they consider a student may be taking non-prescribed drugs

E

Equipment (Maintenance of)
See PMS

Man-Riding Handling Systems
See Launch & Recovery Systems

Equipment Locks and Diving Bell Trunks
See Interlocks

Periodic Examination, Testing and Certification
See PMS

Electrical Equipment
All electrical equipment must be suitable for the application and regularly (6 monthly) tested/examined by a competent person and such test/examination recorded in the PMS.

Electrical Power – Main and Emergency Supplies
Where electrical power is required to operate life support equipment (Man-riding winches, launch/recovery systems, HRLs etc.) there should be provision for a backup power source in addition to the main power source. This should be tested & maintained according to the PMS.

Emergency Breathing Gas Cylinders for Diving Stage/Wet Bell
See Reserve breathing mixtures; see Diver stage; See Wet Bell

Emergency Markings on Hyperbaric Evacuation Systems
Normally marked with 3 signs – 1 on the top of the HRL and 1 each side (Port & Starboard) to enable rescue vessels, aircraft, to identify the HRL and take appropriate actions. Other signs may also be recommended (see also HRL and IMCA guidelines on marking).

Emergency Recovery
See Launch & Recovery Systems

Equipment failure
In the event of any equipment failure, base must be informed as soon as the situation allows, and contact maintained continuously if at all possible until the failure is resolved.

Equipment and Certificate Register
See PMS

Equipment Level
Equipment for diving must be sufficient for the number of divers and include sufficient spare parts, backup equipment to cover breakdowns, damage or loss in order to minimise downtime.

Effluent and Waste Dumping
IDSA members and related personnel must comply with the standards of the country of operation, contractor policies and site rules.
Each member shall establish a strategy and management plan to ensure that there is no damage to the environment from their operations.

Exposure Limits for Air and Oxy-Nitrogen Diving
These are laid down by various bodies (such as USN, IMCA, NPD), and advise Depths/Times & PPO_2 levels for various types of diving procedures.

Environmental Considerations
See Effluent & Waste Dumping

Emergency and Contingency Plan
See Contingency Plans

Equipment Certification and Planned and Periodic Maintenance
See PMS

Emergency Training
All personnel involved in any diving operation must be made familiar with actions in the event of an emergency. It is recommended that drills should be performed periodically in order to check the actions are current and personnel kept familiar with their duties.

Explosives
A normally practical explosive training is not permitted. In these instances divers should still be trained in the theoretical knowledge of common explosives used in the industry, their safe handling and contingency plans.

F

Free Flow Helmets
Diving helmets where the breathing mixture (usually air) flows through the helmet constantly rather than via a “Demand valve”.

Filters (Compressor)
Breathing air compressors should be fitted with suitable filtration equipment to remove oil, dust, water and contaminants in order to ensure the air quality meets IDSA standards

Filters (Compressor)
See Compressors

Fins
Fins should be of suitable material, size and shape for the type of dive.

Fire Fighting equipment & systems
On all dive sites, including vessels/inflatable's, appropriate fire fighting equipment or systems should be available or fitted.

Fire actions
These procedures should be documented and all personnel made familiar with them. Suitable "Fire Actions" notices should be displayed. Actions;

(a) The Supervisor must terminate all diving and recover the divers. (Any decompression requires appropriate action/recompression etc subject to the severity of a fire).

(b) The person discovering the fire should make every effort to put it out and inform others/activate alarms.

(c) The Diving Supervisor should if necessary, and in the priority he considers the situation justifies, consider the following actions:

- Obtaining assistance by radio either from the Base or from the Port Authorities.
- The evacuation of personnel.
- Re-establishing diving once the fire is extinguished (assuming minor and no personnel, diving plant/equipment compromised).

First Aid
First Aid trained personnel must be on the diving site with acceptable First Aid equipment to hand.

First-Aid/Diver Medic Training and Competencies
All divers should undergo an approved First Aid course where certificates are issued upon completion. These may need to be renewed on a regular (for instance 2 yearly) basis. In addition it is recommended that at least one member of each dive team (2 for Saturation diving) undertakes an approved Diver Medic (Advanced First Aid) course. This should be in addition to the Supervisor (if he has undertaken one) as medical care may be required in a DDC under pressure.

First Aid Kits
DMAC have guidelines on suitable First Aid equipment for various diving sites. These kits must be regularly checked & maintained in accordance with the PMS.

Fittings (Hose end; Brass; Bronze; SS; other)
All hose fittings must be constructed of suitable material for the application

Fixed Platforms
Offshore structures on a fixed location. Often "pinned" to the seabed by piling.

Flag (Diving)
The occasions when the Diving Flag, Day signals or lights shown should be shown. In calm conditions a rigid diving flag should be used. International Code Flag "A" is the standard signal used for underwater operations.

Flying after Diving
There may be a risk of decompression illness (DCI) associated with flying or high altitude travel (over mountains for example) where residual inert gases (Nitrogen/Helium) may still be in the divers body. The Diving Medical Advisory Committee (DMAC) have produced recommendation for times to wait before flying after diving and Diving Supervisors should be aware of these.

Full-face masks
A diving mask which covers the divers eyes, nose & mouth as opposed to the "half" mask used in SCUBA diving. The full-face mask often includes communication equipment (microphone & earphones).

G

Gas mixtures
See Breathing Mixture Supply

Gauges (Pressure; Depth; Life support; Diver)
See Depth Gauges

Guide wires
See Launch & Recovery Systems

H

Habitat
A 'dry' subsea compartment located on the seabed or a structure to support divers whilst repairing pipelines or subsea equipment. Divers enter the Habitat by either mating a bell, or through water transfer. There are a wide variety of habitats.

Hand tool/s
Tools used on the surface or underwater which are not "powered" by mechanical means (Air, Hydraulic means etc.)

Half masks
A simple mask commonly used for SCUBA or recreational diving/snorkelling. The faceplate should be made from a non-shattering, clear material, not glass.

Harnesses
Dedicated harnesses Should always be worn.

Hazardous Marine Life
All personnel should be briefed and familiar with any hazardous marine life likely to be found ast the diving site. Contingency plans should include actions in the event of illness or injury so caused.

Helmets & Band masks
Usually incorporates a demand valve breathing system (although some may be free flow – see Free flow Helmet), communications systems, anti-fogging system and umbilical/bailout connections and associated valves. Band-mask are usually retained on the divers head by means of a neoprene hood with zipper at the rear to facilitate entry. Helmets usually have some form of "Neck dam" clamping system.

High-Pressure Water Jetting
See Water Jetting

Hoods (Dry)
When using "Dry hoods" there is a risk of obstructing the outer ear canal creating a pressure imbalance or even Barotrauma. Divers should be trained and aware of the correct use of dry hoods.

Hoses (Gas transportation)
Hoses used for breathing air, mixed gas or pure Oxygen must be of suitable construction, material, pressure and flow rating for the intended purpose. They must also be periodically examined and/or tested in accordance with the PMS.

Hot Water suits
A range of appropriate sized suits should be available and properly maintained according to the PMS.

Hot Water Systems
The system should provide sufficient flow rate and temperature to heat the number of divers using hot water suits at any one time. It should have suitable safety devices to prevent scalding of divers. Sufficient reserve of hot water is recommended to allow the diver/s to be recovered to a place of safety.

Hot Water supply failure
Terminate the dive & bring all divers inboard until the supply is re-established.

Hydraulic equipment & tools
(See **Tools Training**)

Hyperbaric Rescue Systems (HRS; HRL; HRC)
In the event of any emergency where divers are under pressure (in saturation or decompressing for example) and the vessel/platform/structure is in such danger that evacuation is required, hyperbaric evacuation in a transportable compression chamber is the preferred option.

Saturation diving requires TUP capabilities so some form of HRS will always be onboard and fully operational. This usually forms part of the Saturation "Complex" (chambers).
In the extremely rare case where a hyperbaric evacuation is not possible the personnel in the chamber are to be decompressed, evacuated and transported to a suitable compression chamber whilst breathing oxygen for further treatment. The evacuation and recompression is to be treated as an urgent life threatening event and appropriate actions to reduce the potential medical implications taken as necessary. This will also be part of the documented emergency actions planning, Emergency (Abort) decompression table/s should be available on-site.

Where a TUP and a transportable chamber (HRS) is used, the occupants are to be evacuated in the most appropriate manner consistent with safety procedures.

I

Inshore diving
Inside territorial waters including docks, harbours, canals, culverts, rivers, estuaries, lakes, reservoirs, dams, flooded tunnels or tanks.

Instructor Duties (Conflict)
Instructors should not have conflicting duties during a course
Instructors
Staff used as standby diver/s must be qualified to at least the same standard as the level being taught.

Incident reporting
See accident reporting

Interlocks
All decompression/recompression chamber medical locks and closed bell TUP clamps must be fitted with mechanical interlocks which prevent them from being opened whilst under pressure. The presence of pressure should be indicated clearly to operators.

Impressed Current Systems
Devices used to protect underwater equipment and structures from corrosion. They generally use electrical currents so should be considered part of the pre-dive risk assessment and their operation discussed with the operator.

Instructor/Student ratios
For in-water SCUBA training and assessment sessions the instructor/student ratio should not exceed 1:2

J

Job Safety Analysis
See Risk Assessment & Toolbox talks

K

Knives
Every diver (including the standby diver) must always wear a functional, maintained sharp, knife, as a safety device should he become entangled/fouled in an underwater hazard. These are usually in a scabbard, may have a lined attached and worn where easily accessible.

L

Language and Communications
During any diving operation a common language must be agreed and used between team members and other personnel involved. Historically in emergencies personnel have reverted to their mother tongue, which has contributed towards the accident.

Launch & Recovery Systems (LARS)
IDSA guidelines recommend winches used for deploying and retrieving personnel should comply with current ACoPs & good practices. A backup (secondary recovery) system will be pneumatic or hydraulic powered such as guide wire/weight system. Diving personnel baskets will usually be constructed of steel and will be enclosed on three sides to half height by steel mesh and fitted with a drop bar or safety chain on the fourth side. Steel grating shall form the floor and overhead protection. Inboard handholds must be fitted. The basket is to be big enough for two fully equipped divers and will be fitted with a minimum of one 50 litre x 207 Bar air cylinders charged to a minimum of 80% and supplied with 1st stage regulator with demand valves, while the other side should be fitted with an obviously accessible valve and a length of hose which is rigid enough to be pushed up inside the neck seal of a diving helmet. There should also be a contents gauge and preferably a half mask available for use with the SCUBA mouthpiece. The system is to comply with current ACoPs..

The basket is to clearly display its safe working load. For deeper water and large deployment heights a form of spinning restraint (guide wire system) will be incorporated. Guide wire systems must be capable of recovering the diving personnel basket to deck level. Divers are not expected to climb more than 3 metres up a ladder.

Where appropriate, a diving ladder should be deployed in addition to other recovery systems. Ladders will be fitted with a standoff to allow mounting at an appropriate angle; they will be of rigid steel construction, firmly deployed. The rungs shall be adequately spaced from the ladder bottom up to deck level. The ladder shall extend to 1.5m below water level with hand holds/rails extending 1.5 m above deck level.

Life Support Personnel
ALSTs (Assistant Life Support Technician) and LST (Life Support Technician) must have had acceptable training and hold appropriate qualification/certification prior to undertaking those duties. The “IMCA Career Structure” for such personnel is highly recommended.

Lift Wires
See Launch & Recovery Systems

Lifting appliances
See “A” Frames plus Launch & Recovery Systems

Lifting bags (Air)
Using lifting bags underwater can be hazardous and has proved so in the past. Divers should be trained in the correct use of lifting bags in order to prevent uncontrolled ascent of the bag/s.

Lifting Equipment Design, Periodic Test and Examination Requirements
Lifting equipment must be maintained and tested in accordance with National Regulations and Manufacturers instructions. See also Deployment & Recovery Systems

Levels of Oxygen in Helium
Common practice is to have a minimum of 2% Oxygen in any Heliox mixture to prevent Anoxia (which has led to some divers deaths in the past). For extreme deep diving it may be necessary to have less than 2% in order to breath the correct PPO_2
If pure Helium is required on the diving site, special precautions are recommended including but not limited to a lockable “King Valve”; Pre-use analysis; A documented record of start, use and end pressures & risk assessment if there is any possibility of pure helium being fed to the diver by accident.

Live-Boating
Term applied to for diving operations from a vessel while it is underway. It can also include diving from a DP vessel on auto track

Length of Divers' Umbilicals
For air diving the maximum normal depth is 50 msw (165 fsw) so the diver umbilicals should make this depth attainable without effort.
For bell diving, the standard umbilical length is 29 m / 95 ft.
The Standby diver/Bellman umbilcals should alway be 2 m / 6.5ft longer than the divers.
When diving from DP vessels, the divers umbilical must be at least 5m / 16.5ft shorter than the distance to the nearest hazard (thruster for example). This must be calculated and documented by the diving supervisor and made familiar to any tenders or 2nd diver in the water tending the divers' umbilical. Risk assessments should take into account the fact that the umbilical is positive, negative or neutrally buoyant in the water. Umbilicals should have clear markings indicating lengths paid out. (See **Umbilical marking**)

Line Signals
IDSA recommends the simple use of at least the following line pull signals; (additional signals can also be used)

O	1 pull	**O**K, all is well or stop
A	2 pulls	**A**llow slack – moving forward etc
T	3 pulls	**T**ake up slack
H	4 pulls	**H**elp

Logbook
See Divers personal logbook

Lost Bell/Emergency Bell Recovery Contingency Plans
Detailed contingency plans must be documented and all team members aware of the procedures. Periodic drills should be carried out to ensure the plans are current and personnel familiar with them.

Lost diver
All diving support vessels and craft are to carry a readily deployable lost diver marker that is to be immediately available at the diver deployment station at all times.
If a diver is lost during operations immediate action is to be initiated to locate and recover.
The procedure for conducting a lost diver search and recovery is:
If the diver fails to respond to:-
Voice comms
Lifeline/Umbilical signals
Emergency call up procedure

Immediately deploy a lost diver marker at the last known position of the diver.
Look for tell tale signs of divers position i.e. bubbles.
Deploy the standby diver down the lost diver marker line to commence an immediate circular search.
If during the conduct of the circular search or other search scheme the diver is not located, a large area search is to be implemented and additional personnel may be required. The Diving Safety Manager/Responsible person onshore is to be informed immediately.
Details to be provided to the search and rescue team and the Diving Safety Manager are:-

- Time of Loss
- Location including latitude and longitude at time of loss.
- Wind strength and direction at time of loss.
- Current strength and direction at time of loss.
- Tide position and movement direction at time of loss.
- Depth of water at time of loss.
- Equipment worn by diver
- Equipment available at site
- Area already searched

M

Maintenance - See also PMS

The safety and efficiency of a diver depends to a large extent on his equipment and tools, it is essential therefore to have a system of maintenance which ensures that they are properly inspected, tested, repaired and are in first class condition.

When equipment is hired it is essential that it is supplied with the documentation which confirms that it has been tested and inspected in accordance with National Safety and any other relevant regulations. This documentation should be stored with the Maintenance Schedule and where appropriate, copies kept on the dive site.

Marking and Colour Coding of Gas Storage Cylinders, Quads & Banks

IDSA require that all cylinders, quads and banks of diving gases used during IDSA diving operations comply with standard marking systems. These are shown below;

Note: Where National Laws/Regulations vary from the below recommendations, National Laws/Regulations take precedence and all team members should be made aware of any variations in order to prevent accidents caused by the use of incorrect mixtures. Cylinders (or Quads) are often marked by different colours applied to (a) the Body and (b) the Shoulder (or top). In addition the name & chemical formula of the gas is best stencilled on the cylinder. This system is to prevent misuse which in the past has caused injuries sometimes fatal.

Helium (He) BROWN Body BROWN Shoulder Quads – Brown band **Diving Oxygen (O_2)** BLACK Body WHITE Shoulder Quads – Black band **Helium & Oxygen mixtures (He/O_2)** BROWN Body BROWN & WHITE quarters Shoulder Quads - short (8"/20cm) alternating bands **Nitrogen (N_2)** GREY Body BLACK Shoulder Quads - short (8"/20cm) alternating bands Oxygen/Helium/Nitrogen Mixtures ($O_2/He/N_2$) BROWN Body BLACK, WHITE & BROWN Thirds on shoulder Quads: BLACK, WHITE & BROWN short (8"/20cm) alternating bands	**Air (Breathing Air) & Oxygen/Nitrogen Mixtures (N_2/O_2)** GREY Body BLACK & WHITE quarters on shoulder BLACK & WHITE short (8"/20cm) alternating bands Air quads marked "Air Breathing Quality" * Nitrox Quads marked ("Nitrox" with ratio O_2/N_2) **Carbon Dioxide (CO_2)** BLACK Body GREY Shoulder Quads - short (8"/20cm) alternating bands + CO_2 Name **Marking and Colour Coding of Gas Storage Cylinders, Quads & Banks** (Continued) **Calibration Gases** PINK Body PINK Shoulder

Note Industrial Oxygen is often marked differently to breathing (diving) oxygen, being a black body and black shoulder. Care should be taken to ensure that oxygen intended for diving is stored in correctly marked cylinders.
The colour coding of cylinders containing calibration gases may vary from the above. In addition, some are marked with yellow shoulders for toxic contents and red shoulders for flammable contents. Labels and marking should be carefully checked & all gases analysed before use.
In most countries the first gas marked is usually the Oxygen (i.e. 10/90), however, in the USA this is the **opposite** and team members should be made aware of this. There is also no standard single colour code in the USA; cylinders usually have labels indicating the contents. All supplied gases MUST be analysed before use and those being supplied to the diver or DDC at the time of supply.

Medical and Physiological Considerations
All divers must hold an in-date commercial diver medical certificate (normally renewed annually). In addition Supervisors should check a diver is fit to dive and if the diver feels he is not, he must make this known to the Supervisor before.

Medical Checks
All personnel involved in diving operations should hold an appropriate medical examination certificate normally carried out annually.

Medical Equipment
Medical equipment held on-site and at bases should meet current DMAC guidelines.

Mobilisation
Should be completed and all plant & equipment fully operational before diving commences.
Mud/Cuttings from Drilling Operations Confined space diving
Risk assessments should be conducted before diving in the vicinity of drilling mud/cuttings due to the possibility of contact by the diver/s having adverse health effects.
Similarly risk assessments and documented procedures if diving in confined spaces.

Mobile telephones
All personnel should be made aware of instructions the use of mobile telephones on a diving site during diving

MPI (NDT) equipment
Should be suitable, tested & maintained in accordance with the PMS.

N

Non-return valves (NRVs)
Normally fitted on diving control panels to prevent accidental mixing of gases and or oxygen, Nitrox etc.

O

Oxygen
Although necessary to support life, Oxygen (pure or in rich gas mixtures) can be dangerous if the rules for safe use of oxygen are not followed. All personnel who may use or come into contavct with pure or rich oxygen mixtures & equipment must be fully trained and aware of the safe use of these gases.

Oxygen systems
These systems must be designed and constructed of suitable materials and cleaned in accordance with current code of practice and maintained according to the PMS.

Offshore Diving
When conducting diving “Offshore” or in the vicinity of Offshore operations, current ACoPs relating to such diving practices should be followed.

Onshore Diving (Inshore)
When conducting diving “Onshore” or in the vicinity of “Civil engineering” or inshore operations, current ACoPs relating to such diving practices should be followed.

Oxy-Arc Cutting and Burning Operations
These techniques hold inherent risks if safe practices are not followed. It is therefore all personnel involved in the IRM, setting up, testing or use of this equipment are properly trained and familiar with the equipment and methods of use.

Over-Side Loads/Scaffolding and Working
Where equipment is to be lowered or lifted to/from personnel working underwater, due diligence must be taken to ensure no risk of injury caused by loads or equipment being dropped, caused to come into contact with, or raised without warning.

P

Panel (Diving control)
See Diving Control Panel

Personnel Numbers
See Team Sizes

Plant & Equipment Maintenance
See PMS

Planned Maintenance Systems (PMS)
There are many ways of operating a maintenance system, on computer, using a card index system, using a 'Kalamazoo', a register book, and others.

The core of most maintenance systems is a central Register, which is usually set on an annual basis. A simple system using a book, (often A3 in size) - see the following example would contain a list of all equipment and plant, which might be categorised as follows:

Category 1	Permanent items with serial numbers allocated by the manufacturer and which have legal test requirements
Category 2	Permanent items which may or may not have their own Serial Numbers, without legal test requirements, but which are attractive/valuable, and can be re-paired.
Category 3	Consumables - issued and not expected back

Categories 1 and 2 are included in the register sub divided as convenient to the Contractor depending on the amount of equipment held and many other factors. Category 1 items are often listed separately as government inspectors and insurance engineers, are mainly concerned with them.

Serial numbers are often small, and sometimes in inaccessible places which makes them very difficult to read. It has been found helpful to allocate a Company number to all items, and marking them in a place which is clearly visible, and where it will not wear of after a few weeks.

The Register which lists all items held by the company which need to be monitored on ' maintenance sheets' contained in a Maintenance Register. The serial numbers, company numbers, and other useful information of all the items are recorded and the sheets provide a method of recording tests, repairs and services carried out, and the dates tests and services are due. A simple method of providing this record is to ensure that a work or job sheet is completed for all tests, servicing etc. carried on any piece of equipment in the register.

Each work sheet can be given a unique 4-figure reference number, with a suffix indicating the work, which has been carried out, for example:

F	Filter Change	O	External Repair	S	6 Monthly checks
G	Pressure Gauge Test	P	Air Purity Test	T	Air Test (Pneumatic)
H	Hydraulic Test	R	In House Repair	V	Visual Examination

On the next page is an example of a Maintenance Sheet and from it the history of an item can readily be traced, for instance using the simple code above this sheet shows that the ScubaPro regulator in line 1

- Was given a 6 monthly check in January, and the details are available in WorkSheet 1237
- Was repaired in-house in March, details in Work Sheet 1367
- Is due for its next 6 monthly check in July

A central register of worksheets should be kept so that numbers can be allocated readily and not duplicated; it also provides the date of the work. The worksheets themselves can either be filed separately for each piece of equipment, numerically, or in some other convenient way.

Using the register it is relatively easy to list the items, which require test or servicing in the future, and ensure that they are called in for check, service etc.

AN EXAMPLE OF A MAINTENANCE REGISTER SHEET

Type¤	Maker¤	Serial·No¤	Working·Pressure¤	¤	Date¶Received¤	Company·No¤	Jan¤	Feb¤	Mar¤	Apr¤	May¤	Jun¤	Jul¤
PERSONAL·EQUIPMENT¤													
REGULATORS¤													
Single·Hose¤	Scubapro¤	12344¤	¤	¤	22·Feb·2002¤	44¤	1237S¤	¤	1367R¤	¤	¤	¤	S¤
Octopus¤	Scubapro¤	24786¤	¤	¤	1·Nov·2001¤	67¤	1290V¤	¤	¤	¤	S¤	¤	¤
DIVING·CYLINDERS¤													
12·litre¤	Luxfer¤	H1160¤	200·bar¤	¤	29·May·1999¤	146¤	¤	¤	¤	¤	¤	V¤	¤
HELMETS:·SUPERLITE·(KMB·17B)¤													
10·litre¤	Faber¤	97810¤	232·bar¤	¤	21·Jan·2002¤	97¤	1297S¤	¤	¤	¤	¤	¤	V¤
PLANT¤													
Type¤	**Maker¤**	**Serial·No¤**	**Working·Pressure¤**	**Output¤**	**Date·Received¤**	**Company·No¤**	**Jan¤**	**Feb¤**	**Mar¤**	**Apr¤**	**May¤**	**Jun¤**	**etc¤**
COMPRESSOR·Set·(RED)¤													
Compressor¤	Ingersoll-·Rand¤	248960¤	14·bar¤	70cfm¤	3·Sep·1998¤	74¤	1304R¤	¤	¤	SF¤	¤	¤	¤
Receiver¤	Unknown¤	GB·178369¤	14·bar¤	¤	21·Aug·1998¤	74¤	¤	¤	S¤	¤	¤	¤	¤
Prime·Mover¤	Western¤	2/291044¤	¤	¤	3·Sep·1998¤	76¤	¤	¤	¤	S¤	¤	¤	¤
HP·COMPRESSOR·SET·(WHITE)¤													
Compressor¤	W·&·J·Trident¤	48079·(166)¤	232·bar¤	10cfm¤	2·Nov·2000¤	81¤	¤	¤	¤	¤	SF¤	¤	¤
Prime·Mover¤	Eastern·Motors¤	42971/2¤	¤	¤	2·Nov·2000¤	81A¤	¤	¤	¤	¤	S¤	¤	¤

Purpose-Built Diving Support Vessels (DSVs)
These are large Ocean going vessel with built in (often below decks) diving systems comprising a Decompression chamber complex (several chambers interconnected), Diving bell, HRL and ancillary equipment. The vessel is dedicated to offshore deep diving operations.

Permits to Work
Many offshore operators & owners of installations require a "Permit to Work" system whereby certain procedures must be undertaken and "signed off" before any work commences. Example would be on a Treatment & Production platform where there might be a risk of explosive gas & air mixtures in the vicinity.

Panel
See Diving control Panel

Pipework
See Hoses

Pony Cylinders
An independent HP cylinder used as a backup breathing air supply when using SCUBA. Fitted with an independent 1st & 2nd Stage breathing system.

Pressure Relief Valves (PRV's)
A valve designed to open at a pre-set pressure usually to protect the equipment (chamber, cylinder, compressor, hose, gauge, pipework etc) to which is connected/installed.

Pressure vessels (See also PVHO)
The can be low or high pressure containers used as storage for breathing supplies or for the operation of air tools, backup motors, launch systems etc.

Pressure vessel for human occupancy (PVHO)
Usually a Decompression chamber or Diving Bell.

Q

Quads
See Gas cylinders

Qualifications & Competence
Staff, Instructors, standby divers etc should be suitably qual;ified & competent to carry out their duties.

Quantity of Gas
Guidelines are laid down for the recommended minimum quantities of gases on any remote worksite (such as Offshore).

R

Receivers (Air storage)
Often Low Pressure storage pressure vessels used for divers breathing air or powering air tools.

Reclaim systems
Used mostly for offshore diving where Oxy/Helium is the breathing mixture in order to minimise the cost of Helium.

Regulations
The reference details of all relevant National Regulations should be documented. In Countries where there is minimal or no appropriate legislation, this Code of Practice should be followed. Additional guidance is available from the IDSA Secretariat.

Report writing
All divers should be trained in report writing in order to provide accurate & concise information from for example an NDT survey.

Reporting and Investigation of Incidents
See accidents

Reserve systems & supplies
Every diver (including standby diver) must have a reserve breathing supply. In the case of SCUBA diving this may be either a totally independent cylinder ("Pony" cylinder) or reserve stored in main cylinder operated by a valve ("J" valve or similar). In the case of SDDE & Closed Bell divers, they must have both an independent secondary breathing supply (connected to the Diver panel on the surface) and a "Bailout" cylinder filled with suitable breathing mixture for the type of dive to be performed. These supplies should be recorded on the dive log including the type of gas (Air, Nitrox, Heliox etc.) and the start/end pressures.

Restricted Surface Visibility
Conditions considered to be unsafe for diving such as fog which may restrict safe recovery of diver, personnel falling overboard or evacuation of injured person by helicopter.

RIB
Rigid Inflatable boat

Rigging, Ropes, Cordage & Wire
Equipment used in conjunction with diving operations, lifting & lowering tools or equipment and including but not limited to Shackles, Natural or man-made ropes, Wire rope, Slings, Pulley blocks, Tirfors, "Come-alongs", Chain-Blocks, Lifting Bags, Cranes & Winches.

Risk Assessment
The occasions when to carry out a Risk Assessment (also known as a Job Safety Analysis) should be carried out Standard or Generic Risk Assessments for all sites or tasks.

Rope work (see also Rigging)
The use of natural or man-made ropes in attaching or holding tools, equipment, vessels etc in position by conventional knots, lashing, whipping or common means.

S

Secondary recovery of ill or injured diver
A suitable secondary means of recovery of an injured diver from the water must be readily available at the diving station and regularly used in drills. A stretcher is also recommended on-site. (See also First Aid Kit and Oxygen Administration sets).

Safe Use of Electricity
Team members, both divers in the water, and surface personnel, often use electrical equipment so there will always be a risk of electric shock due to misuse, poor maintenance or breakdown. There are excellent guidelines on the safe use of electricity underwater which should be followed. All electrical plant & equipment must be regularly examined and/or tested in accordance with the PMS. Team members should all be trained in First Aid including the causes and treatment of electrocution. See also Battery Charging; See also Cutting underwater.

Safety boat (Fast transport)
Where diving is carried out from a remote location, "daughter-vessel" or SRP, there should be suitable rapid transport to medical aid and or a DDC as appropriate in the Emergency & contingency plans. Normal transit time is under 15 minutes.

Sanitation systems (Toilets; Sinks; Showers)
Part of a Saturation Diving system providing sanitation and washing facilities for the diving team under pressure in the diving complex.

Saturation Diving
This technique is used to optimise the time divers can spend underwater/under pressure. It involved the use of a TUP closed diving bell, Decompression chamber/s, HRL, Life Support Systems, additional equipment & personnel to operate 24 hrs per day. When this saturated state has been reached the time required for decompression is the same no matter how long the divers remain saturated. A closed diving bell is used to transfer divers under pressure to and from the worksite. The breathing medium is usually Heliox, although shallower air saturation dives are sometimes carried out.

SCUBA
Diving equipment where the supply of breathing air is carried by the diver in SCUBA cylinder/s, making him independent of any other source. SCUBA diving is generally a recreational technique and considered an unsafe working practice in commercial diving except in certain situations such as Scientific dives, Archaeological diving & Media (Film) diving.

SCUBA cylinders
High Pressure (200 to 300 bar) steel or alloy cylinders designed to store breathing quality air for use after pressure reduction by the diver underwater.

SCUBA Replacement (SRP)
This technique is where SCUBA diving equipment is replaced with SSDE equipment operating from a suitable small vessel. When operating away from a shore-based location or "Mother-Ship", a fast safety boat is to be available at a dive site capable of transporting an injured person to the nearest aid point within 15 minutes.
The minimum support equipment listed below is to be maintained in an operational condition at all times. The Diving Supervisor is to ensure it is inspected before each use and is stowed within the craft correctly. Monthly checklists are to be completed and returned to the person responsible on shore.

2 x Oars 5 litres drinking water 6 x Handheld & 4 rocket flares, heliograph, whistle Waterproof torch with 4 spare bulbs and 4 spare batteries 6 x thermal reflective space blankets First Aid kit Oxygen administration set (when diving) 20m rescue line and quoit Baler Inflatable craft repair kit & pump Tool kit – inc spark plugs & spare pull start rope	Safety knife Rigid 'a' flag and pole for same Radar reflector and pole for same.....(night diving) Strobe lights.....(night diving) 10 x anti sea sickness tablets Hand held divers compass Signal card Radio with water proof cover and one fully charged spare battery. 2 x full fuel tanks & 2 x fuel leads lost item marker

When carrying out SRP operations the following points should be given consideration:

- Safe launch and recovery limitations of daughter crafts
- Man-riding cranes and crane drivers maybe required
- Limited working depth
- Decompression diving
- Restricted to daylight hours and good visibility only, unless suitable power provided
- Risk assessment of diver recovery & drill conducted to ensure procedures work
- Propeller guards must be fitted to protect diver/s & equipment coming into contact
- Potential for overhead working and dropped objects
- Exposure to environmental forces and elements
- Mooring arrangement

Sea State
The conditions prevailing or which can be reasonably predicted (such as from local knowledge or weather forecasts). The conditions form part of the pre-dive risk assessment and is the decision of the diving suprviusor whether to commence diving. Other persons such as Diving Superintendents, Clients representatives, Ships captain, Master of a vessel, OIM or Toolpusher, Safety delegate can request diving to cease or not commence at any time in the interest of safety.

Searches
Divers undergoing training should be taught the various types of underwater search techniques, including, but not limited to, Circular search, Jackstay (J) search, Snag-line search, Spiral box search, Compass grid search, Ladder search, Swim line search, Directed search using line signals or communications. Other types which may only require explanation includes Towed searches, Current drift search, Depth contour searches.

Seismic Operations, Sonar Transmissions and Piling Operations
There are guidelines regarding diving in the vicinity of these and risk assessments should be undertaken to prevent diving where these operations may cause injury.

Standby Diver
The SB diver should be:

- An experienced diver qualified to the level being taught or greater until the students are considered competent.
- Exercised from time to time.
- Dressed in at least the same level of equipment as the divers, and at immediate readiness to dive except for mask or helmet, which should be ready to don.
- Provided with instructions for his state of readiness in relation to the risk assessment
- Provided with shelter as appropriate to the environmental conditions
- Be in contact with the Diving Supervisor

Staff numbers
The minimum number of staff and students who must be present for a dive to take place must be documented unless defined in National Regulations and of at least the same or greater than IDSA standards. IDSA recommends an Instructor to Student of ……..

Spare Parts
Sufficient spare parts for diving equipment, plant and machinery must be maintained in order not to compromise safety.

Small boat handling
Where National Regulations allow, divers should be trained in the use and handling of small boats. This should include (but not limited to) Preparation; Crewing; Starting; Coming along side; Stopping, Emergency stop; Man-over-Board drill, Basic maintenance including engine & fuel inspection and simple repairs such as spark plug change. Where working away from a base or at sea, reliable communications are recommended between the base & vessel (VHF, Mobile phone etc).

Smoking
Al personnel should be made aware of instructions concerning non-smoking on a diving site.

Still Photography
Divers will be taught still photography. The modern trend is to use Digital cameras in underwater housing with strobe lighting as necessary. Training should include basic “Stand-off”; “Close-up” and “Mosaic” techniques.

Storage Cylinders
See Gas cylinders

Supervisor Injury/Illness
In the event of the Diving Supervisor being injured or becoming ill and unable to continue supervision of wet diver training, diving should cease until a replacement diving supervisor takes over.

Suit inflation
A system when using “Dry” diving suits (Constant volume) whereby the buoyancy of the suit can be controlled by the wearer. Usually by means of a supply from the umbilical, mask/helmet or a dedicated cylinder.

Surface Decompression
Normally this technique need not be used but can be simulated using “imaginary” wet stop/s and actual surface chamber fitted with the appropriate equipment (Oxygen BIBS etc.) and appropriate decompression tables.

Surface Diver Deployment
See Surface Supplied Air Diving & Standby Diver

Surface Supplied Air Diving
This technique uses breathing quality air supplied to the diver/s by umbilical via a control panel from surface equipment usually HP Storage cylinders or direct from HP (reduced pressure) or LP compressors (or a combination of both). (see also minimum quantities of gas).

Surface Supplied Mixed Gas Diving
This technique is similar to Surface Supplied Air Diving except the breathing medium is mixed gas (either Nitrox or Heliox mixtures). Often used in combination with a Wet (Open) Bell.

Survival equipment
Equipment that may be required in the event of an emergency such as (but not limited to) fire, collision, abandonment, PPE, Lost (closed) bell.

T

Team Sizes

Inshore/Offshore Diving
Minimum of 5 (Diving Supervisor, working diver, stand-by diver, tender for working diver, tender for stand-by diver).Additional personnel may be required to operate diving plant & equipment.

Surface Mixed Gas Minimum of 5 (Diving Supervisor, working diver, stand-by diver, tender for working diver, tender for

Closed Bell Diving
Minimum of 7 (Diving Supervisor, Life Support Supervisor, Life Support Technician, 2 Bell divers in bell, 1 diver on surface and tender for surface diver). Additional personnel may be required to operate diving plant & equipment.

Technician
A suitably qualified (by formal training and/or experience) person competent to inspect, repair and maintain all or part of the diving plant & equipment.

Tenders
Tenders are often members of the diving team who tend the safety lines or umbilicals of the diver in the water. The Tender must be properly trained, competent to undertake the role, conscientious in its performance and keep the Diving Supervisor informed of the status of the safety line or umbilical. Any situation which may affect the diver must be reported on immediately. In addition, the tender will be trained in assisting the diver to dress & undress and report the progress using standard “call out” procedures & terminology.

Test certificates (Equipment)
All equipment used in conjunction with underwater operations must be examined & tested in accordance with the PMS. Records must be kept and available for inspection by authorised personnel.

Therapeutic Chamber
A DDC used to recompress an ill or injured diver to undergo a therapeutic treatment using approved tables. These chambers must have at least 2 compartments, fitted with at least one bunk on which the patient can lie down and a seat (or additional bunk) for the tender/diver medic or doctor. The chamber must be fitted with a medical lock (for passing in Medication, Drinks etc) and at least 2 operational BIBS in the main compartment and at least 1 in the entry lock. (Spare functional BIBS should also be kept on the worksite). The BIBS must be capable of being supplied and providing the patient and tender (at the same time) pure Oxygen and/or therapeutic gas mixtures appropriate to the treatment table. In addition there should be a communication system, lighting, an Oxygen analyser (internal PPO2 or external PPO_2 or %), First Aid kit, Hyperbaric fire extinguisher.

Therapeutic (Treatment) tables
These are recompression/decompression tables used to treat an ill or injured person
Therapeutic Tables should be documented and available at the worksite and any location where a therapeutic treatment may be conducted.

Thermal Stress
Divers and Diving Supervisors should be taught the risks associated with thermal stress including Hypothermia & Hyperthermia, Hot Water Suits, Chamber heating systems and working in hot climates.

Toolbox Talks
This is a review and discussion immediately prior to the work taking place. It will include a final review of the risks involved by all participants. An outline record of the toolbox talk, its outcomes and attendees should be documented.

Tools Training
Tools training must be given as set out in the IDSA Standards. It is important that the training is given by a competent instructor.

Training
All diver & diving related personnel training provided by IDSA approved schools must follow the IDSA standards, guidelines and procedures in order to ensure newly qualified diving personnel are competent in the skills they have been taught.

Transfer under Pressure
The technique of transferring divers from or to a closed diving bell to or from a DDC whilst maintaining pressure. Mostly used for Saturation diving. It may also be used when transferring an ill or injured diver from a small chamber to a larger chamber or chamber complex where medical aid can be given.

Umbilicals (SDDE Diver; Excursion; Wet Bell)
A divers', Wet Bell or Closed bell umbilical should;

- Provide all necessary supplies such as breathing air or mixed gas; communications; depth measurement (pneumo)
- Have sufficient strength to maintain the services intact
- Have an in built strain member or be designed with sufficient strength
- Be marked at regular intervals (see umbilical marking)
- Of appropriate length according to the type of dive and not putting the diver at risk near underwater hazards (standard practice is to deduct 5m form the distance to the nearest hazard the diver could reach).

Umbilical Marking
Umbilicals should be marked according to the below table;

Length (m)	Black tape	**Red Tape**
5		**1 Turn**
10	1 Turn	
15	1 Turn	**1 Turn**
20	2 Turns	
25	2 Turns	**1 Turn**
30	3 Turns	
35	3 Turns	**1 Turn**
40	4 Turns	
45	4 Turns	**1 Turn**
50	1 Broad Turn	

Underwater Obstructions
Risk assessment should include the possibility of any underwater hazards, obstructions, fouling, entanglement etc. that could compromise the diver or standby diver.

V

Valves (Ball; Needle; Gate; other)
These fittings should be of suitable design, pressure rating, flow-rate and material for the purpose. They should be maintained, examined & or tested in accordance with the PMS. Fitting on divers' band mask or helmet breathing hoses must be stainless steel or bronze to prevent corrosion and provide strength.
Ball valves should be installed to indicate open/closed position; Needle & Gate valves may require "Signs" to indicate their status.

Video Surveys
An underwater survey performed by the diver using a hand held or hat mounted CCTV system often with running commentaries from the diver and surface controller which may also be recorded for later review.

Visually Safe Eye
A cast ring often built into diver stages as the lifting point rather than a welded pad eye. This has the advantage of being instantly inspected (no need for NDT), is not liable to weld embrittalment or cracking (as no weld) and easily connected to the main lifting wore.

Viewports
Windows in chambers and bells are usually made of acrylic plastic and designed to withstand the pressures exposed to. They are normally replaced every 10 years. They should be protected from heat sources (which causes then to melt) such as hot lamps, overhead cutting/welding, fire and physical damage. A competent person can examine them for stress.

Visual Surveys
A survey conducted underwater by a diver using visual observation only. (This may include a commentary where communications provided).

Volume Tank
S**ee** Receivers

W

Water Intakes and Discharges
An area underwater where there could be a hazard to a diver caused by suction from water intakes or bad visibility or strong current due to discharge of fluids or materials.

Water Jetting
Equipment used for cleaning marine growth from underwater structures. It may use high pressures (200 bar/3000 psi or similar) or low pressure or cavitation techniques. In some circumstances other material (grit) may be added to the liquid (sea water) to improve the cleaning result.

Weights & Weight belts
Equipment worn by a diver to counteract his natural buoyancy. Normally in the form of lead weights or lead shot worn on a belt, dedicated harness or ABLJ (Adjustable Buoyancy Life Jacket).

Wet (Open) Bell

A 'Wet' or 'Open' Bell is a platform for lowering and lifting divers to and from the underwater workplace, which has an air filled space, open at the bottom where the divers can stand or sit with their heads out of the water. The air space is at ambient pressure at all times, so there are no great pressure differences, and the greatest structural loads are usually self weight and the buoyancy of the air space. A fairly heavy ballast is often required to counteract the buoyancy of the airspace, and this is usually set low at the bottom of the bell, which helps with stability. The base of the bell is usually a grating or deck which the divers can stand on, and folding seats may be fitted for the divers' comfort during ascent, as in-water decompression may be long. Other equipment that is carried on the bell include cylinders with the emergency gas supply, and racks or boxes for tools and equipment to be used on the job.

Wet (Open) Bell (C0ntinued)

Such a Bell is normally fitted with the following:

- "Man-riding" winch with auto brake (no "pawl" or "ratchet" to engage/disengage)
- Secondary manual brake
- Non-rotating lift wire (braided type)
- Secondary lifting point fitted
- Secondary means of recovery to surface
- Chain or bar across entry/exit
- Dedicated bell umbilical carrying breathing medium; electricity (comms/cameras); Hot water (if applicable); Pneumos (3)
- Dedicated divers umbilicals connected to internal bell manifold (not surface)
- On-board emergency air cylinders connected to internal manifold capable of being put on-line by diver manually
- Main & Emergency pressurisation valves
- Exhaust valve
- Attachment point for unconscious diver
- Prevented from spinning or tipping
- Depth gauge/Emergency knife
- Internal/External lights if night diving
- SWL marked on bell

Wet suits
See Diving suits

Wet Welding
Welding performed underwater as opposed to in a Habitat or on the surface.

Winches (Man-riding)
See Launch & Recovery Systems

Winches (Non man-riding)
See Launch & Recovery Systems

Wire ropes (see Winches)

Working periods
See Chapter 4, Section 1, General: 'Course Lengths'.

X & Y

Z

Zodiac – brand name for inflatable boat (see also RIB)

INTERNATIONAL DIVING SCHOOLS ASSOCIATION

STANDARDS & PROCEDURES

CHAPTER FOUR: TRAINING ADMINISTRATION

CHAPTER FOUR: TRAINING ADMINISTRATION

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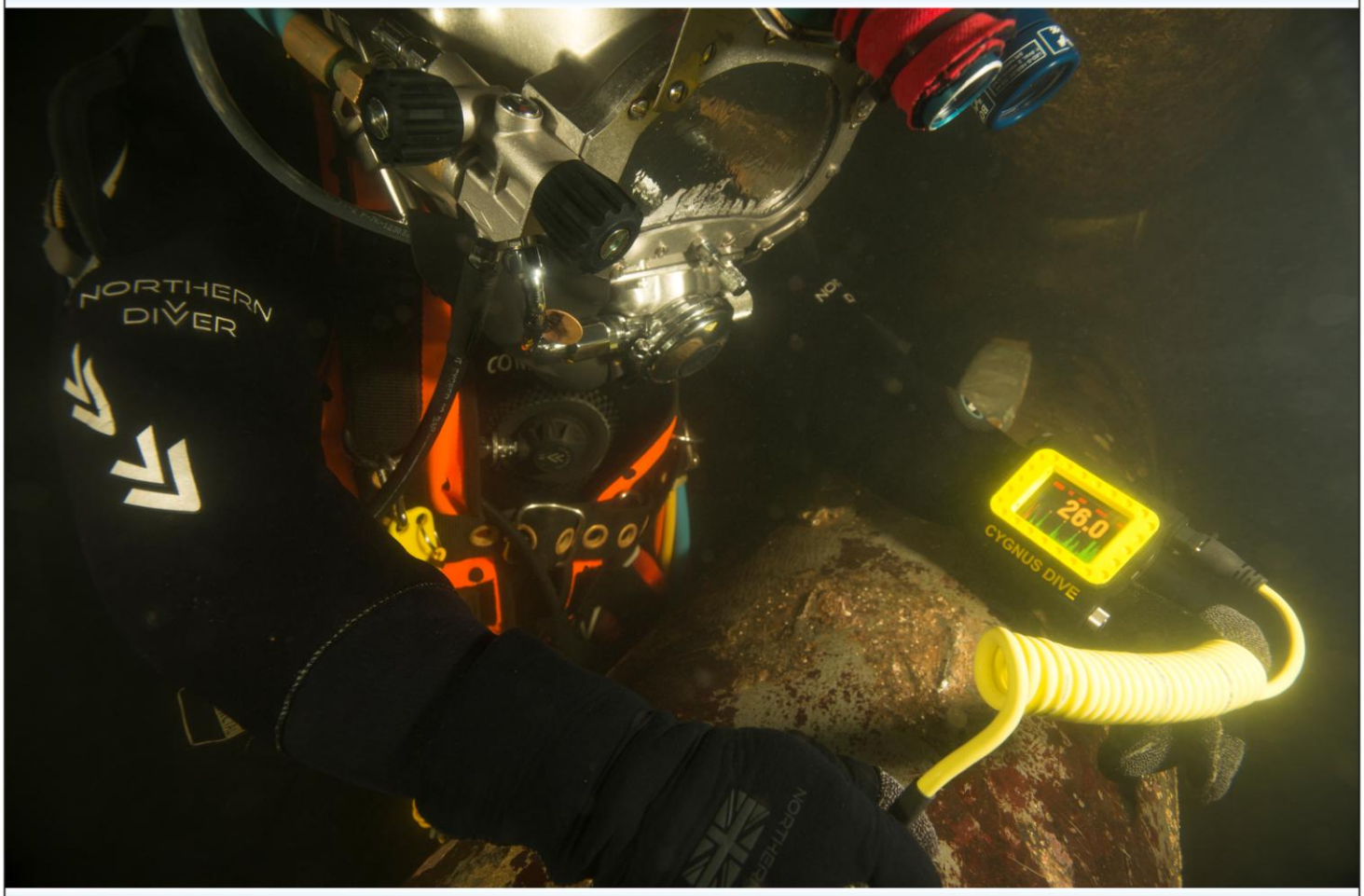
CYGNUS
INSTRUMENTS

Cygnus DIVE Mk2

Wrist-Mountable Thickness Gauge



Now Available with Twin Crystal Probes for Easier Measurements on Heavy Corrosion

- Wrist mountable underwater metal thickness gauge
- Large brighter AMOLED display for clear viewing
- Measures through coatings in multiple echo mode
- On-board data logging capability
- Topside monitoring with measurements video overlayed
- Twin crystal probe option for heavy corrosion and anchor chains

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CONTENTS

1.1 DOCUMENTATION

1.1.1 Language

The language for all formal documentation and meetings of the Association is English

1.1.2 Operational Procedures

It is considered most important that a school has written instructions and guidance for all staff on the efficient and safe operation of the school, called the 'Operational Procedures' or a similar title. As a guide it might be divided into sections, for example:

- Administrative
- Routine Operations
- Safety and Emergency Operations
- Repair and Maintenance

Chapter 3 of these Standards sets out IDSA's Code of Practice for Routine Diving Operations and Emergency Procedures, Guidance on Administration is contained in this Chapter (4).

It is understood that there are many other ways of writing and laying out the necessary information because it has to be tailored to the staff, facilities, equipment and geographic location of a school etc. However, the information must be contained in the school's documentation, preferably in one comprehensive Book/Manual, but otherwise as a series of individual booklets/leaflets, The information – in whatever form, must be issued to all relevant staff, updated as necessary, and a record of the updates maintained.

If there is a conflict between National & IDSA procedures, the National Standards will take precedence unless an IDSA Procedure is considered safer or more stringent by the Auditors.

1.1.3 The Training Manual

Students must be given 'Handouts'/leaflets etc containing the theoretical information necessary to support the relevant IDSA Syllabi. It is strongly recommended that the information is combined into one document, known as the Training Manual or a similar title.

Proprietary Manuals are available often containing information which is not necessary to support the IDSA Syllabi, in this case students should be advised of the chapters or sections which are relevant.

1.2 INSTRUCTIONAL STAFF

The Instructional Staff should hold the following qualifications and/or experience:

Table 1

Grade	Diving Qualification	Minimum Diving Experience after qualification	Teaching Qualification	Supervisor Qualification	Diver Medic See note (iii)	Assessor Qualification See Note (iv)
Senior Instructor	Level being Taught – or equivalent	300 hours bottom time **and** 3 years experience at the level being taught	YES See Note (i)	YES See Note (ii)	Between them the Senior and the Assistant Instructor should hold these qualifications	
Assistant Instructor	Level being Taught – or equivalent	200 hours bottom time **and** 2 years experience at the level being taught	PREFERABLE			
Staff Stand By Diver	Level being Taught – or equivalent	None				
Specialist Instructor (Non-diving)			YES – as required for the Specialisation			

Notes:

If no suitable National Qualification exists:

(i) A Recreational Instructor qualification (CMAS 3* or equivalent), or similar military or civil non diving Instructor Qualification is acceptable, .or a minimum of 2 years experience teaching at level being taught.

(ii) Evidence of 2 years experience, before the date of this application, as a Commercial Diving supervisor is acceptable, as long as there is written confirmation by the Contractors concerned in that time.

(iii) A similar non-diving medical assistant's qualification may be held.

(iv) Alternative experience or alternative qualification is acceptable.

In a situation which is not covered in this section the case must be referred to the Executive Board for approval before an audit can take place. The decision of the Board is final.

1.3 INSTRUCTIONAL STAFF TRAINING

At a minimum there should be a programme which ensures that instructors not only maintain, but also improve their professional qualifications

1.4 DETAILED COURSE PROGRAMMES

One of the main items required by section 3.1 of the Application Form for Full Membership (Chapter 1 Appendix C1) is the Detailed Course Programme

The purpose of a detailed course programme is to show how it is planned to achieve both the theoretical and practical requirements of the relevant IDSA Standard(s) using the equipment, dive locations, staff of all categories etc shown in the Full Member Application.

It is not necessary to present each subject individually or in the order shown in these Standards. The order may be altered to suit the facilities, staff and equipment available, provided it is progressive. With good planning, a number of subjects can be covered during a single training operation. However, the whole content of the module must be covered and competence in each part displayed before the trainee is said to have completed it successfully
A schedule for each day of the course is necessary, and should take into consideration the following:

1.4.1 Course Lengths:

The minimum acceptable course lengths are:

Module A	80 hours
Module B	120 hours
Module C	200 hours
Module D	48 hours

However it is very strongly recommended that the lengths in weeks agreed at the annual meeting in Rotterdam, 2009 are followed, unless the Executive Board agrees otherwise, that is:

Level 1	5 weeks
Level 1+2	10 weeks (5+5 weeks) total
Levels 1+2+3	12 weeks (5+5+2 weeks) total

Also that a normal working week would be assumed to be 5 (five) days of 8 (eight) hours per day, subject to extensions and changes necessary to make allowances for bad environmental conditions, equipment breakdown, the requirement for training under working conditions, staff sickness etc

The Programme should give the following details (A Standard programme for each IDSA Module is shown in the Appendices)

1.4.2 Abbreviations

(a) The activity might be shown using abbreviation as follows:

CL	Classroom Theory
PR	Practical Session
TE	Training Exercise

(b) Assessments might be shown as:

CA	Continuous Assessment throughout the course
IO	Instructor Observation from the surface
IW	Instructor Observation in-water
OP	Oral/Practical session
PT	Practical ‘dry’ assessment
PW	Practical in-water assessment
VO	Video Observation
WE	Written exam

1.4.3 The Layout of the Programmes

(a) The beginning and end times of each day should be shown.

(b) It is not necessary to present each subject individually or in the order shown in these Standards. The order may be altered to suit the facilities, staff and equipment available, provided it is progressive. With good planning, a number of subjects can be covered during a single training operation. However, the whole content of the module must be covered and competence in each part displayed before the trainee is said to have completed it successfully.

(c) The standards contain requirements for the depth and duration of in-water experience, which could be planned as shown in the example which follows.

(d) Breaks for refreshment (Coffee etc) and lunch on diving days can be taken at the Instructors discretion if not shown on the programme.

(e) The time shown for theory lessons is shown specifically in the standard programme in order to enable Instructors to prepare their lesson Plans.. The times for each theory lesson should relate to the level of knowledge required by the Standard.

(f) Standard information for each practical session might be shown as:

(a) Activity - The drill, task or assessment
(b) The Dive Location
(c) Diving equipment
(d) Breathing gas source
(e) Dive Platform

(g) The references in column 2 of the specimen programme which follows, should be taken from the left hand column of the relevant Module in the Diver Training Standards

(h) When compiling a course programme the relevant section(s) of the Diver training standards may be used. The right hand column is blank and has several possible use, for example, the Week and Day of the Schools programme on which subsections are taught can be entered so ensuring that all the sub sections of the module are included in the programme. This reference will also be of considerable assistance both to the Administration when an Application for Full Membership is first made and subsequently to auditors.

Again the standards might be used to track the progress of each student by entering the date he completes each sub-section or group of sub-sections in the right hand column

EXTRACTS FROM A SPECIMEN PROGRAMME

COURSE PROGRAMME: IDSA LEVEL 2: SURFACE SUPPLIED INSHORE AIR DIVER

(MODULES A, B AND C COMBINED)

Course Reference No: ……. **Duration: …….. weeks**

WEEK 1 of 11					
DAY 1 - 0900 TO 1730					
Time	**IDSA Reference**	**Subject**	**L of K**	**Activity/ MOA**	
0900		Admission & Administration: Documentation and Medical checks			
1000		BREAK			
1015	A1	The History of Diving	C-	CL	
1100	A2 (d)	The principles of Buoyancy: Archimedes' Principle: Types of Diving suits and their different buoyancy's.	C+	CL	
	A2 (f)	The Imperial and Metric Systems of Measurement	C+	Cl	
1230		LUNCH			
1330	B7.1 (a)	Choice and use of basic diving equipment	C	CL	
1400	A9.1 (a)	Elementary knots	A	CL	
1430		BREAK			
1445	A6 (a)	Hand & rope signals	C+	CL/PT	
1415	B7.1 (a)	The Use of Dry suits	C	CL/PT	
1445		Brief & prepare for Dive			
1615	B1 (d)	DIVE: A) The use of Basic Equipment B) Shallow Lake C) Dry suit, Mask, Fins, Weight Belt etc	A	TE	
1730	Homework	Hand & rope signals			

PLANNED MINIMUM DIVING TIMES FOR EACH DIVER:-

	SCUBA			SSDE	
Depth	0 to 19m	20 to 30m		0 to 19m	20 to 30m
Today	30	0		0	0
Cumulative	30	0		0	0

WEEK 3 OF 11

DAY 2 - 0830 TO 1730

Time	IDSA Reference	Subject	L of K	Activity/ MOA	
0830		Quiz on previous days theory lessons			
0900	A9 (b)	• The principles for the safe handling and operational use of cordage, wire, ropes, slings, blocks and chain hoists winches and working stages on the surface and underwater, • The need for maintenance	C	CL	
0944	A9 (c)	• Mechanical advantage' • The rigging and safety precautions necessary when diving from stages working platforms	C-	CL	
1014	C7.4 (a)	The operational and safety procedures for Lifting Bags of up to 2000Kgs in water	C	CL	
1014		Brief & prepare for Dive			
1044	C1 (e) C7.4 (b)	DIVE: (a) Assessment in the use of a Free flow Helmet and transfer to Bail-out. Exercises in the use of lifting Bags (b) Deep Lake (c) Free Flow Helmets (d) Onboard Compressor (e) Diving Workboat	A A	IO TE	
1730	Homework	The use of Lifting Bags			

PLANNED MINIMUM DIVING TIMES FOR EACH DIVER:-

	SCUBA			SSDE	
Depth	0 to 19m	20 to 30m		0 to 19m	20m to 30m
Today	0	0		40	0
Cumulative	300	50		150	0

DAY 3 - 0830 TO 1730

0830		Quiz on previous days theory lessons			
0900	A4 (b & c)	<u>Decompression</u> • Allowances for environmental conditions and stress, and the corrective action which is applied for deviation from a decompression schedule • Is familiar with the reasons for and procedures associated with therapeutic treatments	C+	CL	
1014		Brief & prepare for Dive			
1044	C7.6 (b)	DIVE: (a) Use Hydraulic Drill (b) Deep Lake (c) Bandmasks (d) Onboard Compressor (e) Diving Workboat	A	TE	
1730	Homework	Decompression Table exercises			

PLANNED MINIMUM DIVING TIMES FOR EACH DIVER:-

	SCUBA			SSDE	
Depth	0 to 19	20 to 30m		0 to19m	20 to 30m
Today	0	0		40	0
Cumulative	300	50		190	0

1.5 DIVE RECORDS

A record of each dive must be recorded on the dive site using a 'Dive Record Sheet' similar to those illustrated in Tables 1 to 4 which follow. They should be legible and may be copied as necessary, then filed with the Course Records.

The Dive Record Sheets are essential as they provide the details of all diving activities carried out at the school and may provide vital evidence concerning enquiries into incidents/accidents to students not only at the school, but also in their subsequent careers.

At the end of each day the data from the sheet (s) can then be entered into the Course Record as described in the remainder of this sub-section. Additionally copies can be given to the students for entry into their Personal Diving Logbook.

The Record sheets in Tables 1 to 4 provide a space for a 'Performance Assessment Mark' (PAM) which could be a mark out of 10 based on the student's overall performance for the day, diving competence, team attitude, linesman, deckhand, Panel Operator etc. It is a useful way of quantifying the performance of a student, & when viewed as a graph, his progress. See section 1.8

It might also be useful to allocate a separate 'Task' mark for specialist activities, for example - A willing student whose Performance Mark is good may be below average when handling power tools during his dive.

Performance & Task Marks are optional.

TABLE 2: Dive Record Sheet – No Decompression

ABBREVIATIONS: LS = Left Surface LB = Left Bottom AS = Arrived Surface
PAM = Performance Assessment Mark

Course No:	Date	Place
Weather		Sea Height
Current	Sea Bed	U/W Visibility
Instructor/Supervisor	Assistant Instructor	Platform
Equipment	Task	

Diver	LS	LB	AS	Bottom time (Mins)	Depth (msw)	Comment	PAM
1							
2							
STUDENT STAND BY DIVER:							
1							
2							
STUDENT STAND BY DIVER:							
1							
2							
STUDENT STAND BY DIVER:							
1							
2							
STUDENT STAND BY DIVER:							

SENIOR INSTRUCTOR: (Print Name)	Signed
Staff Stand By diver	Others Present:

TABLE 3: Dive Record Sheet – In-water or Surface Decompression

Date		Supervisor		SB Diver			
Dive Type	Scuba/SDDE	Task					
Location		Platform		Sea State			
B.A Type		Course No:		Deco Table			
DIVER SURNAME							
TENDER SURNAME							
CYLINDER/S OR B/OUT PRESS BAR		IN	OUT	IN	OUT	IN	OUT	IN	OUT
BREATHING MIXTURE %O2		%		%		%		%	
LEFT SURFACE (A)									
ARRIVE BOTTOM									
MAX DEPTH		MSW		MSW		MSW		MSW	
LEFT BOTTOM (B)									
BOTTOM TIME (B-A)		MINS		MINS		MINS		MINS	
DECO SCHEDULE		/		/		/		/	
STOP DURATION	15 MSW	MINS		MINS		MINS		MINS	
LEAVE	15 MSW								
STOP DURATION	12 MSW	MINS		MINS		MINS		MINS	
LEAVE	12 MSW								
STOP DURATION	9 MSW	MINS		MINS		MINS		MINS	
LEAVE	9 MSW								
Surface Decompression Only LEAVE WET STOP # ON SURFACE # ARRIVE 12 MSW ON O_2 DDC # STOP DURATION #		MINS		MINS		MINS		MINS	
STOP DURATION	6 MSW	MINS		MINS		MINS		MINS	
LEAVE 6 MSW									
STOP DURATION	3 MSW	MINS		MINS		MINS		MINS	
LEAVE	3 MSW								
ARRIVE SURFACE	(C)								
TOTAL DECO TIME	(C - B)								
TOTAL TIME	(C - A)								
REPET GROUP									

TABLE 4: Dive Record Sheet – Wet Bell

1.6 PERSONAL DIVING LOGBOOKS

Each student MUST be issued with, and maintain, a personal diving Logbook. It should be checked stamped and signed by a Senior Instructor at least once each week. Students should retain them after graduation and maintain them as an authentic record of their work experience thereafter.

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1.7 COURSE RECORDS

These records must be retained securely by the School for a minimum of 6 years. They should contain the following files , or similar documentation which provides the same information, either in printed form or on computer.

1.7.1 The original copies of all Dive Record Sheets – see Section 1.5

1.7.2 A personal file for each student containing:-

- His Diving Fitness Medical Certificate if not in his Logbook.
- Course Application Form
- The details of any aptitude test taken
- Professional Qualifications
- Any other personal information relative to the course
- A written comment, on above or below average performance, and any disciplinary or other problems. - to be written up by the Senior Instructor as necessary.

1.7.3 Original copies of written exams, quizzes etc, plus a summary of the results and the Performance Assessment Mark (PAM) if used

1.7.4 An periodic comment by an Instructor on all students – preferably weekly

1.7.5 A progressive table or 'tote' showing the cumulative bottom time (in minutes) achieved by each student as shown in the Dive Record Sheet(s) completed each diving day. It is then possible to monitor each students progress, and to advise the Instructors of students who fall behind the planned times in the detailed course programme - see section 1.4 - for Medical or other reasons, and need to make up time lost.

Note: This table might be linked with one showing the performance assessment mark (PAM) - low in-water times sometimes relate to poor performance, which in turn may indicate questionable aptitude or attitude.

1.7.6 A record of attendance if required.

1.7.7 Details of any incidents, accidents, equipment malfunctions, adverse weather etc which may have affected the progress of the course.

1.8 THE ASSESSMENT OF COMPETENCE

The purpose of assessment is to ensure that when a student graduates he is competent after further training and experience to become a competent occupational diver.

1.8.1 Theory

There are various methods of assessing the theoretical knowledge of students required by the relevant IDSA Syllabus: conventional examinations, multi-choice questions, quizzes, homework, oral sessions, etc. The fairest result is probably best achieved by a combination of these methods. It is normal for any student who fails an exam to be given an opportunity to take it again (re-sit). The procedure should be set out in the training manual or other relevant documentation as mentioned in the Introduction.

1.8.2 Practical

(a) OVERALL COMPETENCE

The most important aspect of practical assessment is to ensure that students have the qualities necessary to act as a safe and efficient **worker** in the Diving Industry. This is best done by a process of continuous evaluation throughout a course. The qualities required can be summed up in the following aide memoir.

Determination	Many underwater tasks which can be performed quite simply in the dry become complex underwater, they can also be tedious, physically and mentally demanding and boring. A diver must have the determination to finish his allocated task.
Reliability	It is vital for a Supervisor to know that he can rely on a diver to follow his instructions, so that he does not jeopardise his own life or that of others.
Enthusiasm	It is essential that a diver actually enjoys being underwater and feels comfortable under the water, so that he is able to concentrate on his task.
Ability	A professional qualification is of considerable advantage both to the diver himself and his employer.
Mixability	Divers different countries and cultures are often brought together for a project. It is essential that they are able to work as a team whatever the circumstances
Stamina	To be effective in his work a diver must be physically fit and healthy.

The evaluation of these qualities can be carried out in a number of ways: A daily written comment, a simple mark out of 10, a weekly report by the instructor etc. The purpose of the evaluation is to monitor the progress of all students, and to counsel any who do not exhibit the necessary qualities. If after two counselling sessions a student does not improve, then consideration should be given to terminating his place on course.

(b) PROFESSIONAL COMPETENCE

Safety and emergency drills, and work tasks should be monitored separately, and marked against any competence targets which may have been set. As a general rule all students should have at least one training session before taking an assessment, and in the case of failure further training and at least one opportunity to retake the task or drill

1.9 JOINT COURSES

Courses may be held utilising the facilities of more than one school, subject to there being an agreement between the schools concerned which states the responsibilities of each school - equipment, instructors, location etc, plus the CV of any interpreter(s) used. The School issuing the certification must be approved to the level assessed.

The agreement must be forwarded to the Board for approval before the course begins.

1.10 PRIOR LEARNING

Previous commercial training is not accepted, unless carried out at another IDSA School. Recreational Training is not accepted

1.11 STUDENT EMPLOYMENT

Students should not be employed i.e. paid to work until they have qualified, unless they are taking part in an externships, work placement projects, or as part of an apprenticeship programme. In these cases particular attention should be paid to National regulations, and insurance requirements.

1.12 APPEALS and COMPLAINTS

1.12.1 Schools

A School has the right to appeal against any decision made by the Executive Board. Full details of the grounds for the appeal should be forwarded to the Administrator. It will then be considered by a specially convened Committee , who will make an appropriate decision, which is final.

1.12.2 Students & ex-Students

All Full Members must have a written procedure for a complaint concerning his training which must be followed by students.

(a) If a complaint is received by the Member, the action set out in its documentation should be followed. If the complainant is then not satisfied with the decision made, he may appeal to the Board via the administrator. The Board will then review the documentation and make a decision which is final.

(b) If an appeal or complaint is made direct to the Board it will be sent to the member, which then has 4 weeks to investigate it and forward its decision to the Board. If the complainant is not satisfied with this decision , he may appeal to the Board via the administrator. The Board will then review the documentation and make a decision which is final.

1.12,3 Staff

In accordance with National Regulations.

1.12.4 Other Persons

If a complaint is received by a Full Member from a person not mentioned in sections 2.1.2 & 3 above, the school should respond as it sees fit, but all correspondence must be copied to the Administration. If the complaint is received direct by the Administration it will be sent to the school for comment. It no comment is received by the School in 6 weeks, the Board will take whatever action it sees fit.

1.12.5 Policy

If the Director/Manager of a School receives a complaint from a student which he/she considers will affect the Policy of the Association as set out in this document, it must be forwarded to the IDSA Administration for inclusion in the Agenda for the next Annual Meeting. If the matter is urgent it will be circulated to members by post or electronic mail.

2.1 GENERAL

2.1.1 Introduction

Experienced divers with no Diver Training Qualification may obtain an IDSA Diver Qualification Card (IDQC) by successfully completing an assessment of their experience. Applications to hold an experience assessment may be made by either IDSA Full Member Schools or, in Countries where there are no Full Member Schools, by Diving Contractors or similar organisations. Individual divers who wish to be assessed should contact a Full Member School direct.

The assessment - **which will include a theoretical exam** - may only be carried out by a Full Member School or an Assessor appointed by the IDSA Executive Board , either on the premises of a Full Member School or at an alternative location which has all the necessary facilities and equipment.

It is strongly recommended that all assessments are preceded by a refresher training session which may include a mock theoretical examination and familiarisation dives. This training may be carried out either at the school's own premises or the alternative location.

A Level 2 assessment will cover both the theoretical & practical aspects of the syllabuses for both the Level 1 & 2 qualifications, in the same way, the level 3 assessment will cover Levels 1, 2 & 3, but the Level 4 assessment will cover only the theory and practice of the level 4 syllabus.

It should be noted that successful completion of an assessment cannot be guaranteed. If a candidates documentation is not satisfactory, or his in-water competence is below that expected, it will be necessary for him to apply for another assessment.

The maximum number of candidates for one Assessor is 8.

2.1.2 APPLICATION TO HOLD AN ASSESSMENT – FULL MEMBERS ONLY

Full Member Schools wishing to carry out an assessment must apply for approval from the Executive Board - via the Administration - giving full details of the proposed assessment, that is:

- Planned dates
- Assessment Programme
- Outline details of the facilities and diving locations to be used – if the assessment is not to be carried out at the school
- Name of the Instructors - if not listed in the Schools application form their CV's must be forwarded.
- Number of applicants

Once the school's application is approved the Administration will allocate a reference number and it may proceed with the assessment.

2.1.3 APPLICATION TO HOLD AN ASSESSMENT – NOT FULL MEMBERS

Any IDSA Member which wishes to qualify its experienced divers, should complete the Application Form - Appendix A. Once the Administration considers the facilities shown in the Application Form are acceptable, an assessing organisation or assessor will be appointed. The Application will then be forwarded to the Assessor and a Reference number for the assessment will be allocated.

The Assessing Organisation should then contact the Applicant and arrange a mutually convenient date when the, location, equipment and staff etc are available. Keeping the Administration informed.

The Assessing Organisation and the Applicant then make the necessary arrangements for the assessment to take place, including the arrangements for the payment of staff, equipment hire etc.

A fee per candidate payable to IDSA (decided at the Annual Meeting) and which will include the cost of the Qualification Card must be paid by the Assessing Organisation – see section 2.2.3.

2.1.4 Duration of Assessments

Minimum durations for assessments are given in the Table which follows, in practice the actual duration may have to be increased by a school depending on the equipment and facilities, the location of the diving areas and the number of divers to be assessed. At least one additional day should be planned at the beginning of an assessment in order to allow the Assessor time to carry out a pre-assessment audit of equipment, facilities, and documentation, and to discuss the proposed assessment tasks with the Supervisor.

TABLE 5

IDSA LEVEL	DURATION in DAYS						
	1	2	3	4	5	6	7
1							
2							
3							
4		No Minimum time has been set for this level.					

2.1.5 Experience required by Candidates before Assessment

Bottom time requirements are shown in Table 7, and the work experience required for each IDSA training standard in Appendices C to F

TABLE 6: BOTTOM TIMES REQUIRED BEFORE ATTENDING AN IDSA EXPERIENCE ASSESSMENT

Notes:
1. The Total Bottom Time and Minimum Number of Dives shown in this Table are **TWICE** those required during a training course.
2. Recreational Diving Experience, cannot be counted towards the bottom time required for Level 1

IDSA QUALIFICATION		Equipment	Depth in Metres of Sea Water	Total Bottom Time (Mins)	Minimum Number of Dives
IDSA LEVEL 1		**SCUBA**	0 to 19	1000	30
Commercial SCUBA DIVER			20 to 30 – See Note 1	300	10
			TOTALS	1300	40
TOTAL BOTTOM TIME LEVEL 1 = 1300 Minutes					
Note 1: At least 4 dives must be to the maximum depth of 30m.					
IDSA LEVEL 2	**LEVEL 1**	**SSDE**	0 to 19	1900 – See note 2	36
SURFACE SUPPLIED	**PLUS**		20 to 30 – See Note 3	400	8
INSHORE AIR DIVER			TOTALS	2300	44
TOTAL BOTTOM TIME LEVEL 2 = LEVEL 1 (1300 Minutes) + LEVEL 2 (2300 Minutes) = 3600 Minutes					
Note 2: The duration of 2 dives must be for 180 minutes ± 10%.					
Note 3: At least 4 dives must be to the maximum depth of 30m**.**					
IDSA LEVEL 3	**LEVEL 2 PLUS**	**W et Bell**	0 to 29	300	10
SURFACE SUPPLIED		**SSDE**	30 to 40	320	10
OFFSHORE AIR DIVER		**SSDE**	40 to 50	300	10
			TOTALS	920	30
TOTAL BOTTOM TIME LEVEL 3 = LEVEL 2 (3600 Minutes) + LEVEL 3 (920) Minutes = 4520 minutes					
Note 4: The Hot Water suit training may take place during either Surface 0rientated or Wet Bell Dives. Each diver must have made at least 6 dives of minimum duration 30 minutes using a Hot Water suit.					
Note 5: At least 4 dives must have been made to the maximum depth of 50 metres.					

IDSA LEVEL 4 CLOSED BELL/MIXED GAS DIVER	**LEVEL 3 PLUS**	Divers must demonstrate their competence to dive in open water as a diver, rescue diver and bellman by completing: **Notes** (a) 48 bell lockouts as a diver (b) 48 bell runs acting as bellman (c) 10 simulated rescues of an incapacitated diver (d) 24 bell runs from deck chamber to deck chamber with full transfer under pressure. (e) 8 chamber pressurisation and TUP checks (f) 8 pre-dive bell checks (g) Safely and competently three bell bounce dives to depths of 55, 75 and 100 msw respectively. (h) 2 saturation dives from a living depth greater than 50 msw from which the student must complete two bell runs to a depth greater than 50 msw. The lockout for these bell runs should be at least 15 minutes for each diver on each occasion. (See Note). A simulated incapacitated diver rescue should be made during one lockout.
Note No specific bottom times are set for this standard.		

2.2 DOCUMENTATION

The following documentation requirements apply to assessments held not only by both Full Members but also by Other Organisations

2.2.1 Before an assessment

Before the assessment begins the assessor must determine that the following documents are accurate and in-date, and retain the necessary copies to be sent to the IDSA Administration on completion of the Assessment, see section 2.2.3

(a) Fitness to Dive

A medical certificate from all candidates stating that they are currently fit to dive.

(b) Proof of Experience

Proof that all candidates have the required experience by:

Either Checking the relevant List(s) of experience from Appendices B to E at the end of this section, as appropriate, against the candidates Logbook.

0r Checking, that if no personal Diving Logbook has been kept, the Diving Contractors certificate of experience is satisfactory.

(c) Language

When English is the 2nd language for candidates, he must hold a simple written test to confirm that their knowledge of written English is sufficient for them to take the theory examination(s).

The result of these checks should be collated using a simple form – for example:

IDSA Assessment Number					
	Name	Medical	Experience	English	
01					
02					
03					
04					
05					
06					
07					
08					

I certify that I have examined the documentation listed above and that it is satisfactory and the candidates are eligible for assessment

Signature

Assessor

Name (Please print)	Date

Assessing Organisation

2.2.1 BEFORE AN ASSESSMENT (Continued)

(d) CALCULATING LOGGED EXPERIENCE

When checking the logged diving experience prior to an assessment, the bottom time must have been:

- Either paid working dives or carried out in a training module at a Full Member school
- Logged, countersigned by the Supervisor and verified with the Contractors stamp. The school must verify the experience logged with at least 2 of the Diving Contractors.

Please note particularly that the following bottom time CANNOT be counted:-

- Diving experience gained in equipment which is not relevant to the Training Standard.
- Ascent and decompression time.
- Chamber only dives
- Bottom time obtained more than 4 years before the proposed date of the Assessment

(e) GUIDANCE ON CHECKING LOGGED EXPERIENCE

The following guidance is given for occasions when it is necessary to verify the logged experience of a diver requesting a qualification.

Whenever possible have an experienced Instructor carry out the check as he may be able to identify anomalies in Company and Supervisor names, water depths, diving procedures etc. Suspect entries are easier to identify if the diver is asked to list his dives in a simple table, grouped in the depth ranges required. e.g.: Location, Bottom Time, Total Decompression Time etc - See Appendices Ia to Id.

LOOK FOR:

- Smudged and illegible Company Stamps
- Stamps from unknown Companies -check the Company exists.
- Wrong decompression times
- A number of dives recorded in an area where it is known there is little work.
- New pages
- Obvious Photocopies
- Replaced photograph or personal data page

A percentage of the dives should be checked at random with the relevant Contractor.

If an anomaly is found in the Logbook, the verification must be discontinued, and the Logbook returned. Full details of the applicant should be sent to the Administrator who will inform the Executive Board.

2.2.2 DURING ASSESSMENTS

During the Assessments, in addition to the Diving Record Sheet the assessor must maintain a 'tick-off' record of the assessments taken by all candidates. Guidance is given for each Level in the following sections.

(a) **A LEVEL 1 ASSESSMENT**

The purpose of this assessment is to confirm that a diver has the theoretical knowledge & practical ability required by the IDSA Level 1 (Commercial SCUBA Diver) syllabus, by ensuring that he:

- Understands the principles of SCUBA diving operations
- Can dive safely and competently using SCUBA equipment to a depth of 30 metres with air as the breathing mixture.
- Can carry out the work tasks listed in the syllabus safely and competently.

This will be done by checking that he is able to carry out the following tasks competently, and in addition the candidate must be prepared to answer questions from the Assessor concerning any part of the Level 1 syllabus at any time during the assessment

IDSA LEVEL 1 **EXPERIENCE ASSESSMENT No** **Note:** Either wet or dry suits may be worn		**01 – NAME**	**02**	**03**	**04**	**05**	**06**	**07**	**08**
IDSA Ref	**Assessment**								
A4-2	Carry out Expired Air Resuscitation and administer oxygen								
B1	Dive in Open Water using SCUBA to a depth of 30m								
B2	Act as a member of the surface team, both with and without communications during routine operations								
B3 (a)	Carry out a Chamber Dive to 40m (if not shown in Logbook)								
B4-1 to 4	As a linesman, Standby Diver and Diver, both with and without communications, during emergency exercises..								
B6 - When carrying out any 2 of the following underwater tasks									
B6.1	Carry out a simple rigging task.								
B6.2	Carryout a seabed search								
B6.4	Use a Lifting Bag								
B6.5	Use a Hand tool								
B7-2, B7-3 (a) or (b)	Operating an HP compressor or HP air bank to charge diving cylinders								
	Sitting a theoretical exam covering the syllabus of IDSA modules A & B								

2.2.2 DURING AN ASSESSMENT (Continued)

(b) A LEVEL 2 ASSESSMENT

The purpose of this assessment is to confirm that a diver has the theoretical knowledge and practical ability required by the IDSA Level 1 syllabus – see section 3.4.2 above, and the IDSA Level 2 (Supply Supplied Inshore Air Diver) syllabus, by ensuring that he:

- Understands the principles of SCUBA diving operations
- Can dive safely and competently using SCUBA equipment to a depth of 30 metres with air as the breathing mixture.
- Can carry out the work tasks listed in the Level 1 syllabus safely and competently.
- Understands the principles of Surface Supplied Diving Operations
- Can dive safely and competently using surface supplied equipment to a depth of 30 metres with air as the breathing mixture.
- Understands the operational and safety procedures for the tools and underwater work tasks listed in the syllabus.
- Can carry out the work tasks listed in the Level 2 syllabus safely and competently.

This will be done by checking that he is able to carry out the following tasks competently, and in addition the candidate must be prepared to answer questions from the Assessor concerning any part of the Level 2 syllabus at any time during the assessment

IDSA LEVEL 2 **EXPERIENCE ASSESSMENT No** **Note:** Dry suits must be worn		**01 - NAME**	**02**	**03**	**04**	**05**	**06**	**07**	**08**
IDSA Ref	**Assessment**								
C1 & 2 - During routine diving operations:									
	Carry out pre & post dive checks								
	Dive in 2 different types of SSDE to a depth of 30 m.								
	Act as a linesmen								
	Act as Panel Operator								
C4(d)	Operate a two compartment chamber during routine diving operations under supervision								
C5.1 to 4	Act as a linesman, Standby Diver and Diver, in the event of breathing supply or communication failure, during emergency exercises..								
C7 – When carrying out 1 of the following tasks:									
C7.4	Use a lifting Bag								
C7.6	Use a power tool								
C7 – When carrying out 1 of the following tasks:									
C7.9	Use Thermal-arc cutting equipment								
C7.10	Carry out a simple wet weld								
C8.2	Prepare and operate an LP compressor								
	Sitting a theoretical exam covering the syllabus of modules A,,B and C								

2.2.2 DURING AN ASSESSMENT (Continued)

(c) A LEVEL 3 ASSESSMENT

The purpose of this assessment is to confirm that a diver has the theoretical knowledge and practical ability required by the IDSA Level 1 & 2 Syllabuses – see sections 3.4.2 & 3.4.3 above, and the IDSA Level 3 (Surface Supplied Offshore Air Diver) syllabus, by ensuring that he:

- Understands the principles and procedures required for surface supplied operations using both a Wet Bell and Hot Water system.
- Can dive safely and competently in air diving operations using surface supplied diving equipment, both from the surface and from an Wet Bell, to a depth of 50 metres.
- Can carry out the work tasks listed in the Level 2 syllabus safely and competently.
- Can dive safely and competently using a hotwater suit

This will be done by checking that he is able to carry out the following tasks competently, and in addition the candidate must be prepared to answer questions from the Assessor concerning any part of the Level 3 syllabus at any time during the assessment

IDSA LEVEL 3 **EXPERIENCE ASSESSMENT No** **Note:** 1. Dry or Hotwater suits must be worn as appropriate. 2. Hotwater suit dives may be combined with Wet Bell dives.		**01 - NAME**	**02**	**03**	**04**	**05**	**06**	**07**	**08**
IDSA Ref	**Assessment**								
D2-1 (b)	Carrying out pre and post dive checks on an Wet Bell System								
D2-2 (b)	Carrying out Pre and Post Dive Checks on a Hot Water System.								
D1-1 (b)	Diving safely and competently on air using a Wet Bell to a depth of 10m								
D3-1	Carrying out the simulated rescue of an unconscious diver from an open bell including emergency first aid in the bell								
D3-2 (a) or (b)	Completing a drill which demonstrates the ability to deal with the loss of communications or breathing gas								
D1-2 (b)	Diving safely and competently in surface orientated equipment to carry out a simple work task during a simulated decompression dive to a depth greater than 40m.								
D1-3 (b)	Carrying out a simple work task wearing a Hot-Water suit.								
	Sitting a theoretical exam covering modules A, B, C and D.								

(d) A LEVEL 4 ASSESSMENT – IN THE COURSE of PREPARATION

Duration will be dependant upon the number of divers to be assessed.

2.2.3 ON COMPLETION OF AN ASSESSMENT

On completion of an Assessment the Assessor must send the Administrator a file for each diver containing copies of the documents listed below:

- Either: A certificate of experience for each diver (See Appendices B to E at the end of this section), if not submitted before the assessment.

  Or In cases where the divers have not kept their own Logbooks a certificate from his last two employers stating that he has achieved the bottom times listed in section 3.5 , and the Work Tasks of the relevant IDSA Level as in Chapter 2

- A Table of assessment results – see section 2.2.2
- A Statement that all divers Medical Certificates were sighted and in-date.
- The Dive Record Sheets or certified copies of those used for the assessment.
- The written exam papers, and a list of results
- A report of any accident or incidents.
- A letter signed by the Assessor stating the language used during the assessment if other than English.
- The IDSA Card request form from Chapter 1 Appendix E3

NOTE: IDQC's will not be issued until all the above documentation has been received and checked by the Administration, and the fee per candidate received.

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

NAME of ORGANISATION

CONTACT:

ADDRESS:

Telephone Number: Mobile

E-Mail: Web:

IDSA Membership Number: Associate/Affiliate/ Industrial (Please delete as necessary)

CONTENTS

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

1. GENERAL

If the information requested is already held by the IDSA Administration it need not be repeated, only the reference needs to be given.

The Applicant or the Assessor – as appropriate – must inform IDSA Administration and give full details of any changes to the information given in this part of the Application before the Assessment begins

A fee is payable to IDSA (set at the annual meeting) for each candidate assessed

1.1 PROPOSED DATE & PLACE of the ASSESSMENT

1.2 ASSESSMENTS REQUIRED (TICK AS NECESSARY)

LEVEL 1	Commercial SCUBA Diver	
LEVEL 2	Surface Supplied Inshore Air Diver	
LEVEL 3	Surface Supplied Offshore Air Diver	
LEVEL 4	Closed Bell Mixed Gas Diver	

1.3 LIST OF CANDIDATES

Name	Age	Nationality

1.4. STAFF

Details of the Diving staff – who cannot be candidates

	Name	Qualification(s)
Supervisor		
Assessor		
Stand By Diver 1		
Stand By Diver 2 if required		
Other personnel		

Attach brief CV's

2. ASSESSMENT FACILITIES

2.1 DIVING PLATFORMS & STATIONS

Describe the Shore Diving Stations and Diving Areas which will be used for the assessment. Attach sketch maps, plans etc giving depths, locations, water access etc.

If a vessel is to be used (either owned or hired) does it conform to the relevant Local and/or National Regulations:

YES/NO

If NO explain what steps have been taken to ensure that the vessel(s) safe and seaworthy.

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

2.2 DIVING AND SAFETY EQUIPMENT

2.2.1 General

Is a First Aid Kit and Oxygen Administration set available at each diving station **YES/NO**

See chapter 3 for additional specifications

2.2.2 LEVEL 1: Commercial SCUBA Diver

Indicate the number you hold and where appropriate a brief description of the following:

Type of Equipment		Description	Number Held
Diving Suits: One for each student up to the maximum number for the course	Dry		
	Wet		
Suit Inflation System: One for each student up to the maximum number for the course			
Complete Sets of SCUBA: .			
Reserve system			
Full Face Masks			
Lifelines with Communications			
Communication Boxes: A minimum of 3			
Hand Tools for example: Hacksaws, chisels, lump hammers etc			
Lifting Bags: between 100 & 140 Kgs lifting capacity			

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

2.2.3 LEVEL 2: Surface Supplied Inshore Air Diver

Type of Equipment		Description	Number Held
Surface Supply Dive Stations A Shed, Shack or cabin suited to the environment and the location, containing	Diving Panel(s) fitted to take 2 divers and a StandBy.		
	Comms for 2 divers and a Stand-By - may be built in to the Diving Panel		
	3 umbilicals 1½ x the maximum expected diving depth, consisting of: • Air Hose • Pneumo Hose • Lifeline (if necessary) • Comms Line		
	Comms to the working deck		
	Comms with base, radio or otherwise.		
	Hanging fittings for umbilicals		
	Desk adjacent to Diving Panels with space for Panel Operator to keep dive records etc, without leaving the panel		
	Main air Supply to panel(s)- sited so that the noise does not affect diving operations		
	Reserve air supply to panel(s)		

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

2.2.3 LEVEL 2 – Surface Supplied Inshore Air Diver - Continued

Type of Equipment		Description	Number Held
Band Masks: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance			
Helmets	Free Flow: Minimum 1		
	Demand: Minimum 2		
Harnesses + sufficient weights			
Bail out Cylinders: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance Must have sufficient air capacity to reach the surface from the maximum expected diving depth in a controlled ascent, and then to remain on the surface long enough to be recovered in the environmental conditions prevailing on the dive site.			
A Two compartment Recompression Chamber – see Chapter 3 Section 3 **Note:** If not owned by the school, full details of the chamber, its location and availability to the school must be given			
Lifting Bags: Of between 1000 & 1400 Kgs capacity			
Power Tools	Air		
	Hydraulic		
Airlifts			
Low Pressure Water Jetting Equipment			
Underwater Cutting Equipment			

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

2.2.4 LEVEL 3 – Surface Supplied Offshore Air Diver

Type of Equipment	Description	Number Held
Hot Water Suits: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance		
Hot Water Undersuits: A minimum of 1 for each diver in the water, 1 for the Stand-by, and 1 spare/maintenance		
Hot Water System which should be: • Capable of supplying 2 divers and 1 Stand-By diver at a comfortable temperature • Capable of returning the divers to the surface in the event of failure of the power supply. • Fitted with a Hi-Lo temperature alarm and temperature display showing the temperature being supplied to the divers.		
Wet Bell should: • be able to carry at least two divers in an uncramped position. • Carry emergency breathing gas cylinders of sufficient capacity to bring the divers to the surface in a controlled ascent and recover them. • be designed to prevent the diver(s) falling out and to prevent spinning and tipping. • Be fitted with a control panel and Communications • Have an emergency lifting system. • Be fitted with a dedicated umbilical connected to a manifold system and 2 separate diver umbilicals.		
A Diving Basket is not a mandatory requirement, but if used should conform to the requirements of a Wet Bell except that: • It should be fitted with suitable overhead protection and handholds. • It need not be fitted with a control panel		

APPENDIX A: APPLICATION TO HOLD AN EXPERIENCE ASSESSMENT (Not a Full Member)

3. CERTIFICATION

I certify that:

3.1 Candidates

3.1.1 Each candidate will bring with him:

Either — The relevant form(s) from Appendices B to E summarising the necessary experience plus his Logbook(s) which supports them

Or — A certificate[2] from the contractor who has employed him for more than 3 months in the 12 months before the date of the assessment stating that the candidate has both the necessary bottom time and the practical and theoretical knowledge required by the relevant IDSA Syllabus.

3.1.2 Written photographic proof of his identity for example passport, identity card.

3.1.3 His medical certificate stating that he is fit to dive.

3.2 Equipment

Test and Inspection certificates for all equipment used during the assessment will be available on-site

3.1 Personnel

All Staff diving personnel will be properly qualified as appropriate, and their qualification and medical certificate will be available during the assessment.

3.3 Operations

All diving operations will be carried out in accordance with National Regulations, supported by the IDSA Code of Practice as necessary.

3.4 Records

Diving Records will be maintained accurately and legibly by the Supervisor and the original sheets will be given to the Assessor on completion of the Assessment.

3.5 Insurance

Insurance policies will be made available to the Assessor showing that the assessor(s), candidates, diving staff, and third parties are covered against accidents/illnesses etc arising from the assessment.

Date of Application	**Signature**
Name (Please print0	Position in the Organisation

[2] Divers from the same company may be covered by one certificate

APPENDIX B – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 1

LAST NAME	FIRST NAME	Male/ Female
Date of Birth	Nationality	
Address		

1, The purpose of this assessment is to confirm that an experienced diver has the theoretical knowledge & in-water competence required by the IDSA Level 1 (Commercial SCUBA Diver) syllabus. On successful completion the diver may be awarded a Level 1 IDSA Diving Qualification Card

2. The assessment will check that the diver:

- Understands the principles of SCUBA diving operations
- Can dive safely and competently using SCUBA equipment to a depth of 30 metres with air as the breathing mixture.
- Can carry out the work tasks listed in the syllabus safely and competently.

This will be done by assessing his practical competence on the surface and in the water as detailed in this section – sub-section 2.2.2 (a)- and by a written theory examination.

DIVING EXPERIENCE required in order to be eligible for assessment

The bottom times and the minimum number of dives shown in this Table are TWICE those required during a training course.				
IDSA QUALIFICATION	**Equipment**	**Depth (Metres)**	**Total Bottom Time (Mins)**	**Minimum Number of Dives**
IDSA LEVEL 1	**SCUBA**	0 to 20	1000	30
Commercial SCUBA Diver		20 to 30	300	10

(a) No diver may be assessed unless he has Logbook proof or verified letters from employers stating that he has worked as a diver for at least 2 years
(b) .All dives must have taken place while in paid employment,
(c) Only time on the bottom counts towards the required durations. Descent and decompression times may not be counted.
(d) At least 4 dives must be to the maximum depth of 30m
(e) All logged dives must have been countersigned by the Supervisor

APPENDIX B – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 1

Applicants name

List of SCUBA Diving Experience

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Task	Diving Contractor
0 to 20 Metres					
1					
2					
3					
4					
4					
6					
7					
8					
9					
10					
11					
12					
13					
14					
14					
16					
17					
18					
19					
20					
21					
22					
23					
24					
24					
26					
27					
28					
29					
30					
		TOTAL			

Applicants name

LIST OF SCUBA DIVING EXPERIENCE (Continued)

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Task	Diving Contractor
20 to 30 Metres					
1					
2					
3					
4					
4					
6					
7					
8					
9					
10					
		TOTAL			

LIST OF SCUBA WORK EXPERIENCE

Suitable dives from the List of Diving Experience above may be included.--

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Where	Diving Contractor
Evidence of taking part in the following underwater work tasks:					
Lifting bags - at least 100kgs capacity					
1					
2					
Carrying out a bottom search					
1					
2					
Using Hand Tools					
1					
2					
Visual or photographic inspection					
1					
2					
I wish to take part[in an assessment of my SCUBA Diving & Work Experience in order to gain the IDSA Level 1 qualification, and certify that I have completed this application with true extracts from my Logbook(s), and that I hold an up to date Medical Certificate stating that I am fit to dive					
Date of Application			**Signature**		
Name (Please print0					

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 2

LAST or FAMILY Name	First Name	Male or Female
Date of Birth	Nationality	
Address		E Mail:

1, The purpose of this assessment is to confirm that an experienced diver has the theoretical knowledge & in-water competence required by the IDSA Level 2 (Supply Supplied Inshore Air Diver) syllabus. On successful completion the diver may be awarded a Level 2 IDSA Diving Qualification Card.

Note: As well as having the experience required by this form and holding an in-date Medical Certificate. The applicant **MUST** either hold a Level 1 qualification or take part in a combined Level 1 & Level 2 assessment.

2. The assessment will check that the diver:

- Understands the principles of Surface Supplied Diving Operations
- Can dive safely and competently using surface supplied equipment to a depth of 30 metres with air as the breathing mixture.
- Understands the operational and safety procedures for the tools and underwater work tasks listed in the syllabus

This will be done by assessing his practical competence on the surface and in the water as detailed in this section – sub-section 2,2,2,(b) and by a written theory examination.

DIVING EXPERIENCE

The bottom times and the minimum number of dives shown in this Table are TWICE those required during a training course.

IDSA QUALIFICATION		Equipment	Depth (Metres)	Total Bottom Time (Mins)	Minimum Number of Dives
IDSA LEVEL 2 Surface Supplied Inshore Air Diver	**LEVEL 1** (See Notes 1 to 5)	**SSDE**	0 to 20	1900	36
			20 to 30	400	8
			TOTALS	2300	44

Notes

1. All logged dives must have been countersigned by the Supervisor
2. All dives must have taken place while in paid employment.
3. Only time on the bottom counts towards the required durations. Descent and decompression times are not counted.
4. Wet Bell dives may not to be counted.
5. At least 8 dives must be to the maximum depth of 30m.

Applicants name

LEVEL 2 - LIST OF SURFACE SUPPLIED DIVING EXPERIENCE

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Task	Diving Contractor
0 to 20 Metres					
1					
2					
3					
4					
4					
6					
7					
8					
9					
10					
11					
12					
13					
14					
14					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
		TOTAL			

Applicant's name

LEVEL 2 - LIST OF SURFACE SUPPLIED DIVING EXPERIENCE (Continued)

20 to 30 Metres					
1					
2					
3					
4					
4					
6					
7					
8					
		TOTAL			

LEVEL 2 - LIST OF SURFACE SUPPLIED WORK EXPERIENCE

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Where	Diving Contractor
Evidence of taking part in the following underwater work tasks:					
+Lifting bags operations (at least 1000 kgs capacity)					
1					
2					
Using Power Tools					
1					
2					
Using Thermal-Arc cutting equipment					
1					
2					
Using an airlift					
1					
2					
Using a water jet					
1					
2					
Simple underwater construction					
1					
2					

I wish to take part in an assessment of my Surface Supplied Diving & Work Experience in order to gain the IDSA Level 2 qualification, and certify that I have completed this application with true extracts from my Logbook(s), and that I hold an up to date Medical Certificate stating that I am fit to dive[3].

Date of Application	**Signature**

Name (Please print)

Note: Suitable dives from the List of Diving Experience above may be included.

[3] Both these documents must be brought to the assessment for verification

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 3

LAST NAME	FIRST NAME	Male/ Female
Date of Birth	Nationality	
Address		

1. The purpose of this assessment is to confirm that a diver has the theoretical knowledge and practical ability required by the IDSA Level 3 (Surface Supplied Offshore Air Diver) syllabus. On successful completion the diver may be awarded a Level 3 IDSA Diving Qualification Card.

   Note: As well as having the experience required by this form and holding an in-date Medical Certificate. The applicant **MUST** either hold a Level 2 qualification (or equivalent) or take part in a combined Level 1, 2 & 3 assessment.

2. The assessment will check that the diver:

   - Understands the principles and procedures required for surface supplied operations using both a Wet Bell and Hot Water system.
   - Can dive safely and competently in air diving operations using surface supplied diving equipment, both from the surface and from an Wet Bell, to a depth of 50 metres.
   - Can carry out the work tasks listed in the Level 2 syllabus safely and competently.
   - Can dive safely and competently using a hotwater suit

   This will be done by assessing his practical competence on the surface and in the water as detailed in this section – sub-section 2,2,2,(c) and by a written theory examination.

Diving Experience required in order to be eligible for assessment

The bottom times and the minimum number of dives shown in this Table are TWICE those required during a training course.

IDSA QUALIFICATION		Equipment	Depth (Metres)	Total Bottom Time (Mins)	Minimum Number of Dives
IDSA LEVEL 3 Surface Supplied Offshore Air Diver	**LEVEL 2 PLUS (See Notes 1 to 7)**	**Wet Bell**	0 to 29	300	10
		SSDE	30 to 40	320	10
		SSDE	40 to 50	300	10
			TOTALS	920	30

1. All logged dives must have been countersigned by the Supervisor
2. All dives must have taken place while in paid employment.
3. Only time on the bottom counts towards the required durations. Descent and decompression times are not counted.
4. At least 10 dives must have been carried out from a Wet Bell.
5. The Hot Water suit training may take place during either Surface 0rientated or Wet Bell Dives.
6 Each diver must make at least 6 dives of minimum duration 30 minutes using a Hot Water suit.
7 At least 4 surface orientated dives must be made to the maximum depth of 50 metres.

Applicant's name

List of experience in using a Wet Bell and Hotwater System

Dive No	Depth (in Metres)	Date	Bottom Time (In Minutes)	Task	Diving Contractor
1.3 WET BELL					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
HOT WATER SYSTEM – minimum duration 30minutes					
1					
2					
3					
4					
5					
6					
1.4 POWER TOOLS - OVER 35M					
1					
2					
1.5 SURFACE ORIENTATED DIVE TO 50M					
1					
2					
3					
4					

I wish to take part in an assessment of my SDDE Diving & Work Experience in order to gain the IDSA Level 3 qualification, and certify that I have completed this application with true extracts from my Logbook(s), and that I hold an up to date Medical Certificate stating that I am fit to dive[4].

Date of Application	**Signature**
Name (Please print)	

[4] Both these documents must be brought to the assessment for verification

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 4

LAST NAME	FIRST NAME	Male/ Female
Date of Birth	Nationality	
Address		

1. The purpose of this assessment is to confirm that a diver named has the theoretical knowledge and practical ability required by the IDSA Level 4 (Closed Bell/Mixed Gas syllabus), by ensuring that he:

   Note: *As well as having the experience required by this form and holding an in-date Medical Certificate. The applicant **MUST** either hold a Level 3 qualification (or equivalent) or take Chapter in a combined Level 1, 2, 3 & 4 assessment.*

2. The assessment will check that the diver:

   (a) Has a complete understanding of the principles of safe chamber operations, bell handling systems, bell breathing gas systems, gas reclaim systems, bell diver heating systems, gas analysis systems and emergency procedures.
   (b) Understands the principles of closed bell and mixed gas diving operations
   (c) Assist with the launch and recovery of a closed bell, as both bell diver and surface tender.
   (d) Is able to mate and clamp the bell to a deck chamber system, equalise internal pressures and effect a safe "Transfer under Pressure" of the bell and chamber occupants.
   (e) Can work safely and competently as a bellman, bell diver and surface tender.
   (f) Can demonstrate an understanding of the design, theory and the procedures of closed bell diving from a dynamically positioned vessel.

   This will be done by assessing his practical competence on the surface and in the water as shown in the following table, which is taken from Section E2 & E3 of the IDSA Level 4 Closed Bell/Mixed Gas syllabus, and by a written theory examination.

   A. Competently carrying out closed bell internal and external examinations by means of the companies checklists including individual equipment (the bell incorporated a gas reclaim system)
   B. Competently carrying out internal & external examinations of saturation chambers, including the TUP chamber and HRL. Set up & test the BIBS. Maintain chamber hygiene. Correctly react to simulated chamber emergencies.
   C. Correctly performing TUPs (Transfer under Pressure) from bell to transfer chamber & then to living chamber
   D. Competently carrying out closed bell lockouts under saturation conditions
   E. Act as bellman during saturation dives assisting diver to dress & undress; monitoring bell & locked out diver and reporting to supervisor as required
   F. As bellman, take CO2 readings in bell under pressure and report as required
   G. As bellman competently carrying out simulated "unconscious diver rescue" including checking for pulse, clearing airway and extending, applying simulated CPR.
   H. Carrying out simulated unconscious diver transfers from bell to TUP chamber by means of diver recovery harness system
   I. Reacting to various emergencies such as simultaneous diver gas & communications failure; bell scrubber/interior lights failure; HRL evacuation simulation; DDC Fire; Contaminated atmosphere & use of BIBS; Bell winch power failure; HW failure and use of Survival equipment; Bell communications power failure (including comms); Use of TW comms system.

Notes
   (a) In addition to these assessments the applicant must be prepared to answer questions from the Supervisor/Assessor concerning any part of the Level 3 syllabus during the assessment.
   (b) The IDSA References shown in this table are taken from the IDSA Diver Training Standards – see Chapter 2.
   (c) Hot water suit dives may be combined with wet bell dives
   (d) Before taking part in an Assessment this application must be completed with information taken from the applicant's Logbook showing that he has the necessary diving and work experience.

LEVEL 4 - List of Closed Bell Experience

Dive No	Depth (msw)	Date	Bottom Time (minutes)	Task	Diving Contractor
Chamber pressurisation & TUP checks					
1					
2					
3					
4					
5					
6					
7					
8					
Bell pre-dive checks					
1					
2					
3					
4					
5					
6					
7					
8					
Bell diver lockouts					
1					
2					
3					
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29					
30					

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 4

Dive No	Depth (msw)	Date	Bottom Time (minutes)	Task	Diving Contractor
Bell diver lockouts (Continued					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
Bell Runs as Bellman					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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27					
28					
29					
30					

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 4

Dive No	Depth (msw)	Date	Bottom Time (minutes)	Task	Diving Contractor
Bell Runs as Bellman (Continued)					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
Diver Rescues (Simulated)					
Bell Runs from Deck to Deck with full TUP Procedure					
1					
2					
3					
4					
5					
6					
7					
8					
9					
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11					
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21					
22					
23					
24					

APPENDIX C – CERTIFICATE OF DIVING EXPERIENCE – LEVEL 4

Dive No	Depth (msw)	Date	Bottom Time (minutes)	Task	Diving Contractor
Closed Bell Bounce dive to 55 msw					
1					
2					
3					
4					
5					
6					
Closed Bell Bounce dive to 75 msw					
1					
2					
3					
4					
5					
6					
Closed Bell Bounce dive to 100 msw					
1					
2					
3					
4					
5					
6					
Saturation dive >50 msw (min 15 minute lockout time)					
1					
2					
Saturation diver rescue >50 msw					
1					
2					
Gas loss & Communications failure (simulated)					
1					
2					

I wish to take part in an assessment of my Closed Bell/Mixed Gas Diving & Work Experience in order to gain the IDSA Level 4 qualification, and certify that I have completed this application with true extracts from my Logbook(s), and that I hold an up to date Medical Certificate stating that I am fit to dive[5].	
Date of Application	**Signature**
Date of Application	**Signature**
Name (Please print)	

[5] Both these documents must be brought to the assessment for verification

ABBREVATIONS

ABLJ	Adjustable Buoyancy Lifejacket
ABS	American Bureau of Shipping (certifying authority)
ACoP	Approved Code of Practice
ACDE	Association of Commercial Diving Educators
ADAS	Australian Diver Accreditation Scheme
ADCI	Association of Diving Contractors International
ADC UK	Association of Diving Contractors Inshore
ADS	Atmospheric Diving Suit
AED	Automated External Defibrillator
ALST	Assistant Life Support Technician
ANSI	American National Standards Institute
AODC	Association of Offshore Diving Contractors (now IMCA)
AS	Australian Standard.
ATA	Atmospheres Absolute
BA	Breathing Apparatus
BIBS	Built in Breathing System
BS	British Standards
BV	Bureau Veritas
CCTV	Closed Circuit Television
CMAS	Confederation Mondiale des Activities Subaquatique (World Underwater Federation)
CSA	Canadian Standards Association
CV	Curriculum Vitae
DART	Diver Attendant Recompression Transportable
DCBC	Diver Certification Board Canada
DCI	Decompression Illness
DDC	Deck Decompression Chamber
DM (DMT)	Diver Medic
DMAC	Diving Medical Advisory Committee
DNV	Det Norske Veritas (Norwegian certifying authority)
DP	Dynamic Positioning
DPO	DP Operator on a DP DSV

ABBREVATIONS

DPVOA	Dynamic Positioning Vessel Owners Association (now part of IMCA)
DSM	Diving Safety Memorandum (UK HSE Diving Safety Notes)
DSV	Diving Support Vessel
EDTC	European Diving Technology Committee
FMEA	Failure Mode & Effect Analysis
FSW	Feet of Sea Water
GL	Germanischer Lloyds (certifying authority)
GOM	Gulf of Mexico
HAZID	Hazard Identification
HAZOP	Hazard & operability study
HES	Hyperbaric evacuation system
HELIOX	Helium & Oxygen gas breathing mixture
HIRA	Hazard identification & risk assessment
HP	High Pressure
HRC	Hyperbaric Rescue Chamber
HRL	Hyperbaric Lifeboat
HRS	Hyperbaric Rescue System
HRV	Hyperbaric Rescue Vessel (Hyperbaric Lifeboat)
HSE	UK Health and Safety Executive
HS&E	Health, Safety and Environmental
ICOP	International Code of Practice
IDQC	IDSA Diver Qualification Card
IDSA	**International Diving Schools Association**
IMCA	International Marine Contractors Association
IMO	International Maritime Organisation
IP	Institute of Petroleum
IRM	Inspection, Repair and Maintenance
ISM	International Safety Management
ISO	International Standards Organisation
JSA	Job Safety Analysis

ABBREVATIONS

LP	Low Pressure
LR	Lloyds Register
LSP	Life Support Package (Portable containerised unit for emergency assistance of saturation divers)
LSS	Life Support Supervisor
LST	Life Support Technician
MPI	Magnetic Partiucle Inspection
MSW	Meteres of Seawater
NDT	Non-destructive testing
NITROX	Nitrogen & Oxygen breathing mixture
NOAA	National Oceanic and Atmospheric Administration
NOSOK	Norwegian Offshore Standards
NPD	Norwegian Petrolem Directorate
NRV	Non-return valve (one way valve)
NURGOD	Norway/UK Regulatory Guidance for Offshore Diving (IMCA D 034)
OGP	International Association of Oil & Gas Producers
OIM	Offshore Installation Manager
OSHA	Occupational Safety & Health Administration (American Govt. Body)
PPE	Personal Protective Equipment
PMS	Planned Maintenance Schedule
POB	Persons on-board
PPO2	Partial Pressure of Oxygen
PRV	Pressure Relief Valve
PVHO	Pressure Vessels for Human Occupancy
QRA	Quantitative /Qualitative Risk Assessment
RIB	Rigid Inflatable Boat
ROV/RCV	Remotely Operated Vehicle/Remotely Controlled Vehicle
SAR	Search and Rescue
SBM	Single Buoy Mooring
SCUBA	Self Contained Underwater Breathing Apparatus
SDC	Submersible Decompression Chamber (Closed diving bell)
SI	Statutory Instrument (UK law/ legal requirement)

ABBREVATIONS

SMS	Safety Management System
SRP / SRU	SCUBA Replacement Pack / Unit.
SS	Stainless Steel
SSDE	Surface Supplied Diving Equipment
STCW	Standards of Training Certification & Watch Keeping for Seafarers
SWL	Safe working Load
TUP	Transfer under Pressure
TWC	Through Water Communications
USN	US Navy
VHF	Very High Frequency

DEFINITIONS

In this document whenever reference is made to the masculine it also includes the feminine.

Bottom Time.	/s the total elapsed time from the time the diver leaves the surface to the time he leaves the bottom. Bottom time is measured in minutes and is rounded up to the next whole minute.
Breathing Gas	Air/Gas mixtures of oxygen and nitrogen, called nitrox ■/Oxygen and helium, called heliox /Oxygen, nitrogen and helium, called trimix /Other gas mixtures suitable for diving
Closed Out	The rectification of a major or minor non compliance
Commercial Diver	Generic term for an occupational group that works under water. Examples: Commercial divers using surface oriented or saturation diving techniques as well as rescue divers, police divers, scientific divers, media divers and inspection divers who use SCUBA equipment.
Instructor	A diver suitably qualified & experienced under IDSA rules to be in charge of all or part of a diver training operation
Minor Non Compliance	A small error in procedure which is readily corrected: unsuitable equipment which can easily be replaced: incorrect record keeping which can be rectified simply: generally the rectification of minor deficiencies or improvements to the overall efficiency of the training programme.
Major Non Compliance	The use of an unsafe procedure: badly maintained equipment: insufficient equipment: the inadequacy of a facility: the incompetence of a member of staff or his/her lack of training, or any other matter which threatens the safety and/or the fundamental integrity of the course.
Open Water	Any large body of water. Including harbours, lakes and rivers where the environment is affected by tides, currents, wind or other associated environmental factors.
Personal Diving Equipment	The equipment and diving suit worn by a diver including underwater breathing apparatus.
Phoenetic Alphabet	International Phonetic Alphabet (IPA) used to avoid misunderstanding communications
Powered Tools	Tools that run on electric, pneumatic, hydraulic or similar power.
Rescue Diver	An occupational diver who is a member of a professional rescue diver team trained to come out within a short response time to an incident site and dive down to 30 meters in order to save human lives. A rescue diver can also serve in simple inspection missions and search for objects or missing persons even though such assignments are not defined as rescue diving. For other ordinary diving tasks, however, it is required that the diver has received the necessary formal training and is holder of a diving certificate corresponding to at least IDSA Level 3, or in some countries IDSA Level 2.
Rescue Diving Supervisor	A person who is to supervise a rescue diving mission must be an experienced rescue diver who has received the formal training in accordance with the applicable national regulations or recognized industrial standards.
Specialist Diver	Training Supervisor, Diver Medic/DMT, Life Support Technician, Diver Inspectors and other similar specialisations.
Surface Oriented	Diving method where the diver is supplied with breathing gas through a Diving umbilical from the surface.


INTERNATIONAL DIVING SCHOOLS ASSOCIATION
IDSA