# MINUTES of EDTC 2025 ANNUAL MEETING

## Mary Rose Museum

## Portsmouth, UK

**25-26 September 2025**

**Hosted by**

IMCA

**AGENDA**

| | | |
|---|---|---|
| **25th September 2025, Thursday** | | |
| **15:00 - 16:00** | EDTC Executive Board Meeting | **EDTC Board** |
| **18:00 – 20:30** | Dinner at Mary Rose Museum | **Members and Guests** |
| **26th September 2025, Friday, Mary Rose Museum** | | |
| **09.00–09.30** | Registration | |
| **09:30-09:35** | Welcome | **Chairman, Jörn Ryberg** |
| **09:35-10:00** | Introductory Presentations by Host Country and Safety and Security Information | **Host** |
| **10:00-10:15** | EDTC Admin Matters, Apologies EDTC<br>Membership Summary<br>Treasurer Report | **Secretary, Akın S. Toklu**<br>**Treasurer, Phil Crombie** |
| **10:15-10:35** | Chairman's Report<br>Summary of Actions from 2024/2025 | **Chairman, Jörn Ryberg** |
| **10:35-10:50** | Reports from the EDTC Medical Subcommittee | **Pieter-Jan van Ooij** |
| **10:50-11:10** | **COFFEE BREAK** | |
| **11:10-12:00** | Workshop on "how can EDTC and its members have impact on the implementation of guidance" | **All** |
| **12:00-12:45** | **LUNCH** | |
| **12:40-13:30** | Visit to Mary Rose Museum | **All** |
| **13:30-15:30** | National Reports | **Members** |
| **15:30-16:00** | **COFFEE BREAK** | |
| **16:00-16:20** | Elections | **All** |
| **16:20-16:50** | Any Other Business, Next Meeting | **All** |
| **16:50-17:00** | Closing remarks | **Chairman Jörn Ryberg** |
| **27th September 2025, Friday, Mary Rose Museum** | | |
| **10:45** | Visit to Submarine Museum | **Members and Guests** |

# THOSE PRESENT

## HOST

| MEMBERS | COUNTRY |
|---|---|
| Ali Macleod | UK (IMCA) |
| Jim Cullen | UK (IMCA) |

## EXECUTIVE BOARD

| NAME | REPRESENTING | TASK |
|---|---|---|
| Jörn Ryberg | SWEDEN | Chairman |
| Akin Savas Toklu | TURKEY | Secretary |
| Phil Crombie | UK | Treasurer |
| Helene Szulc | FRANCE | Member Executive Board |
| Jurg Wendling | SWITZERLAND | Member Executive Board |

## PARTICIPANTS

| MEMBERS | COUNTRY | PARTICIPANTS | COUNTRY |
|---|---|---|---|
| Achermann Andreas | SWITZERLAND | Jim Cullen | UK |
| Akin Savas Toklu | TURKEY | Jord LUCAS | FRANCE |
| Ali Macleod | UK | Jörn Ryberg | SWEDEN |
| Allan Beith-Schütt | DENMARK | Jurg Wendling | SWISS |
| Amanda Sordes | AUSTRALIA | Leif Morten Rasch | NORWAY |
| Anders Rosén | SWEDEN | Leo Lagarde | NEDERLAND |
| Andrea Cencetti | ITALY | Marcel Fievez | NETHERLANDS |
| Aublin Blandine | FRANCE | Mario van Mierlo | THE NETHERLANDS |
| Aurelian Ivascu | ROMANIA | Mark Caney | UK |
| Bard Humborstad | NORWAY | Martin Heer | NORWAY |
| Bulelwa Huna | SOUTH AFRICA | Massimo Becherucci | ITALIA |
| Christian Wölfel | SWITZERLAND | Mats Hagberg | SWEDEN |
| Daniel Larsson | SWEDEN | Maurice Schlauri | SWITZERLAND |
| Eric Saint-Sulpice | FRANCE | Øyvind Loennechen | NORWAY |
| Erik Petersen | DENMARK | Pasquale Longobardi | ITALY |
| Erwin Helderman | THE NETHERLANDS | Philip Crombie | UK |
| Giovanni Esentato | ITALY | Pieter-Jan van Ooij | NETHERLANDS |
| Giuseppe Petrone | ITALY | Rolf Roessland | NORWAY |
| Hans Cuylits | BELGIUM | Somikazi Charlie | SOUTH AFRICA |
| Helene Szulc | FRANCE | Taira Caton | UK |
| Ion Bogdan Cristian | ROMANIA | Thomas Pineau | FRANCE |
| Jean Lelievre | FRANCE | Tracy Childs | CANADA |
| Jennifer Mayer | GERMANY | Ulrik Junge | NORWAY |

## APOLOGIES FOR ABSENCE

| MEMBERS | COUNTRY | MEMBERS | COUNTRY |
|---|---|---|---|
| Ali Uzunoğlu | TURKIYE | Nicolae Visan | ROMANIA |
| Brian Murphy | IRELAND | Pavel Macura | CZECH REP. |
| Carla d'Espiney Amaro | PORTUGAL | Phillip Newsum | USA |
| Damir Podnar | SLOVENIA | Roland Vanden Eede | BELGIUM |
| Danilo Mijajlovic | MONTENEGRO | Roswitha Prohaska | AUSTRIA |
| Frank Werner | GERMANY | Salih Murat EGİ | TÜRKIYE |
| Jacek Kot | POLAND | Thomas Gaisberger | AUSTRIA |
| Jack Meintjes | SOUTH AFRICA | Veronika Rybarova | SLOVAKIA |
| Jaroslav Šot | ČESKÁ REPUBLIKA | | |

## WELCOME ADDRESS

The Chairman Jörn Ryberg opened the EDTC 2025 meeting welcoming members. He thanked the host and other people contributed organizing the Annual Meeting in Portsmouth and invited Jim Cullen to give an introduction along with safety and security information, and to make his presentation. Jim Cullen welcomed all members and guests to the meeting and gave his presentation.

## PRESENTATIONS BY HOST COUNTRY

Jim Cullen gave safety and security information before his report. Then he introduced IMCA as a global membership organisation representing marine contracting, with over 800 member companies in 65 countries. He described the purpose of the organization to be the global reference for developing marine energy resources safely and sustainably. He shared statistics regarding activities of IMCA and described how IMCA operates. He listed marine contractor, energy company and regulatory members. He finished his report by detailing the IMCA Technical Team. See the detail about the report in Annex-1.

## EDTC ADMIN MATTERS

The Secretary, Akin S. Toklu informed members about the previous meetings noting the date and place of EDTC annual meetings. He added that the host for EDTC 2026 Meeting will be announced during the closing remarks.

The secretary noted that 27 countries and 6 organizations are represented in the EDTC and added that there are 10 correspondent members. He informed the members about the website and the password protected page of "members area" and shared the password for entering. He asked all members to check the information on the page and let him know if any revisions are needed. He showed the list of members who sent apologies for not being able to participate to the meeting and listed the name and countries of the participants. He listed new EDTC members and position changes in the EDTC Medical Subcommittee and the EDTC Board. Then the secretary gave information about the number of countries represented in the EDTC, the number of members and their categories and the vacant positions for each category. He showed the occupancy rates for four categories stating that the most occupied categories were Industry (85%) and Medicine (81 %). He finished his report after listing the names of the members nominated for EDTC Board member election. See detail in Annex-2. He invited treasurer Phil Crombie to give a report.

Phil Crombie stated that the EDTC balance is approximately 27.500 Euros. He noted that he could accept membership fees as cash during the meeting. He explained the purpose of balance is to contribute towards host costs and to cover some strategic expenses such as inviting important guests. He reminded members to make clear their country and representative when making any bank transfers. See Annex-3

## CHAIRMAN'S REPORT

The Chairman, started his report by detailing the profile of the EDTC, aims and objectives of the organization and the executive board. He explained the purpose of EDTC, membership categories and the ways to reach the aim. He introduced the board members and reported that Helene Szulc replaced Jean Lelievre as a board member. He gave information about the activities and achievements of the Board during 2024/2025.

The Chairman has given some figures regarding fatal diving accidents and added the statistics of fatal diving accidents in diving industry. He provided some detail on recent fatal diving accidents.. The Chairman shared a statement issued by EDTC Medical Subcommittee regarding the team size as a contributing factor.

The Chairman introduced the document of SLIC Guide for Labour Inspectors on Health and Safety in Occupational Diving. He asked members to request the document from the secretary if they hadn't received a copy. He mentioned the Guidance on Safe Working Practices in Commercial Diving published on the website. The Chairman detailed the ongoing work of a subcommittee chaired by Pasquale Longobardi, on regulation conflicts about two types of pressure chambers.

Chairman informed the members about the workgroup activity in which "How can EDTC and its members have impact on the implementation of guidance?" The Chairman's report can be seen in Annex-4

## WORK GROUPS ACTIVITY

Participating members were divided into six workgroups to discuss "How can EDTC and its members have impact on the implementation of guidance?". Representatives of the workgroups presented the reports of the groups.

**Workgroup 1:** Somikazi Charlie, from South Africa reported that implementation of EDTC guidelines can be achieved by ensuring adherence to standards through a combination of strong regulations, international alignment, dedicated education and collaboration efforts, and active stakeholder involvement. Together, these actions foster a safer and more consistent European diving environment for all participants. Please see Annex-5 for her presentation.

**Workgroup 2:** Mario Van Mierlo from The Netherlands made a report on behalf of the group. He stated that following up on the previous group reports the members comment that the situation in the Member States and in South Africa differ from each other. It is not mandatory to have a diving team of four people in all member states. The composition of the team often depends on the risk assessment. Group members noted that SCUBA divers are doing projects when surface supply should be used. SCUBA divers are often used by municipalities. Labor Inspectorates therefore must inspect municipalities too. It is up to the social partners to urge their respective ministries to implement the guidance from EDTC. To get EDTC guidance implemented, it would help if it was translated into the specific country language. Safe diving must be priority number 1. That has a price and that price must be paid. Risk Assessments must be enforced by Labor Inspectorates. Please see Annex-6 for the pdf file of presentation shared.

**Workgroup 3:** Martin Heer from Norway represented for the group, He explained how to implement the EDTC documents as follows;

- Top-down approach (EU)
- Bottom-up approach, where each representative uses their own channels to promote and influence implementation locally
- Influence through registries:
    - European registry of certifications
    - European registry of diving companies (application-based)
- Influence through training:
    - Diving supervisor training
    - A new course for top management in diving companies
- In addition, we discussed the importance of manning levels, SCUBA, and the need for clear and easily understandable regulations.

**Workgroup 4**: Jurg Wendling represented for the workgroup and shared the summary of the discussion.

1) The group consisted of Jean Lelièvre (France, industry), Arnaud Laval (France, industry/SNETI), Jord Lucas (IOGP), Ulrik Junge (Norway, GOV), Knud-Helge Andreasen (Denmark, GOV), Jürg Wendling (Switzerland, Medical).
2) Who should be involved? Whoever it is, to be successful a distinct commitment is expected.

3) What is the impact of guidance? Nationally recognised guidance gets a quasi-legal status by default, if the concerned item is not covered by the legislation. National recognition may get achieved when the labour inspectorate or workers national insurance would endorse the guidance.
4) Freelancers as a problem: In most countries freelancers will not be directly covered by the regulations. A good solution is established in France: all commercial diving providers need to be certified by a national institution (controlled by authorities), even self-employed freelancers. Most European countries do not have this need for a certification, but this would be a feasible way to get freelancers under the guidance. Hired freelancers of a company with employees are however under the legislation like the employed.
5) Responsibility of the client: In most countries this is not regulated, what means that clients are not responsible for risk management of a contractor. However, if harm to a worker or a fatal accident happens, the penal law will use a recognised guidance as a "norm", even for hobby divers performing a commercial diving job.
6) Occupational medicine specialists: In most countries diving medicine physicians are engaged by contractors only for medical surveillance of the divers (fitness to dive assessments). Contract medical advisors (occupational medicine specialists with diving medical competence) should however be involved in the planning phase of a commercial diving project to co-author the health and safety concept, based on the project. This is part of the EDTC guidance 2025, described more in detail in the EDTC standards for "Competence for physicians of occupational diving and tunnelling companies 2019". In France every company must have a contract with an occupational medicine doctor on a fixed basis. In Denmark, this is not the case, neither in Norway (there the responsibility for OHS is a clients charge). In Switzerland diving companies must have a health and safety specialist contracted only if they have more than 10 employees, otherwise they need to edit a health and safety concept. Controls however are very loose as the number of incidences has not alarmed the authorities yet.
7) What can EDTC do to help the process? It is recommended that national guidance (or law if it covers our items) shall be translated into English and analysed against the EDTC guidance. There should then be a list of open (not covered) items. This list should be published as "gap list" in defined intervals (for instance every 2 years) to make aware the concerned of the to-do's until the national guidance will match the EDTC guidance. National EDTC delegates area suggested to stimulate implementation.

**Workgroup 5**: Erwin Helderman from The Netherlands made a report on behalf of the group. The group suggested involving regulators and experts in EDTC meetings, making a (EU/international) standard (certification scheme) and certify or accredit: Diving schools (IDSA?), individual competencies, company's / contractors. The detail of the report can be seen in Annex-7

**Workgroup 6:** Øyvind Loennechen from Norway detailed the discussion in the group as follows;

- EDTC Staff position. Consider to have an EDTC employed resource (full or part time) on payroll
    - To follow up admin and contact external parties for sharing of their material
    - Liaison typically with the diving contractors themselves (Incl IMCA), O&G operators (IOGP) have made a lot of material, National organisations, the dive schools, unions etc
    - Liaison with national diving authorities getting access to learning material from diving accidents, investigations, fraud certificates and audits
- EDTC establishes a repository for documents / video and animation materials promoting safe diving conduct from around the industry
    - EDTC to establish examples and document templates for inshore diving, typically for: Dive Project Plan, Dive Plan, Emergency Preparedness Plan, Emergency Hyperbaric Flowcharts known from offshore.
    - Gather the safe conduct material on the EDTC web-page under a separate "Resources" page

    - Collect or make video/animation showing why minimum personnel requirement must be dimensioned for emergencies. Explain roles and tasks which must be in place to make the rescue chain work.
    - EDTC could establish a Social Media presence starting to link up and distribute safe conduct materials for safe diving execution and explanation videos from others
- EDTC could establish a template policy document which EDTC members may start promoting in their contract proposals
    - for clients w/ requirement descriptions, educating clients over good practices and minimum requirements
    - for diving contractors to use as a basis for their commercial proposals (everyone will benefit from level playing field)
    - similar to the proposed SLIC inspector audit guidance; also making SLIC inspectors aware of EDTC policy documents/guidance
- Each EDTC member must be responsible for engaging with their own Labour Inspection Authority / responsible authority making them aware of the EDTC policy documents.
- Commercial Diver Education: EDTC to approach EU and National authorities with requirement for consistent "minimum diving operations and equipment safety training" at independent commercial diver training schools. Several member states leaves this entirely to apprenticeship in the companies with varying success.
- Trade Forum: EDTC membership is based on Authority / Medical / Union / Industry representation. Potentially EDTC together with the national members should push to establish national tri-part trade forums having Authority – Industry – Union as a basis latching on medical and commercial dive schools where possible. Recruiting a collective national representation to EDTC / EU.
- EDTC and national members to source and make available learnings / safety flash / court case material for experience transfer and learning purposes, like the Frenc OPP-BTS as presented
- EDTC to visualise gaps in regulations with a detailed gap matrix for member states

# REPORT FROM THE MEDICAL SUBCOMMITTEE

Pieter-Jan van Ooij, the chairman of EDTC Medical Subcommittee stated that subcommittee members came together for a meeting during the EUBS Meeting in Helsinki, on 05.09.2025. He added 13 EDTC member countries and 8 corresponding members were present. His report included information about the FTD manual, "Medical assessment for work under pressure", information from DMAC (EDTC MedSub is permanently represented at the DMAC as well as vice-versa), diving doctors databank (edmd.eu), revision of EDTC-ECHM training standards for diving and hyperbaric medicine (2011) and concern about small diving team a contributing factors to diving accidents. Detail regarding Medical Subcommittee Report can be seen in Annex-8.

# NATIONAL REPORTS

**FRANCE (Hélène SZULC, Jord LUCAS)**

Hélène SZULC presented the report on behalf of French delegation; Arnaud LAVAL as SNETI Chairman (Industry) and Blandine AUBLIN (OPPBTP/ Medics), Jean LELIEVRE. She gave detail about the fatality that occurred on December 12th 2025 in Léhon's lock. She gave an update on CNEH (national center of hyperbaric expertise) creation process after IDRCF decision to exclude France following INPP closure. She mentioned actions for safety improvement: « standards de prévention lors des travaux immergés » / health, safety and regulation Guidelines (published by OPPBTP) as an official standard for underwater Works. She gave the 2025 figures regarding the certification of companies and divers : « Titre professionnel », technical training improvement with AFPA. See the detail in Annex-9.

Jord Lucas gave detailed insight on Inland/Inshore Diving in the Oil & Gas sector and associated challenges. He focused on ship husbandry scopes and a related IOGP initiative. He gave information about the fatalities including the one in Taiwan during ship husbandry close to TTE perimeter. See Annex-10 for the detail of his report.

**ITALY (Giovanni Esentato, Pasquale Longobardi)**

Giovanni Esentato mentioned the National Underwater Domain Plan (PNS), that is a strategic initiative designed to strengthen national and international capabilities in the subsea environment. He stated The PNS integrates defense, industrial development, environmental protection, and scientific research within a comprehensive framework, positioning Italy as a global leader in the underwater domain. He added professional diving plays a pivotal role in the PNS, providing both technical expertise and operational capability. See Annex-11for his report.

Pasquale Longobardi made a presentation including a study titled "Adapted Algorithms for Safe and Efficient Decompression in Extended Altitude Dives". He summarized activity of "Diving Doctors in Italy". More detail regarding the study and altitude diving can be seen in Annex-12.

**NORWAY (Ulrik Jünge)**

Ulrik Jünge presented the Norwegian national report that includes Havtil's responsibilities across petroleum operations, $CO_2$ transport and storage, offshore renewable energy, and future mineral activities on the Norwegian Continental Shelf. He stated as of January 2025, Norway has over 2200 active wells, nearly 100 fields in production, and extensive infrastructure both offshore and onshore. Havtil continues to develop and revise regulations in collaboration with industry stakeholders, including potential new diving regulations and updates to existing frameworks. The 2024 DSYS report covers both saturation and surface-oriented diving, with statistics on incidents and decompression sickness. Diver training in Norway is managed by NYD and HVL, with 191 certificates issued in 2025. No diving accidents or medical incidents have been reported on the Norwegian shelf in 2025 so far, and diving activity is expected to reach around 250 days by year-end. Key focus areas include supervisor certification, a national diving activity register, updates to NORSOK U-100, and a study on hyperbaric evacuation. Trends in risk level (RNNP survey) divers' questionnaire for 2024 covered both Norway and the UK. The report is published on the Havtil website. An investigation has been completed following three DCS incidents during Nitrox diving in 2024. The investigation revealed issues with gas control, organizational structure, and regulatory compliance. He also shared a slide presented by the Norwegian Labour Inspection Authority underscored the critical importance of following the manufacturer's instructions for maintaining diving equipment. This focus is part of the follow-up to a fatal diving accident that occurred in Norway in December 2024. Further details about the incident will be disclosed at a later date. Maintenance of diving equipment has also been a central theme during inspections of several diving companies this year. The equipment supplier Kirby Morgan provides detailed checklists for both daily and monthly maintenance of their masks and helmets. Records from these inspections suggest that companies do not fully comply with these instructions. See Annex-13 For the detail.

**ROMANIA (Aurelian IVAŞCU)**

Aurelian IVAŞCU presented his national report on Romanian legislation on professional diving. He stated that the previous legislation issued by National Defense Ministry in 2021 was modified and published in 21.01.2025. He added it is a complex document with 183 pages 543 Articles and 35 Annexes regarding military / civil professional and scuba diving. He listed content of the legislation as; method of conducting and organizing of diving activities, training, preparation and classification of divers, authorization and inspection of all underwater activities with divers, general and specific occupational health and safety rules, method of recognizing of the professional qualifications for occupations and professions in the "Divers" group for Romanian and foreign citizens in order to exercise these professions in the territory of Romania. He detailed several articles of the legislation that can be seen in Annex-14

**SWEDEN (Mats Hagberg)**

Mats Hagberg informed the participants regarding the accidents officially recorded between 2011 and 2025. He stated that in Sweden FTD examinations were started to comply EDTC standard, in accordance with "Medical assessment for work under pressure" updated 2024. He reported that Dr. Ander Rosén will be the new Swedish medical representative in EDTC starting from 2026. Detail can be seen Annex-15

**THE NETHERLANDS (Mario van Mierlo)**

Mario van Mierlo presented national report for The Netherlands. His report included following;

Change of system: Transition from certification to registration for four regulated professions: diving Physician, diver, diving supervisor and diving medical attendant. Diver and diver supervisors remain regulated professions. Requirements for inspections will be included in the regulations.

SCUBA with air supply from surface is included in the A scope. Public services police and fire brigades have indicated that they will make more use of SCUBA equipment with (HP) air supply from the surface where possible. In the annual plan of SWOD the use of this technology will be approached in a generic way.

Regarding volunteers and diving the project on recreational diving and voluntary activities was finalized. Conclusions of this project are in a nutshell: under Dutch legislation, allowing organized volunteer diving activities under specific conditions, frameworks of European Scientific Diving into the current A-scope for SCUBA diving.

A presentation was given about results of Diving Accidents or Incident Registration. The results are based on reports submitted (2024-2025). The purpose is to improve safety, identify risks, and comply with legal reporting obligations. The key takeaways are the

Majority of incidents are without injury., Among the accidents/incidents is a high use of Surface-Supplied Equipment. Shallow diving (< 9m) is most common. Visibility and current are recurring risks. Causes are linked to equipment issues & external factors.

The reporting chain includes employer and authorities. See Annex-16 for more detail.

**UK (Phil Crombie, Ali Macleod)**

Phil Crombie presented accidents and incidents reported in the UK between 1 April 2024 and 1 April 2025. This included one fatality of a missing shellfish diver in December 2024. He reported on changes to the List of Approved Diving Qualifications that were published in Jan 2025 – the most significant changes were that French diving qualifications are no longer approved (since the closure of INPP) and Spanish diving qualifications have been removed from the list. He went through some examples of enforcement that HSE have taken in the past year and reported on the number of divers trained at HSE schools. He then went on to discuss Closed Bell diver training and the intention of Deep to train closed bell divers at their campus in Chepstow. His presentation is in Annex-17.

Ali Macleod presented an overview of what IMCA have done in 2024-2025, and where they're heading. He introduced IMCA Diving personnel. He detailed IMCA diving documents published or to be published. He mentioned accidents occurred during underwater ship husbandry and IMCA guidance on the issue. He gave information about Diving Medical Advisory Committee and Diving Equipment Sub-Committee. His presentation is in Annex-18

# ELECTIONS

The Secretary announced that there are three nominations for the positions of Jürg Wendling from Switzerland and Phil Crombie from United Kingdom, in EDTC Board. The nominations were Jan-Pieter van Ooij from The Netherland, Phil Crombie from United Kingdom, Mario van Mierlo from The Netherland. Pieter van Ooij and Phil Crombie were elected to the EDTC Board.

## ANY OTHER BUSINESS, NEXT MEETING, VENUE AND DATE

The Chairman announced Germany as the host country for EDTC 2026 and stated the meeting will be held in November. He stated the detail will be shared with the members when clarified.

## ACKNOWLEDGEMENTS & CLOSING REMARKS

The Chairman thanked the host for organizing and all EDTC members and guests for participating at the EDTC 2025 Annual Meeting.

Compiled by Akin S. Toklu

**Annex-1**

# About us

**Who we are**

- We are the global membership organisation representing marine contracting, with over 800 member companies in 65 countries.
- Our purpose is

  *"To be the global reference for developing marine energy resources safely and sustainably"*

# In numbers...

- A proud track record for **53** years.
- **828** member companies and associates working in **65** countries across the globe.
- More than **700** items in our Technical Library – guidance and information notes.
- More than **2,000** individual Safety Flashes.
- **49**-person Secretariat – technical experts and more. **46** committees, sub-committees and workgroups.
- Around **6,000** IMCA-certified offshore colleagues.
- **+4,000** vessels owned/operated by our members
- **1,886** vessels inspected by **418** inspectors through eCMID.

# How we operate

## We operate through a structure of committees and workgroups

- There are over **500** people engaged with **46** committees and workgroups generating and maintaining our **Technical Library**.
- Our toolkit includes:
  - Personnel competence and training standards.
  - Equipment standards and compliance requirements.
  - Safe processes and procedures.
  - Audit and compliance systems and tools.

Some of our committees:

- Diving
- DP
- Lifting & Rigging
- Offshore Survey
- ROV
- HSS
- GHG Reduction
- Environmental Sustainability
- Marine Autonomous Ships
- Legal Contracts & Insurance

# Marine contractors

A selection of IMCA contractor Members active in the offshore energy industry:

# Energy company Members

# Regulator Members

# IMCA Technical Team

Jim Cullen
Technical Director

Mark Ford
Marine & Quality Manager

Roger Moore
Technical Advisor – ROV, Survey

Adrian White
HSS Manager

John Kingston
Document Assurance Specialist

Bill Chilton
Diving Manager

Rhys Jones
Technical Advisor – Marine

Sara McQuillan
Assistant Technical Advisor – ROV, Survey

Nick Hough
Safety & Security Consultant

Ali McLeod
Technical Advisor - Diving

Richard Purser
Technical Advisor - Marine

David Slater
Technical Advisor - Diving

Jennifer Evans
Technical Advisor – Marine

Kester Keighley
Technical Advisor - Diving

Argiro Bell
Marine Administrator

Katie Kidd
Assistant Technical Advisor - Diving

Andy Goldsmith
Marine Consultant

Gavin Anthony
Diving Consultant

Steve Sheppard
Diving Consultant

Annex-2

# EDTC Secretary Report

Akın Savaş Toklu

# HOSTS of ANNUAL MEETINGS

| YEAR | HOST | YEAR | HOST |
|---|---|---|---|
| 2000 | UK | 2013 | TURKEY |
| 2001 | BELGIUM | 2014 | SPAIN |
| 2002 | FRANCE | 2015 | POLAND |
| 2003 | SWITZERLAND | 2016 | ESTONIA |
| 2003 | AUSTRIA | 2017 | AUSTRIA |
| 2004 | TURKEY | 2018 | ROMANIA |
| 2005 | BELGIUM | 2019 | SWEDEN |
| 2007 | PORTUGAL | 2020 | ONLINE |
| 2008 | ITALY | 2021 | ITALY |
| 2009 | DENMARK | 2022 | FRANCE |
| 2010 | CZECH R. | 2023 | THE NETHERLAND |
| 2011 | FRANCE | 2024 | SWITZERLAND |
| 2012 | NORWAY | 2024 | UK |

# HOSTS of ANNUAL MEETINGS

| YEAR | HOST | YEAR | HOST |
|---|---|---|---|
| 2000 | UK | 2013 | TURKEY |
| 2001 | BELGIUM | 2014 | SPAIN |
| 2002 | FRANCE | 2015 | POLAND |
| 2003 | SWITZERLAND | 2016 | ESTONIA |
| 2003 | AUSTRIA | 2017 | AUSTRIA |
| 2004 | TURKEY | 2018 | ROMANIA |
| 2005 | BELGIUM | 2019 | SWEDEN |
| 2007 | PORTUGAL | 2020 | ONLINE |
| 2008 | ITALY | 2021 | ITALY |
| 2009 | DENMARK | 2022 | FRANCE |
| 2010 | CZECH R. | 2023 | THE NETHERLAND |
| 2011 | FRANCE | 2024 | SWITZERLAND |
| 2012 | NORWAY | 2025 | UK |

ADDENDUM 3

# EDTC EUROPEAN DIVING TECHNOLOGY COMMITTEE

## RELATIONSHIP EDTC - CEC

### Historical review

With reference to CEC letter of 16th May 1988 to the Treasurer of EDTC, regarding the CEC financial aid to the EDTC, I may provide the following historical review of the EDTC and the connections with CEC.

1. During 1973 the Society for Underwater Technology -SUT- at London took the initiative to found the European Diving Technology Committee -EDTC-. The main reason for this founding was the large number of fatal accidents in diving in offshore activities in the North Sea area.
Members of the committee were the representatives of the countries surrounding the North Sea. In principle every country is represented by three members, e.g. one of industry, one of the government and one of the medical profession. The object of the work of the committee in general was to improve the safety of divers working in the North Sea area.


History
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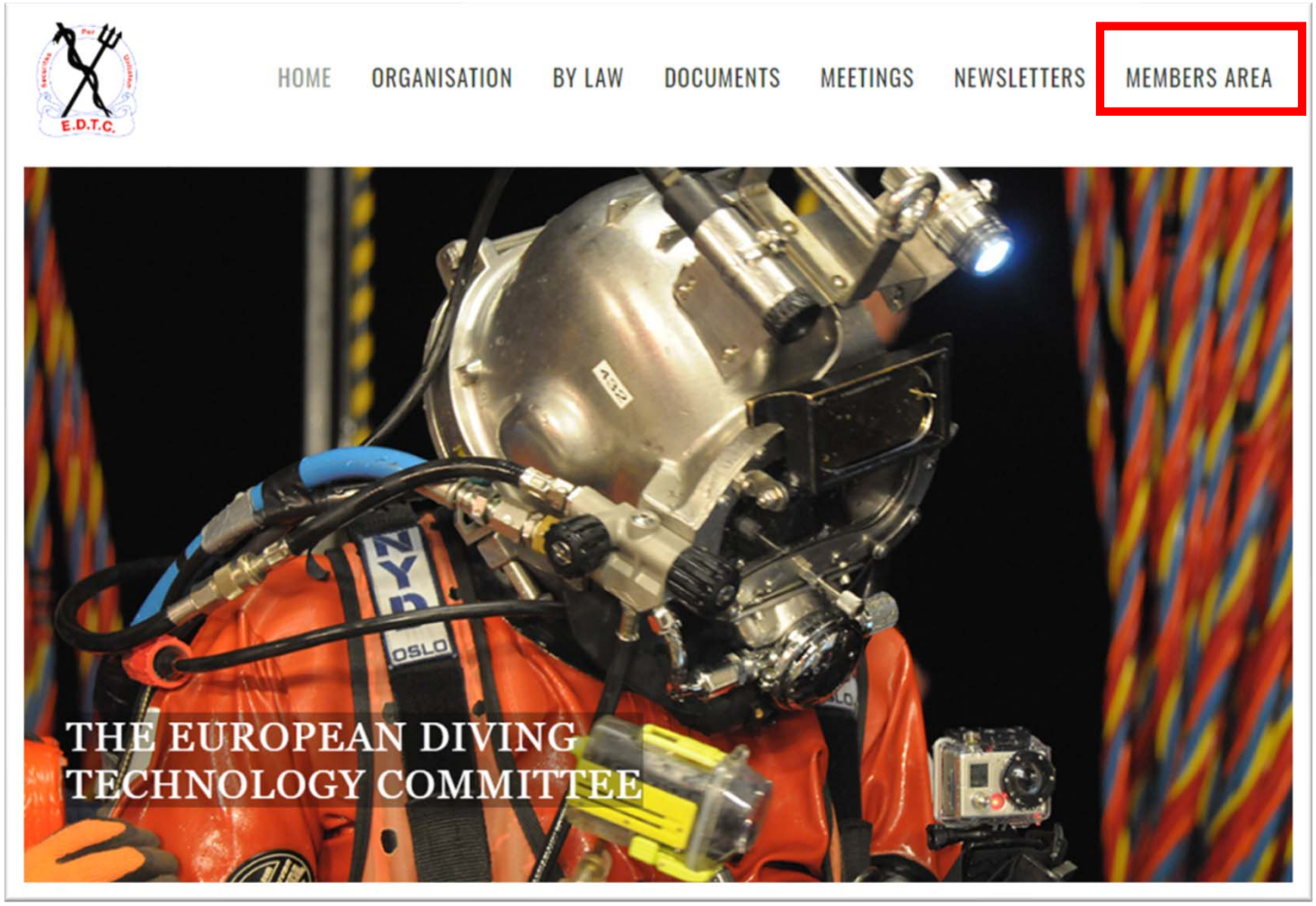
ICELAND
FINLAND
RUSSIA
2007-2012
2019
2016
LATVIA
LITHUANIA
2009
IRELAND
BELORUSSIA
KAZAKHSTAN
2000-2025
2023
POLAND
GERMANY
2015
UKRAINE
2001
2010
2005
SLOVAKIA
MOLDAVIA
FRANCE
2017
HUNGARY
2003-2024
2018
GEORGIA
AZERBAIJAN
ARMENIA
SLOVENIA
CROATIA
2002-2011-2022
ITALY
BOSNIA & HER.
SERBIA
IRAN
2008
BULGARIA
2004-2014
2006
SPAIN
KEY
2014
2008-2021
ALBANIA
MACEDONIA
GREECE
SYRIA
IRAQ
MOROCCO
ALGERIA
TUNESIA
SAUDI ARABIA

# EDTC 2026 ANNUAL MEETING

in ?

27 Countries, 6 Organization, 10 Correspondents




**http://edtc.org/**

## AUSTRIA

| | |
|---|---|
| Dr. Roswitha Prohaska<br>Seeboeckgasse 17<br>A – 1160<br>Wien, AUSTRIA | Medical<br>Tel: + 43 699 19442390<br>Fax: + 43 19442390<br>E-Mail:prohaska@gmx.info |
| Mr. Thomas Gaisberger<br>WIFI OÖ GmbH<br>Wiener Hauptstrasse 150<br>A-4024 Linz, AUSTRIA | Industry<br>Tel: +43 (0)5 7000 7500<br>Fax: +43 (0)5 7000 7409<br>E-mail:thomas.gaisberger@wifi-ooe.at |

## BELGIUM

| | |
|---|---|
| Mr. Hans Cuylits<br>Hans Cuylits<br>Krimperslaan 4 d<br>9140 Temse, BELGIUM | Industry<br>Email privé: Cuylits.hans@gmail.com<br>Email Work: hans@antwerpsolutions.com<br>Tel:+32 472 67 44 21 |
| Dr. Med. Roland Vanden Eede<br>Heidestraat 8<br>2660 Hoboken, BELGIUM | Medical<br>Tel: +32 3 827 57 31 (Private)<br>Tel: +32 2 549 71 03 (Work)<br>Mobile: +32 478 22 34 04<br>E-mail: roland.vandeneede@mensura.be |

## CROATIA

| | |
|---|---|
| Dr.Zeljko Dujic<br>University of Split, School of Medicine<br>Department of Integrative Pyhsiology<br>Soltanska 2 21000<br>CROATIA | Medical<br>E-mail: zeljko.dujic@mefst.hr |

# EDTCpass2020

# APOLOGIES FOR ABSENCE

| NAME | REPRESENTING |
|---|---|
| Ali Uzunoğlu | TURKIYE |
| Brian Murphy | IRELAND |
| Carla d'Espiney Amaro | PORTUGAL |
| Damir Podnar | SLOVENIA |
| Danilo Mijajlovic | MONTENEGRO |
| Frank Werner | GERMANY |
| Jacek Kot | POLAND |
| Jack Meintjes | SOUTH AFRICA |

| NAME | REPRESENTING |
|---|---|
| Jaroslav Šot | ČESKÁ REPUBLIKA |
| Pavel Macura | ČESKÁ REPUBLIKA |
| Roland Vanden Eede | BELGIUM |
| Roswitha Prohaska | AUSTRIA |
| Salih Murat EGİ | TÜRKIYE |
| Thomas Gaisberger | AUSTRIA |
| Veronika Rybarova | SLOVAKIA |
| Leif Morten Rasch | NORWAY |

# LIST OF PARTICIPANTS

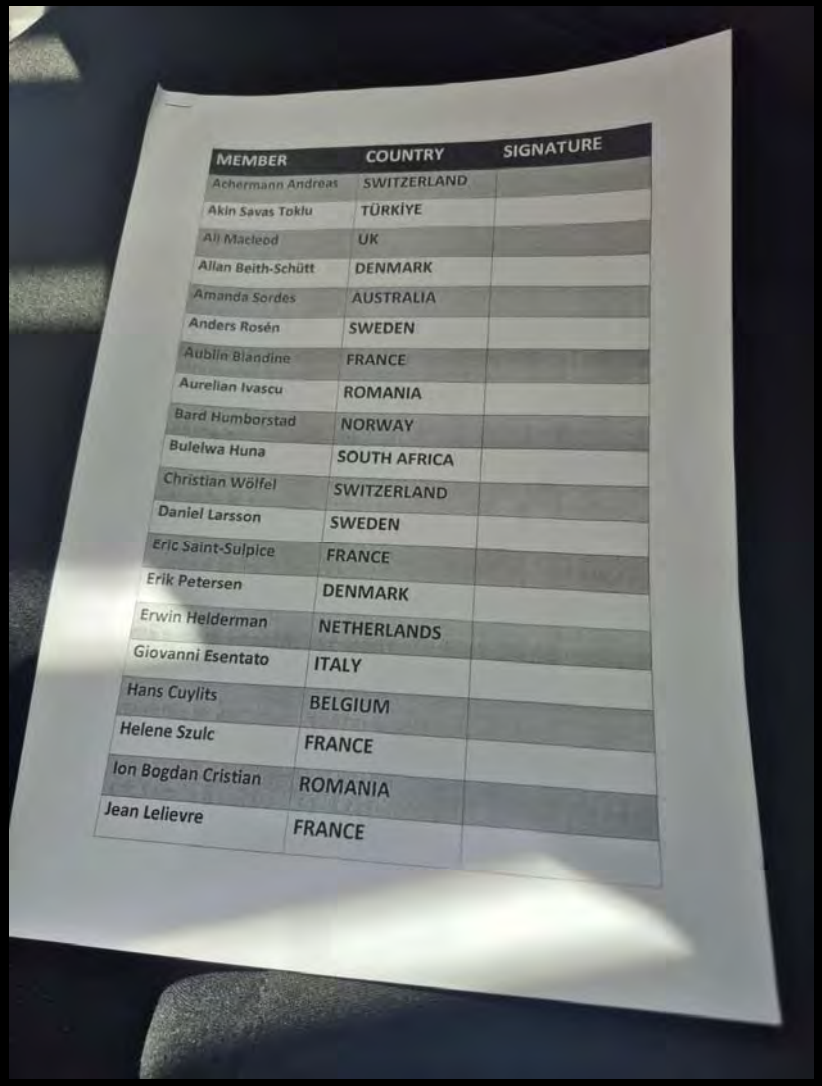
| NAME | REPRESENTING |
|---|---|
| Achermann Andreas | SWITZERLAND |
| Akin Savas Toklu | TURKEY |
| Ali Macleod | UK |
| Allan Beith-Schütt | DENMARK |
| Amanda Sordes | AUSTRALIA |
| Anders Rosén | SWEDEN |
| Aublin Blandine | FRANCE |
| Aurelian Ivascu | ROMANIA |
| Bard Humborstad | NORWAY |
| Bulelwa Huna | SOUTH AFRICA |
| Christian Wölfel | SWITZERLAND |
| Daniel Larsson | SWEDEN |

| NAME | REPRESENTING |
|---|---|
| Eric Saint-Sulpice | FRANCE |
| Erik Petersen | DENMARK |
| Erwin Helderman | THE NETHERLANDS |
| Giovanni Esentato | ITALY |
| Hans Cuylits | BELGIUM |
| Helene Szulc | FRANCE |
| Ion Bogdan Cristian | ROMANIA |
| Jean Lelievre | FRANCE |
| Jennifer Mayer | GERMANY |
| Jim Cullen | UK |
| Jord LUCAS | FRANCE |
| Jörn Ryberg | SWEDEN |

# LIST OF PARTICIPANTS

| NAME | REPRESENTING |
|---|---|
| Jurg Wendling | SWISS |
| Katie Kidd | UK |
| Leo Lagarde | THE NETHERLANDS |
| Marcel Fievez | THE NETHERLANDS |
| Mario van Mierlo | THE NETHERLANDS |
| Mark Caney | UK |
| Martin Heer | NORWAY |
| Massimo Becherucci | ITALIA |
| Mats Hagberg | SWEDEN |
| Maurice Schlauri | SWITZERLAND |
| Nicolae Visan | ROMANIA |
| Øyvind Loennechen | NORWAY |

| NAME | REPRESENTING |
|---|---|
| Pasquale Longobardi | ITALY |
| Philip Crombie | UK |
| Phillip Newsum | USA |
| Pieter-Jan van Ooij | THE NETHERLANDS |
| Rolf Roessland | NORWAY |
| Somikazi Charlie | SOUTH AFRICA |
| Taira Caton | UK |
| Thomas Pineau | FRANCE |
| Tracy Childs | CANADA |
| Ulrik Junge | NORWAY |
| | |
| | |



| MEMBER | COUNTRY | SIGNATURE |
|---|---|---|
| Achermann Andreas | SWITZERLAND | |
| Akin Savas Toklu | TÜRKİYE | |
| Ali Macleod | UK | |
| Allan Beith-Schütt | DENMARK | |
| Amanda Sordes | AUSTRALIA | |
| Anders Rosén | SWEDEN | |
| Aublin Blandine | FRANCE | |
| Aurelian Ivascu | ROMANIA | |
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| Erwin Helderman | NETHERLANDS | |
| Giovanni Esentato | ITALY | |
| Hans Cuylits | BELGIUM | |
| Helene Szulc | FRANCE | |
| Ion Bogdan Cristian | ROMANIA | |
| Jean Lelievre | FRANCE | |

# NEW MEMBERS

| NAME | REPRESENTING | CATEGORY |
|---|---|---|
| Delyan Hristov | **BULGARIA** | Industry |
| Hristo Valeriev Hristov | **BULGARIA** | Government |
| Papoutsidakis Kissandraki Evangelos | **GREECE** | Medicine |
| Haris Kladovasilakis | **GREECE** | Industry |

# NEW POSITIONS

| NAME | POSITION |
| --- | --- |
| Jan-Peiter van Ooij<br>Replacing Jürg Wendling | Chair, EDTC Medical Subcommittee |
| Helene Szulc<br>Replacing Jean Lelievre | EDTC Board Member |

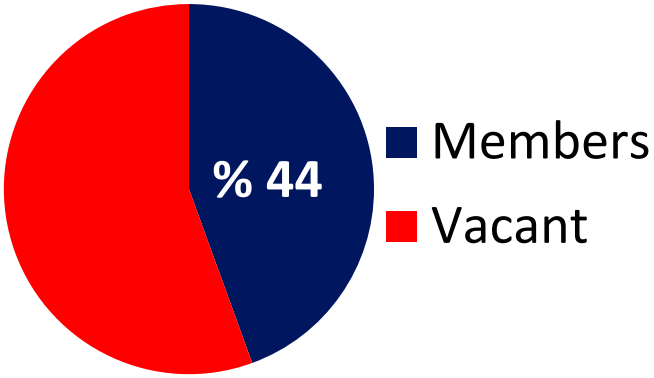
# Membership facts in numbers

- The # of member countries 27
- Expected # of members 108
- Current # of members 65
- # of vacant positions 43
  - Government 15
  - Industry 4
  - Medicine 5
  - Union 19

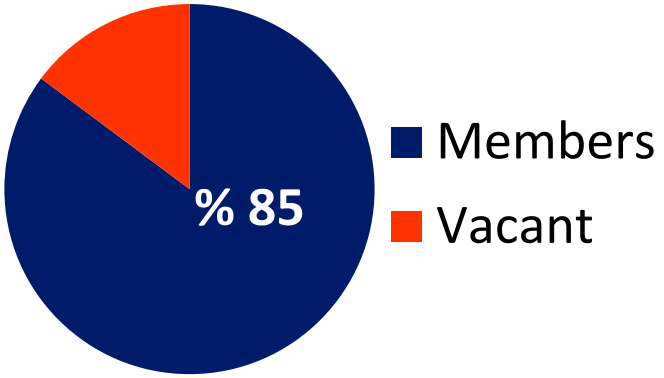
Per Securitas Unitatem

E.D.T.C.

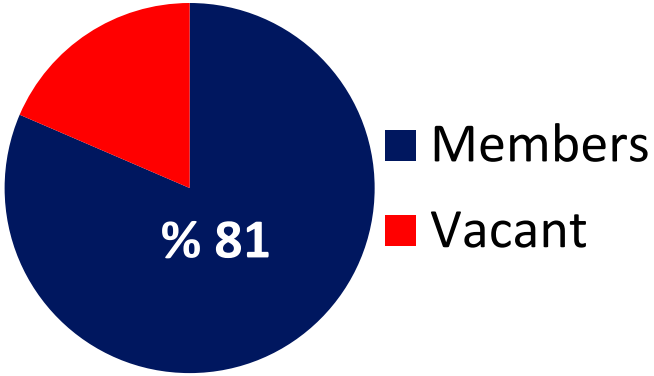
## GOVERNMENT



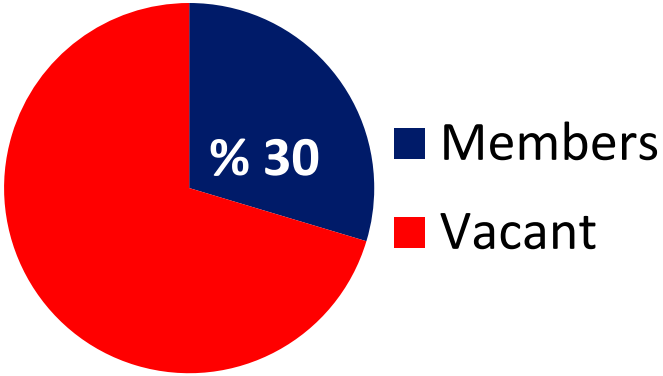

## INDUSTRY




## MEDICINE




## UNION




# TWO BOARD MEMBERS COMPLETED 3rd YEARS in EDTC BOARD

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**Jürg Wendling, CH**

**Phil Crombie, UK**

# MEMBERS NOMINATED FOR EDTC BORAD MEMBER ELECTION

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**Jan-Pieter van Ooij, NL**
**Phil Crombie, UK**
**Mario van Mierlo, NL**
**Jürg Wendling, CH**
**Akın Savaş Toklu, TR**

# PROGRAM

## 2025 EDTC Annual Meeting

| 26th September 2025, Friday | | |
|---|---|---|
| 09:00–09:30 | Registration | |
| 09:30-09:35 | Welcome | **Chairman, Jörn Ryberg** |
| 09:35-10:00 | Introductory Presentations by Host Country and Safety and Security Information | **Host** |
| 10:00-10:15 | EDTC Admin Matters, EDTC Membership Summary<br>Treasurer Report | Secretary, Akın S. Toklu<br>Treasurer, Phil Crombie |
| 10:15-10:35 | Chairman's Report<br>Summary of Actions from 2024/2025 | Chairman, Jörn Ryberg |
| 10:35-10:50 | Reports from the Med. Subcommittee | Pieter-Jan van Ooij |
| 10:50-11:10 | **COFFEE BREAK** | |
| 11:10-12:00 | Workshop on how can EDTC and its members have impact on the implementation of guidance | **All Members** |
| 12:00-12:45 | **LUNCH** | |

# PROGRAM

## 2025 EDTC Annual Meeting

| 26th September 2025, Friday | | |
|---|---|---|
| **12:45-13:30** | Visit to Mary Rose Museum | **All Members** |
| **13:30-15:30** | National Reports | **Members** |
| | FRANCE | Helene Szulc |
| | FRANCE | Jord Lucas |
| | ITALY | Giovanni Esentato |
| | ITALY | Pasquale Longobardi |
| | NORWAY | Ulrik Junge |
| | ROMANIA | Aurelian Ivascu |
| | SWEDEN | Mats Hagberg |
| | THE NETHERLANDS | Mario van Mierlo |
| | UK | Philip Crombie |
| | UK | Ali Macleod |
| **15:30-16:00** | COFFEE BREAK | |
| **16:00-16:20** | Elections | **All Members** |
| **16:20-16:50** | Any Other Business, Next Meeting | **All** |
| **17:00-17:20** | Closing remarks | **Chairman Jörn Ryberg** |

**Annex-3**

# EDTC – Treasurer's report 2025

Phil Crombie

# Balance approx €27,500

Purpose of balance –

- Contribute towards host costs
- Strategic expenses – such as inviting important guests

# Payments for 2025

- €50 per member per year
- Please make clear country and representative when making bank transfer.

Annex-4

# EDTC Annual Meeting
# 26 September 2025

## "Time to implement guidance"

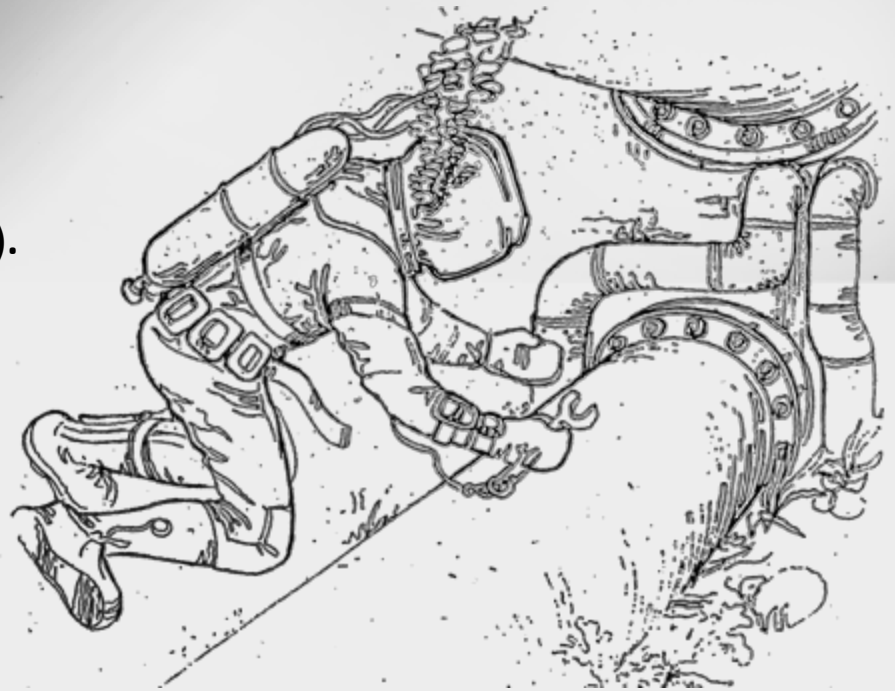
### Content

1. EDTC Profile - Aims & Objectives – executive board
2. A reminder
3. News during 2024/2025
4. Who is responsible ?
5. The way forward
6. Proactive & the Principle

Presented by: EDTC Chairman Jörn Ryberg

# 1. European Diving Technology Committee (EDTC)Profile

**EDTC is a not-for-profit organization - formed 1973. Today EDTC has representation within 27 European (geographical) countries. This year we are greeting new members from Greece and Bulgaria.**



## Purpose

**Safer Commercial Diving,**

- **Through Unity, Strength (Securitas per unitatem).**

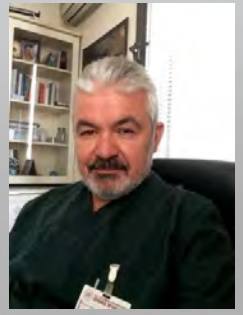
## Representation

- **Membership - entire geographical Europe,**
- **Medical,**
- **Government,**
- **Industry (employers),**
- **Labour Unions (employees).**

## EDTC reach its aims by

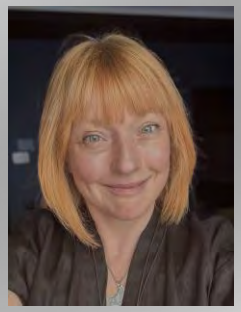
- **Independent European forum,**
- **Discussions,**
- **Standards,**
- **Guidance.**

# 1. The executive board of 2024/2025



Akin Toklu

Jean Lelievre ⟺ Hélène SZULC



Jörn Ryberg

Jürg Wendling

Pasquale Longobardi

Philip Crombie

## Efficient quarterly board meetings using MS Teams

Fixed agenda:

1. Welcome and opening comments by the Chairman,
2. Review and approval of previous Board meeting minutes,
3. Actions and matters outstanding since last meeting,
4. Economic reports,
5. Discussion on EDTC annual activities,
6. Discussion about preparing the annual meeting,
7. Any other business,
8. Next meeting.

## Other board achievements during 2024 / 2025

- Digital meetings with board members,
- Discussions with EU Commission unit C2 – HSE at work,
- Discussions with SLIC/Divex,
- Assisting Chambers Subcommittee,
- Reviewing different regulation interference re. DDC,
- Hélène SZULC co-opt as replacement of Jean Lelivre,
- Providing information to all members.

# 2. European Commercial Diving –

## A reminder why we all are doing this work

**The diving industry – Expensive knowledge**

***Terrible annual message!***

**Diving Industry – poor statistics of fatal accidents**

**Little Governmental information**

**Collected by voluntary individuals**

- 1960 – 1999 – 815 fatal accidents occurred,
- 2000 – 2024 - 1123 fatal accidents occurred.
- **2025 – 7 of 25 fatal accidents registered in Europe**

This year even the SLIC has come to the answer that there is a lack of consistency over Europe.

This is a vicious spiral that has become worse year by year.
It underlines that the work of EDTC is even more valuable to continue

***Behind each figure is a tragedy!***

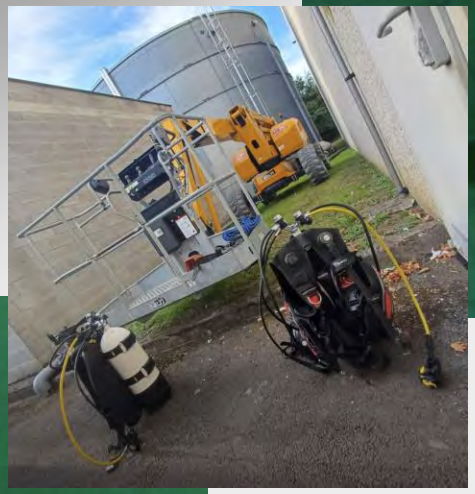
| | |
|---|---|
| 2000 | 37 |
| 2001 | 36 |
| 2002 | 31 |
| 2003 | 21 |
| 2004 | 41 |
| 2005 | 41 |
| 2006 | 40 |
| 2007 | 48 |
| 2008 | 53 |
| 2009 | 52 |
| 2010 | 75 |
| 2011 | 78 |
| 2012 | 73 |
| 2013 | 50 |
| 2014 | 55 |
| 2015 | 54 |
| 2016 | 50 |
| 2017 | 31 |
| 2018 | 47 |
| 2019 | 38 |
| 2020 | 31 |
| 2021 | 31 |
| 2022 | 35 |
| 2023 | 28 |
| 2024 | 47 |
| 2025 | 25 |

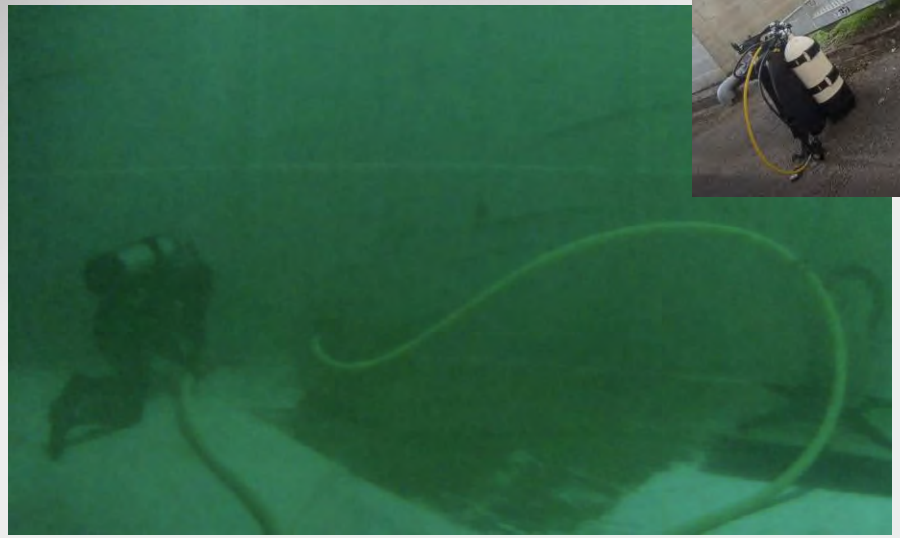
# 2. Safety at work in Europe 2025 ?

## Implementation of modern diving regulations – or why tragedies occur…

**This work is conducted by EIFFAGE Energie Systemes. One of the largest companies in France.**

***No options for better standards and guidance for safe work?***





**Cleaning of water tanks with a hose connected to the outlet valve? What syllabus teaches these methods? What happens if the hose gets damaged and the valve is still opened?**

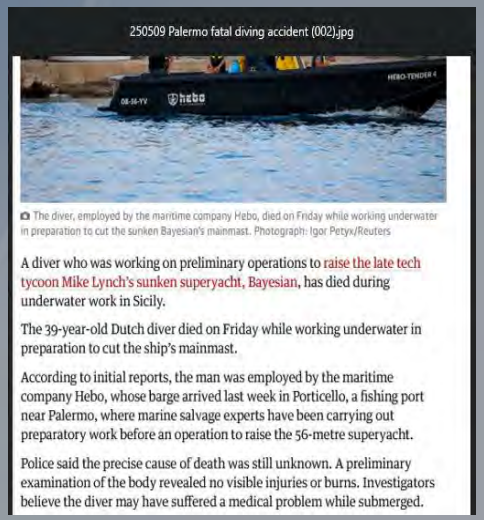
# 2. Seven fatal accidents in Europe since last meeting

**It's a dark picture that's is drawn all over the industry – why is not good guidance implemented?**

## France – delta P

A French commercial diver has been victim of a delta p while working in front of a small sluice on the 12 december. Apparently he has been caught in one of the door sluice valve and stayed trapped there at a depth of about 2 m during several long minutes before being rescued by 2 firemen divers. And enquiry has been started but at first shight it seems that some fatal mistake was made above water during that dive.
In a coma since his accident, the 40-year-old diver was disconnected from his respiratory assistance last night.
This sad accident shows us once again that many divers are unaware of the consequences that such a phenomenon can generate. And it tells us that delta P are and remain the accidents that generate the most deaths in the commercial diving sector (+/- 149 fatal accidents recorded in the world since 1975).


## Italy - salvage




The diver, employed by the maritime company Hebo, died on Friday while working underwater in preparation to cut the sunken Bayesian's mainmast. Photograph: Igor Petyx/Reuters

A diver who was working on preliminary operations to raise the late tech tycoon Mike Lynch's sunken superyacht, Bayesian, has died during underwater work in Sicily.

The 39-year-old Dutch diver died on Friday while working underwater in preparation to cut the ship's mainmast.

According to initial reports, the man was employed by the maritime company Hebo, whose barge arrived last week in Porticello, a fishing port near Palermo, where marine salvage experts have been carrying out preparatory work before an operation to raise the 56-metre superyacht.

Police said the precise cause of death was still unknown. A preliminary examination of the body revealed no visible injuries or burns. Investigators believe the diver may have suffered a medical problem while submerged.

## Norway - fishfarm

The incident occurred in connection with diving from the vessel KB Fløing. The picture of the vessel was taken on another occasion.
Photo: KB Group

### Norway: man in his 20s dies in diving accident

The tragedy occurred today. The diver was carrying out a routine task for diving and service company KB, which provides services to the salmon farming industry.

Editorial team
Published 4 December 2024 - 18:40

The company, owned by Smir Group, stated in a press release that the accident occurred in connection with a routine diving mission that the vessel *KB Fløing* carried out at Gjerdinga in Nærøysund municipality on Wednesday afternoon. The diving boat had a crew of five.

The company notified the rescue services immediately after receiving the message about the serious accident. Several units responded, and the company set up a crisis team.

The employee was retrieved from the sea by colleagues and first aid was initiated. The diver, a man in his 20s, was declared dead at the scene by medical personnel shortly after 2.30pm.



## Austria – delta P


## Spain – Aquaculture – 2 divers


## Sweden – civil engineering

# 2. Not only Europe

## a REMINDER why we all are doing this work

| Year | Month | Day | Surname | Forename(s) | Country | Contractor | Depth (metres) | Diving Category | Details |
|---|---|---|---|---|---|---|---|---|---|
| 2025 | 8 | 22 | Nurhidayat | Indra | Indonesia | | 40 | Hookah | Aged 30, resident of Banyuwangi, East Java, diving at a fish farm in north Lombok, four man dive team to repair a water pipe (seawater inlet for fish ponds), S/S air, 15 minutes into the dive his breathing tube surfaced, colleagues dived but only found his fins. Body floated to the surfaced two days later. Reported by Koranntb.com |
| 2025 | 8 | 2 | Trebisacci | Joel | USA | | | SCUBA | Aged 47, fishing vessel propeller inspection in Stonington Town Fishing Dock. Stonington police are working with the state's Department of Energy and Environmental Protection to learn more about why a diver inspecting the hull of a fishing vessel died Saturday "Nothing appears suspicious but we are investigating," Deputy Chief Todd Olson said Monday. "This man contracts on his own and was called to check the bottom of one of the fishing vessels for line that may have been entangled around the propeller or rudder. When he didn't surface for a while he was pulled to the surface and was found to be unresponsive." Reported in the New Haven Register |
| 2025 | 7 | 24 | Yergara | Yonathon | Chile | Servicios Maritimos Trapen | | | "A statement from the personnel department of the fishing and salmon farming company Blumar SA confirmed the death on July 24 of diver Yonathan Vergara, who was subcontracted by the company "Servicios Marítimos Trapén" to maintain the anti-sea lion nets at the Bahía León fattening center, located in Seno Skyring, Magallanes region" Reported by Interferencia |
| 2025 | 7 | 21 | C B A | | Chile | | | SCUBA | A diver has died while carrying out underwater tasks at a salmon farming site operated by Australis Mar S.A., near Puerto Cisnes, Chile. The incident occurred on the morning of Monday, 21 July, and is under investigation by the Maritime Police and Carabineros' investigative unit (SIP). According to information from the Puerto Cisnes Harbour Master's Office, the Chilean Navy received an emergency call at 11:00 a.m. reporting an accident during diving operations at the "Canalad" grow-out site. The worker, identified by the initials C.B.A., was found unconscious in the water by fellow |
| 2025 | 7 | 20 | B | | South Korea | | | S/S Air | 30s were rescued unconscious while cleaning the floor of a large ship anchored at the container pier of Busan New Port, but two died and one is in critical condition, dive commenced around 08:12, incident reported at 11:43. Air supply contaminated with 3,600ppm CO, Diver B's blood carboxyhemoglobin was 73%. Breathing sir compressor intake reported as being 45cm from the diesel exhaust. |
| 2025 | 7 | 20 | C | | South Korea | | | S/S Air | Vessel Husbandry (Hull cleaning). Three divers (B, C and D) in their 30s were rescued unconscious while cleaning the floor of a large ship anchored at the container pier of Busan New Port, but two died and one is in critical condition, dive commenced around 08:12, incident reported at 11:43. Air supply contaminated with 3,600ppm CO, Diver C's blood carboxyhemoglobin was in the 40% range. Breathing sir compressor intake reported as being 45cm from the diesel exhaust. Reported in Maeil Business Newspaper |
| 2025 | 7 | 7 | Not Reported | | USA | | | | "The body of a diver who was inspecting a dam in the Allegan area Wednesday has been recovered, according to that report, the diver was working on a Consumers Energy safety inspection project at Calkins Bridge Dam, located in Valley Township. At some point, the diver did not resurface from beneath the water, prompting a search from emergency crews. According to the update, the body of the diver was recovered around 4 p.m., just downriver from where he had last been seen. The name of the diver has not been released at this time. Reported by WHTC Holland and WOOD TV |
| 2025 | 7 | 3 | Julnasir | Cpl Mohd Haswansir | Malaysia | | | SCUBA | Aged 30, commando attached to 22nd regiment based at Kem Iskandar in Mersing, Johor, on a training course in Kuantan, diving with three other commandos on a SCUBA training dive in Port Kuantan, reported as 'became detached from swim line and swept away by current'. Body found 48 hours later 300 metres from last |

### *25 Fatal accidents all over the world*

2025 is an extremely sad year when it comes to fatal accidents.

The picture on side shows an extract over a list collected by individuals since little or no statics are held by governments/authorities.

**Overwhelming part of these accidents were "commercial SCUBA"**

IOGP has reacted on the ship husbandry situation and started an Expert Group to improve diving safety within this sector.

***Has the time come to ban SCUBA as a method for commercial activities ?!***

# 2. A Statement from the medical sub committee

**“During the Medical Subcommittee meeting of the EDTC in Helsinki on September 5, 2025, attendees expressed concern that several accidents, including fatalities, have been reported in commercial diving operations involving small (3-person) teams. The Medical Subcommittee recognizes that this is a safety issue rather than a health (medical) concern but wishes to formally raise our worries about this matter. We urge employers of divers and relevant regulatory bodies to review these incidents to identify specific contributing factors, such as training, supervision, team sizes, or other operational issues that may be common to these incidents. If common factors are identified—or if team size could have prevented such incidents—these should be incorporated into company risk assessments, become standard industry practices, and be considered for national and/or EU regulation. The Medical Subcommittee asks that the EDTC Board take the lead on this effort”**

# 3. News 2025 – SLIC – DIVEX workgroup

*Diving is a high-risk work activity. Divers may work in multiple EU Member States with different regulations of diving.*

*Guidance is a key word*

The SLIC/Divex in 2024 carried out a survey similar to that carried out by the EDTC in 2018.

| Topic | EDTC 2018 | Divex 2024 |
|---|---|---|
| No regulations | 8 of 22 | 8 of 24 |
| No minimum dive crew | 7 of 22 | 9 of 24 |
| No medical fitness | 7 of 22 | 7 of 24 |
| No mandatory training | 6 of 22 | 5 of 24 |

Since 2018 nothing or very little has happened and there are still huge differences within Europe with little or no co-ordination at EU level.

***Has the time come to ban SCUBA as a method for commercial activities finally come?!***

**After extensive work, the DIVEX working group within the EU Commission has published its "Guide on Occupational Diving".**

The EDTC contributed significantly throughout the process, drawing on years of expertise that laid the foundation for this result.
EDTC is referenced multiple times in the document, and the conclusions align entirely with what EDTC has long advocated.

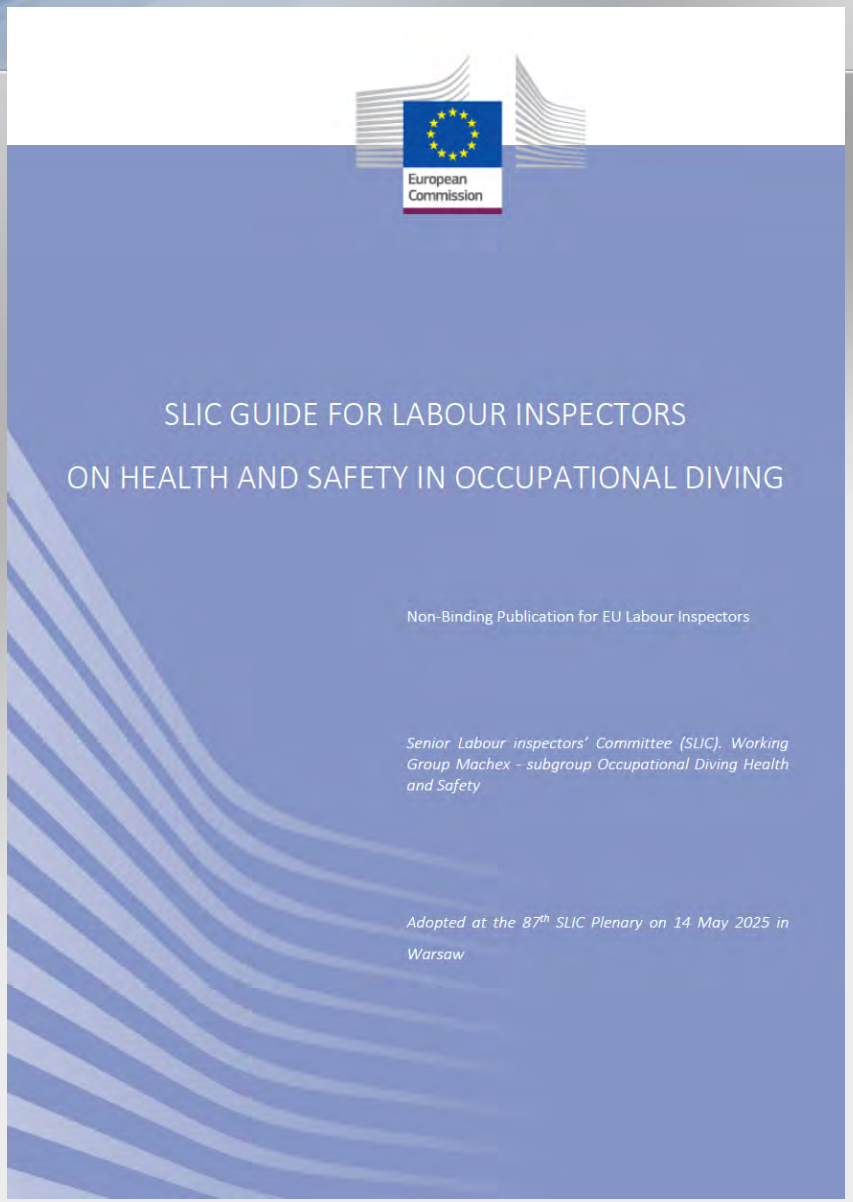
**Conclusion**
Occupational divers often work across multiple EU Member States, sometimes only briefly in each location. The complexity of diving work, overlap with maritime regulation, lack of EU-wide training standards, and inconsistent national laws present challenges for labour inspectors.

The DIVEX group recognizes the need to harmonize diving regulations and training. While no EU-wide law currently exists, they propose further guidance to help inspectors conduct consistent inspections across Member States using best practices from an EU-wide survey.

**In essence, the EU has now formally endorsed what EDTC has supported for years.**

**Key Requirements**
- Mandatory risk assessment and detailed dive plan
- Minimum dive team of 4–5 members (unlike the 3 allowed in some countries)
- Restricted or prohibited use of SCUBA
- Decompression chamber must be nearby
- Dive team must have appropriate qualifications and skills

# 3. News 2025 – SLIC – DIVEX workgroup




***The document has been sent to all registered EDTC members.***

***In case that you miss it, send a request to our secretary.***

***Akin Toklu***

***edtcsecretary@outlook.com***

# 3. News 2025 - Finalized work within EDTC

## Decided 2023 – final version 2025

**After considering the comments given at last years annual meeting in Lucerne and approval by the EDTC executive board, a final version of the document has been published.**

**You will find it at: www.edtc.org/documents**

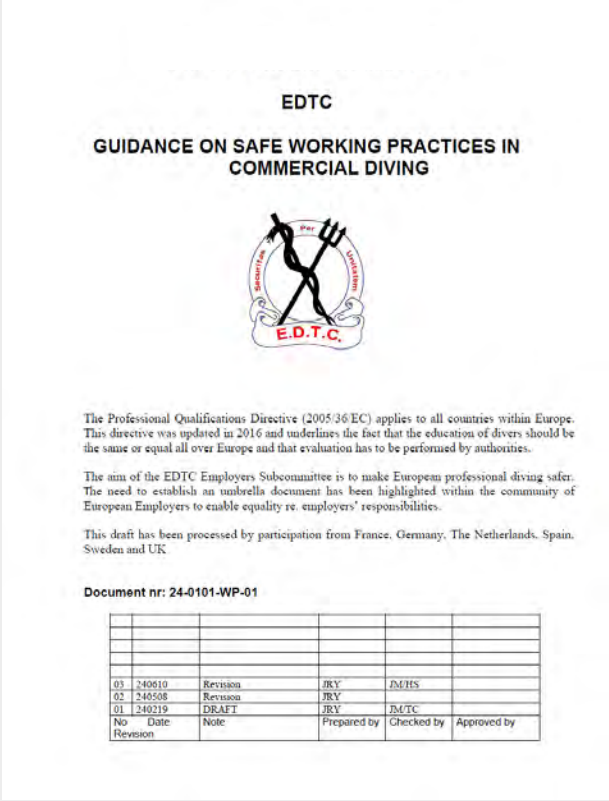
### Guidance for inshore - nearshore

Facts presents the huge responsibilities that are brought to not at least the employers' shoulders. Facts also shows the inconsistency within Europe.

**After making consensus in between EDTC employers and employees, the cross references to existing directives has been made and create basis for the new directive.**

***A fast way to implement guidance and a common basis within Europe is now existing and in place. It includes cross references and is aligned with the EU Commission***

**Thanks to everyone that made this happen**



EDTC

GUIDANCE ON SAFE WORKING PRACTICES IN COMMERCIAL DIVING

The Professional Qualifications Directive (2005/36/EC) applies to all countries within Europe. This directive was updated in 2016 and underlines the fact that the education of divers should be the same or equal all over Europe and that evaluation has to be performed by authorities.

The aim of the EDTC Employers Subcommittee is to make European professional diving safer. The need to establish an umbrella document has been highlighted within the community of European Employers to enable equality re. employers' responsibilities.

This draft has been processed by participation from France, Germany, The Netherlands, Spain, Sweden and UK.

Document nr: 24-0101-WP-01

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| 02 | 240508 | Revision | JRY | | |
| 01 | 240219 | DRAFT | JRY | JMTC | |
| No Revision | Date | Note | Prepared by | Checked by | Approved by |

# 3. Ongoing subcommittee within EDTC– Pressure Chamber

## Collision of rules/regulations

Due to the collision between EU regulations and national law there is and absolute need for harmonisation.

Pasquale Longobardi (IT) has chaired a work group during 2024/2025 and now a draft document is in place.

**The Two Types of Chambers**

Medical Hyperbaric Oxygen (HBO) Treatment Chambers, as within Equipment Directive (PED) 2014/68/EU and

Emergency Recompression Chambers (ERCs), collective protective equipment (CPE), as within workgroup conclusion

**The problem**

There is no exemption for hyperbaric chambers merely because they are not for medical use. Therefore, emergency recompression chambers used on dive sites are subject to the PED, even if not intended as medical devices, and must comply accordingly.

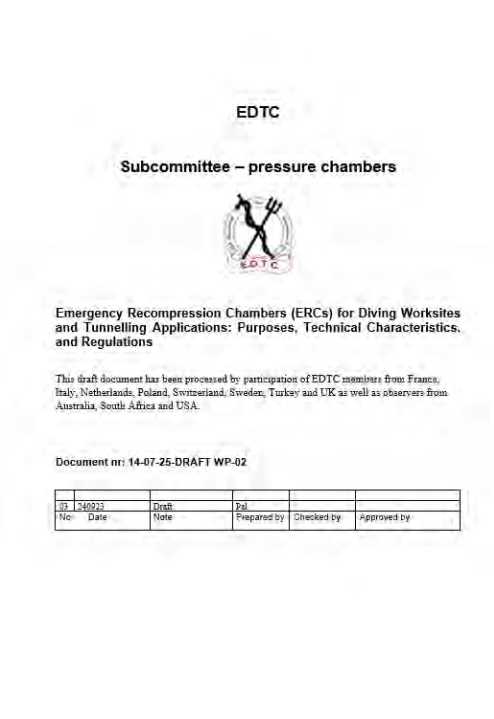
**The solution**

It is evident that, due to inconsistencies across national laws, European directives, and technical standards, further discussion is necessary. To enhance workplace safety, it is recommended that a harmonised European document be developed, setting out specifications for the use, types, and availability of Emergency Recompression Chambers.

**The way forward**

EDTC to continue the work group and to address the EU commission with the findings for the time being. The aim is to finalize the draft and thereby create and develop a harmonised European document.

# 3. Ongoing subcommittee within EDTC– Pressure Chamber



EDTC

Subcommittee – pressure chambers

Emergency Recompression Chambers (ERCs) for Diving Worksites and Tunnelling Applications: Purposes, Technical Characteristics, and Regulations

This draft document has been processed by participation of EDTC members from France, Italy, Netherlands, Poland, Switzerland, Sweden, Turkey and UK as well as observers from Australia, South Africa and USA.

Document nr: 14-07-25-DRAFT WP-02

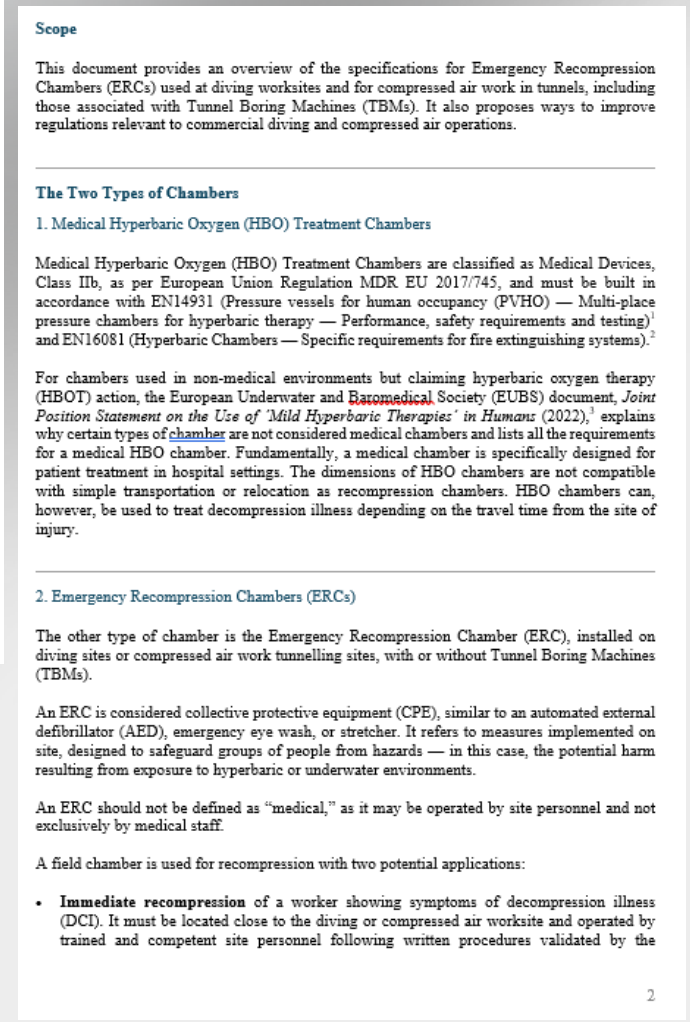
| | | | | | |
|---|---|---|---|---|---|
| 03 | 240923 | Draft | Pal | | |
| No: | Date | Note | Prepared by | Checked by | Approved by |

**The document clarifies the two types of Chambers**

Get your copy from:

AKIN TOKLU

**edtcsecretary@outlook.com**



**Scope**

This document provides an overview of the specifications for Emergency Recompression Chambers (ERCs) used at diving worksites and for compressed air work in tunnels, including those associated with Tunnel Boring Machines (TBMs). It also proposes ways to improve regulations relevant to commercial diving and compressed air operations.

**The Two Types of Chambers**

1. Medical Hyperbaric Oxygen (HBO) Treatment Chambers

Medical Hyperbaric Oxygen (HBO) Treatment Chambers are classified as Medical Devices, Class IIb, as per European Union Regulation MDR EU 2017/745, and must be built in accordance with EN14931 (Pressure vessels for human occupancy (PVHO) — Multi-place pressure chambers for hyperbaric therapy — Performance, safety requirements and testing)[1] and EN16081 (Hyperbaric Chambers — Specific requirements for fire extinguishing systems).[2]

For chambers used in non-medical environments but claiming hyperbaric oxygen therapy (HBOT) action, the European Underwater and Baromedical Society (EUBS) document, *Joint Position Statement on the Use of 'Mild Hyperbaric Therapies' in Humans* (2022),[3] explains why certain types of chamber are not considered medical chambers and lists all the requirements for a medical HBO chamber. Fundamentally, a medical chamber is specifically designed for patient treatment in hospital settings. The dimensions of HBO chambers are not compatible with simple transportation or relocation as recompression chambers. HBO chambers can, however, be used to treat decompression illness depending on the travel time from the site of injury.

2. Emergency Recompression Chambers (ERCs)

The other type of chamber is the Emergency Recompression Chamber (ERC), installed on diving sites or compressed air work tunnelling sites, with or without Tunnel Boring Machines (TBMs).

An ERC is considered collective protective equipment (CPE), similar to an automated external defibrillator (AED), emergency eye wash, or stretcher. It refers to measures implemented on site, designed to safeguard groups of people from hazards — in this case, the potential harm resulting from exposure to hyperbaric or underwater environments.

An ERC should not be defined as "medical," as it may be operated by site personnel and not exclusively by medical staff.

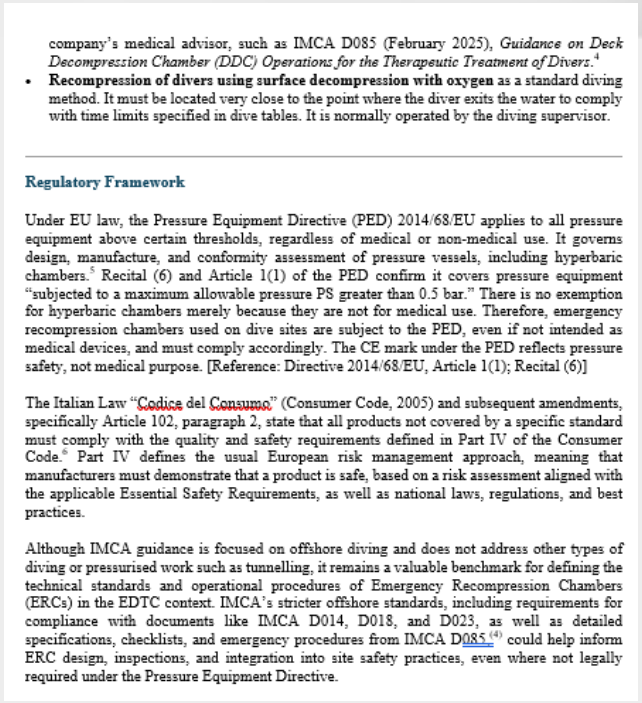
A field chamber is used for recompression with two potential applications:

- **Immediate recompression** of a worker showing symptoms of decompression illness (DCI). It must be located close to the diving or compressed air worksite and operated by trained and competent site personnel following written procedures validated by the

2

## Draft document

The document is in place and each member country, that would like to do so, to comment on draft before 2025-12-31



company's medical advisor, such as IMCA D085 (February 2025), *Guidance on Deck Decompression Chamber (DDC) Operations for the Therapeutic Treatment of Divers*.[4]

- **Recompression of divers using surface decompression with oxygen** as a standard diving method. It must be located very close to the point where the diver exits the water to comply with time limits specified in dive tables. It is normally operated by the diving supervisor.

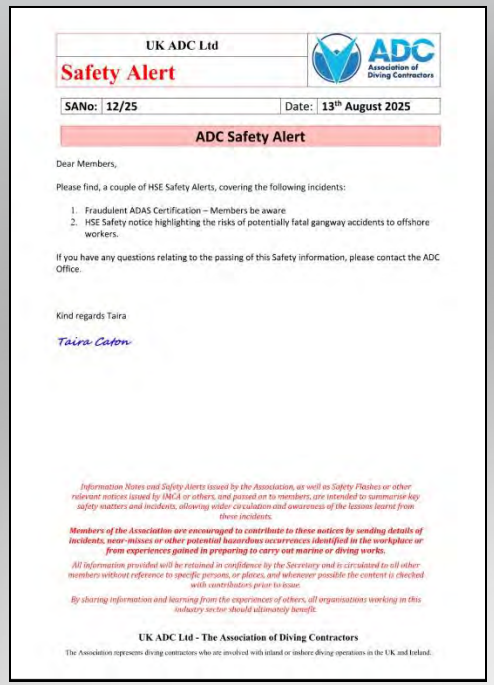
**Regulatory Framework**

Under EU law, the Pressure Equipment Directive (PED) 2014/68/EU applies to all pressure equipment above certain thresholds, regardless of medical or non-medical use. It governs design, manufacture, and conformity assessment of pressure vessels, including hyperbaric chambers.[5] Recital (6) and Article 1(1) of the PED confirm it covers pressure equipment "subjected to a maximum allowable pressure PS greater than 0.5 bar." There is no exemption for hyperbaric chambers merely because they are not for medical use. Therefore, emergency recompression chambers used on dive sites are subject to the PED, even if not intended as medical devices, and must comply accordingly. The CE mark under the PED reflects pressure safety, not medical purpose. [Reference: Directive 2014/68/EU, Article 1(1); Recital (6)]

The Italian Law "Codice del Consumo" (Consumer Code, 2005) and subsequent amendments, specifically Article 102, paragraph 2, state that all products not covered by a specific standard must comply with the quality and safety requirements defined in Part IV of the Consumer Code.[6] Part IV defines the usual European risk management approach, meaning that manufacturers must demonstrate that a product is safe, based on a risk assessment aligned with the applicable Essential Safety Requirements, as well as national laws, regulations, and best practices.

Although IMCA guidance is focused on offshore diving and does not address other types of diving or pressurised work such as tunnelling, it remains a valuable benchmark for defining the technical standards and operational procedures of Emergency Recompression Chambers (ERCs) in the EDTC context. IMCA's stricter offshore standards, including requirements for compliance with documents like IMCA D014, D018, and D023, as well as detailed specifications, checklists, and emergency procedures from IMCA D085,[4] could help inform ERC design, inspections, and integration into site safety practices, even where not legally required under the Pressure Equipment Directive.

# 3. News 2025 – Fraudulent Certificates



UK ADC Ltd

**Safety Alert**

ADC Association of Diving Contractors

SANo: 12/25 | Date: 13th August 2025

**ADC Safety Alert**

Dear Members,

Please find, a couple of HSE Safety Alerts, covering the following incidents:

1. Fraudulent ADAS Certification – Members be aware
2. HSE Safety notice highlighting the risks of potentially fatal gangway accidents to offshore workers.

If you have any questions relating to the passing of this Safety information, please contact the ADC Office.

Kind regards Taira

*Taira Caton*

*Information Notes and Safety Alerts issued by the Association, as well as Safety Flashes or other relevant notices issued by DMCA or others, and passed on to members, are intended to summarise key safety matters and incidents, allowing wider circulation and awareness of the lessons learnt from these incidents.*

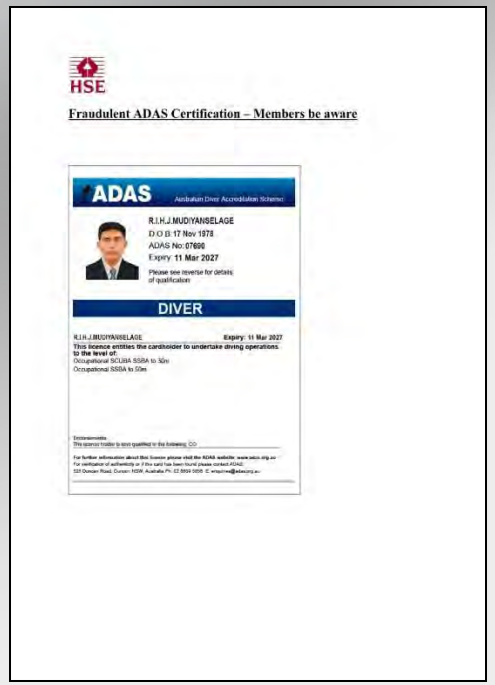
***Members of the Association are encouraged to contribute to these notices by sending details of incidents, near-misses or other potential hazardous occurrences identified in the workplace or from experiences gained in preparing to carry out marine or diving works.***

*All information provided will be retained in confidence by the Secretary and is circulated to all other members without reference to specific persons, or places, and whenever possible the content is checked with contributors prior to issue.*

*By sharing information and learning from the experiences of others, all organisations working in this industry sector should ultimately benefit.*

**UK ADC Ltd - The Association of Diving Contractors**

The Association represents diving contractors who are involved with inland or inshore diving operations in the UK and Ireland.



HSE

**Fraudulent ADAS Certification – Members be aware**



ADAS Australian Diver Accreditation Scheme

R.I.H.J.MUDIYANSELAGE

D O B: 17 Nov 1978

ADAS No: 07690

Expiry: 11 Mar 2027

Please see reverse for details of qualification

DIVER

R.I.H.J.MUDIYANSELAGE Expiry: 11 Mar 2027

This licence entitles the cardholder to undertake diving operations to the level of:

Occupational SCUBA SSBA to 30m

Occupational SSBA to 50m

Endorsements:

This licence holder is also qualified in the following: DO

For further information about this licence please visit the ADAS website: www.adas.org.au

For verification of authenticity or if this card has been found please contact ADAS:

320 Duncan Road, Duncan NSW, Australia Ph: 02 9904 0000 E: enquiries@adas.org.au

## Few schools for deeper diving

Since the closing of INPP, there are not many schools left for deeper diving.

Further there has been outstanding issues related to documents and divers certificates. But the French government is now working on recovering the INPP database.


As an aftermath to the lack of diving schools, more and more fraud certificates circulates. Untrained and uncertified individuals are trying to enter the profession. Not someone you would like to have within your dive team. **ADC UK** has noticed this and highlighted this within a newsflash

# 4. Who is responsible ?

- **Responsibilities according to legislation**

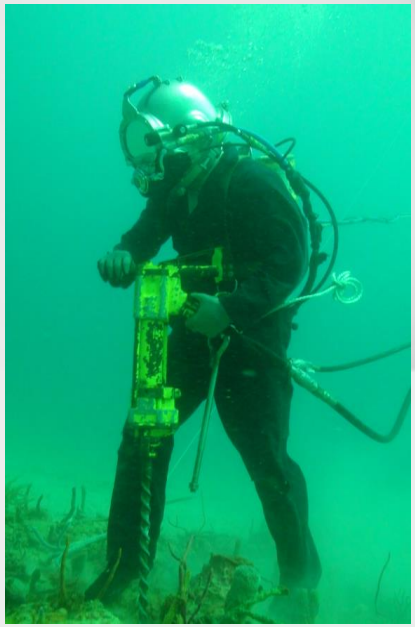
  **The principles are the same all-over geographical Europe**


# 4. Who is responsible ?

## Offshore - Reactive to the situation

- **The offshore Oil & Gas industry has safety and best practice remaining as the focus of everything that is done. Its a very safe and mature undertaking.**

**IMCA has and still is, providing guidance and good standards for this sector.**



## In-shore/near-shore, little improvement since 2018

- **By contrast, we have the near-shore/in-shore sector, which has a much larger number of Companies and Employees engaged in Diving activities.**

**Unfortunately, almost all fatalities within the industry comes from this sector.**

**Who is responsible then?**
Much of the responsibilities are brought to the employers but also employees has the responsibility to stop working at unsafe conditions.

# 5. The way forward – Guidance – SLIC statement

## Why does it seam like guidance has had little impact?

**Some items where further guidance is needed have been identified by SLIC**

- Mandatory risk assessment and detailed dive plan
- Minimum dive team of 4–5 members (unlike the 3 allowed in some countries)
- Restricted or prohibited use of SCUBA
- Decompression chamber must be nearby
- Dive team must have appropriate qualifications and skills

**Further item that has been identified**

- Clients' responsibility.

## Main topic to discuss:

- **How can EDTC and its members have impact on the implementation of guidance?**

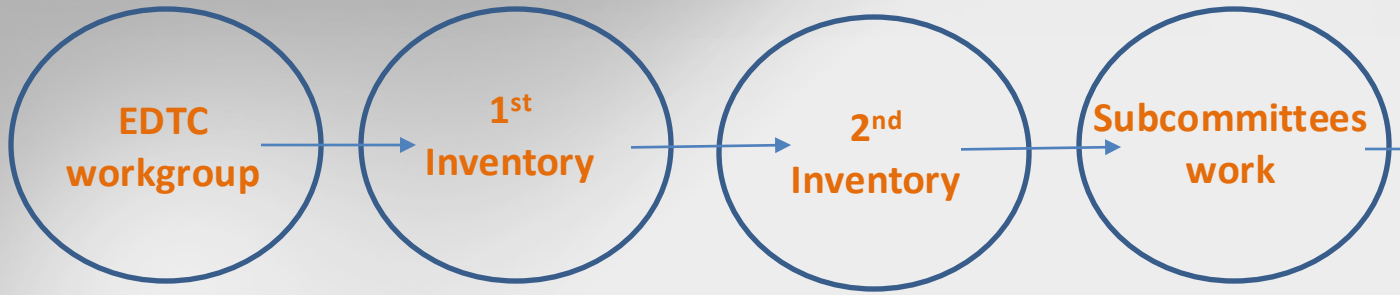
**To be discussed today during a workgroup session**

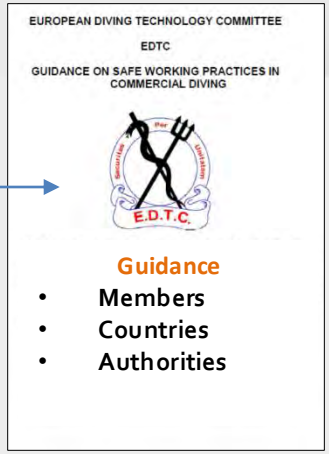
# 6. EDTC - Proactive instead of Reactive

- **Helping anyone involved to understand the industry.**

The free movement of workers means that nationals of any member state of the European Union can take up an employment in another member state on the same conditions as the nationals of that particular member state.

**EDTC process and well-defined milestones**

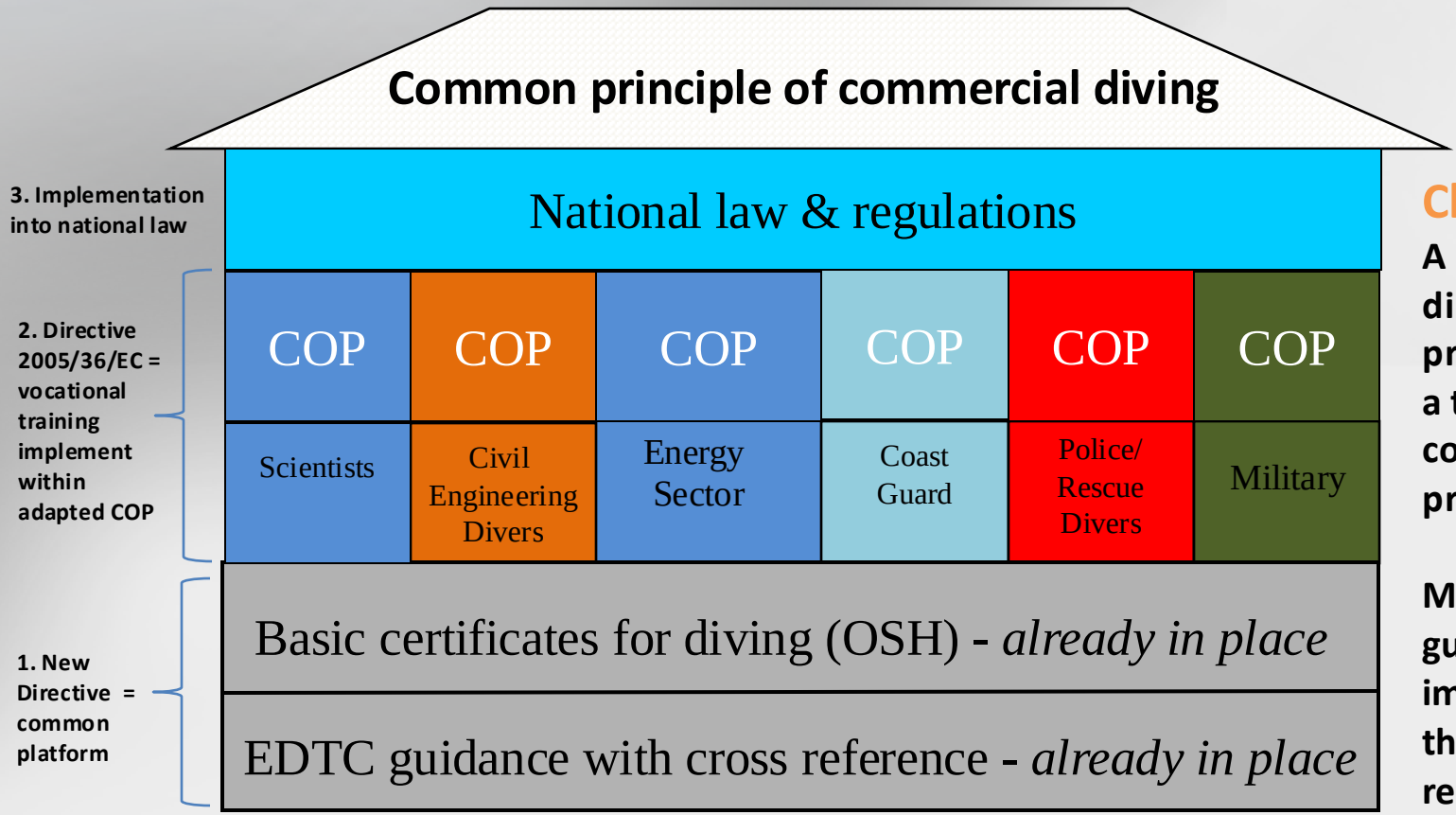



**EDTC Guidance**

**The "FREE MOVEMENT" creates some challenges due to the mobility and small fast mowing parties within the industry.**

# 6. The principle




## Clear signal

**A new EU directive can be prepared within a time-consuming process.**

**Meanwhile guidance can be implemented through cross references from existing directives.**

## The principle of "the house" fulfils the demands:

1) to dive in a safe manner and
2) to be educated and trained to perform and conduct the actual works, in a competent and safe manner

# Summary

- **EDTC provides an independent non-for-profit forum that states the facts,**
- **EDTC inventories – now fully confirmed by SLIC/Divex,**
- **EU directives cross references are implemented in EDTC guidance,**
- **Guidance has been created and is existing – time to implement.**

**Any questions ?**

EDTC Chairman - Jörn Ryberg E: jorn.ryberg@ms-invest.se

Per Securitas Unitatem E.D.T.C.

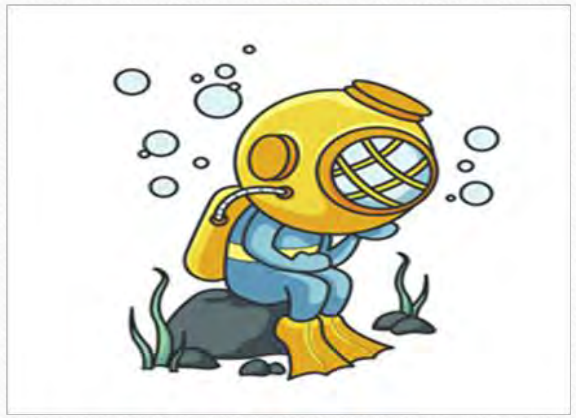
Annex-5

# EUROPEAN DIVING TECHNOLOGY COMMITTEE

25-26 SEPTEMBER 2025

# HOW THE EUROPEAN DIVING TECHNOLOGY COMMITTEE (EDTC) ENSURES ADHERENCE TO ITS GUIDELINES

Presenter: Somikazi Charlie
Organization: Group 1



# INTRODUCTION

The European Diving Technology Committee (EDTC) promotes safe and standardized diving practices across Europe. Its guidelines aim to harmonize national regulations and improve diver safety. Member countries are encouraged to align their practices with international standards.

# Establishment of National Regulations

- Ensure each member country has regulations aligned with EDTC recommendations.
- Promote consistency and compliance across national frameworks.
- Strengthen the legal foundation for diving operations and safety management.

# Incorporation of International Standards

- Integrate recognized international diving standards into national laws.
- Align local regulations with global best practices.
- Facilitate mobility and mutual recognition of diver qualifications.

# Engagement of Diver Trade Unions

- Encourage participation of diver trade unions in reviewing and updating legislation.
- Strengthen worker representation and advocacy for diver safety.
- Promote collaboration between regulators and diving professionals.

# Continuous Education and Training

- Support ongoing professional development for divers.
- Promote awareness of safety protocols and new technologies.
- Encourage a culture of lifelong learning in the diving industry.

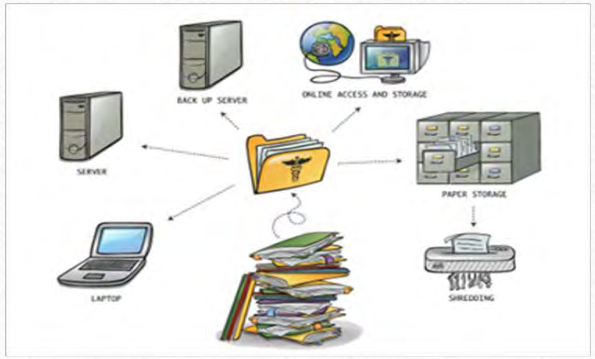
# Visibility and Outreach

Increase EDTC visibility through:

- Workshops and training sessions
- Technical meetings and forums
- Newsletters and information updates
- Promote transparency and knowledge sharing among stakeholders.

# Stakeholder Involvement

- Engage all relevant stakeholders in regulatory review and development.
- Ensure inclusive consultation processes.
- Strengthen accountability and alignment across the industry.



# Summary

EDTC ensures adherence through:

- Strong regulations
- International alignment
- Education and collaboration
- Active stakeholder involvement

Together, these actions foster a safer and more consistent European diving environment.

# Conclusion

- The EDTC's role extends beyond setting standards it builds a unified and safety-driven diving community.
- Continuous engagement, education, and cooperation ensure long-term compliance and improvement.

Thank you.

Annex-6

# How can EDTC and it's members have impact on the implementation of guidance ?

GROUP 2

# Members

- Bulelwa HUNA  Ministry of labour - South Africa
- Marcel FIEVEZ – Governement Netherlands (military)
- Taira Caton – UK – Industry
- Bard HUMBORSTAD Norway – Government
- Mario Van MIERLO – Netherland - Industry
- Hélène SZULC – France - Industry

1- translate the EDTC Guidelines in the national language

2- Government should implement what industry and workers agreed about in the law

3- Scuba commercial should be banned from commercial diving

4- Enforcement : Control and sanction of the labour inspectors

# United Kingdom

- UK : the EDTC Guidance is under the 5 divers standarts, that’s why it has not been promoted

# FRANCE

- In France law says : minimum of 3 divers
- 4 or more divers teams depend on the employer’s risk assessment and the client’s specifications
- Scuba professional (Mention B)are often emploees of cities, harbours (civil servants), so scuba commercial is a « saving money »
- The Diving industry have officially asked to the Ministry of Labour to change the law
- EDTC Guidelines have been translated in french so as to make them understandable by french administration

# South Africa

- Diving team is 4
- The risk assessment can lead to 5 or more diver teams

- Scuba commercial is allowed

Annex-7

# EDTC

Syndicate 5

Minutes by E Helderman (Netherlands)

Swiss, Australia, Sweden, Netherlands…

# Implementing EDCT advice/ statements

Examples:

- Teamsize
- Scuba
- Decompressionchamber/ MDR
- Fit to dive Medical examinations

# Implementing by regulators:

- Involve regulators in EDTC meetings.
  - In-shore regulator
  - Off-shore regulators
  - Renewable enery (windmills, and other new methodes within 12 miles zone)

# Implementing by other paricipants:

- Experts present on the meeting can implement new statements made by EDTC in national legislation
- Use new insights to make, change or improve legislation.

# Implementing through certification.

- Make a (EU/international) standard (certificationscheme) and certify or accredit:
  - Divingschools (IDSA?)
  - Individual competencies.
  - Company’s / contractors.

# Implementing by following EU obligations

(Competencies)

- IMI https://ec.europa.eu/internal_market/imi-net/index_en.htm
- REGPROF https://ec.europa.eu/growth/tools-databases/regprof/home

**Directive:** *Directive 2005/36/EC of the European Parliament and of the Council of the European Union of 7 September 2005 on the recognition of professional qualifications (OJ L 255), as last amended by Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ("the IMI Regulation") (OJ L 354, 2013).*

Maybe EDTC can mean somthing in making these platforms more efficiënt. Or get them implemented by the relevant authorities.

Annex-8

# European Diving Technology Committee

**Chairman Medical Subcommittee**
**Pieter-Jan van Ooij MD PhD FUHM**
e-mail: pieter-jan@duikerarts.nl

## MINUTES MEDICAL SUBCOMMITTEE MEETING - Helsinki, 05.09.2025

**Present**: Bo Bech (DK), Anne Räisänen-Sokolowski (FI), Pasquale Longobardi (IT), Pieter-Jan van Ooij (NL), Jacek Kot (PL), Veronika Rybàrovà (SK), Jordi Desola (ES), Mats Hagberg (SE), Jürg Wendling (CH), Phil Bryson (UK), Bengusu Mirasoglu (for Akin Toklu TR), Roswitha Prohaska (AT), Wilhelm Welslau (DEU)

**Corresponding members and guests**: Alessandro Marroni (ECHM), Barbara Karin Vela (UAE), Ian Millar (AUS), Rienk Rienks (NL), Jean-Eric Blatteau (FR), Feiko de Jong (NL), Clair Wade (UK), John Peters (USA), Tony Lee (MY), Neal Pollock (CA), Francis Burman (USA)

### 1) Welcome, Introduction of new members

The chairman welcomes the current delegates, corresponding members, and guests. He thanks Finland for facilitating this meeting. There were no new members at this gathering. Neal Pollock, Francis Burman, and Clair Wade were welcomed as first-time attendees.

### 2) Fitness to dive manual

The EDTC Fitness to Dive Manual 2024 is a great success. It is endorsed by the European Committee of Diving Experts (EU-CODE), a working group of the European Defence Agency, for use by countries that lack their own national fitness to dive standards.

### 3) Information from DMAC

- This November marks the 50th anniversary of the DMAC meeting. On Thursday 6th November, there will be a joint symposium with the Norwegian Baromedical Society on diving incidents. This will take place after the Bergen International Diving Seminar in Bergen. The Chairman encourages everyone to attend this event.
- DMAC is reviewing their guidance notes to determine if they need to be updated revised.

### 4) Informations from EDTC

- The last EDTC meeting took place in Luzern. The Chairman of EDTC expressed his concerns about the relatively high number of accidents and fatalities due to occupational diving.
- There is still a high mortality rate among small diving teams, especially in SSE and predominantly in three-man diving teams. Austria has experienced two fatalities, both involving divers from three-man teams. The Medical Subcommittee considers three-man teams unacceptable in most cases and recommends that a minimum of five members should be standard. EDTC should issue a statement on this matter. The Chair will make a statement on behalf of the Medical Subcommittee to the EDTC Boards.

### 5) Diving doctor's databank: edmd.eu

National registration in the EDMD.EU database was not renewed due to poor communication. As a result, all registrations have now expired. The website will be updated to include an automatic

reminder for the registration expiry date. For now, all previous registrations will be automatically reinstated. Please encourage your colleagues to register through the national coordinator. Rienks asked why it is not automatically linked to national registrations. Bryson agrees. The attendees seem to endorse this idea. The Chairman expressed some concerns regarding the General Data Protection Regulation, using automatic inclusion. He will explore the possibilities.

**6) Revision of EDTC-ECHM educational and training standards for diving and hyperbaric medicine 2011**

DMAC registration for medical courses involves extensive paperwork and requires a framework for the courses. Therefore, the new proposal is to obtain accreditation from DMAC for the dive medical examinations of Level 1 & 2D (L2D). Kot anticipates issues with aligning educational standards between DMAC and ECHM. Additionally, L3 should be revised or modified. Marroni agrees that there are current conflicts and discrepancies between various L2 qualifications from DMAC, EDTC, and ECHM courses. Wendling stated that the diving industry is dissatisfied with the inexperience and training level of diving physicians and calls for a greater emphasis on scenario-based training and knowledge testing. The focus should be more on the outcomes of the training (namely, the examination) rather than the course itself. Marroni advocates for both theoretical and practical/simulation training and assessment for L2D. Austria presented updated training objectives, differentiating between L1 and L2D while removing repetitive entries. The aim is to limit L1 to 2-3 days, concentrating on the basics of overall diving operations knowledge and fitness to dive standards, especially for low-complexity groups such as regular scuba divers. L2D will include training on dry compressed air workers, saturation diving, dive pathology, interactions with chronic diseases and medications, and other advanced topics like children and the elderly. Wendling mentioned that these should be used as the framework. Wendling requests a reply to this email, even if the comment is 'no comment'. In the coming weeks, all feedback for L1 must be concluded, after which work on L2D will begin.
The Chairman emphasises that the framework for L1 and L2d should be simple and include keywords for each objective of the L1 and L2d courses. DMAC needs this type of framework to continue its work on the Dive Medical Knowledge Test. After completing the L1 framework, the Chairman and Jurg Wendling will discuss the results with ECHM to assess how much the objectives of both L1 courses differ.

**6) Any other business**

As there were no topics to discuss, the Chairman closed the meeting. The next meeting will be organised again during the EUBS Congress in Geneva, 2026.

for the minutes record
Pieter-Jan van Ooij

18th September 2025

Annex-9

SNETI

SYNDICAT NATIONAL des ENTREPRENEURS de TRAVAUX IMMERGÉS

Per Securitas Unitatem E.D.T.C.


# EDTC 2025 Meeting

# Portsmouth, United Kingdom, 26th September 2025

National Report Industry

Hélène SZULC

SYNDICAT NATIONAL des ENTREPRENEURS de TRAVAUX IMMERGÉS

# French delegation

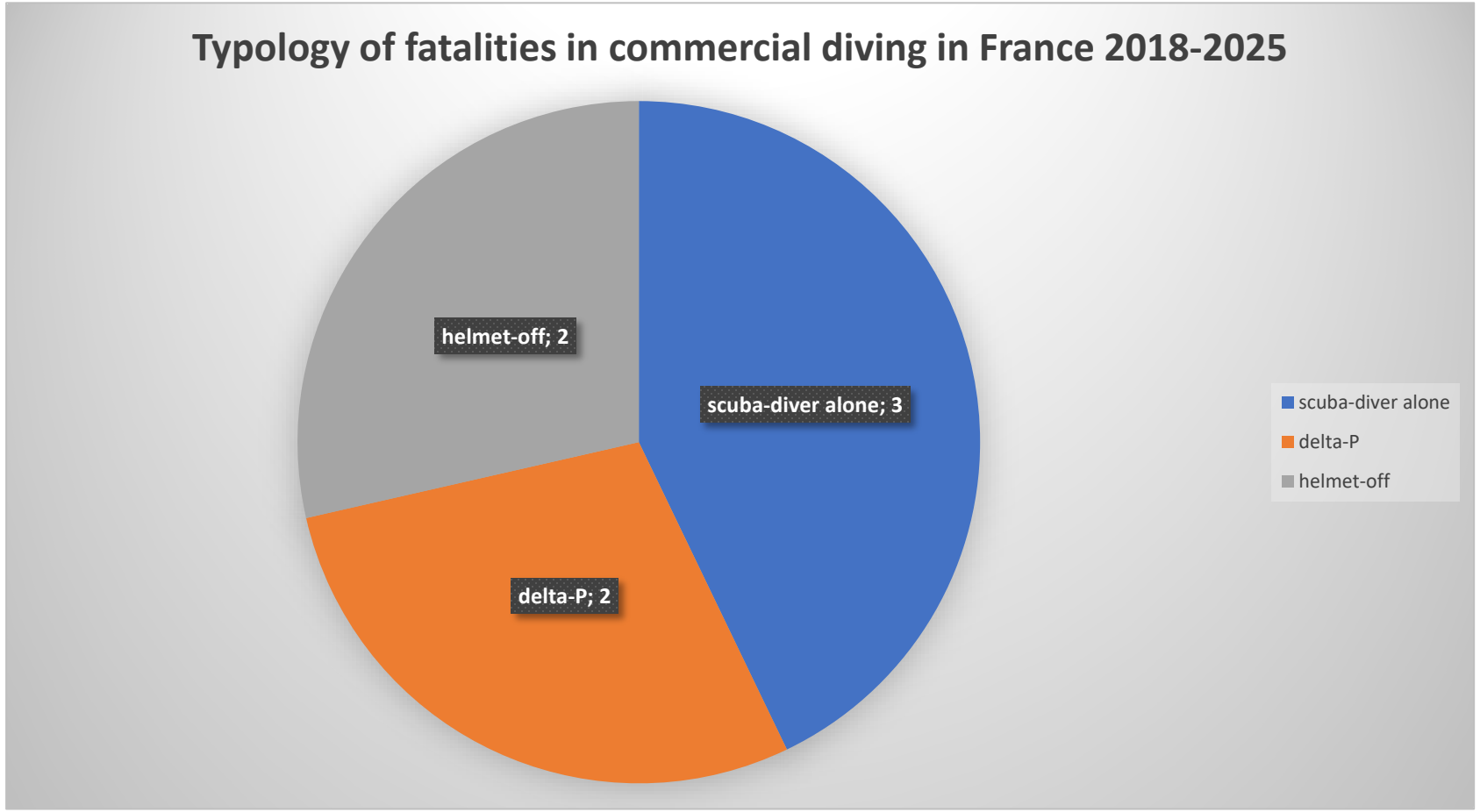
**Arnaud LAVAL- Chairman**
Commercial divers Cl II-A
Company : SATIF-SA

**Jean LELIEVRE- Ex-Chairman**
Commercial divers
Cl II-A
Former Company : HYDROKARST
Auditor

**Blandine AUBLIN**
Hyperbaric Medecine
Nuclear Medecine
Occupational Doctor (BTPST)
OPPBTP expert

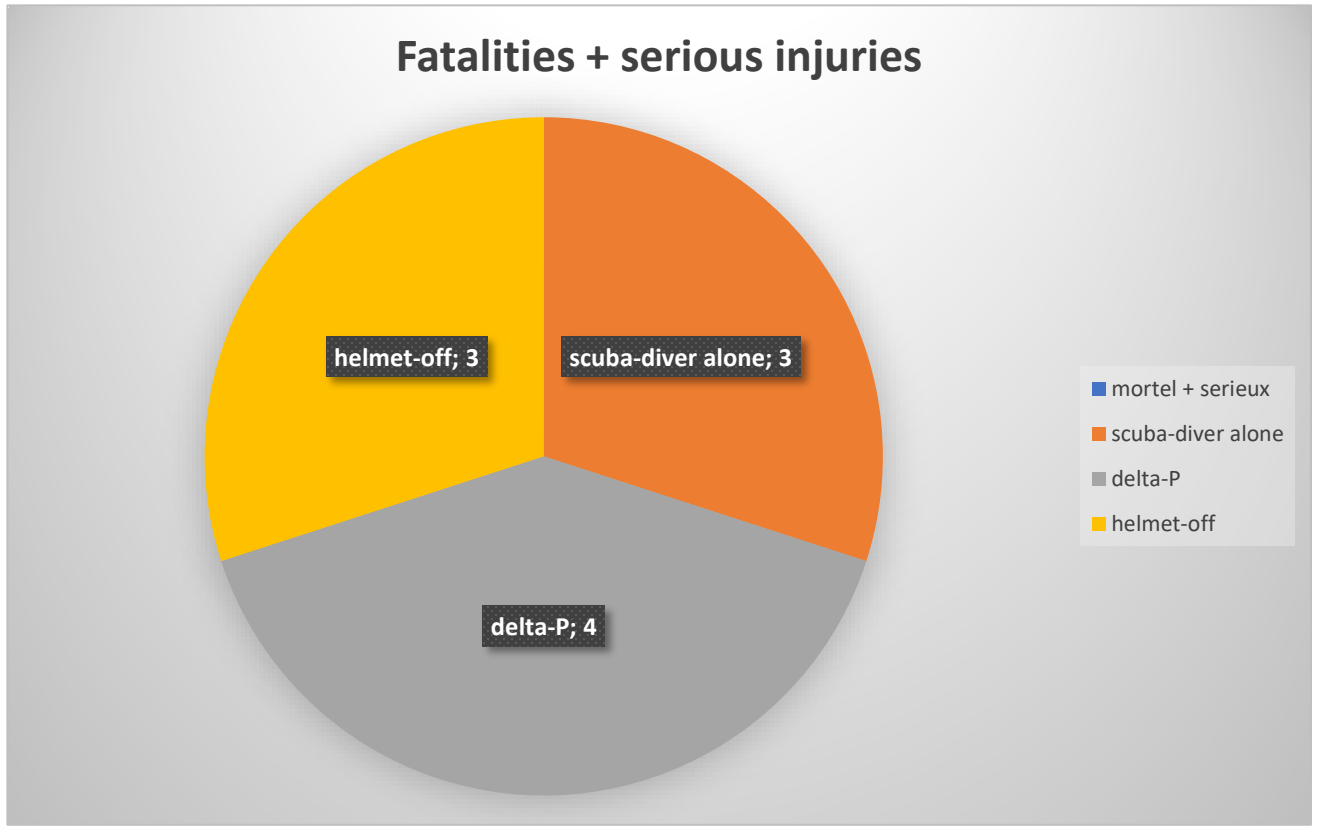
**Thomas PINEAU**
Commercial diver
IIA
Freelancer
Union Scaphmotion

# Fatalities commercial diving France 2018-2025



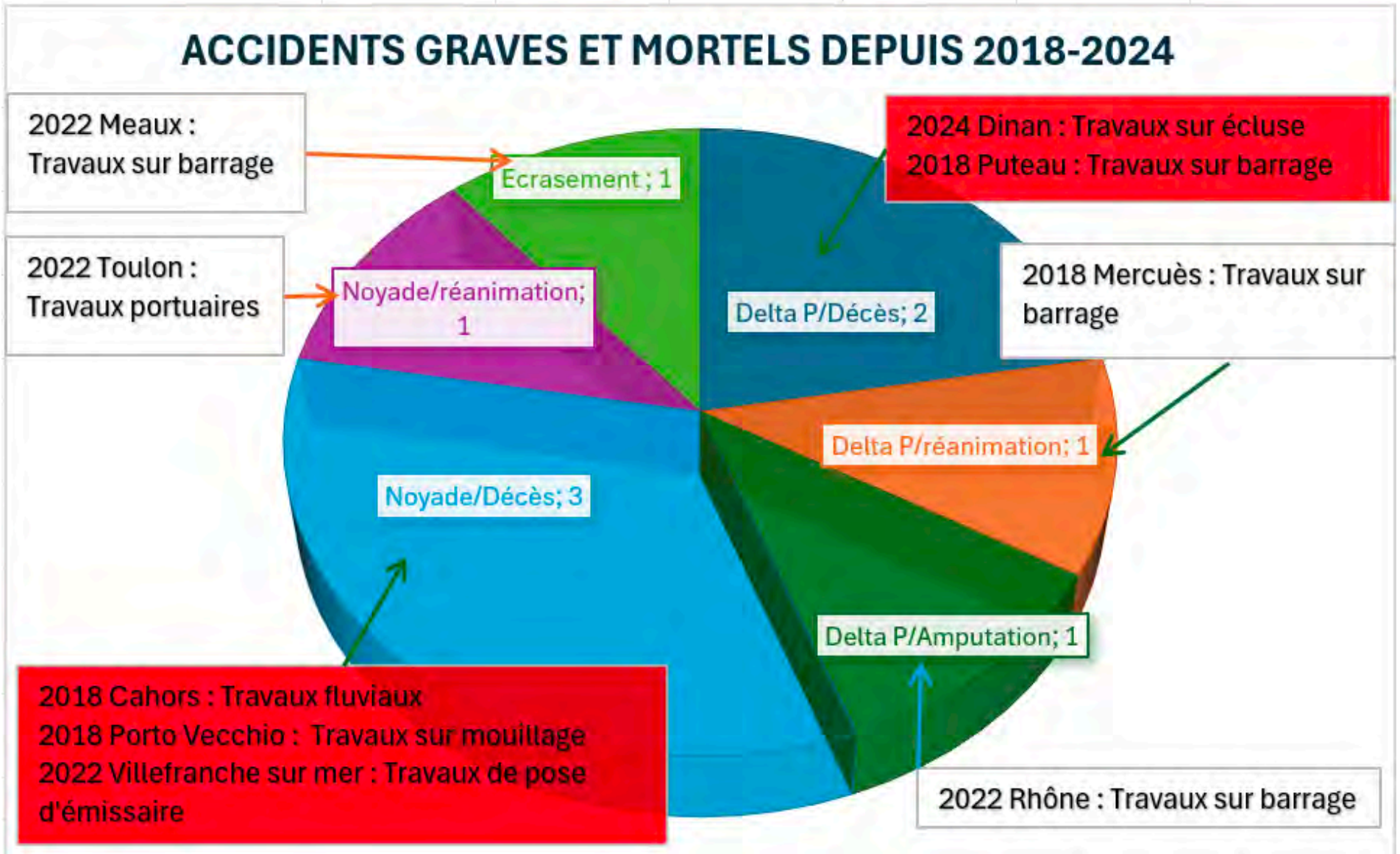

| Year | Fatalities |
|---|---|
| 2018 | 4 |
| 2019 | 0 |
| 2020 | 1 |
| 2021 | 0 |
| 2022 | 1 |
| 2023 | 0 |
| 2024 | 1 |
| 2025 | 0 |

# Fatalities + serious accidents commercial diving France 2018-2025




| Year | Fatalities | Serious accidents* | Total |
|---|---|---|---|
| 2018 | 4 | 1 | 5 |
| 2019 | 0 | 0 | 0 |
| 2020 | 1 | 0 | 0 |
| 2021 | 0 | 0 | 0 |
| 2022 | 1 | 2 | 3 |
| 2023 | 0 | 1 | 1 |
| 2024 | 0 | 0 | 0 |
| 2025 | 1 | 0 | 1 |

*serious accidents : data non available …


ACCIDENTS GRAVES ET MORTELS DEPUIS 2018-2024
2022 Meaux : Travaux sur barrage
2022 Toulon : Travaux portuaires
2024 Dinan : Travaux sur écluse
2018 Puteau : Travaux sur barrage
2018 Mercuès : Travaux sur barrage
Ecrasement ; 1
Noyade/réanimation; 1
Delta P/Décès; 2
Delta P/réanimation; 1
Noyade/Décès; 3
Delta P/Amputation; 1
2018 Cahors : Travaux fluviaux
2018 Porto Vecchio : Travaux sur mouillage
2022 Villefranche sur mer : Travaux de pose d'émissaire
2022 Rhône : Travaux sur barrage

# Fatal diving accident Léhon Lock-ARGANOL

- A fatal accident occured 12/12/2025 near Dinan
- Delta P
- Depth - 2 m
- Company : ARGANOL
- Victim profile : 42 years old , 5 years experience, temporary work
- Team size : 4 including the manager

(3 when the accident occured, the manager's left just before the end of the dive)

- Galeazzi work
- Equipment : KMB18, thermic low pressure compressor
- Environment : Vantelle has been voluntarily opened

Circumstances and causes of death are not clear at the moment.

The case is being investigated by the police.

MASQUE KMB 18

# Health and safety standarts

OPPBTP
PUBLICATION

## Standards de prévention lors des travaux immergés

### Maîtriser le risque hyperbare lors des travaux en mention A

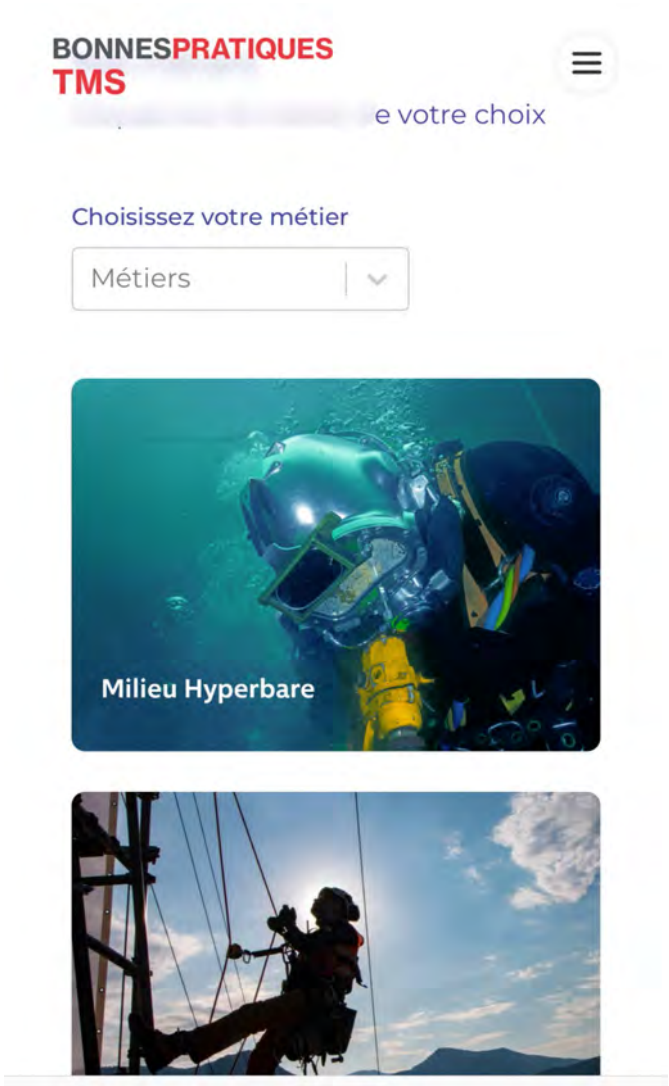
Préface de Paul Duphil, Secrétaire général de l'OPPBTP

En cours de réalisation dessin

COLLECTION TECHNIQUE
EDITION 2025

# OPPBTP / SNETI

- OPPBTP :
- Professional Organisation
- for Prevention in Construction and Public Works




# Guide Travaux hyperbares

TRAVAUX EN MILIEU POLLUÉ

FICHE N°2

1. LE PRINCIPE

Stations d'épuration, égouts, sites nucléaires, méthaniseurs, digesteurs, cuves de produits chimiques, bassins contenant une eau polluée par des produits chimiques ou métaux lourds ... tout milieu dont l'absence d'innocuité pour le scaphandrier n'est pas connue (principe de précaution)

La toxicité du milieu se conjugue souvent avec d'autres dangers tels que : absence de visibilité, températures élevées, densité forte du milieu, accès limités (trou d'homme), équipements dangereux (pompes, agitateurs ...)

Mesures de prévention

AVANT TRAVAUX

Évaluer les risques : analyses du produit, informations sur les polluants présents dans le milieu, leur quantité et concentration.

matériaux

solvants

l'ouvrage.

Identifier au stade de l'inspection commune les machines dangereuses pour les consigner.

Évaluer aussi les risques pour le personnel en surface : risques de vaporisation, d'anoxie, d'intoxication, contact avec les contaminants lors de l'assistance du scaphandrier

Suivi médical : à préciser au médecin du travail dans le cadre du suivi individuel renforcé (SIR), des vaccinations peuvent être nécessaires (hépatite, leptospirose) et des restrictions peuvent être incompatibles (poids du casque et du matériel, état de santé incompatible avec certaines expositions ou le travail à la chaleur).

# Responsability of the buyer is detailed and the Guide helps him to control the contractor’s organisation

Il doit évaluer les potentiels dangers et les risques qui peuvent survenir lors de la réalisation du chantier et définir les mesures de prévention à mettre en œuvre. Il collabore pour cela avec le maître d'œuvre et le coordonnateur en matière de sécurité et de protection de la santé (CSPS) sur les opérations soumises à ce dispositif.

Cette évaluation correspond à une analyse préalable indispensable de l'opération pour éviter ou réduire l'exposition des professionnels intervenant sur le chantier et faire en sorte qu'ils bénéficient des meilleures conditions de travail.

Ainsi, ce n'est qu'à l'issue de son évaluation préalable des risques, sur le fondement des principes généraux de prévention (articles L4531-1 et L4121-2 du Code du travail) qu'il justifiera, le cas échéant, de la nécessité du choix d'une intervention de scaphandriers pour réaliser des travaux immergés.

Dans ce cas, de l'évaluation des risques professionnels liés à l'exécution de son opération jusqu'à la définition des mesures de protection et de prévention à mettre en œuvre, en passant par le choix des acteurs qui réaliseront son ouvrage (maître d'œuvre, coordonnateur SPS et entreprises), le maître d'ouvrage doit veiller à mettre en œuvre tous les moyens nécessaires à la sécurité des professionnels qui interviennent sur son chantier de construction et lors des interventions ultérieures.

Pour prévenir les risques lors des interventions ultérieures, le maître d'ouvrage se référera utilement au dossier d'intervention ultérieure sur l'ouvrage (DIUO).

**Modèle de fiche simplifiée de visite DO de chantier hyperbares**

| | | |
|---|---|---|
| **Nom/localisation de l'opération de travaux (chantier) :**<br>**Date de la visite :**<br>**Personne réalisant la visite :**<br>**Entreprise de travaux immergés :**<br>**Personne contact de l'entreprise de travaux immergés :** | | |
| **A. Contrôles généraux** | | |
| Les documents suivants sont ils présents sur le site de plongée ? | OUI | NON |
| Manuel de sécurité hyperbare | ☐ | ☐ |
| Plan des opérations de plongée (analyse des risques liés à l'activité) | ☐ | ☐ |
| Plan de gestion des urgences | ☐ | ☐ |
| **B. Contrôles relatifs à l'équipe de plongée** | OUI | NON |
| 1. Les membres de l'équipe de plongée appartiennent-ils au même personnel que celui spécifié dans le cadre de la préparation des travaux ? | ☐ | ☐ |
| 2. L'équipe de plongée respecte-t-elle les effectifs minimaux requis par l'arrêté mention A en vigueur (3) ou arrêtés dans le cadre de la préparation des travaux ? | ☐ | ☐ |
| 3. un membre de l'équipe s'est il vu clairement attribuée la fonction d'opérateur de secours ? | ☐ | ☐ |
| Inscrire ici le nom des personnes assurant les fonctions suivantes (pour celles définies) :<br>COH :<br>Surveillant de plongée :<br>Aide opérateur 1 :<br>Aide opérateur 2 :<br>Plongeur secours 1 :<br>Plongeur secours :<br>Opérateur immergé 1 :<br>Opérateur immergé 2 : | | |
| 4. Chaque membre de l'équipe de plongée possède-t-il les éléments suivants ? | ☐ | ☐ |
| CAH à jour | ☐ | ☐ |
| Visite médicale d'aptitude au poste de travail des scaphandriers et des aides opérateurs | ☐ | ☐ |
| **C. Contrôles de l'équipement** | OUI | NON |
| 1. la méthode de plongées définie dans le cadre de la préparation des travaux est elle respectée ? | ☐ | ☐ |
| 2. Un équipement complet d'immersion est-il disponible pour le plongeur secours | ☐ | ☐ |
| 3. le système de communication bidirectionnelle entre l'unité de surface et le plongeur est il opérationnel ? | ☐ | ☐ |
| 4. La prise d'alimentation du compresseur est-elle située à l'écart des gaz d'échappement ou d'autres contaminants ? | ☐ | ☐ |
| **D. Contrôles de sécurité et d'urgence** | OUI | NON |
| 1. Un système de réanimation à l'oxygène normobare est-il capable de fournir de l'oxygène pendant au moins 30 minutes sur le site de plongée ? | ☐ | ☐ |
| 2. Les deux drapeaux de plongée et le code alpha international sont-ils affichés ? | ☐ | ☐ |
| **E. Consignation des équipements à risque relevant du DO** | OUI | NON |
| a. Les consignations prévue dans le cadre de la préparation des travaux ont elle été réalisées et vérifiée ? | ☐ | ☐ |

# CNEH Forshadowing (prefiguration)

- CNEH = National Center of Hyperbaric Expertise
- Mandate from the government
- Unique entry point for divers certificates check
- Sovereign function : state representation
- Expertise in hyperbaric topics
- Control on training centers

# Pending topics : France exclusion from IDRCF

- INPP files are preserved
- CAP TREBEURDEN files are fully transfered
- ENS : confirmation of a certificate only by picking so far
- Next step is : Government must appoint an independent organism as a single entry point
- SNETI and OPPBTP might be temporary options if CNEH establishment is delayed

PREMIER MINISTRE

*Liberté*
*Égalité*
*Fraternité*

- **Présentation du mandat de préfiguration**
- **d’un Centre national d’expertise hyperbare**
- **CNEH**

**Comité de pilotage**
**7 janvier 2025**

# Les missions de service public du futur CNEH

1. Suivi administratif de la formation des travailleurs en milieu hyperbare
2. Appui technique à l'élaboration de textes réglementaires relatifs au travail en milieu hyperbare et aux matériels permettant d'exercer cette activité
3. Contrôle de conformité et normalisation d'équipements en milieu hyperbare
4. Diffusion de l'information sur la sécurité au travail en milieu hyperbare
5. Représentation de la France dans les instances internationales relatives au travail en milieu hyperbare
6. Valorisation des compétences et de l'expertise française en matière de travail en milieu hyperbare à l'international

# Aqui s'adresse le futur CNEH ?

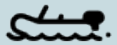
Sectorisation des activités de l'Hyperbarie

| | Hyperbarie humide | Hyperbarie sèche |
|---|---|---|
| Travaux | **Mention A**: Travaux industriels, de génie civil ou maritimes  | **Mention D** : Travaux sans immersion  |
| Interventions | **Mention B**: Interventions subaquatiques  | **Mention C** : Intervention dans le domaine de la santé  |

# A qui s'adresse le futur CNEH ?

## Répartition des travailleurs par mention

(Sources : SNETI 2018 / *Source ANSES 2015)*

| | Hyperbarie humide | Hyperbarie sèche |
|---|---|---|
| **Travaux** | **Mention A** : Travaux industriels, de génie civil ou maritimes   **1 840 / 1500** | **Mention D** : Travaux sans immersion    **670 / 670** |
| **Interventions** | **Mention B** : Interventions subaquatiques   **11 400 / 6 553** | **Mention C** : Intervention dans le domaine de la santé   **750 / 400** |

# Valabre : Rescue divers center (Mention B)

- **Cdt Jean-Jacques GRENAUD**
- Chef de projet
- Officier supérieur de sapeurs-pompiers professionnel
- Référent national en milieu aquatique et hyperbare de la DGSCGC Chef du centre national de plongée et des activités nautiques (CNP) de l'ENTENTE VALABRE – ECASC
- Inspecteur référent associé en milieu aquatique et hyperbare de
- l'inspection générale de la DGSCGC
- Expert mention B auprès de la direction générale du travail (DGT)
- Classe III mention Bc

# Partenaires institutionnels et privés du CNP

MINISTÈRE DE L'INTÉRIEUR
*Liberté Égalité Fraternité*

LA METROPOLE AIX-MARSEILLE-PROVENCE

SAMU

comex

MINISTÈRE DU TRAVAIL, DE L'EMPLOI ET DE L'INSERTION
*Liberté Égalité Fraternité*

MEDSUBHYP
Société de Médecine et de Physiologie Subaquatiques et Hyperbares de langue française

SIS/ BASC /GHSC

Gendarmerie maritime

PRINCIPAUTÉ DE MONACO SAPEURS-POMPIERS

Hôpitaux Universitaires de Marseille | ap hm

DGA

MINISTÈRE DE L'ÉCONOMIE, DES FINANCES ET DE LA SOUVERAINETÉ INDUSTRIELLE ET NUMÉRIQUE
*Liberté Égalité Fraternité*

DOUANES & DROITS INDIRECTS

FRONTEX
EUROPEAN BORDER AND COAST GUARD AGENCY

VSM TRAINING

phymarex

# Méthode et calendrier de la mission de préfiguration

# Pending topics : Composition of commercial diving team : No answer from the Government so far

- 4 or more divers in most inshore works : letter to Ministry of labour June 2024

OPPBTP
Organisme Professionnel de Prévention du Bâtiment et des Travaux Publics

Secrétariat général

SNETI

Ministère du travail, de la Santé et de la Solidarité
Direction générale du travail
Tour Mirabeau
39-43 Quai André Citroën
75902 PARIS Cedex 15

N. Réf. : PCD/HWO n° 24/057

Boulogne-Billancourt, le 24 juin 2024

A l'attention de Monsieur Pierre Ramain, Directeur Général du Travail
A l'attention de Monsieur Jean Galvé, chef du Bureau CT2

Objet : proposition d'évolution de la réglementation concernant la composition des équipes de travailleurs réalisant des travaux hyperbares relevant de la mention A.

Monsieur le Directeur général,
Monsieur le Chef de bureau,

En effet, comme détaillé dans la note que nous vous adressons en pièce jointe à ce courrier, de nombreuses activités réalisées en milieu hyperbare, et relevant de la mention A, ne peuvent pas être réalisées en sécurité avec une équipe composée uniquement de 3 personnes pour assurer les 5 missions nécessaires à la bonne réalisation de l'activité.

Une équipe composée de 4 scaphandriers minimum devrait selon nous être la règle, afin de garantir, dans la grande majorité des travaux hyperbares de la mention A, d'être réalisés en sécurité.

Cette composition minimum est un standard professionnel de plus en plus partagé dans le secteur des travaux hyperbares immergés de la mention A, notamment à l'international, mais pas uniquement.

OPPBTP
25, avenue du Général Leclerc
92660 Boulogne Billancourt Cedex
Tél. : 01 46 09 27 00
cnsg@oppbtp.fr

ISO 9001 ORGANISME CERTIFIÉ

N° Siret 775 725 914 00433 • APE 9412Z • N° TVA intracommunautaire : FR 23 775 725 914

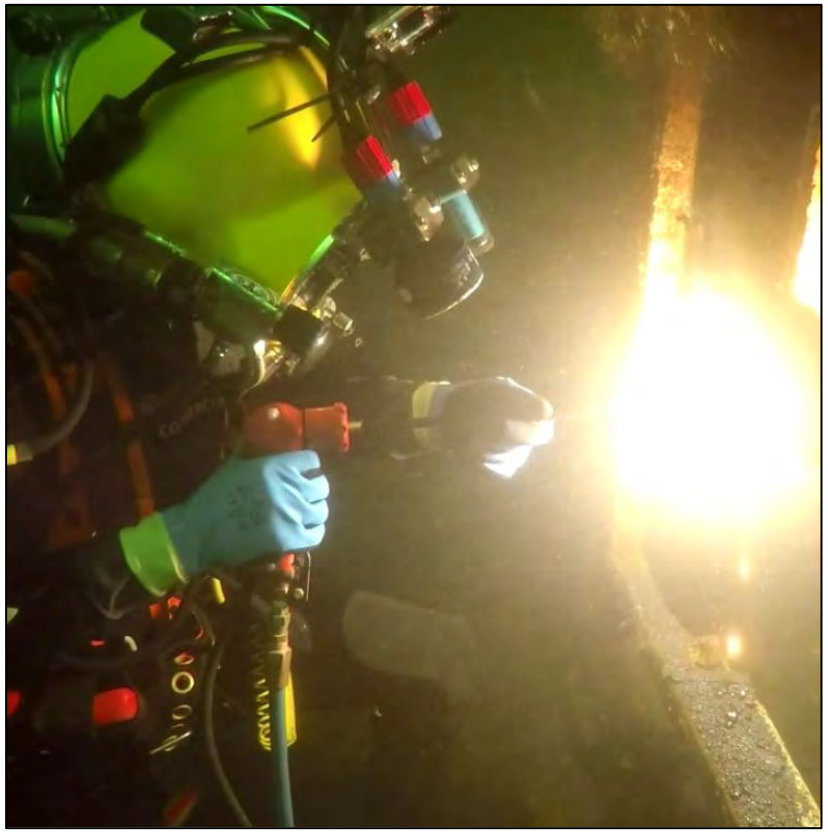
OPPBTP

Annex-10

# SHIP HUSBANDRY

# INLAND/INSHORE

# INSIGHT from O&G Operators
# TOTALENERGIES Perspective



Jord LUCAS (IOGP Diving Sub-committee chairman)

EDTC Seminar September 2015

# AREA of CONCERN (1/2)

## Increasing activities in Wind Offshore

- New area for O&G players
- Multiple partners
- Multiple layers of responsibilities
- International standards are not always referred to

## Diving Operations Midstream and Downstream

- New area of concerns
- Weak national standards
- Exposure is not that low
- Risks are poorly known
- No DWR / Chamber at stake
- Diving team size (3 instead of 5)
- New suppliers yet to be approved

# AREA of CONCERN (2/2)

## Operated by Others (OBO)

- Multiple partners (JV)
- Multiple layers of responsibilities
- Recognized standards are not always referred to
- Suppliers are not always subject to assurance process

## Ship Husbandry

- Rarely in Project perimeter
- Handled by sub-entities of the yard and/or the ship owner
- Inshore diving suppliers are generally less safety minded
- Far less control and low visibility
- Major safety concern for the industry (average of 1 fatality a month over the past years)

# Fatality in Taiwan when carrying out Ship Husbandry Close to TTE perimeter

Please be advised that we have been notified by the works manager at 12.08hrs LT of the following serious incident:

- A diver, working for a local Taiwanese diving subcontractor, was involved in hull cleaning works on a fallpipe vessel, located at berth. (note: hull cleaning and especially cleaning of the seawater inlets of box-coolers is very common in tropical areas every 2-3 months in order to ensure full operational conditions of sea-going vessels and especially offshore construction vessels.)
- The diver was recovered unconscious, was reanimated and subsequently taken to a hospital. No further details about his medical condition have been provided till date.
- The local police arrived at the site at 12.35hrs LT and is currently undertaking investigations with all involved parties, whereby YWPC is not a involved party.
- Our thoughts are with the diver, his family and his colleagues.

International Association of Oil & Gas Producers

- IOGP Ship Husbandry Diving Improvement Expert Group

- Nigel Lusby, Shell lead the group on behalf of IOGP

# Background

- The IOGP has formed an industry Experts group to influence the Supply chain in Ships Husbandry Diving
- Ships husbandry diving is an activity that is carried out on marine vessels. Including Bio fouling cleaning, bio fouling is estimated to cost the marine industry in excess fuel costs and emissions at $30billion annually ( International Institute of Marine Surveying). Other activities include Inspection in lieu of dry-docking for class, removal of propeller fishnet fouling and impact damage assessment.
- The activity is carried out by small specialist contractors and where equivalent non diving solutions often result in significant cost increases
- International  and local Standards globally are variable or non-existent resulting in frequent fatalities – purported anecdotally to be as high as one per month – with ships husbandry diving having the highest Fatal Accident Rate of any Marine service

# IOGP Ships Husbandry Diving Experts Group Members

| Name | Company | Email |
|---|---|---|
| N Lusby<br><br>Initiative Lead | Shell | Nigel.Lusby@shell.com |
| Jord Lucas<br><br>DOSC Chair | Total Energies | <jord.lucas@totalenergies.com> |
| Ismaeel Husain | IOGP | <iah@iogp.org> |
| Graham Coles | OCIMF | <Graham.Coles@ocimf.org> |
| Bill Chilton | IMCA | Bill.Chilton@imca-int.com |
| Phil Newsum | ADCI | <Phillip.Newsum@adc-int.org> |
| Rob Rostron | DNV | <Robert.Rostron@dnv.com> |
| Kris Chambers | BP | <Kristopher.Chambers@uk.bp.com> |
| Scott Crook | Chevron | <Scott.Crook@chevron.com> |
| Antonio Savergnini | Petrobras | <antonio.savergnini@petrobras.com.br> |
| Graham Simon POWELL | NOC | <Graham.POWELL@noc.qa> |
| Jason Standing | ADNOC | jStanding@adnoc.ae |



IMCA

International Association of Oil & Gas Producers

# Examples of Incidents

( Source, Bill Chilton, Diving Manager, IMCA www.imca-int.com)

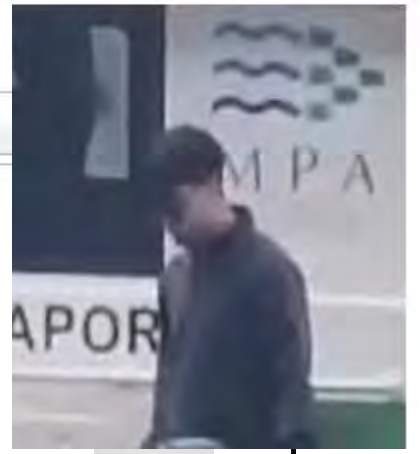
**Diver dead in G**
**Archipelago – c**
**investigated**

Malaysian diver, 22, dies after getting entangled with boat propeller while cleaning ship's hull

Published 5 Jan 20
Updated at 15.08

**A diver in his 5**
**at a ship in the**
**The incident is**
**violation.**
**"This is by far**
**Jönsson, CEO**
**assignment.**

SINGAPORE




Commercial diver dies after failing to surface while cleaning ship's hull off East Coast

The di

experience in the field and is ranked one of the best in India. On Sunday, Anil entered the hull of Aeris Marine, owned by a Malayali businessman, to clean the bottom of the ship.

A contractual worker has lost his life at Keppel Subic Shipyard in the Philippines.

The Manila Times said the yard submitted a report to the department of labour's bureau of working conditions stating that diver Eleazar Viernes, 63, died last month.




IMCA

International Association of Oil & Gas Producers

8

# Objectives

- To increase the focus and recognition of the importance of safety requirements for this activity amongst its stakeholders. These include Inter Alia, International and National Regulators and Governments, Ship Owners, Ship Charterers, Ship Managers and Operators, Port Authorities, Classification Societies and associations for the marine industry.
- To seek the immediate prohibition of the use of Self Contained Underwater Breathing Apparatus (SCUBA) for this activity, its unsuitability has been published by the leading Diving contractor's associations ( ADCI and IMCA) and in IOGP 411 rev 1 *Recommended Practices for Diving Operations appendix J* – The use of SCUBA is one of the main root causes of Fatal Accidents in this industry sector
- Promote the recommended practice contained in IOGP report 411, appendix D Ship Husbandry Diving amongst the supply chain – see next slide

# IOGP Diving Operations Recommended Practice. Ships Husbandry Diving



## Appendix D. Underwater Ships Husbandry

| Title | Underwater Ships Husbandry |
|---|---|
| **Definition** | Use of surface supplied diving methods to perform cleaning, inspection, survey or repair on the underwater systems of ships, MODUs, barges and vessels. |
| **Scope** | Performed inland/inshore or offshore and may include inspections using visual or non-destructive techniques for certification by class societies. Hull cleaning and prop polishing is typically performed in conjunction with inspections. Repairs may be performed on the hull, to propulsion and steering systems, or anti corrosion systems. |
| **Minimum Team Size and Competence** | • Minimum of 5 (Diving Supervisor, working diver, stand-by diver, tender for working diver, tender for stand-by diver)<br>• Personnel should be trained in underwater inspection and in the use of hull cleaning and repair equipment.<br>• Personnel should also be familiar with systems/equipment relevant to the ships propulsion, steering, water suction/discharge, sonar and anti-corrosion systems when perform tasks on or in the vicinity of those systems.<br>• Team size subject to formal risk assessment. There must be sufficient number of competent and, where appropriate, qualified personnel to operate all the diving plant and to provide support functions to the dive team. This may require additional support personnel and other management or associated technical support personnel, for example project engineers or maintenance technicians. The Diving Supervisor shall be competent for the task and be in possession of a letter of appointment from the diving contractor. |
| **Equipment** | • Diving contractor must be satisfied that sufficient plant, suitable for the use to which it will be put, is provided for the diving project and that sufficient plant is available, whenever needed, which is suitable to carry out safely any action which may need to be taken in a reasonably foreseeable emergency<br>• Diving system audited to IMCA D 040 DESIGN or IMCA D 023 DESIGN standard, which ever system is used<br>• Decompression chamber (when operating > 10m water depth)<br>• Dive vessel suitable in size and manning to accommodate the dive system, inspection/ repair/cleaning equipment, and anticipated sea state<br>• Hull and prop cleaning/buffing equipment designed for safe diver manual operation<br>• Inspection and welding equipment designed for diver operation |
| **Operational Factors** | • Isolation of any ships underwater equipment which could potentially harm the diver (Propulsion, steering, suction/discharge, electrical corrosion, sonar, etc.)<br>• Small boat/Daughter craft diving next to a large vessel<br>• Diving under a ship (Restriction to surface)<br>• Maximum umbilical lengths and obstruction/fouling hazards (Propellers, rudders, sea chests, etc.)<br>• Dropped objects from the vessel onto the dive worksite<br>• Diving near high vessel traffic area (jetties and anchorages)<br>• Anchored vessels moving exposing dive workboat to sea changes<br>• Changing environmental conditions and forecasting<br>• Diver and umbilical must remain unattached from cleaning equipment<br>• Operational guidance from the Association of Diving Contractors International (ADCI) for Ships Husbandry |
| **Emergency and Contingency** | • Distance to decompression chamber as stated in Table 1<br>• Bail-out cylinder duration consideration of extended umbilical distances when working on large vessels |





International Association of Oil & Gas Producers

Annex-11

EDTC 2025 – Portsmouth – 25-27 September

# THE NATIONAL PLAN OF THE UNDERWATER DIMENSION

**EUROPEAN COOPERATION FOR THE DEVELOPMENT OF DIVING TECHNOLOGY**

PNS

POLO NAZIONALE DELLA DIMENSIONE SUBACQUEA

National Center for Underwater Dimension

# KEY POINTS OF THE PRESENTATION

The underwater dimension in the national context

- **Contribution** of professional diving activities
- **European and international** cooperation in the diving sector

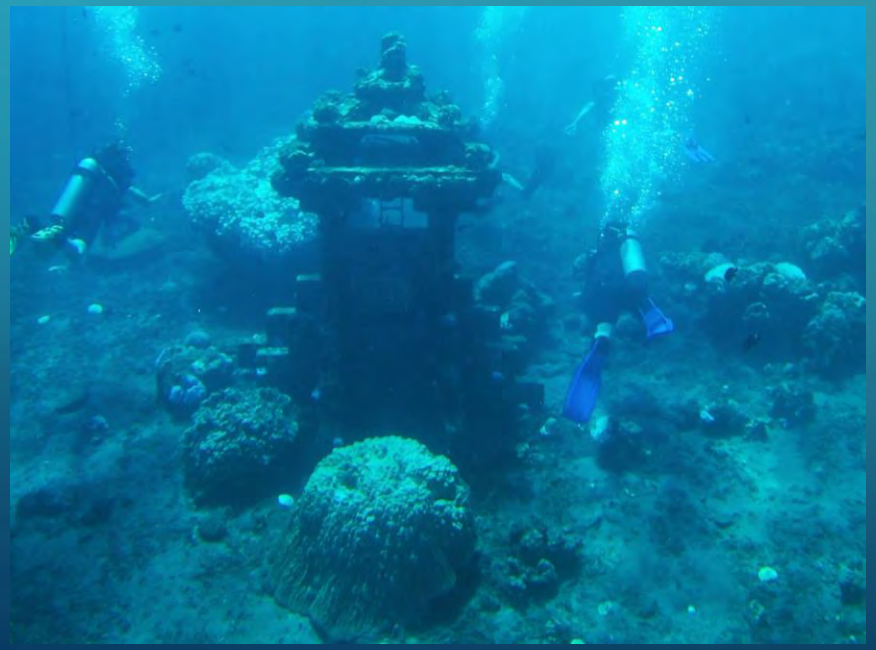
EDTC 2025 – Portsmouth – 25-27 September

# THE UNDERWATER DIMENSION IN THE NATIONAL CONTEXT

# STRATEGIC OBJECTIVES OF THE NATIONAL PLAN OF THE UNDERWATER DIMENSION

- Promotion Of Research
- The Plan Promotes Scientific Research To Deepen The Knowledge Of Italian Underwater Environments.
- Technological Development
- It Supports The Development Of Innovative Technologies To Improve Diving Activities And Safety.
- Safety And Sustainability

# MAIN ACTORS AND INSTITUTIONS INVOLVED



Public bodies involved

- Ministries are crucial for the regulation and coordination of diving activities at the national level.
- Role of universities
- Universities provide advanced research and specialized training to support the diving industry.
- Specialized research centers
- Research centers develop innovative technologies and knowledge to improve diving activities.
- Specialized companies
- Specialized companies provide essential services and products for underwater exploration and management.

# LEGISLATIVE AND REGULATORY ASPECTS IN ITALY

- National diving legislation
- Italy has specific laws that regulate diving activities to ensure safety and environmental protection.
- European directives applied
- The European directives integrate the Italian legislation to harmonize underwater safety and environmental protection.
- Operator safety
- The regulations guarantee the safety of divers during activities in the marine environment and inland waters

# CONTRIBUTION OF PROFESSIONAL DIVING ACTIVITIES

# ROLE OF UNDERWATER ACTIVITIES IN ENVIRONMENTAL RESEARCH AND MONITORING

## Underwater scientific research

- Diving activities are essential for collecting scientific data and understanding marine biodiversity.
- Monitoring marine ecosystems
- Underwater monitoring helps assess the health of ecosystems and identify environmental changes.
- Conservation and sustainable management
- Underwater activities support the conservation of marine resources and the responsible management of habitats.

# INDUSTRIAL AND INFRASTRUCTURE APPLICATIONS

## Settore Oil & Gas

- Underwater operations are crucial for the safe extraction and management of oil and natural gas resources.
- Marine infrastructure construction
- The construction of marine infrastructure requires advanced diving techniques to ensure stability and durability.
- Maintenance of underwater systems
- Regular maintenance of diving facilities ensures operational efficiency and safety in industrial activities.

# SAFETY AND TRAINING OF DIVERS

Importance of security

- Safety is key to protecting dive operators from diving hazards and accidents.
- Advanced training
- Advanced training programs prepare operators to handle emergency situations underwater effectively.
- Professional certifications
- Certifications ensure that operators have recognized skills and high safety standards.

# LAW 2521 *(EX 1462)* "PROVISIONS FOR DIVING SAFETY

## Legislative Context and Approval

Bill No. 2521, entitled "Provisions on the Safety of Underwater Activities," was introduced by the Government on April 15, 2025, and approved at first reading by the Senate on July 17, 2025.

*Atti Parlamentari* — 1 — *Camera dei Deputati*

XIX LEGISLATURA — DISEGNI DI LEGGE E RELAZIONI — DOCUMENTI

CAMERA DEI DEPUTATI N. 2521

DISEGNO DI LEGGE

APPROVATO DAL SENATO DELLA REPUBBLICA

*il 17 luglio 2025 (v. stampato Senato n. 1462)*

PRESENTATO DAL PRESIDENTE DEL CONSIGLIO DEI MINISTRI

(MELONI)

E DAL MINISTRO PER LA PROTEZIONE CIVILE E LE POLITICHE DEL MARE

(MUSUMECI)

Disposizioni in materia di sicurezza delle attività subacquee

*Trasmesso dal Presidente del Senato della Repubblica il 17 luglio 2025*

# LAW 2521 "PROVISIONS FOR DIVING SAFETY

Main purposes Completion of an organic regulatory framework
The bill aims to fill a legislative gap in the underwater sector, regulating access, safety standards for vehicles and operators, underwater works, infrastructure protection and environmental protection, even in the high seas of the Senate of the Republic

# LAW 2521 "PROVISIONS FOR DIVING SAFETY

Main purposes Completion of an organic regulatory framework
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*Nello Musumeci - Minister of Civil Protection and the Sea*

# LAW 2521 "PROVISIONS FOR DIVING SAFETY

Establishment of the Underwater Safety Agency (ASAS)A public body is born with regulatory, administrative and financial autonomy, under the coordination of the Prime Minister or the delegated authority for marine policies, which will represent the technical-operational fulcrum for the governance of the underwater dimension

# LAW 2521 "PROVISIONS FOR DIVING SAFETY

Protection of underwater infrastructureRules are established for monitoring and protecting submarine cables, pipelines and other critical infrastructure, with attention to preventing accidental or malicious damage, while simplifying access and maintenance in urgent cases

# LAW 2521 "PROVISIONS FOR DIVING SAFETY

Technical and health standards and the sanctions frameworkThe text introduces minimum requirements for vehicles and operators, rigorous health procedures and a system of sanctions - including criminal ones, up to two years in prison - for those who operate without the necessary authorizations

# CONCLUSION

## Sustainable Underwater Development

The plan supports the sustainable growth of diving activities, protecting the marine environment and natural resources.

## European Collaboration

EDTC facilitates cooperation between European nations to improve safety and standards in diving activities.

## Innovation and High Standards

The plan promotes technological innovation and the adoption of high standards to ensure safety and quality.

EDTC 2025 – Portsmouth – 25-27 September

# Thank you for your attention.

***see you soon***

Annex-12

EDTC 2025 MEETING

25-27 September 2025, Portsmouth, UK

LAST CALL

# Adapted Algorithms for Safe and Efficient Decompression in Extended Altitude Dives


**P. Longobardi, A. Gerola, G.L. Baroni**

Centro Iperbarico Ravenna (Medical Director)

Italian Diving and Hyperbaric Medical Society (SIMSI)

Scuola Superiore Sant'Anna Pisa (Affiliated researcher)

Fondazione Mistral (President)

Diving Doctors Italy (Medical Director)

**direzione@iperbaricoravenna.it**


# Diving Doctors Italy

## Health care and diving medicine service provided in 20 Nations

**As of 25 August 2025:**
**11,384 days with doctors**
**2,684 days with a nurse.**
**2,714 days with remote assistance.**
**€4.5 million paid by companies for the service**

**Diving Medicine**
**Physician at dive-site**

**telemedicine**

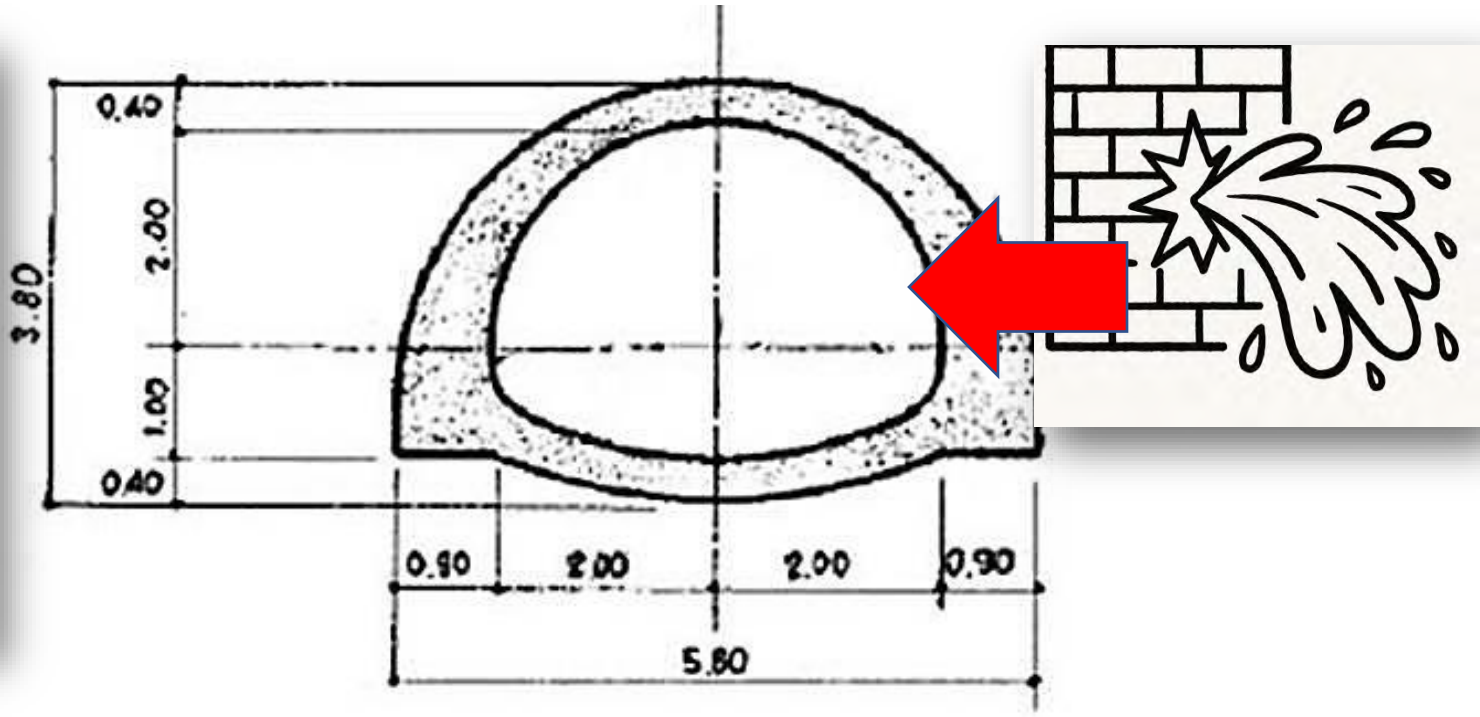
# Lake Zoccolo Zoggler-Stausee

**1,141 meters (3.743 ft) asl**
**1013 hPa**

**May 2025: failure in bottom outlet tunnel lowered lake by 13.5 m (44 ft)**

**Aquatic fauna,** threatened by water loss, **relocated** to prepared tanks

**By 18 Aug 2025: only initial inspection of gallery possible**



# High-altitude dive: the tunnel broke, the water won

- **Altitude diving at 1,128 m a.s.l. —** 65 m (213 ft) flooded tunnel penetration. Divers placed 5 × 2 m (16 × 6.5 ft) panels, later removed after floor collapse and downstream flooding.
- **Team:** 1 Supervisor + 8 Divers
- **Basin depth range:** -24.5 m / -35.5 m ( -80 ft / -120 ft )
- **Equivalent deco depth:** -30 m / -42 m ( -100 ft / -140 ft )
- **Dives performed:** 14
- **Total bottom time (hh:mm):** 3:27
- **Total decompression time:** 66 min **(Stops @ -6 m / -3 m** [ -20 ft / -10 ft ])
- **Total dive time (hh:mm):** 6:10

**The maximum Sea Level Equivalent Depth (SLED) was 42 m / 140 fsw**

especially

- High **altitudes** (>10,000 ft / ~3,000 m) **stress the body** and may cause altitude sickness during acclimatisation.
- Reduced pressure means **dives at altitude require more decompression** than at sea level.
- **Above 1,000 ft / ~300 m, all dives need correction** (USN DM rev7 #9-13.2).
- **Cross Correction** adjusts the dive depth to sea level values, **ensuring adequate decompression.**

US Navy Diving Manual Revision 7 Change A, 30 April 2018

**Sea Level Equivalent Depth (SLED) = 120 fsw (30 msw) * 1.000 ATA / 0.864 ATA =**
**=140 fsw (42 msw)**

**1,141 meters (3.743 ft) asl**

| | Atmospheric Pressure | | | | |
|---|---|---|---|---|---|
| Altitude in Feet | Atmospheres absolute | Millimeters of Mercury | Pounds per sq. in. absolute | Millibars | Kilopascals |
| 4000 | 0.864 | 656.4 | 12.69 | 875.1 | 87.51 |

- The diver should **wait 24 hours after arrival at altitude before making the first dive** to allow the acclimatization process.
- A **fathometer was be used to measure the lake depth** and **pneumo hose** (adding the correction factor) **to determine the diver's actual depth**
- **Repetitive diving was not allowed**

| Actual Depth (fsw) | Altitude (feet) | |
|---|---|---|
| | 3000 | 4000 |
| 50 | 60 | 60 |
| 55 | 70 | 70 |
| 60 | 70 | 70 |
| 65 | 80 | 80 |
| 70 | 80 | 90 |
| 75 | 90 | 90 |
| 80 | 90 | 100 |
| 85 | 100 | 100 |
| 90 | 110 | 110 |
| 95 | 110 | 110 |
| 100 | 120 | 120 |
| 105 | 120 | 130 |
| 110 | 130 | 130 |
| 115 | 130 | 140 |
| 120 | 140 | 140 |
| 125 | 140 | 150 |
| 130 | 150 | 160 |
| 135 | 160 | 160 |
| 140 | 160 | 170 |

US Navy Diving Manual Revision 7 Change A, 30 April 2018

# Exposure limits for air diving operations

Revision 1 published 01/18

According to the HSE, diving project plans should include the recommended **maximum time limits**, as compliance with these limits **has resulted in a significant reduction in the incidence of DCI**

https://www.hse.gov.uk/pubns/dvis5.pdf

| Depth | | Bottom time limits (minutes)* | |
|---|---|---|---|
| Metres | Feet | Surface decompression and in-water decompression | Lake Zoccolo |
| 0-12 | 0-40 | 240 | N/A |
| 15 | 50 | 180 | 210 |
| 18 | 60 | 120 | 140 |
| 21 | 70 | 90 | 120 |
| 24 | 80 | 70 | 100 |
| 27 | 90 | 60 | 90 |
| 30 | 100 | 50 | 70 |
| 33 | 110 | 40 | 60 |
| 36 | 120 | 35 | 50 |
| 39 | 130 | 30 | 50 |
| 42 | 140 | 30 | 50 |

| Sea Level Equivalent Depth (SLED m/ft) | Bottom Time Range (min) | Max TDT (min) | Max Total Dive Time (min) | Oxygen Breathing Time (min) |
|---|---|---|---|---|
| 15 m / 50 ft | 150 - 180 | 76 | 256 | 60 |
| 18 m / 60 ft | 130 - 150 | 127 | 277 | 60 |
| 21 m / 70 ft | 100 - 120 | 122 | 242 | 60 |
| 24 m / 80 ft | 90 - 110 | 140 | 250 | 60 |
| 27 m / 90 ft | 70 - 90 | 127 | 217 | 60 |
| 30 m / 100 ft | 60 - 80 | 132 | 212 | 60 |
| 33 m / 110 ft | 50 - 70 | 135 | 205 | 60 |
| 36 m / 120 ft | 40 - 60 | 143 | 203 | 60 |
| 39 m / 130 ft | 5 - 50 | 128 | 178 | 60 |
| **42 m / 140 ft** | **5 - 50** | **151** | **201** | **60** |


- **Travaux en milieu hyperbare / mesures particulieres de prevention.** Journal Officiel de la Republique Francaise, **Juin 1992**, ISBN-10: 110733225; ISBN-13: 978-2110733221
- **Galfetti, A. (1999)**. *Il sub in acque dolci* / **altitude dive tables** (4th ed.). Editoriale Olimpia

**1,141 meters**
**(3.743 ft) asl**
**1013 hPa**

DecoPlanner

Version 4.6.5 by Andreas Hagberg (based on the works of Erik Baker)

▼ Altitude

Plan dive for: ○ Sea level ● Altitude

Elevation: 1141 meters

☑ Acclimatized at elevation

▼ Total decompression

Total decompression
**93 minutes**
Compared to bottom time
**186 %**
Rounded ratio, BT : deco
**1 : 1.9**

Bühlmann ZH-L16b, Gradient Factors: First stop (GF Lo) 90%, Surfacing (GF Hi) 90%

Altitude: 1141mtr

| Depth | Duration | Gas | Start | End | PO2 | Gas Usage | GF% | CNS% | OTU |
|---|---|---|---|---|---|---|---|---|---|
| 140 ft 42 | 50 | 21% | 4 | 50 | 1.05 | 4843 | 0 | 18.2 | 51.4 |
| 15 | 3 | 21% | 52 | 55 | 0.49 | 230 | 69 | 19.4 | 53.0 |
| 12 | 6 | 21% | 55 | 61 | 0.43 | 186 | 85 | 19.4 | 53.0 |
| 9 | 13 | 21% | 61 | 74 | 0.37 | 344 | 89 | 19.4 | 53.0 |
| 6 | 24 | 21% | 74 | 98 | 0.31 | 527 | 89 | 19.4 | 53.0 |
| 3 | 47 | 21% | 98 | 145 | 0.25 | 824 | 89 | 19.4 | 53.0 |
| 0 | | 21% | 146 | | 0.18 | | 90 | 19.4 | 53.0 |

V-Planner
Deco planning for Technical divers

V-Planner v3,110
Copyright©1997-2025 HHS Software Corp

Elevation data
Dive elevation 1141
Hours dive elev. 24
Ascended from 0
Travel time (hr) 0
Average elev. last 2 weeks. 1141
Depth meter calibration ○ Sea level ◉ Altitude

# PRE-OXYGENATION BEFORE DIVING

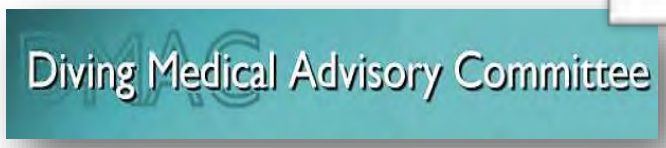
- **Breathing 100% oxygen before diving reduces inert gas load** and **limits** decompression **bubble formation** by denitrogenation, **enhanced gas nuclei elimination**, and **antioxidant effects**.
- **Typical protocol:** about **30 minutes of O2, breathing before diving**.
- **Bosco:** recommends a **short interval (~15 minutes)** of ambient air breathing **between the end of pre-oxygenation and the dive start, to avoid relative hyperoxia.**


- Bosco G., Camporesi E.M. (**2017**). Hyperbaric Oxygen Pretreatment and Preconditioning. In: Textbook of Hyperbaric Medicine. Springer, Cham. https://doi.org/10.1007/978-3-319-47140-2_40
- Castagna O, Gempp E, Blatteau JE. Pre-dive normobaric oxygen reduces bubble formation in scuba divers. Eur J Appl Physiol. **2009** May;106(2):167-72. doi: 10.1007/s00421-009-1003-z. Epub 2009 Feb 14. PMID: 19219451.
- Butler BD, Little T, Cogan V, Powell M. Hyperbaric oxygen prebreathe modifies the outcome of decompression sickness. *Undersea Hyperb Med* 33: 407–417, **2006**.
- Landolfi, A., Yang, Z.J., Savini, F. *et al.* Pre-treatment with hyperbaric oxygenation reduces bubble formation and platelet activation. *Sport Sci Health* 1, 122–128 (**2006**). https://doi.org/10.1007/s11332-006-0022-y

# Take home messages

- **Altitude diving: little knowledge, limited experience, big safety concern**
- **No accidents. One diver reported headache during pre-oxygenation, linked to dehydration and mild acidosis, resolved with bicarbonate water**. Diver completed project without adverse events.

  [Hct 51%, pH 7.38, $pCO_2$ 45 mmHg, $HCO_3^-$ 21 mmol/L, Base Excess -3 mEq/L]
- The divers must maintain an **adequate level of fitness, sufficient food and fluids intake** during the diving project.
- There may be **benefit from ensuring that good communications are available for remote assistance**.
- **Health staff on diving worksite must be trained according** to **DMAC, EDTC, IDMEB, IMCA guidelines.**






**Adapted Algorithms for Safe and Efficient Decompression in Extended Altitude Dives**

**Pasquale Longobardi**[1], Antonio Gerola[2]

[1]Medical Director of the Ravenna Hyperbaric Centre, Vice-President of the Italian Society of Underwater and Hyperbaric Medicine (SIMSI), Associate Researcher at the Sant'Anna School of Advanced Studies (SSSA) in Pisa, Italy, EDTC EB member

[2]Technical and engineering Manager of the Marine Consulting srl (Italy). IMCA Bell diving Supervisor

In April 2025, a surface-supplied diving operation was conducted at Lake Zoccolo (Zoggler-Stausee), the largest reservoir in Val d'Ultimo, South Tyrol, at an altitude of 1,141 metres. Built between 1957 and 1963, the hydroelectric dam submerged various structures, including farms and chapels. A 65-metre penetration dive was carried out inside the reservoir's bottom outlet tunnel to assess sediment thickness prior to its relining (**Figure 1** and **Table 1**). The diving contractor, Marine Consulting Srl, sought longer bottom times than those included in its operational manual. To mitigate risks, customised decompression tables were developed by comparing the Galfetti tables, French tables, and Decoplanner version 4.6.3 software. The safety of the procedure was enhanced by oxygen preconditioning. This protocol involved 30 minutes of oxygen breathing followed by a 15-minute air break prior to diving (**Table 2** and **Figure 2**). Only one diver experienced a headache following oxygen preconditioning. Medical consultation suggested mild dehydration and acid-base imbalance, likely exacerbated by a diet low in vegetables and high in carbohydrates and protein. The symptom was resolved with bicarbonate intake, and no further issues were reported. The project concluded successfully, with oxygen preconditioning proving beneficial and well received by the dive team. Looking ahead, three saturation dives are scheduled for 2026, at a storage depth of 50 metres and a duration of 28 days each, involving 12 divers.

**Figure 1:** Drawing of the outlet tunnel section at the bottom of the reservoir

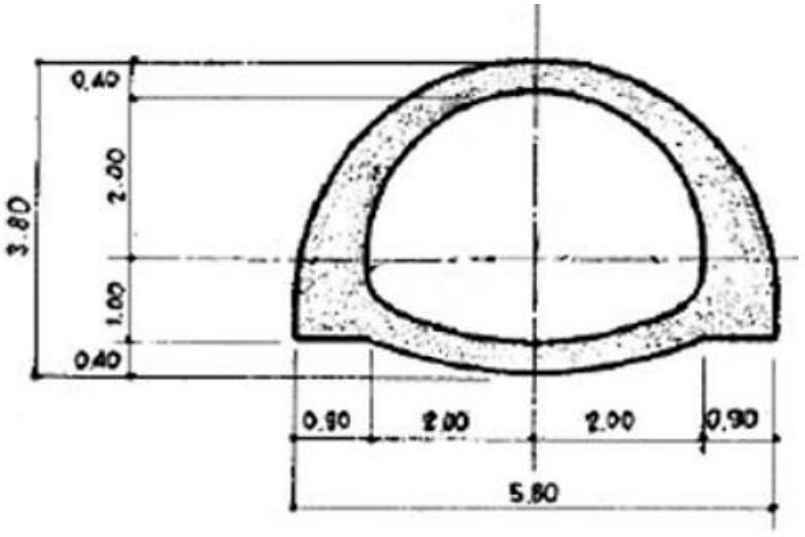



**Table 1** shows the dive parameters for the project**.**

| | |
|---|---|
| Altitude of diving | 1,128 metres above sea level (asl) |
| The team composition | one supervisor and 8 (eight) working divers |
| The depth of the reservoir, over the course of the project | varies between -24.3 metres / -25.5 metres |
| The fictitious depth for the decompression table | -30 metres / -33 metres |
| The number of dives performed | 14 (fourteen) |
| The total number of man-hours (recorded in hours and minutes) | 03:27 |
| Total decompression time (minutes) | 66 minutes at a steps depth of -6/-3m. |
| Total dive time (recorded in hours and minutes) | 06:10 |

**Table 2** Total decompression time for the extended bottom time required by the project at Lake Zoccolo (Italy) at an altitude of 1,141 metres asl. The safety of the procedure was enhanced by oxygen preconditioning.

| **Diving depth (metres)** | **Equivalent depth at high altitude (1000-1500 metres)** | **Bottom Time limits included in Marine Consulting operational manual (minutes)** | **Extended Bottom Time (minutes)** | **Total Decompression Time (min:sec)** |
|---|---|---|---|---|
| 23 | 30 | 70 | 110 | 139:30 |
| 24 | 30 | 70 | 110 | |
| 25 | 33 | 60 | 90 | 126.45 |
| 26 | 33 | 60 | 90 | |

**Figure 2.** Oxygen preconditioning required by the project at Lake Zoccolo (Italy) at an altitude of 1,141 metres asl

**Annex-13**

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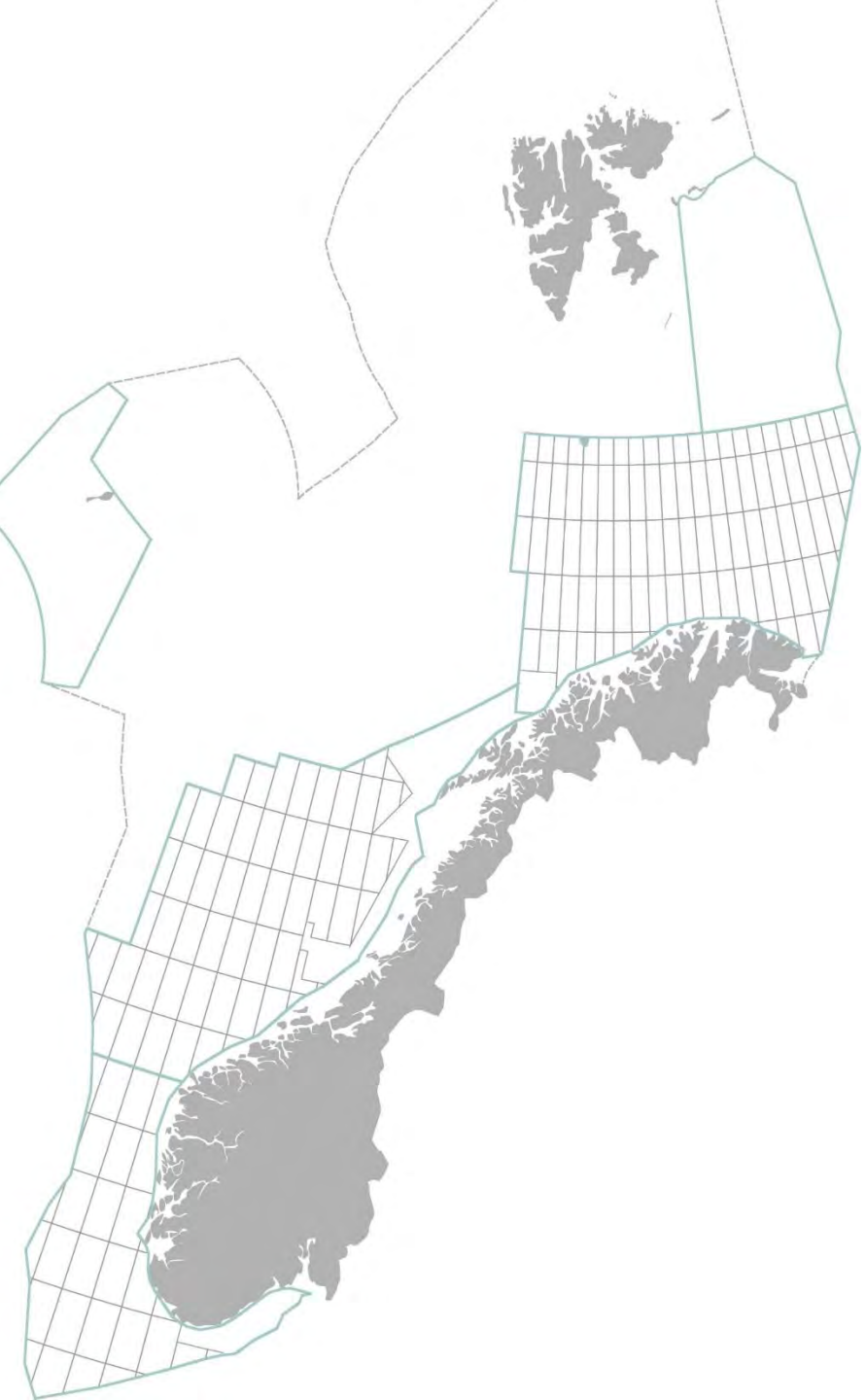
# EDTC National Report Norway

**26 September 2025**



# Areas of responsibility

**Petroleum operations – offshore and on land**

- 94 fields on stream
- 61 fixed facilities
- 42 mobile facilities with AoCs
- 382 subsea facilities
- 2247 active wells
- 25 000 employees offshore
- 18 310 km of pipelines
- 7 land plants

Updated 1 January 2025

**Mineral operations**

- Future mineral operations on the NCS has been delegated to Havtil

**Renewable energy production offshore**

- Two areas of the NCS have been opened for offshore wind development: Utsira North and Southern North Sea II

**Transport and storage of CO2**

- Value chain for transport and storage under development.
- Land plant at Øygarden in Vestland county.
- Pipeline transport to permanent storage in formations beneath the North Sea.

Havtil Norwegian Ocean Industry Authority

# Regulations

**Development and adoption – Work on new diving regulations**

- Havtil is responsible for developing and adopting regulations in its areas of responsibility
- This work will be pursued in dialogue with the parties in the industry (the Regulatory Forum)

  ➢ **This is also relevant for any changes in the diver training program**

**Petroleum operations**
- Framework regulations
- Management regulations
- Activities regulations
- Facilities regulations
- Technical and operational regulations
- Regulations pursuant to the Working Environment Act (adopted by the Ministry of Labour and Social Inclusion – AID)

**Transport and injection of $CO_2$**
- $CO_2$ safety regulations

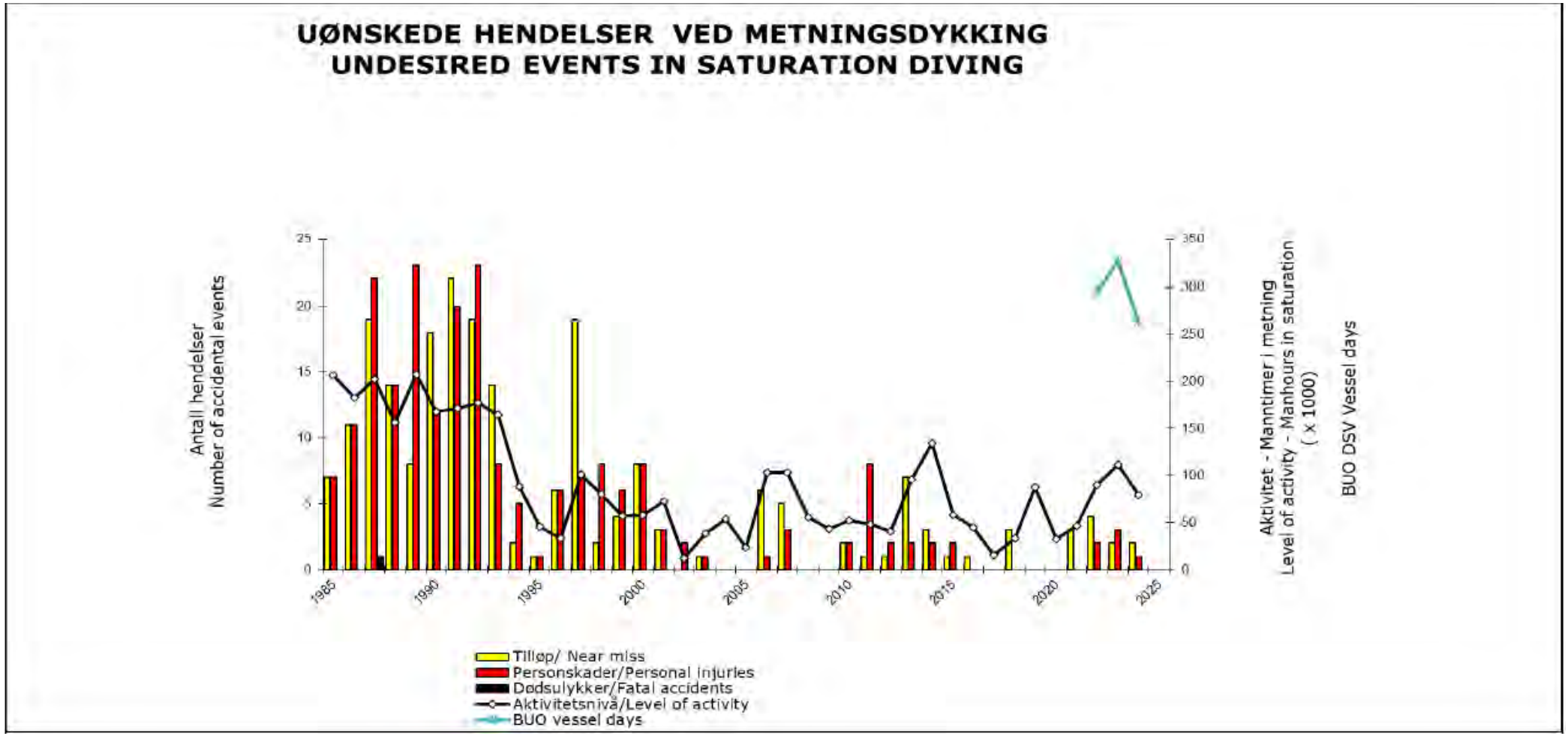
**Renewable energy production at sea**
- Regulations on safety and the working environment for offshore renewable energy

**Mineral operations** *(awaiting activity)*

Havtil Norwegian Ocean Industry Authority

# DSYS report for 2024

## Saturation Diving

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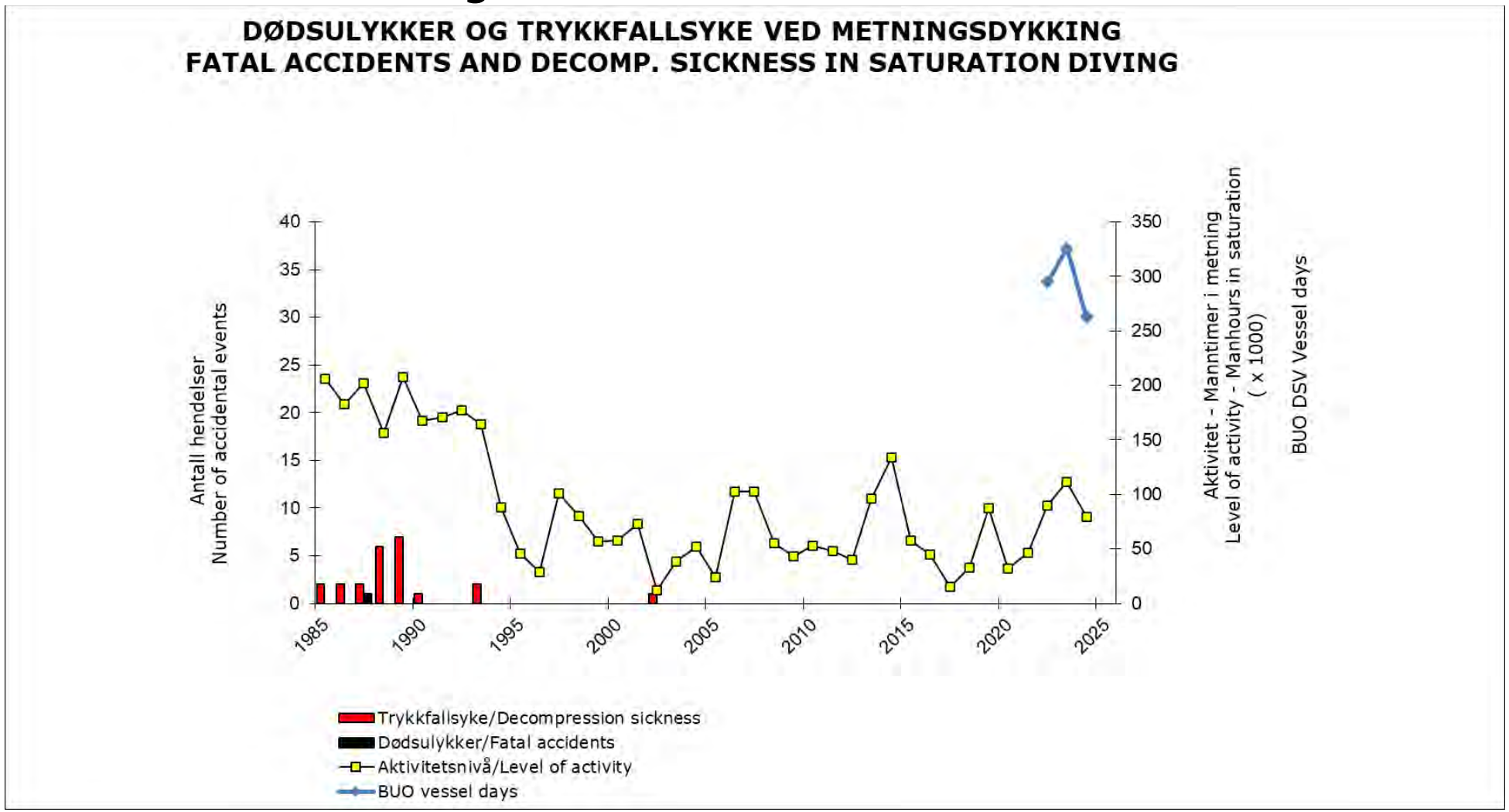
# DSYS report for 2024

## Saturation Diving – Fatalities & DCS

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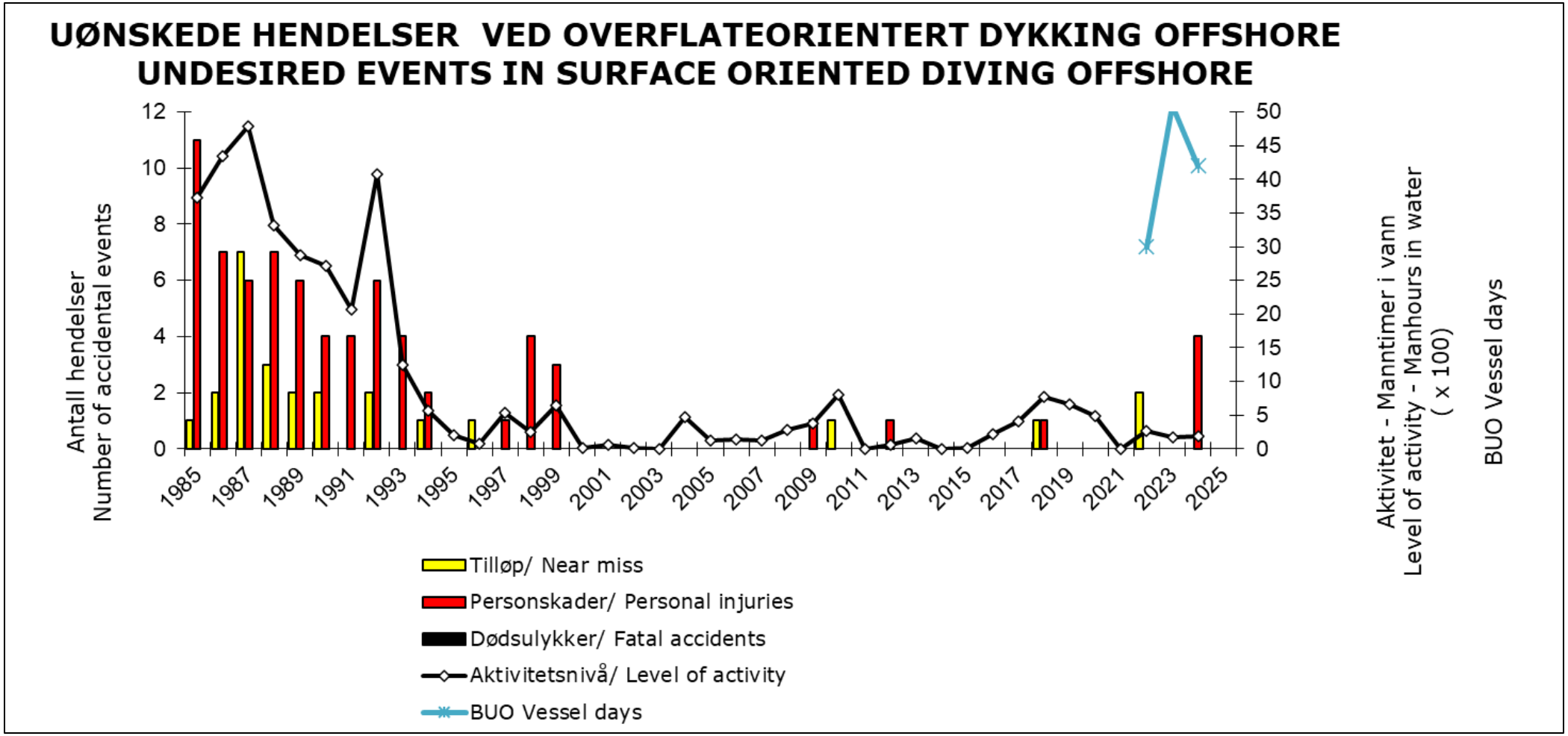
# DSYS report for 2024

## Surface oriented diving offshore

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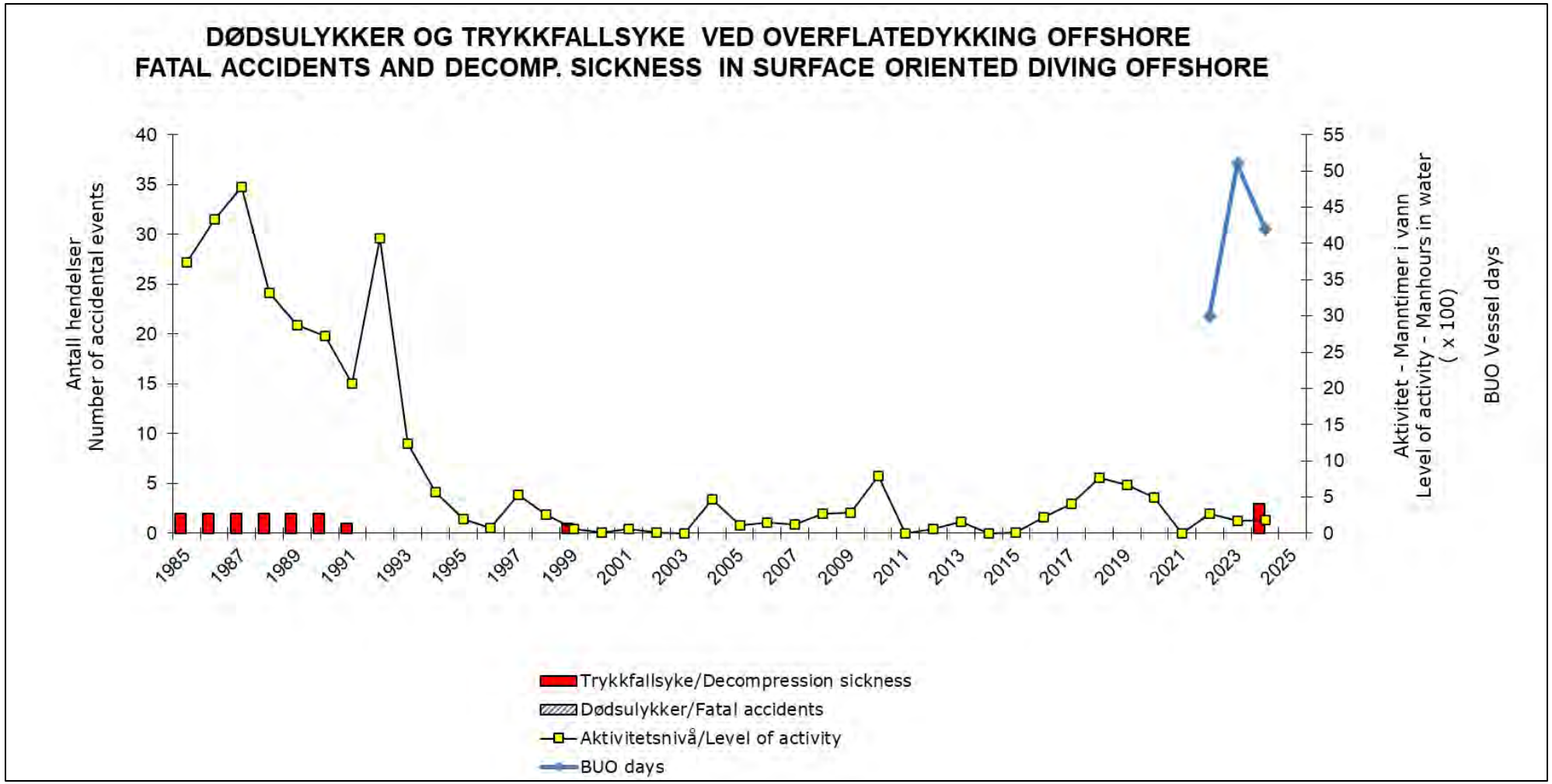
# DSYS report for 2024

## Surface oriented diving – Fatalities & DCS

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# Norwegian diver training – NYD

**NYD statistics 2024 – 2025**

- 172 Class 1 air divers
- 36 Inshore Dive Supervisors, 40 refresher
- 22 coded underwater welders
- 8 Rescue divers
- 55 divers on other courses
- 11.048 dives conducted


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# Norwegian diver training – HVL

**HVL Statistics 2024 - 2025**

- 19 Class 1 divers (1 year vocational school education)
- 65 Inshore Dive Supervisors (Refresher)
- 13 Inshore Dive Supervisors
- 19 DLR Supervisor Rescue Diving (Refresher)
- 8 DLR Supervisors Rescue Diving
- 14 Rescue Divers
- 8 Engineer divers


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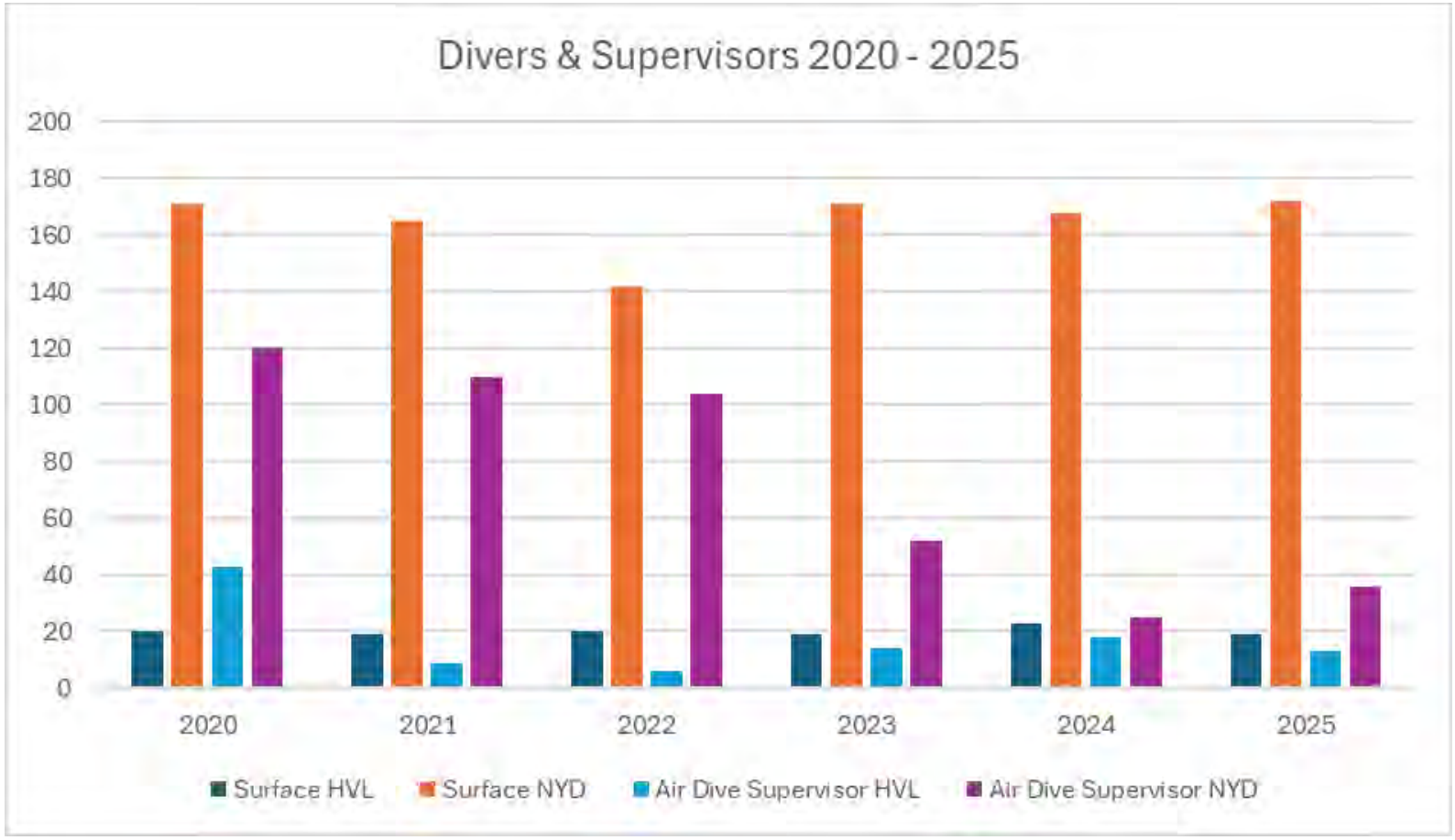
# No. of Divers & Supervisors certs issued 2020 – 2025

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Surface HVL | 20 | 19 | 20 | 19 | 23 | 19 |
| Surface NYD | 171 | 165 | 142 | 171 | 168 | 172 |
| Inshore Air Dive Supervisor HVL | 43 | 9 | 6 | 14 | 18 | 13 |
| Inshore Air Dive Supervisor NYD | 120 | 110 | 104 | 52 | 25 | 36 |




NOTE: Havtil does not issue conversion certificates

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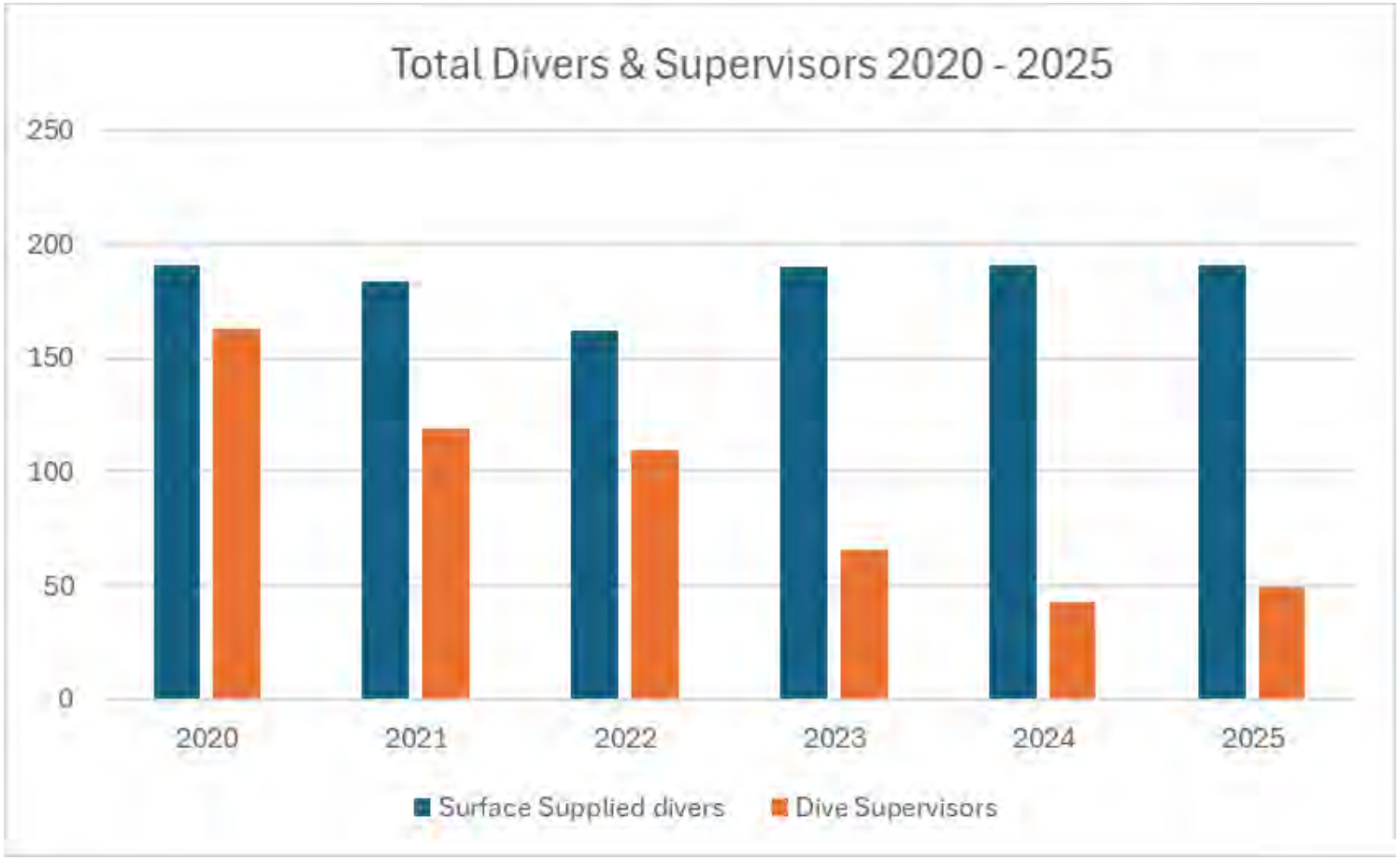
# Total Divers & Supervisors 2020 – 2025

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Surface Supplied divers (Total) | 191 | 184 | 162 | 190 | 191 | 191 |
| Dive Supervisors (Total) | 163 | 119 | 110 | 66 | 43 | 49 |




NOTE: Havtil does not issue conversion certificates

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# Norway Havtil Update

## Incidents & Accidents under Havtil jurisdiction

**Accidents during offshore diving operations in 2025**

- None

**Minor incidents / medical treatments since last EDTC meeting**

- None

# Norway Havtil Update

**Diving Activity 2024 – under Havtil jurisdiction**

<u>The total for 2024:</u>

- 263 DSV days saturation
- 42 Diving days surface oriented diving
- 120 Diving days surface oriented land based facilities

**Total of 425 diving days in 2024**

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# Norway Havtil Update

## Diving Activity 2025 under Havtil jurisdiction

<u>For the reporting period jan – june 2025:</u>

- 25 DSV days satuartion diving
- 104 days surface oriented diving

**Total of 129 diving days in the first half of 2025**

Estimated total for 2025:

**Approx. 250 diving days**

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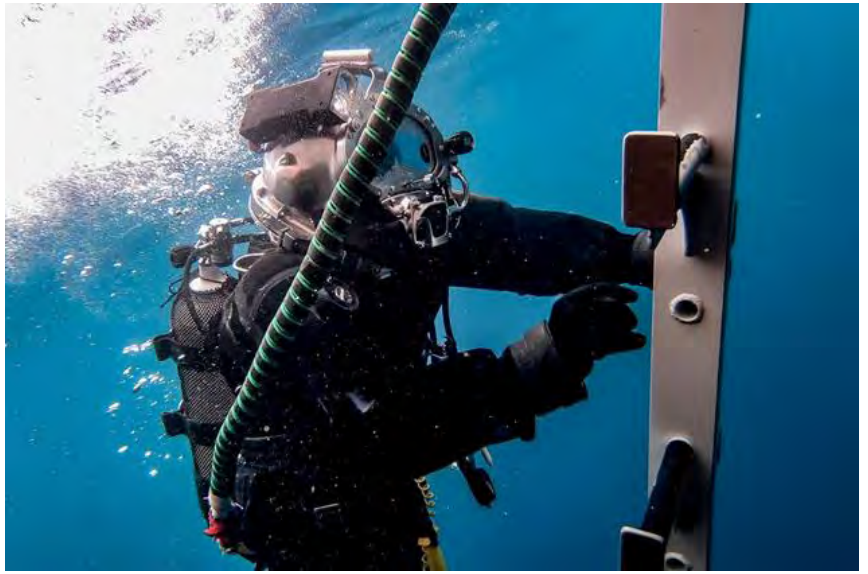
# Havtil focus areas

**Activity 2024 – 2025**

- Dive Supervisor certification
- NORSOK U-100 corrections
- Proposed new diving regulations
- Diver questionnaire completed in 2024
- Kick-off for study on hyperbaric evacuation from TUP



<u>Audits since last EDTC meeting:</u>

2025 ConocoPhillips Norway – Diving operations on Norpipe Wye

2025 Audit of Rapid Response Rescue Vessels (RRRV)

2025 Vår Energi – Completed the investigation of 3 x DCS in 2024

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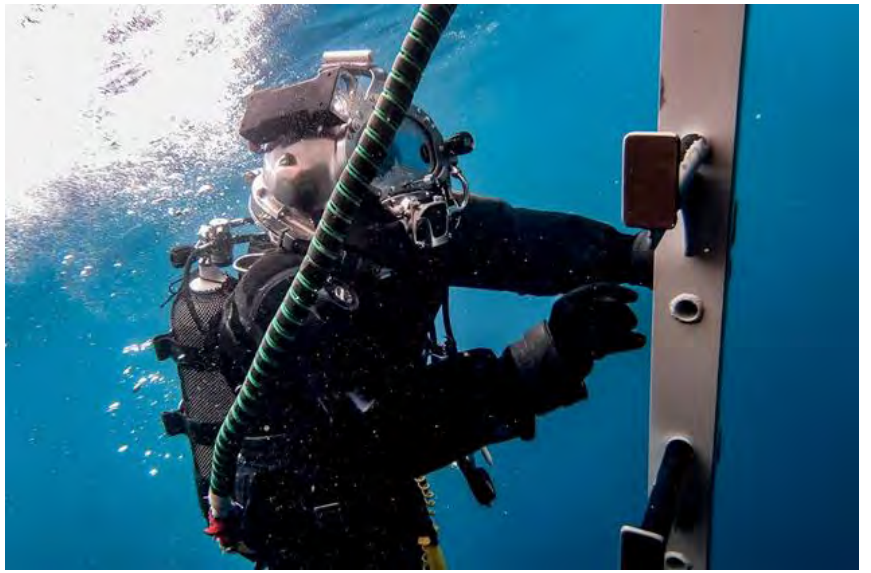
# Investigation of 3x DCS

**3x DCS incidents occured during Nitrox diving at Goliat FPSO in 2024**

**Background:**

- Surface oriented diving to 22msw
- Breathing gas: Nitrox 38% O2



**Causes:**

- Not controlling / not considering uncertainties
- Qualification & use of  tables with 1% oxygen intervals
- Organisation

**Deviations:**

- Insufficient follow-up.
- Lack of decision-making criteria/guidelines
- Lack of specification of the requirements set out in the regulations

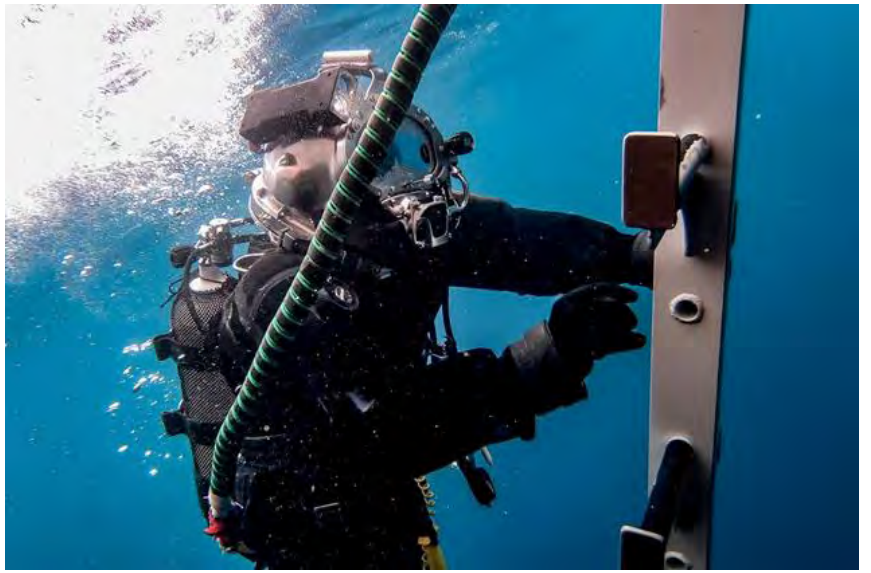
Havtil
Havindustritilsynet

# Investigation of 3x DCS

**3x DCS incidents occured during Nitrox diving offshore in 2024**

**Observations:**

- Manning and organisation
- Key personnel roles and lack of independence
- Setting of gas alarms
- Control of gas supply
- Handling of the first incident – Incident classification
- Follow-up of diving contractor
- Initial investigation from Contractor & Operator



**Variations in O2-content from gas analysis (>2%):**

- Potentially a large number of dives omitting decompression

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# Follow the instruction manual



**Kirby Morgan®**
KMB 18/28 BandMask®

## A2.2
Monthly Inspection And Maintenance Checklist

THIS INSPECTION IS THE MINIMUM RECOMMENDED MAINTENANCE AND **SHOULD BE** PERFORMED AT LEAST **ONCE A MONTH** WITH MASK(S) IN CONTINUOUS USE (USED FOR MORE THAN 20 DIVING DAYS IN A MONTH) OR AT LEAST EVERY **TWO (2) MONTHS**, WITH MASK(S) USED LESS THAN 10 DIVING DAYS A MONTH.

This checklist is intended to aid persons performing routine maintenance and inspections of the KMB 18/28 Band Masks. This checklist should be used in conjunction with the Modular Operations and Maintenance Manual for the Band Mask model being serviced, and is primarily intended to be used as a guide and to document the maintenance as it is completed. Specific detailed procedures for each section of this checklist can be found in the Modular Operations and Maintenance Manuals. This checklist when completed should be retained in the equipment maintenance files. This checklist is generic in nature and is intended to be used for all models of KMDSI Band Masks.

**NOTE** Mask(s) being used in extreme environments will require more frequent inspection.

**NOTE** During removal of components for inspection, O-rings and other consumable items may be reused, providing they are clean and a visual inspection does not reveal any damage or deterioration.

**NOTE** Perform the Side Block/Demand Regulator inspection procedures with gas supplies not connected to the Side Block. Attach the gas supply at Step 5 of the "Side Block/Demand Regulator" inspection procedure.

**Monthly Inspection And Maintenance Checklist** A2.2

| Procedures | Initials |
|---|---|
| 3) Remove the Steady Flow Knob and inspect the exterior surfaces of the shaft and bonnet nut for obvious signs of corrosion and damage. Replace and repair as necessary.<br><br>**GUIDANCE:** Brass/Chromed Brass Side Block (SB) | |
| 4) Check the Umbilical Supply One-Way Valve for proper operation by sucking on the Umbilical Adapter with the Emergency Valve or steady flow valve open. No gas should be drawn through the One-Way Valve.<br><br>**GUIDANCE:** One Way Valve (OWV) | |
| 5) Remove the Regulator Cover Clamp, Cover, and Diaphragm for the SuperFlow®/SuperFlow® 350 and Regulator Cover/Retainer Assembly and Diaphragm for the 455 Balanced Regulator. Visually inspect the interior of the Regulator Body for corrosion and/or contamination. Clean as necessary.<br><br>**GUIDANCE:** 455 Balanced Regulator (455BAL) or SuperFlow® 350 Regulator (SF350)<br><br>As a general guideline dents in the regulator cover should not exceed ⅛"/3.2 mm.<br><br>Additional guidance on when a SuperFlow®/SuperFlow® 350 regulator cover may need to be replaced:<br><br>• Sharp dents may require cover replacement even if they do not exceed ⅛"/3.2 mm<br>• Dents that deform the regulator cover slots. These slots are critical for proper | |

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Annex-14

# REPORT REGARDING ROMANIAN LEGISLATION on PROFESSIONAL DIVING

## PORTSMOUTH, UK-2025


Aurelian IVAȘCU, M .D. , ROMANIA

Certificate of Complementary Studies in Hyperbaric Medicine 2009 RO,

Dive Medicine 2024 R.C.S.Ed. , UK

3 Offshore Projects as dive doctor

Executive Vice-President Romanian Society of Hyperbaric Medicine

# ROMANIAN LEGISLATION

- Order M 63 / 2021 of National Defense Ministry, modified and published in the Official Monitor of Romania, Part I, No. 51 bis / 21.I.2025
- Complex document – 183 pages, 543 Articles + 35 Annexes regarding military / civil professional and scuba diving.

# ROMANIAN LEGISLATION

- Content
  1. Method of conducting and organizing of diving activities,
  2. Training, preparation and classification of divers,
  3. Authorization and inspection of all underwater activities with divers,
  4. General and specific occupational health and safety rules,
  5. Method of recognizing of the professional qualifications for occupations and professions in the ,,Divers’’group for Romanian and foreign citizens in order to exercise these professions on the territory of Romania.


AUTORITATE NAȚIONALĂ ÎN DOMENIUL SCAFANDRERIEI

# CENTRUL DE SCAFANDRI

Dacă ar fi ușor, oricine ar putea face!

## “If it were easy, anyone could do it !”

- The ROMANIAN DIVE CENTER is the specialized structure through which the Ministry of National Defense exercise it’s powers in the field of training, certification, improvement of training, as well as in the field of authorization and inspection of underwater activities.
- The ROMANIAN DIVE CENTER was presented in EDTC Meeting 2018.

# TYPE OF DIVES

- Art. 11: Authorized Objectives of Dives – 10:
  1. Dives for commercial underwater works,
  2. Dives for scientific purposes,
  3. Dives for biologic samples,
  4. Recreational dives,
  5. Military dives,
  6. Real or simulated dives for maintaining/improving dive skills,
  7. Search/salvage/recuperation (personnel and goods ) dives,
  8. Archeological dives,
  9. Professional training dives for divers,
  10. Dives to ensure other activities carried on or under water.

# CLASSIFICATION

- Art. 12: According to the type of equipment / breathing apparatus:
  1. Self-contained dives,
     - Open circuit dives,
     - Semi-closed-circuit dives,
     - Closed circuit dives.
  2. Surface-supply dives,
  3. Surface supply with open or closed bell dives,
  4. Saturation dives.

# CLASSIFICATION

- Art. 13: According to the breathing gases used by divers:
    1. Air dives,
    2. Oxygen dives,
    3. Mixed gas dives.

# CLASSIFICATION

- Art. 16: According to the maximal depth:
    1. 3rd Class Diver: Self contained diver or Surface-supply diver certified for dive till 30 msw.,
    2. 2nd Class Diver: Self contained diver or Surface-supply diver certified for dive till 50 msw.,
    3. 1st Class Diver: Divers trained and certified for dives below 50 msw.

DIFFERENCES COMPARING 2018 PRESENTATION TO EDTC MEETING IN CONSTANȚA, ROMANIA:

THE BORDER LEVELS WERE 40 MSW, 60 MSW AND BELOW

# CLASSIFICATION

- Art. 20: According to the depth and skills acquired:
    1. Autonomous divers,
    2. Surface-supplied divers up to 30 msw,
    3. Surface-supplied divers up to 50 msw,
    4. Deep sea-divers below 50 msw,
    5. Rescue divers.

# TESTS FOR THE CANDIDATES

- Art. 23: At the admission, for depth up to 30 msw:
  1. Specific medical examination,
  2. Assessment of physical fitness level,
  3. Assessment of skills in the aquatic environment,
  4. Baro-function test,
  5. Oxygen tolerance test.

For superior categories, are added narcosis tests, 50 msw testing levels and above, more than 2 years work experience.

# SPESIFIC TESTS

- Art. 32 – 36: Baro-function test: Testing in hyperbaric chamber to 20 msw for 3 to 5 minutes the ability of ear equilibration to increased pression.
- Art. 37 – 42: Oxygen tolerance test : 25 minutes of O2 exposure to 18 msw with monitoring of heart rate to be below 100 / min. After the O2 exposure, return to surface with air, with speed of 15 m / min. Exclusion parameter - heart rate above 100 beats / min to 18 msw.
- Art. 43 – 55: Narcosis test: Memory (1 minute) and mathematic test (3 minutes) to surface, then to 72 msw dive in 6 minutes with repeating both tests. Then surfacing with different speeds: 15 m/min from 72 msw to 12 msw, 4 pause layers (12 m – 1 min, 9 m – 3 min, 6 m – 5 min and 3 m – 23 min . Between pause layers , surfacing with 1 m / min. Maximal compression time to 72 msw is 15 min, including tests.
- Art. 56 – 63: Test for deep dives in hyperbaric chamber till 180 msw in heliox with bottom time no more than 60 – 70 minutes.

# DIVE TEAM

- Art. 96(1): Minimal personnel for a dive till 12 msw – 4 persons:
  1. One diver + 1 safety diver,
  2. One dive boss,
  3. One diver-medic, paramedic, medical assistant or one dive medic as medical first aid.
- Art. 96(2): Minimal personnel for a dive below 12 msw – 5 persons:
  1. 2 divers + 1 safety diver,
  2. One dive boss,
  3. One diver-medic, paramedic, medical assistant or one dive doctor as medical first aid.

# DIVE TEAM

- Art. 98: The minimal personnel for a surface-supplied dive (till 50 msw) - 5 persons:
  1. 1 diver + 1 safety diver,
  2. 1 dive boss + 1 dive technician,
  3. 1 tender for each diver, including safety diver,
  4. 1 diver medic, 1 paramedic , 1 medical assistant or 1 dive doctor.
- Art. 103:  The minimal personnel outside the living hyperbaric chamber for a saturation dive:
  1. 1 site manager + 3 dive bosses + 3 chamber operators,
  2. 3 deputy chamber operators + 3 dive technicians,
  3. 1 dive doctor.

# DIVE TEAM

- Art. 107: In the event that is needed a hyperbaric chamber to the dive site, the minimal personnel is supplemented with qualified personnel to operate it.

# BREATHING GASES

- Art. 124: In the dry dives, the used gases are:
  1. Air till 50 msw, excepting narcosis test – 72 msw,
  2. He-$N_2$-$O_2$ (trimix) between 48 – 120 msw,
  3. He-$O_2$ between 48 – 300 msw.
- Art. 141: For closed bell dives:
  1. Air till 50 msw
  2. He-$N_2$-O2 (trimix) till 120 msw,
  3. He-$O_2$ till 180 msw.

# BREATHING GASES

- Art. 145: For saturation dives:
  1. Air till 12 msw,
  2. $N_2$-$O_2$ till 70 msw,
  3. He-$O_2$ till 500 msw,
  4. He-$N_2$-$O_2$ till 500 msw.

# THANK YOU

## Any question?

# Swedish medical report September 27 2025 Porthsmouth UK

Annex-15

1 Official accidents Sweden 2011-2025

2 Sweden to start complying with FTD according to EDTC 2024

3 Ander Rosén new Swedish medical representive in EDTC from 2026

# Accidents Swedish Worklife Authority
# Working divers code 7541

Death 2011-2025 = 3 (2021, 2024 Jan, 2025 July)

July 30th 2025, a 26-year-old construction diver dies while lake dive, working with cables

| Reported accidents with sick leave | | AR | | | | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | |
| Gender | | | | | | | | | | | | | | | | | |
| Females | | 1 | . | . | 1 | . | 1 | . | . | . | . | . | 2 | 1 | . | . | 6 |
| Males | | 7 | 4 | 5 | 4 | 4 | 5 | 2 | 9 | 4 | 5 | 6 | 7 | 10 | 5 | 8 | 85 |
| Total | | 8 | 4 | 5 | 5 | 4 | 6 | 2 | 9 | 4 | 5 | 6 | 9 | 11 | 5 | 8 | 91 |

Most common cause of accidents with sick leave

29 slips and falls

# Sweden to start annual FTD for working divers

## Sweden to start complying with FTD according to EDTC 2024

According to the Swedish Work Environment Authority (Law), the FTD of working divers should be done according to EDTC. So far, annual examinations have not been enforced. There is an initiative to make annual examinations mandatory, as proposed by EDTC Fitness, to dive 2024 with in-depth assessment at 5-2 year intervals and heart score determination from the age of 45.

**Ander Rosén new Swedish medical representative in EDTC from 2026**

**Appointed by the Swedish Aeronautical Medical Association (Part of the Swedish Medical Society)**

**Anders Rosén MD PhD (MED, anesthesiologist and Hyperbaric specialist physician)**

**Thesis 2022: Diving and the brain**

Abstract Mats Hagberg, University of Gothenburg Sweden Sept 27 2025 EDTC meeting, Portsmouth, England

Swedish medical report, September 27, 2025 Portsmouth

1 Official accidents for working divers with reported sick leave in Sweden 2011-2025 N= 91 (6 were women working divers).
Most common cause of accidents with sick leave was 29 slips and falls.

Fatalities 2011-2025 N=3 (2021, 2024 and 2025 July). On the 30th of July 2025, a 26-year-old construction diver died while working in a lake with cables.

The relative incidence of workplace fatalities between working divers and the Swedish working population is 56 (see table). The relative incidence of workplace fatalities between construction workers and construction divers is 70!

| **Population** | | **2024 work place fatalities** | **2025 workplace-fatalties** | **Incidence** | **RR 2024 working divers/work force** |
|---|---|---|---|---|---|
| SE work force | 5000000 | 45 | 40 | 0.000009 | |
| Working divers | 2000 | 1 | 1 | 0.0005 | 56 |
| Construction workers | 350000 | 10 | | 0.000029 | RR 2024 construction divers/ constuction workers |
| Construction divers | 500 | 1 | 1 | 0.002 | 70 |

2 According to the Swedish Work Environment Authority (Law), the FTD of working divers should be conducted according to the EDTC. So far, annual examinations have not been enforced. There is an initiative to make annual examinations mandatory, as proposed by EDTC Fitness, to dive 2024 with an in-depth assessment at 5-2 year intervals and heart score determination from the age of 45.

3 Ander Rosén new Swedish medical representative in EDTC from 2026.
Appointed by the Swedish Aeronautical Medical Association (Part of the Swedish Medical Society). Anders Rosén MD PhD (MED, anesthesiologist and Hyperbaric specialist physician). Thesis 2022: Diving and the brain, link to thesis:
https://gupea.ub.gu.se/bitstream/handle/2077/70941/Anders%20Ros%c3%a9n%20Thesis%20Diving%20and%20the%20Brain%202022.pdf?sequence=1&isAllowed=y

Annex-16

# EDTC Meeting Southampton 26 September 2025

Presentation of NL Report

# FROM Certification to Registration

Change of system

- Transition from certification to registration
- Four regulated professions:
  - Diving Physician
  - Diver
  - Diving Supervisor
  - Diving Medical Attendant
- Diver and Diver supervisors remain regulated professions
- Requirements for inspections includedin the regulations

# SCUBA with air supply from surface

- Included in the A scope
- Public services police and fire brigades have indicated that they will make more use of SCUBA equipment with (HP) air supply from the surface where possible
- In the annual plan of SWOD the use of this technology will be approached in a generic way

# Volunteers and diving

- Project on recreational diving and voluntary activities
- Under Dutch legislation
- Allowing organized volunteer diving activities under specific conditions
- Frameworks of European Scientific Diving into the current A-scope for SCUBA diving

# Results of Diving Accidents or Incident Registration

Based on reports submitted (2024-2025)

Form used to collect standardized reports of diving accidents or incidents.

Purpose: improve safety, identify risks, and comply with legal reporting obligations.

Reports are anonymized: no personal names, employers, or entities included.

Timeframe: Feb 2024 – May 2025

Total reports submitted: 9

# Time of Accidents/Incidents

- 7 out of 9 reports included time
- Afternoon (10:00–15:00): 4 reports
- Evening (19:00–21:00): 3 reports

# Type of Reported Case

- Incident without injury: 89% (8 cases)
- Fatal accident: 11% (1 case)

# Scope of Work

- In-shore diving: 33%
- Salvage: 22%
- SCUBA in open water: 22%
- Shipping-related: 11%
- Other: 11%

# Diving Conditions

Depth: < 9 m – 88%, 30–50 m – 12%

Visibility: 1–2 m – 43%, 2–10 m – 29%, < 1 m – 29%

Wave/current: No significant – 83%, Hazardous – 17%

# Diving Equipment & Entry Point

Equipment: Surface-Supplied (67%), SCUBA (33%)

Entry point: From shore/quay (75%), From vessel/pontoon (25%)

# Activities

Inspections: 22%

Powered tools:11%

Lock/dam works :11%

Lifting operations :11%

Welding/cutting :11%

Vehicle recovery: 11%

Cleaning tasks: 11%

Safety alert (equipment): 11%

# Causes of Incidents

- Equipment-related: 27%
- Other contractors/machinists: 18%
- Lack of competence: 9%
- Poor communication: 9%
- Other causes (36%): unstable vehicle, passing vessel, ongoing investigation, uncertified work

# Reporting Obligations

- Employer: 40%
- Client: 30%
- Netherlands Labour Inspectorate: 20%
- Emergency services: 10%

# Key Takeaways

- Majority: incidents without injury
- High use of Surface-Supplied Equipment
- Shallow diving (< 9m) most common
- Visibility and current are recurring risks
- Causes linked to equipment issues & external factors
- Reporting chain includes employer and authorities

Annex-17

PROTECTING PEOPLE AND PLACES HSE

# EDTC – UK Update 2025

Portsmouth

- Accidents and Incidents
- Enforcement
- Update on legislation etc
- Statistics regarding certification numbers
- News regarding closed bell diver training

# Reported Accidents and Incidents (01.04.2024 to 01.04.2025)

**Offshore accidents/ill Health**

- Underserved skin bend  - Air TUP diving
- Slip and trip on deck of DSV – break to Tibia and Fibula

**Offshore Dangerous Occurrences**

- Taught wire failure during deployment
- Subsea valves were operated before divers and bell were clear of risk area
- LP umbilical leak
- Bell overrun by 8 minutes
- Taut wire began to free fall, following emergency stop wire snapped
- Filter blockage of diver supply at bell panel
- Birds nest of wire on bel lift rope due to broken strand
- HP gauge hose ruptured on diver’s bailout
- Flooded COBRA rebreather
- Bell overrun by 15mins – due to issue getting seal on trunking (O-ring issues)
- Unusual odour from blowdown gas – no ill effects

# Reported Accidents and Incidents (01.04.24 to 01.04.25)

## Accidents/ill health

**Shellfish Diving**
- Diver went missing – body found on beach 9 days later
- DCI following 3 dives to 27m – using combination of dive tables and dive computers to push limits.

## Dangerous Occurrences

**Police training**
- diver panicked on deep dive – missed stops, no injuries

**Inland Inshore**
- Diver went over depth chasing a dropped anode – missed stops
- LP Compressor O ring failure resulting in inadequate pressure at depth
- Fish farming – undeserved DCI

**Recreational at work**
- uncontrolled ascent after 6 minute dive through a tunnel – 14 year old student

**MOD training**
- 42m SSDE - both diver and instructor lost main gas. Ascended on bailout. HP system to compressor was isolated and compressor tripped.
- Omitted deco due to rebreather warnings on ascent following 51m dive
- Rapid ascent from 10m following water ingress to FFM

# Changes in Legislation/procedures

## Revisions to List of Approved Qualifications

- French quals no longer approved (unless issued prior to 14th June 2024)
- Spanish qualifications removed
- New category added to Inland Inshore: *In support of diver training in the use of specialist military diving equipment by overseas military divers - qualifications issued by the following manufacturers:*

Subsea Craft Ltd

# Enforcement

Prosecution of Samaki Kidogo Ltd – following a fatal shellfish diving incident in 2022.
Fined £8000

Failed to plan, manage and conduct a diving operation and use suitable and sufficient equipment.

- No system in place for the prompt recovery of an incapacitated diver from the water.
- Insufficient quantity of emergency medical oxygen for the likely duration of their transit to a suitable medical facility.
- No lifeline attached to the working diver.
- No system of two-way communications.
- Insufficient team size resulted in a substantial delay in the recovery of an unconscious and incapacitated diver from the water.
- Lack of maintenance of plant.

# Enforcement

**Prohibition Notices:**

**Inland Inshore**

insufficient number of first aiders

**Shellfish**

no standby diver

**Improvement Notices:**

**Media diving**

- No medical
- Home made surface supplied diving equipment
- Failure to plan, manage and conduct a dive safely (media production company)
- Failure to store chemicals correctly

# Improvement notices cont.

**Recreational at Work**

- Insufficient team size – no rescue diver
- Inadequate diving operations record
- Inadequate diving project plan – didn’t identify risks of taking inexperienced 14 year old into extensive overhead environment
- No diving medical for instructor of technical diver training

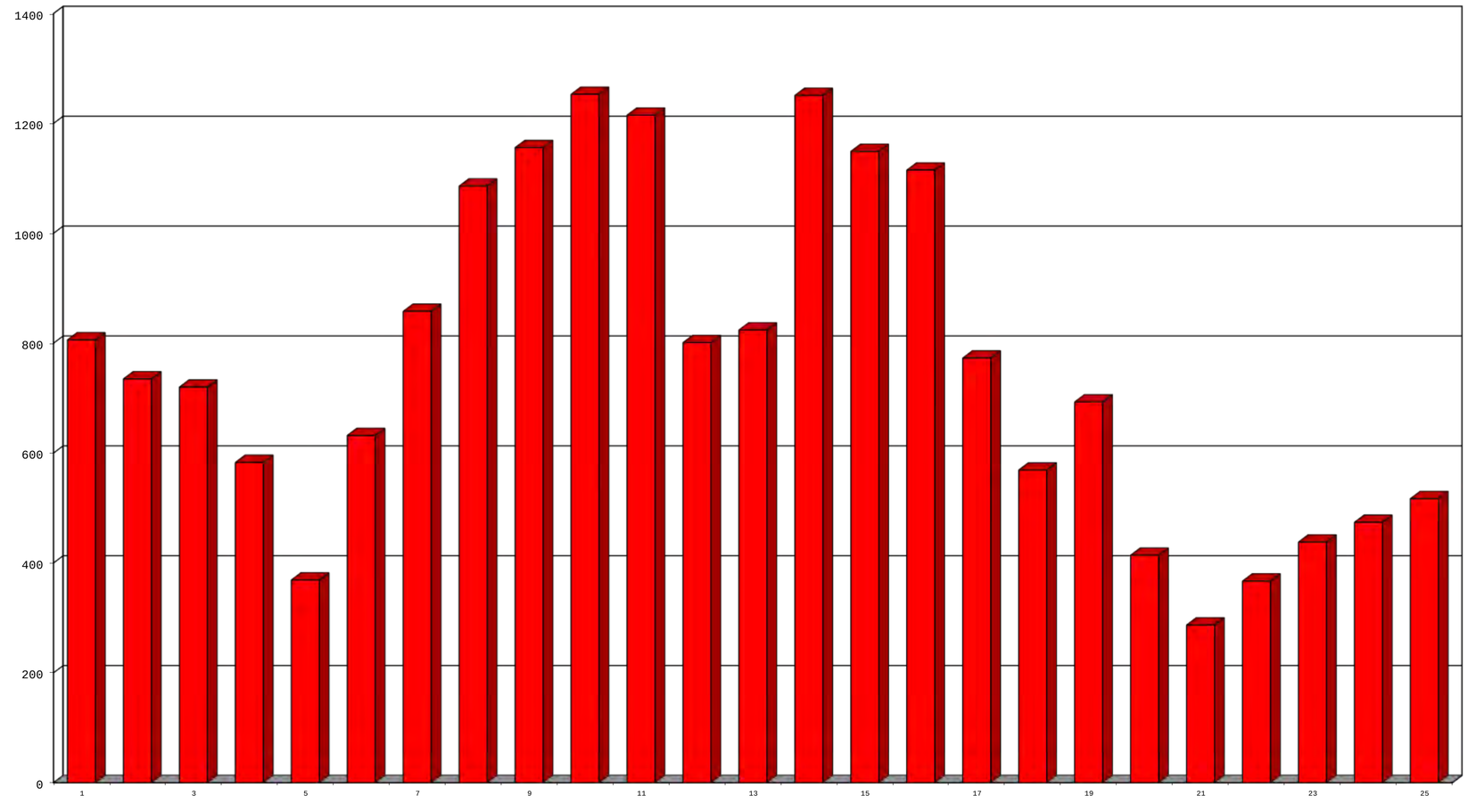
**Shellfish diving**

- Insufficient team size
- No medical for working diver
- No diver communications

## Schools:

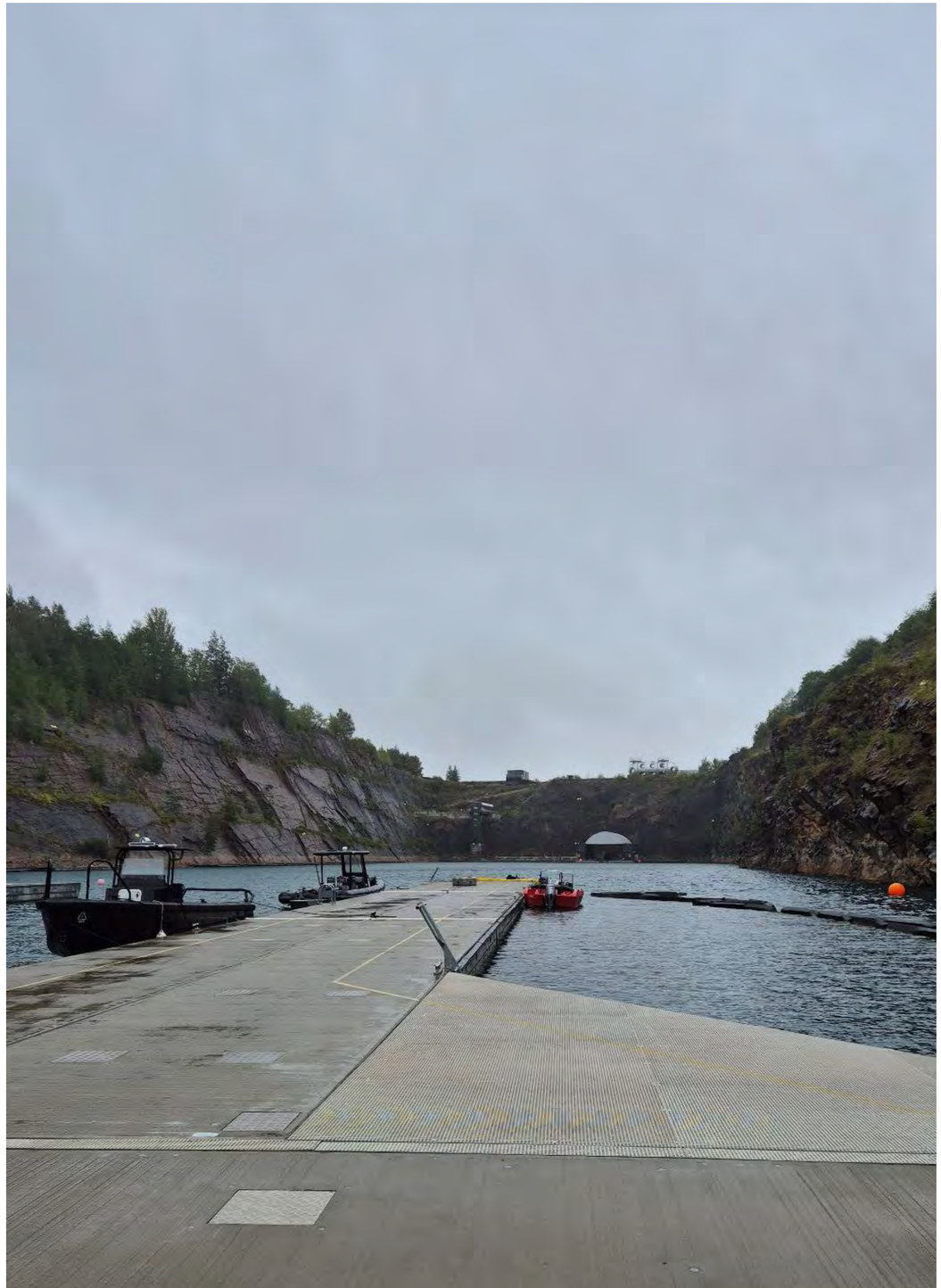
| | |
|---|---|
| The Professional Diving Academy (Dunoon) | TU, SS, SCUBA |
| Commercial Diver Training (Fowey) | TU, SS, SCUBA |
| Police Scotland | Police SS, SCUBA |
| Northumbria Police | Police SS, SCUBA |
| Plymouth University | SCUBA |
| TH Diving Services (Plymouth) | SCUBA |
| DV Diving (N.I.) | SCUBA |
| ~~Tritonia Scientific Ltd (Dunstaffanage)~~ | ~~SCUBA~~ |
| Puffin (Oban) | SCUBA |
| Andark (Southampton) | SCUBA |
| Bristol Channel Diving Services (Cardiff) | SCUBA |
| Remora Global Ltd (Fareham) NEW | SCUBA (only military personnel) |

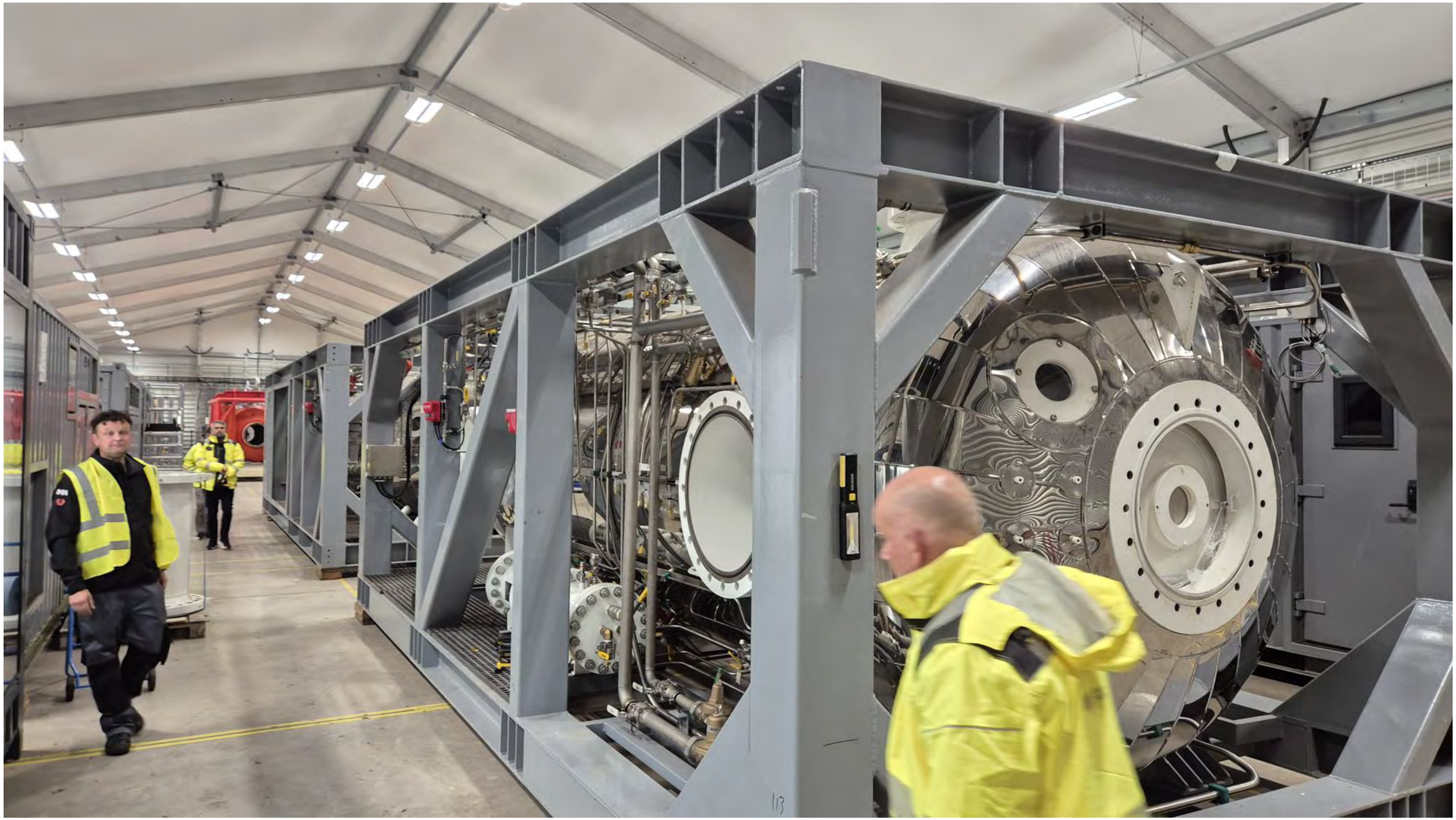
# Number of certificates issued – 2024: 517

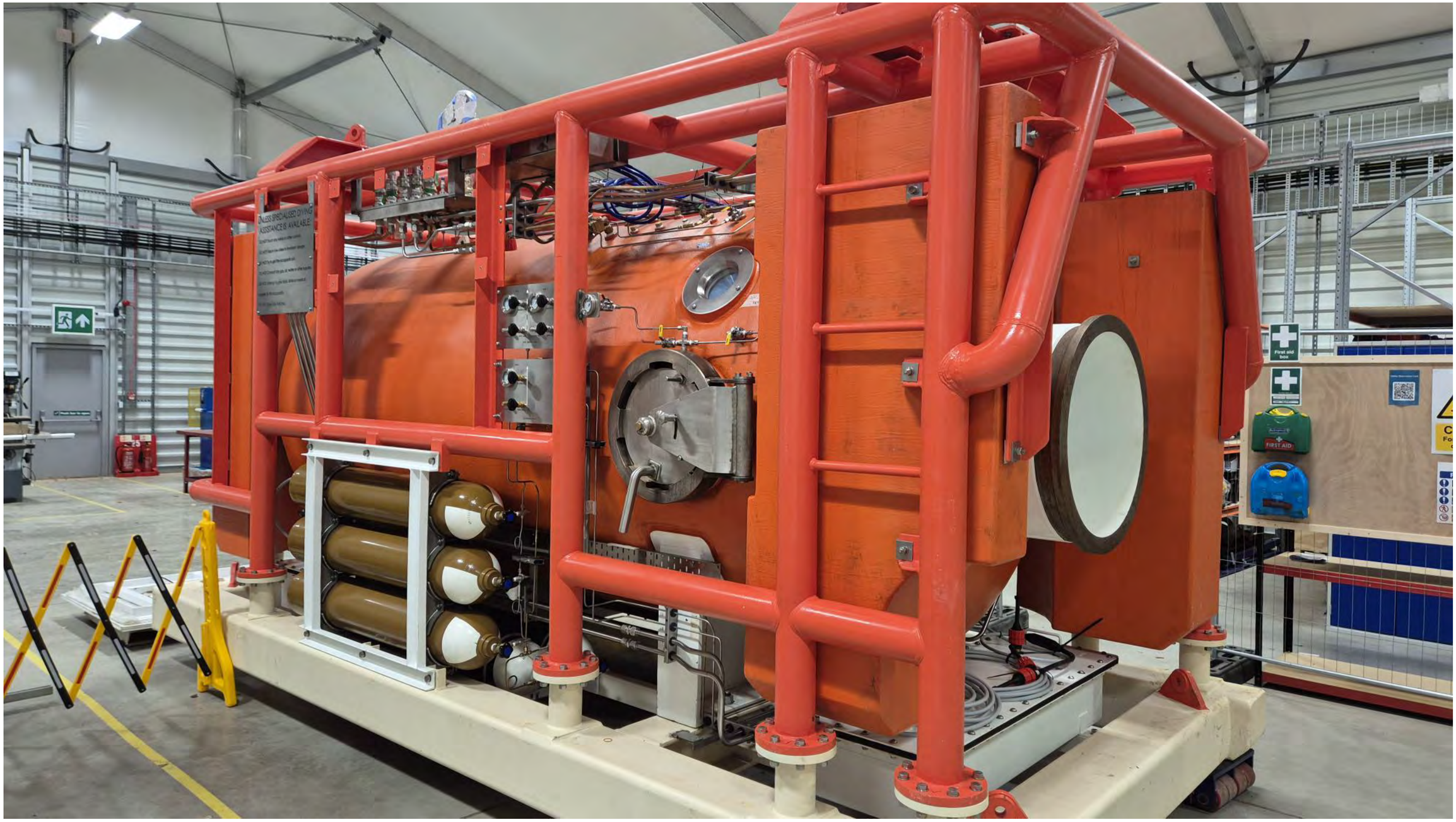


# Deep.com – Saturation system.

- **3-Person Diving Bell** allowing for safe and efficient transport of divers to and from the underwater work site.
- **9-Person Hyperbaric Rescue Craft (HRC):** and Life Support Package (LSP) equipped to handle hyperbaric emergencies, ensuring the safety and well-being of divers in distress.
- Rated to operate at depths of up to **300 msw**, suitable for diver training in a robust system
- Built in accordance with the stringent standards of the Lloyds Register classification society and adheres to the guidelines set forth in **IMCA D024** and **D018**.
- Capable of continuous operation **24/7**, even in **sea states up to level 4**, ensuring reliability and resilience in various marine conditions.
- **Split living and sleeping chambers** to maximize comfort for the divers during extended training missions.
- High-pressure **dedicated gas storage** for Helium-Oxygen (HEO2) mixtures is provided, ensuring a reliable supply of breathing gas for saturation diving operations.
- A **dedicated workshop** is available for technician training to learn how to maintain and service the similar systems. Our Saturation Facility is installed on-water at DEEP Campus in the Southwest region of England.

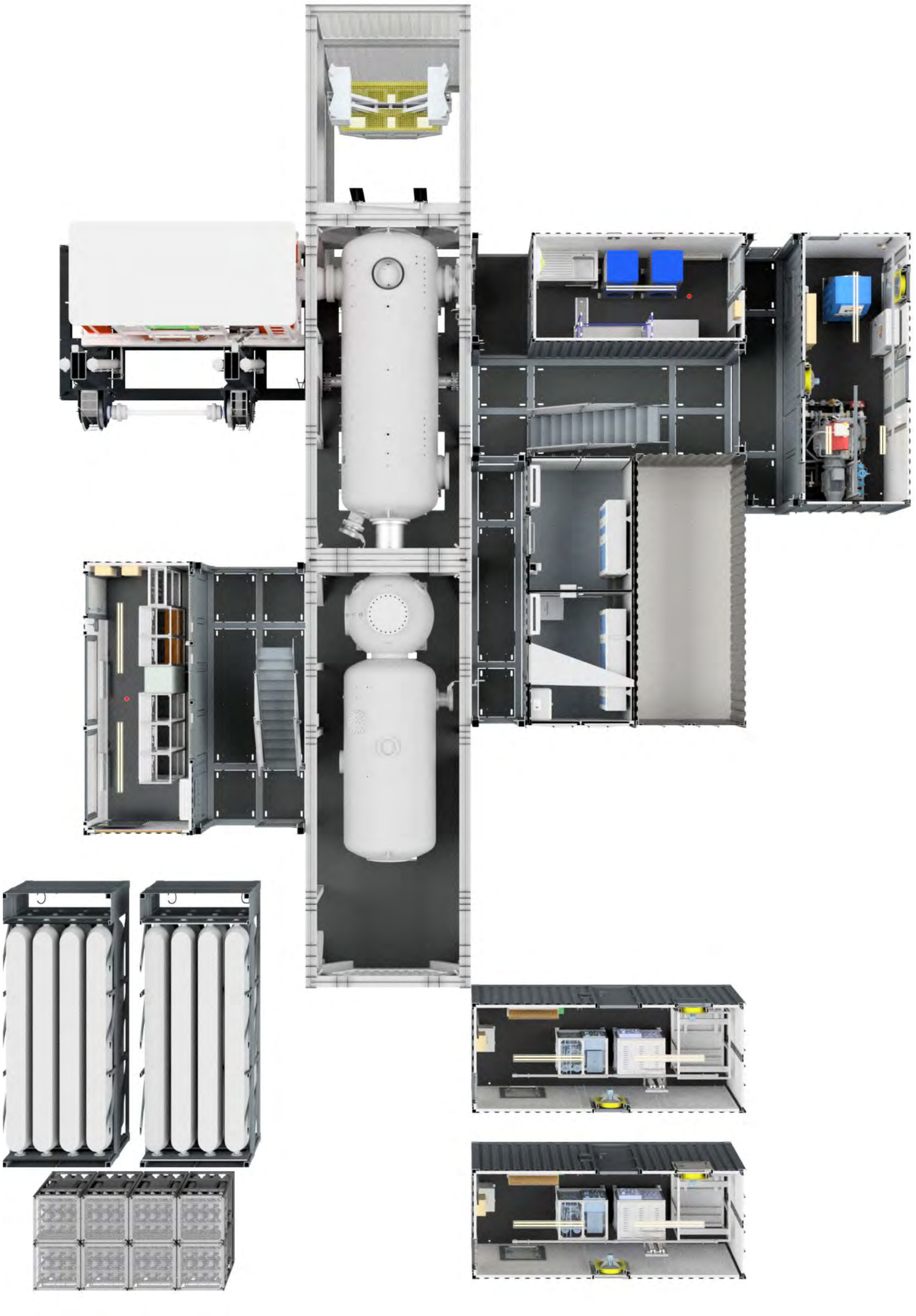


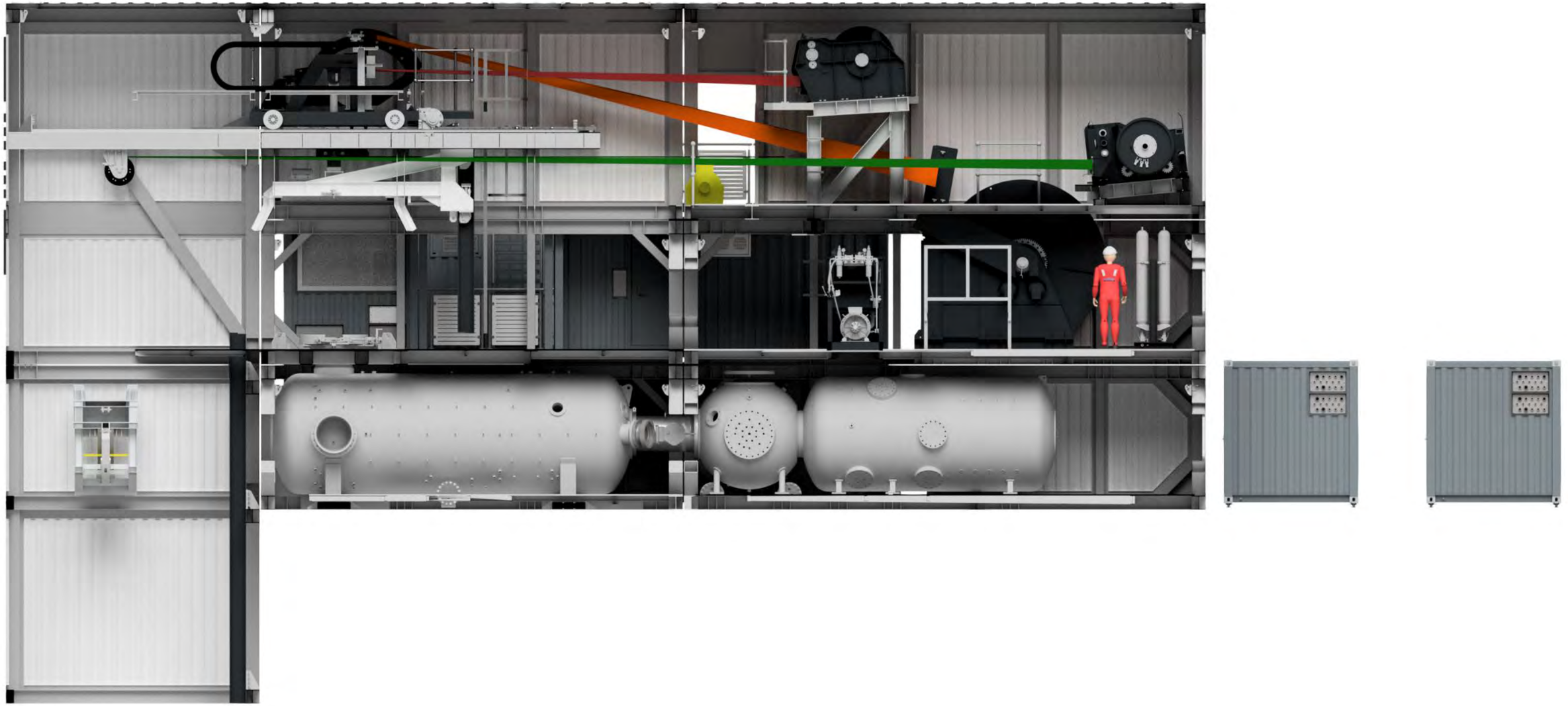


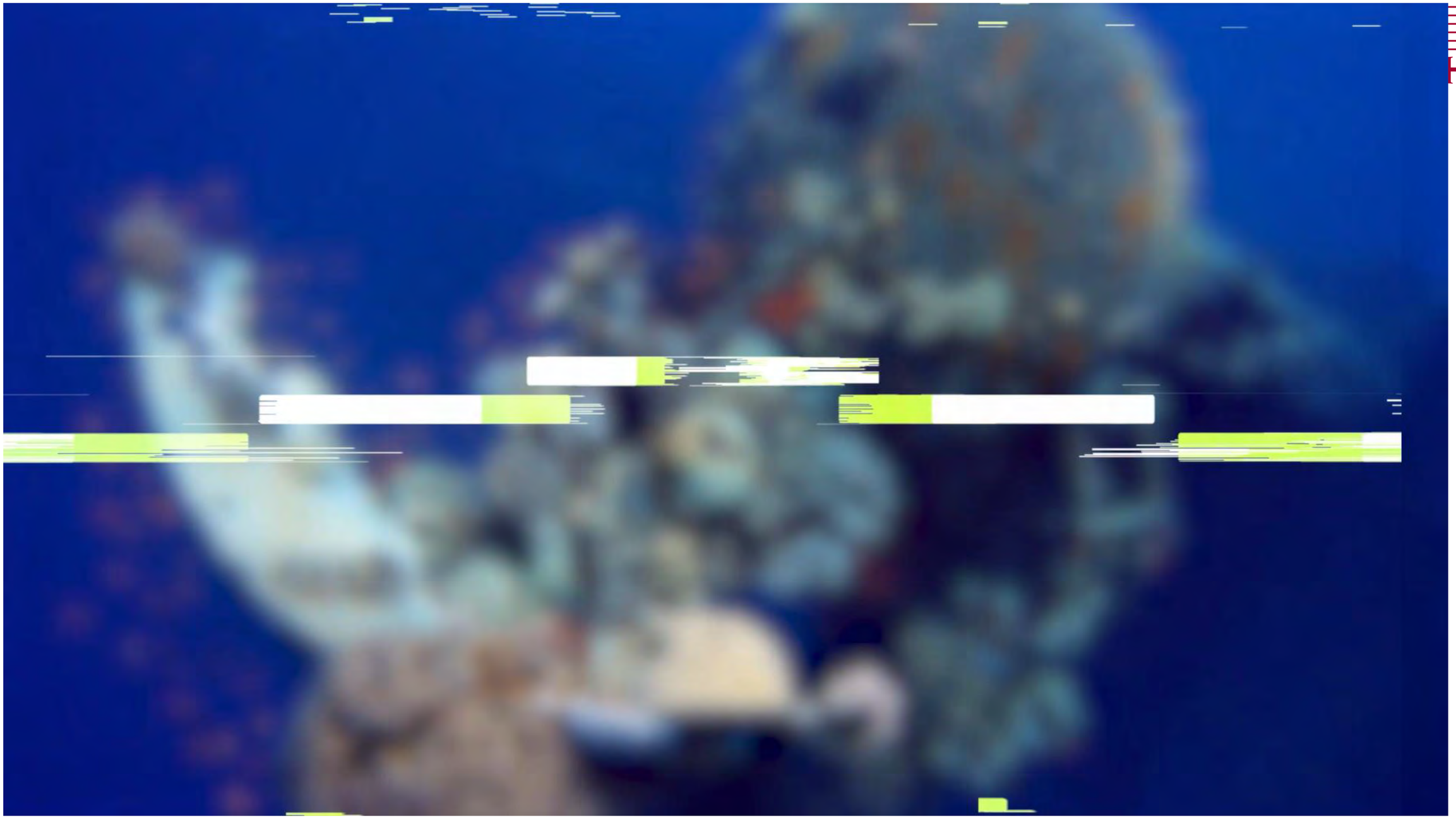

UNLESS SPECIALISED DIVING
ASSISTANCE IS AVAILABLE
First aid box
FIRST AID


BELL INTERNAL DEPTH
GAUGE ISOLATION
OPEN
CLOSE
ANALYSIS PANEL
DIVE CONTROL BELL CONTROL PANEL
DECK COMMUNICATION
THROUGH WATER COMMUNICATION
DIVER COMMUNICATION
AMCOM IV
TENDER
DIVER 1
DIVER 2
DIVER 3
OFF
BELL EXT LIGHT 2,4
BELL EXT LIGHT 1,3
BELL EXTERNAL
LIGHT 2+4
LIGHT 1+3
ON
OFF
SCRUBBER 1
LIGHT 1
LIGHT 3
COLOUR QUAD PROCESSOR 1
ALARM MONITOR
SELCO
RESET
TEST
ALARM


ML2 DEPTH
ML2 TEMP/HUM
ML2 O2 CONTROL
TENDER
VENT ATMOSPHERE
VENT ATMOSPHERE
0-60 BAR
0-60 BAR







# Timing

They state they will be : “On the water by August 2026. Training by Jan 2027. Aiming for earlier.”

Questions?

Annex-18

# IMCA Diving 2024-2025:  An overview of what we've done, and where we're heading

Ali Macleod

September 2025

# Personnel

# IMCA Diving 2025: *Personnel*

**IMCA Contact**
**Bill Chilton**
Diving Manager

**Ali Macleod**
Technical Adviser – Diving

IMCA Lead on:

- Diver training (in-water and surface courses)
- Diving Medicine (Secretary of DMAC)

**David Slater**
Technical Adviser – Diving

IMCA Lead on:

- Diving Equipment and DESIGN
- Auditing (membership and audits with cause)

**Katie Kidd**
Assistant Technical Adviser – Diving

IMCA Lead on:

- Diving CPD App

SMTT

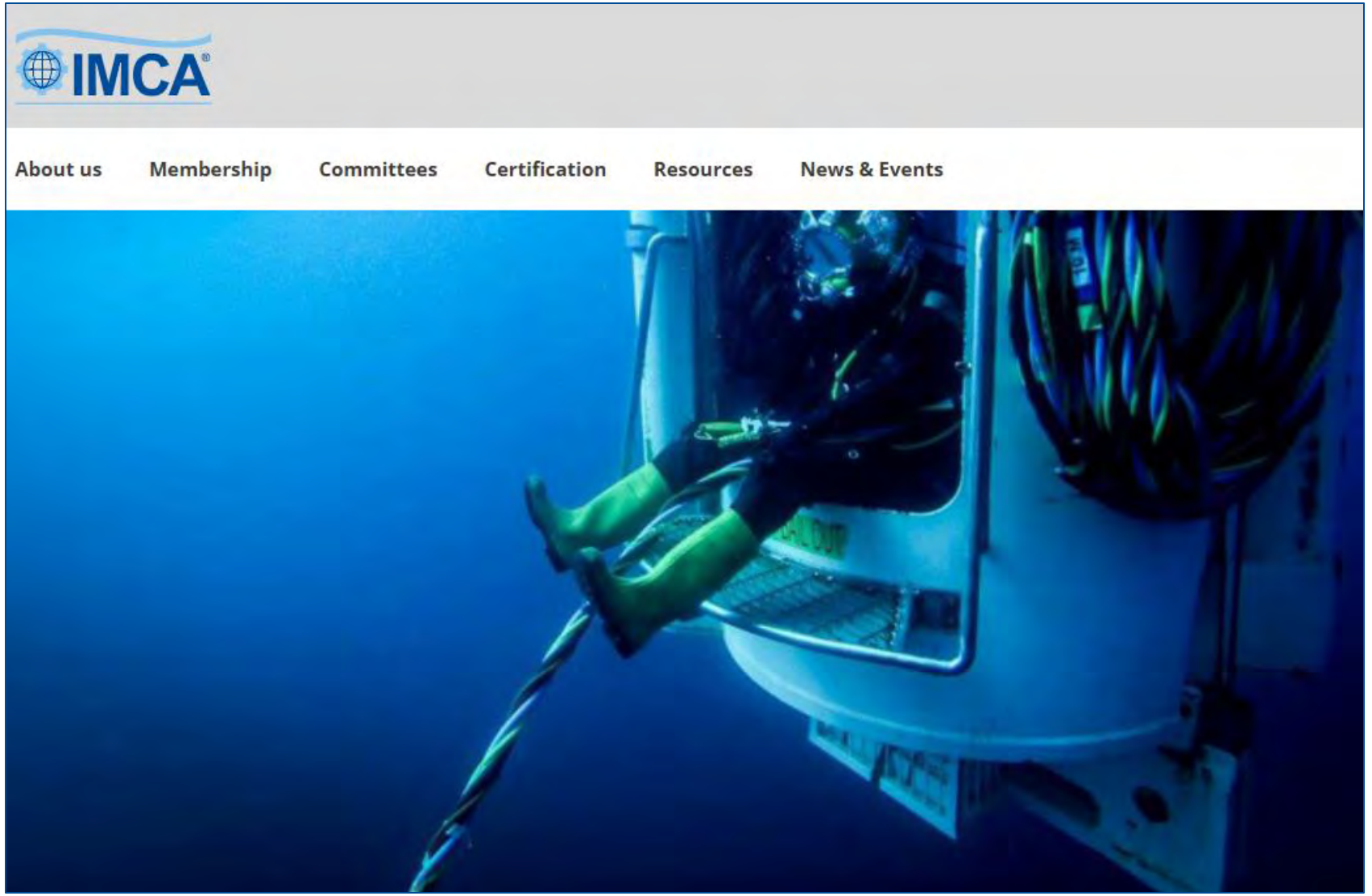
**Kester Keighley**
Technical Adviser– Diving

IMCA Lead on:

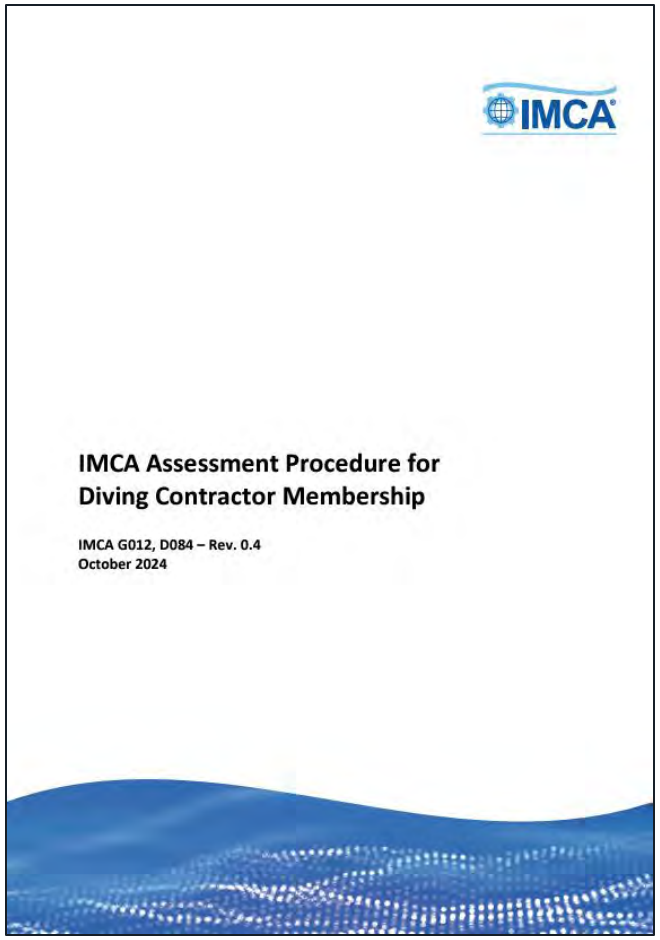
- Diving membership audits

# Documentation

# IMCA Website: IT@imca-int.com



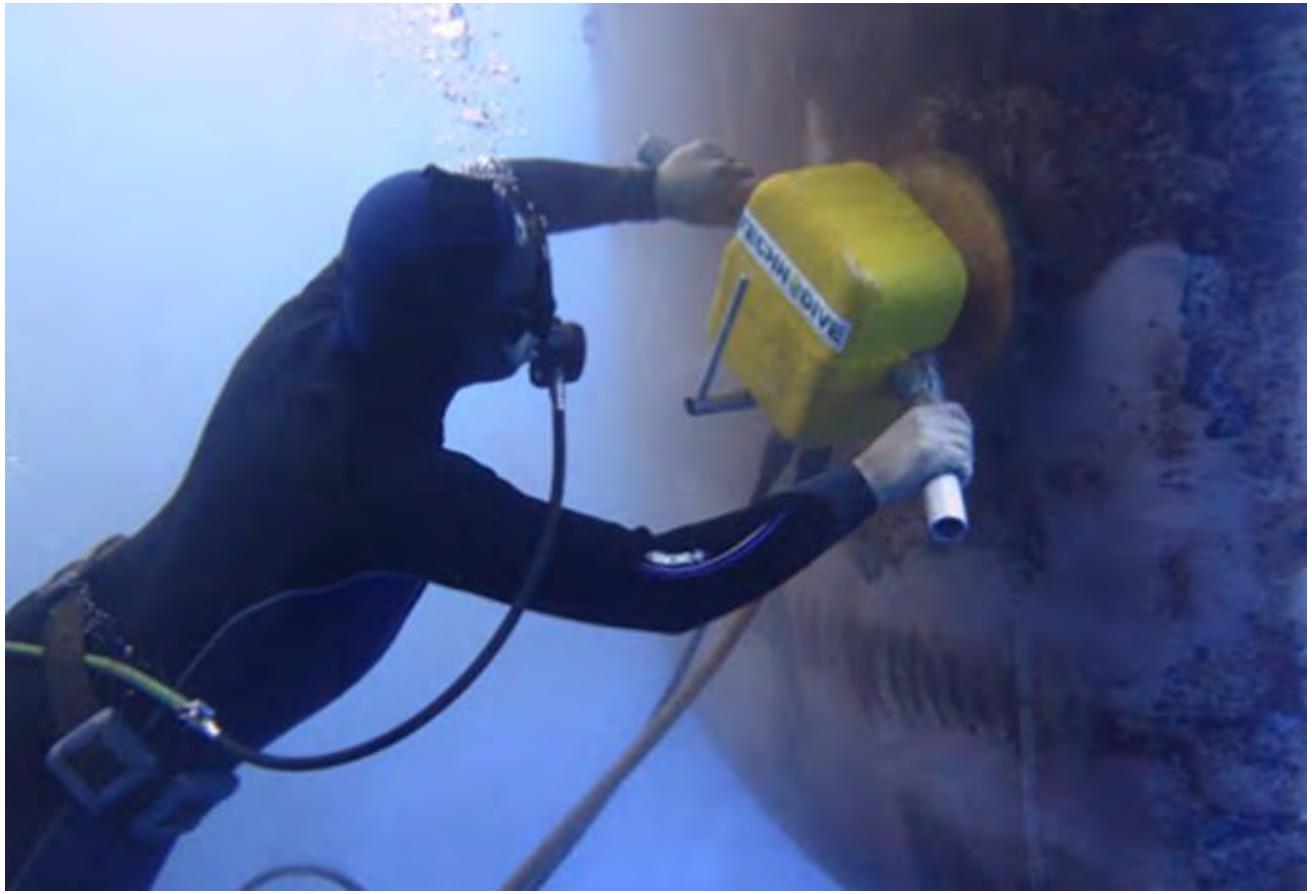
# Diving Documents: IMCA D084/G012 Assessment Procedure for Diving Contractor Membership




- Published October 2024
- Process for potential applicants to follow if wanting to join IMCA's diving division
- Brings together several dated Information Notes
- 'One stop shop' for prospective members

# IMCA D083/G013:  Audits with Cause

- Published August 2024
- Outlines process to be followed when undertaking an audit with cause on an IMCA member
- IMCA has no regulatory or enforcement powers
- Relies on verifiable evidence



# IMCA D022: *Guidance for diving supervisors*

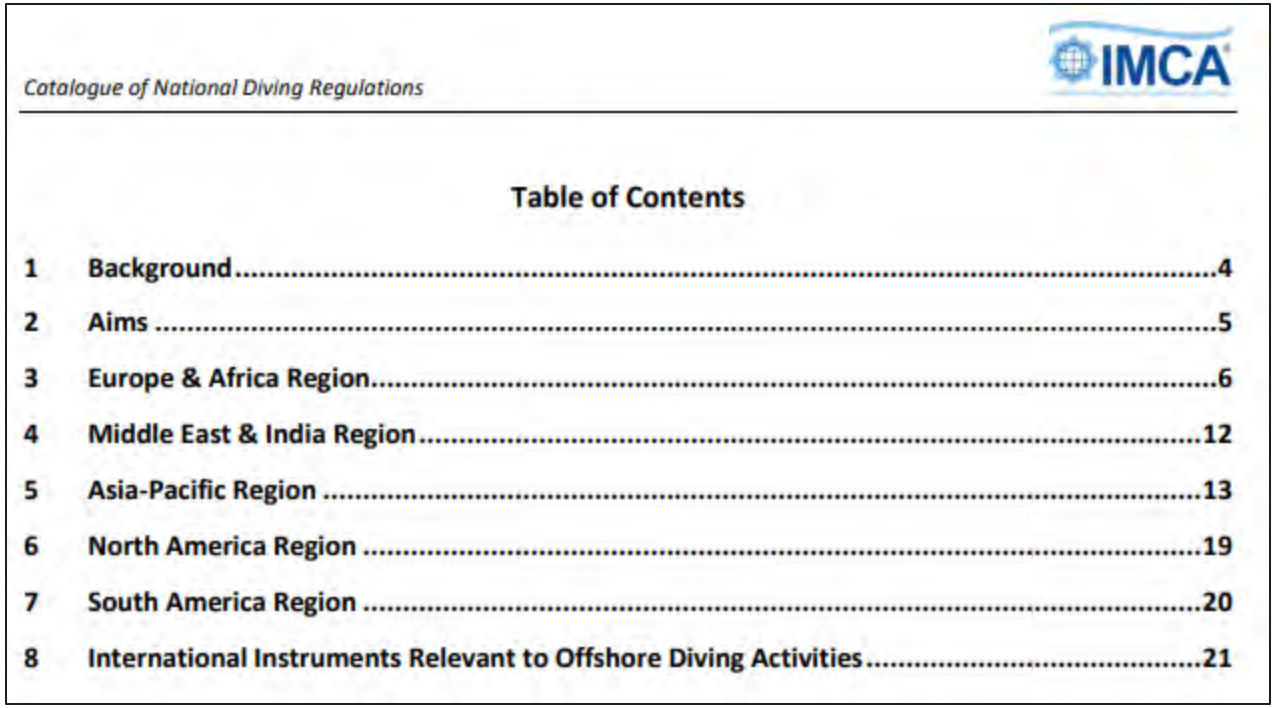
- Aiming to publish by end of Q3 2025
- 300 page document
- Thorough review started last year
- Comments have now closed
- Final technical review

# IMCA D085 *Guidance on deck decompression Chamber (DDC) operations for therapeutic treatment of divers*

- Published February 2025
- There is skill fade in this area
- IMCA aware of three serious incidents where chambers on site but weren't used in DCI emergencies
- Focus on deck decompression chamber operation, roles and responsibilities, planning, etc.
- Added to 2025 CPD modules

# IMCA D086: *Catalogue of National Diving Regulations*

- Published March 2025
- This document aims to assist IMCA Members in identifying their legislative duties related to offshore energy diving projects in various countries of the world.



*Catalogue of National Diving Regulations*

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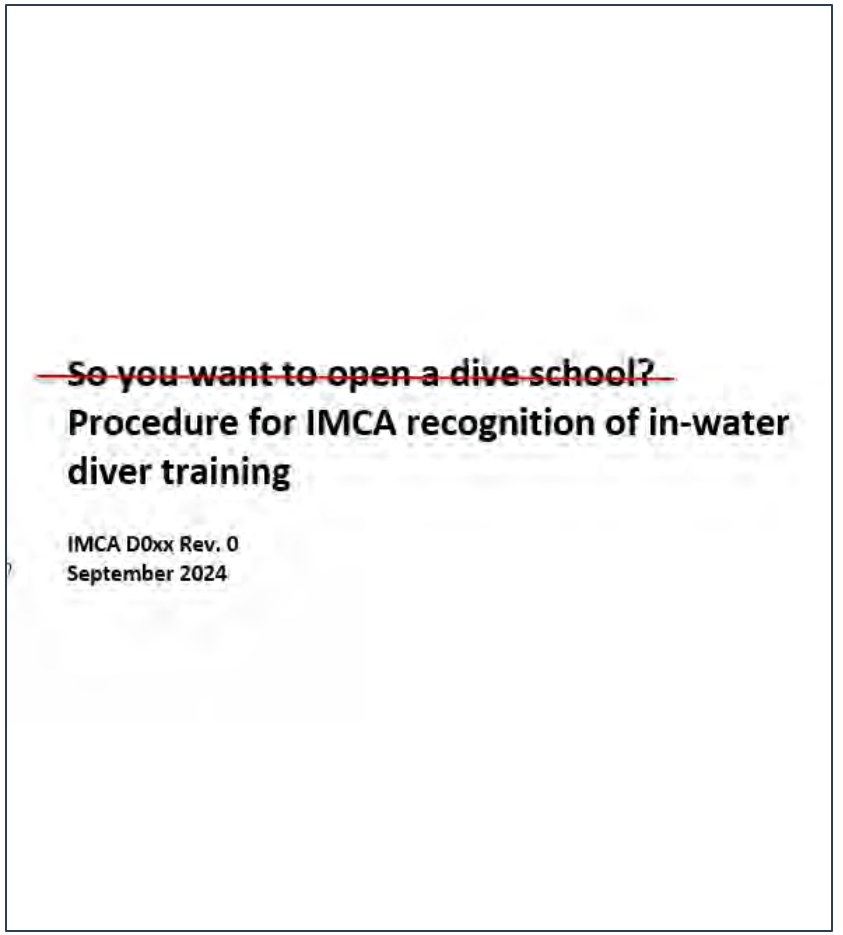
# IMCA D087- *Diver Training Schools: Procedure for IMCA recognition of in-water diver training qualifications.*

- Published in June 2025
- IMCA only recognises diver training certificates issued by national/local government or government appointed agencies (the certifying organisations)
- All training providers requesting IMCA recognition must successfully complete the IMCA assessment, including desktop review of the training centres safety management system and site inspection
- This site assessment should include a meeting with the national/local government representatives/certifying organisation to verify that they have oversight of the in-water diver training course



# IMCA D088 *Diver certification and verification*

- Published June 2025
- Will replace several information notes – most noticeably IMCA IN1394 *Diver training and certification*
- Contains current list of in-water diver training certs that are recognised by IMCA.

# IMCA and in-water diver training

- IMCA D087 *Diver Training Schools: Procedure for IMCA recognition of in-water diver training qualifications*
- IMCA D088 *Diver certification and verification*
- IMCA D0XX Experienced Diver Competency (EDCA) Assessments (Q4 2025)

# Underwater ship husbandry

# Diver dead in G Archipelago – c investigated

Published 5 Jan 2024 at 12.06
Updated at 15.08

**A diver in his 5( at a ship in the (**
**The incident is violation.**
**"This is by far Jönsson, CEO ( assignment.**

The di

A contractual worker has lost his life at Keppel Subic Shipyard in the Philippines.

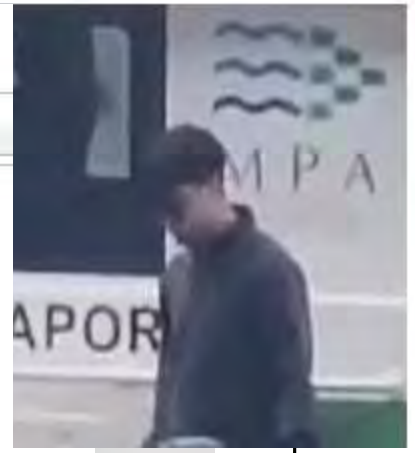
The Manila Times said the yard submitted a report to the department of labour's bureau of working conditions stating that diver Eleazar Viernes, 63, died last month.

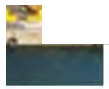
# Malaysian diver, 22, dies after getting entangled with boat propeller while cleaning ship's hull

SINGAPORE

# Commercial diver dies after failing to surface while cleaning ship's hull off East Coast

experience in the field and is ranked one of the best in India. On Sunday, Anil entered the hull of Aeris Marine, owned by a Malayali businessman, to clean the bottom of the ship.



ROPELLER OF DSV

# IMCA D082: Guidance on UWSH

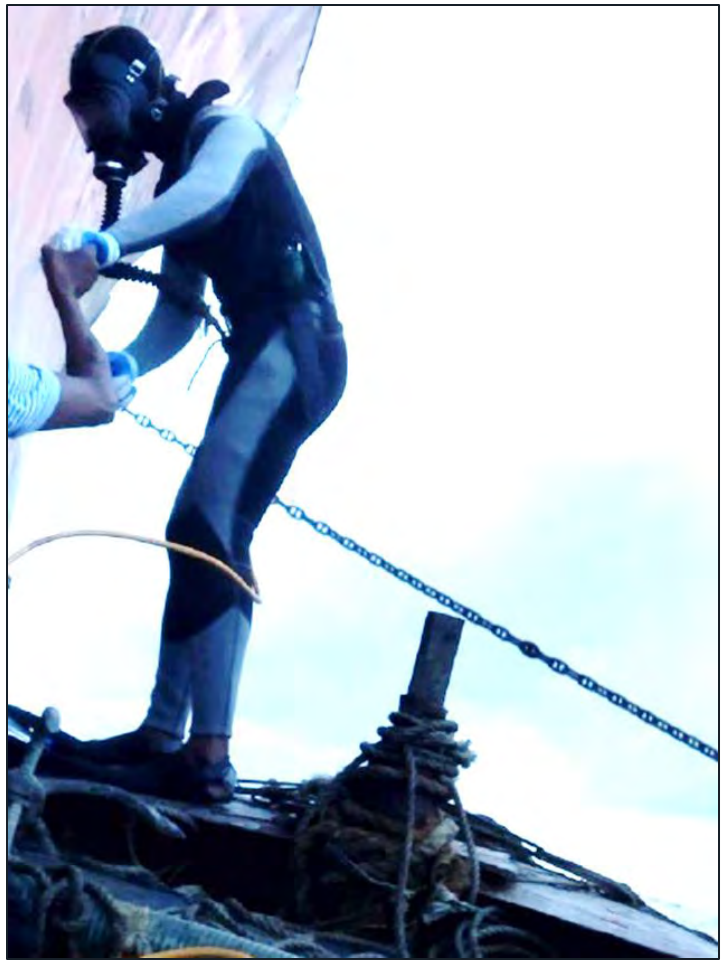
Not core IMCA diving contractor Member business.  However, IMCA has prepared detailed guidance on conducting UWSH diving operations safely.

- The incredibly high number of diving fatalities in this sector persists
- Some of our Marine Members contract in the services of UWSH diving contractors
- IMCA's global influence on commercial diving

# IMCA D082: Guidance on UWSH

Not core IMCA diving contractor member business.  However, IMCA has prepared detailed guidance on conducting UWSH diving operations safely.

- Producing/free issue of IMCA D082: *Guidance on Diving Ops in Support of UWSH* (2024)
- Singapore UWSH Seminar (2024)
- Participation in IOGP's UWSH Expert Group (2025)
- Assisting with ADCI UWSH Seminar, Panama (2025)



# Medical

# Diving Medical Advisory Committee

- Ali Macleod appointed as DMAC Secretary: info@dmac-diving.org
- DMAC to investigate Mental Health guidance
- DMAC 26 *Saturation diving chamber hygiene* has been reviewed to include water quality
- Priority list of DMAC documents for revision created
- DMAC will celebrate 50 years since formation in November 2025

Ali Macleod
IMCA Dive Team lead
Medical and Training

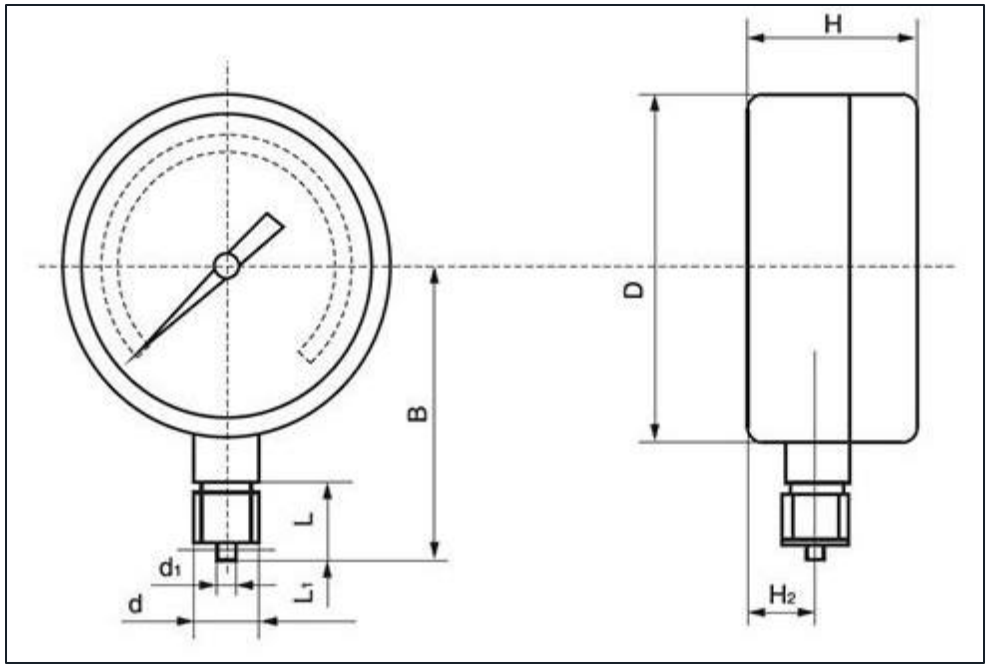
# Technical

# Formation of IMCA's Diving Equipment Sub-Committee (DESC):

- Dave Slater is the IMCA Secretariat point of contact
- Technical experts from around the world
- Permanent Sub-Committee reporting to Diving Division Management Committee
- Deal with all equipment issues and DESIGN docs (recent issues include square medical locks, second motors on LARS systems)

# IMCA Diving Equipment Sub-Committee

- Dedicated sub-committee addressing equipment queries
- Integrated action tracker which facilitates:
  - —A systematic approach to issue tracking
  - —The ability to evaluate multiple solutions for each defined issue
  - —A mechanism for reporting feedback to party that raised them

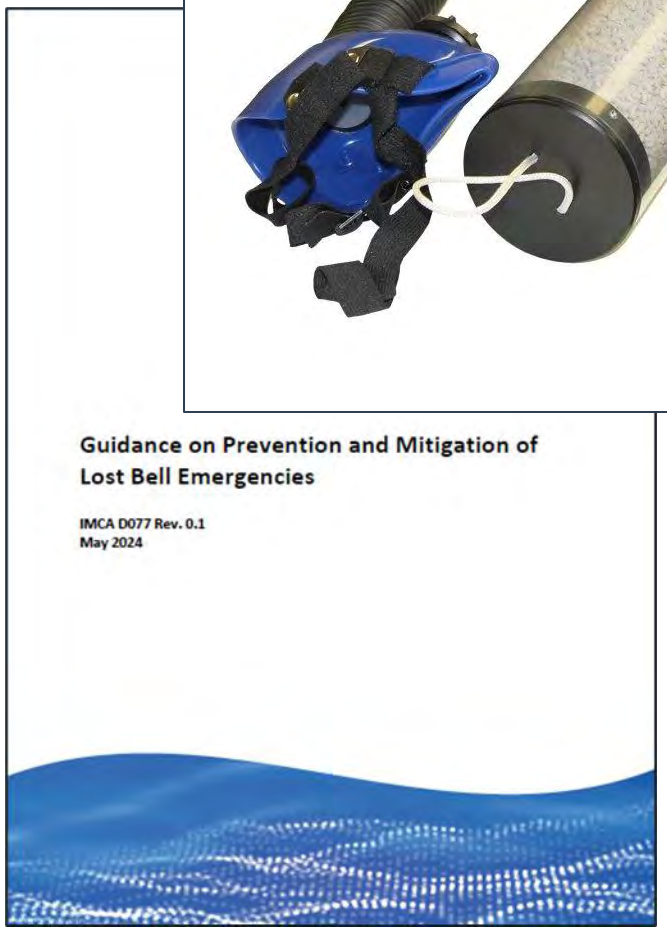


# D077 workgroup:  Lung powered scrubbers (bell survival packs)

- No real data regarding the performance standards for Emergency Lung Powered Scrubbers
- Project / workgroup has been set up to review and update the relevant section in D077 Guidance on Prevention and Mitigation of Lost Bell Emergencies.

# D077 workgroup:  Lung powered scrubbers (bell survival packs)

- Working group has met three times. Consists of medical professional, diving personnel and suppliers
- Reviewing diving standards and breathing limits
- Determine the endurance of the lung-powered scrubber. To achieve this, the group discussed the production of a test protocol and procedure for ELPS soda lime testing
- Data available for 500mtrs. Limited to the duration of the ELPS at present

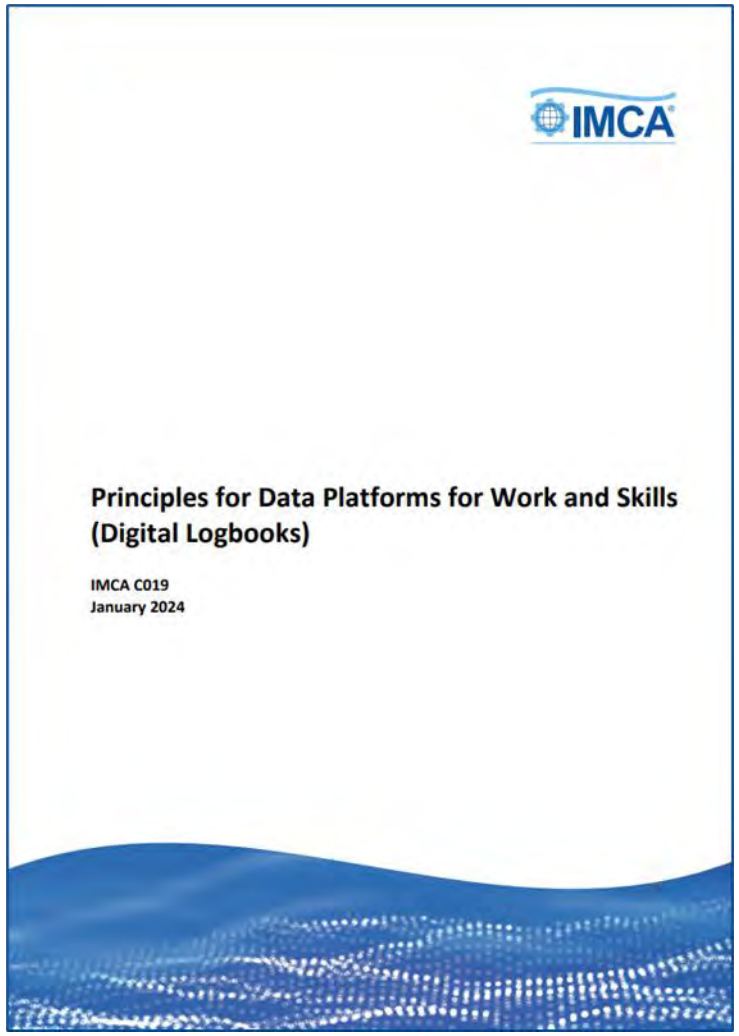


# IMCA D041 *Use of battery-operated equipment in hyperbaric conditions*

- Project to review all current guidance / industry advice etc. and see if document is still fit for purpose
- Project team: Dave Slater, Gavin Anthony and Steve Sheppard

# Training

# Digital logbooks and competence records

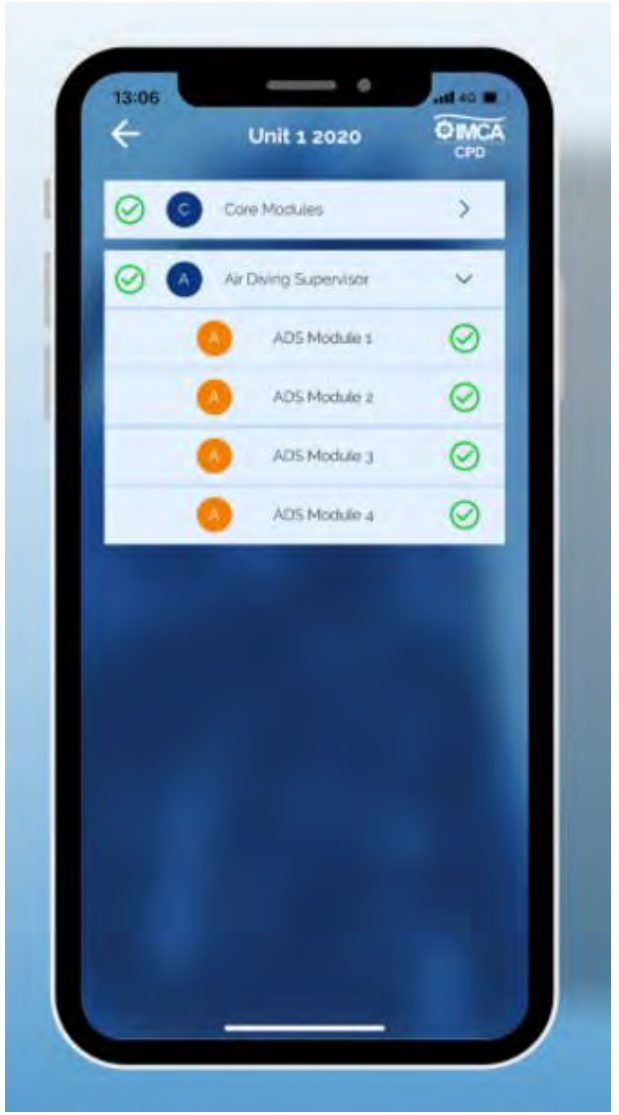



- Digital platforms offer the opportunity for a significant expansion in data collected – not limited by the size of a physical page and offering a broad range of input controls to aid completion, standardise recorded data and enable in-depth analysis of offshore work.
- It is envisaged that further guidance will be developed by IMCA on standard taxonomies for such options and categorisation.

# Extension of the Supervisor CPD Scheme


- **IMCA Diving CPD Pro:** For existing diving supervisors
- Cost frozen at £100 p/a

- **IMCA Diving CPD Mix:** For other interested parties. Option to skip modules
- CPD Mix has a delay of three months from material accessed by Pro users
- £200 p/a (+ tax where applicable)

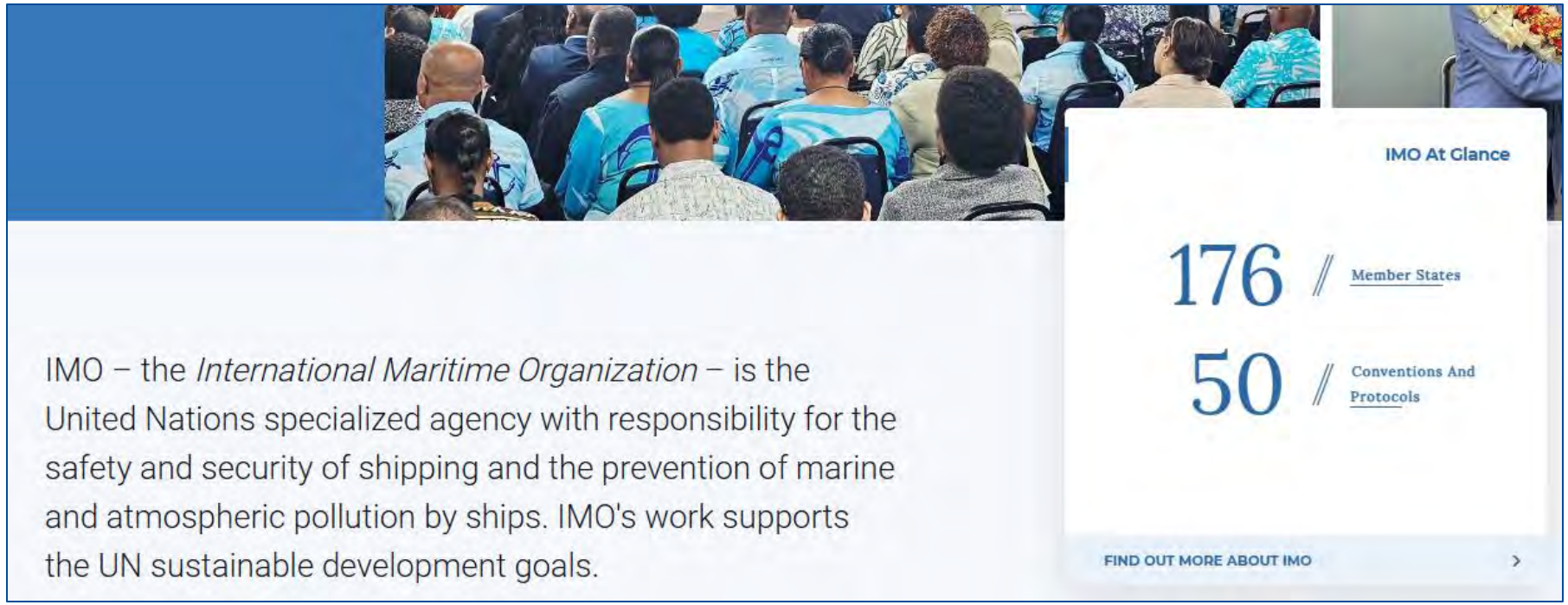


# IMCA received an applications with forged UK HSE diving, IMCA DMT, and CSWIP 3.1U certificates

# Advocacy and lobbying

# Formation of advocacy and lobbying team.

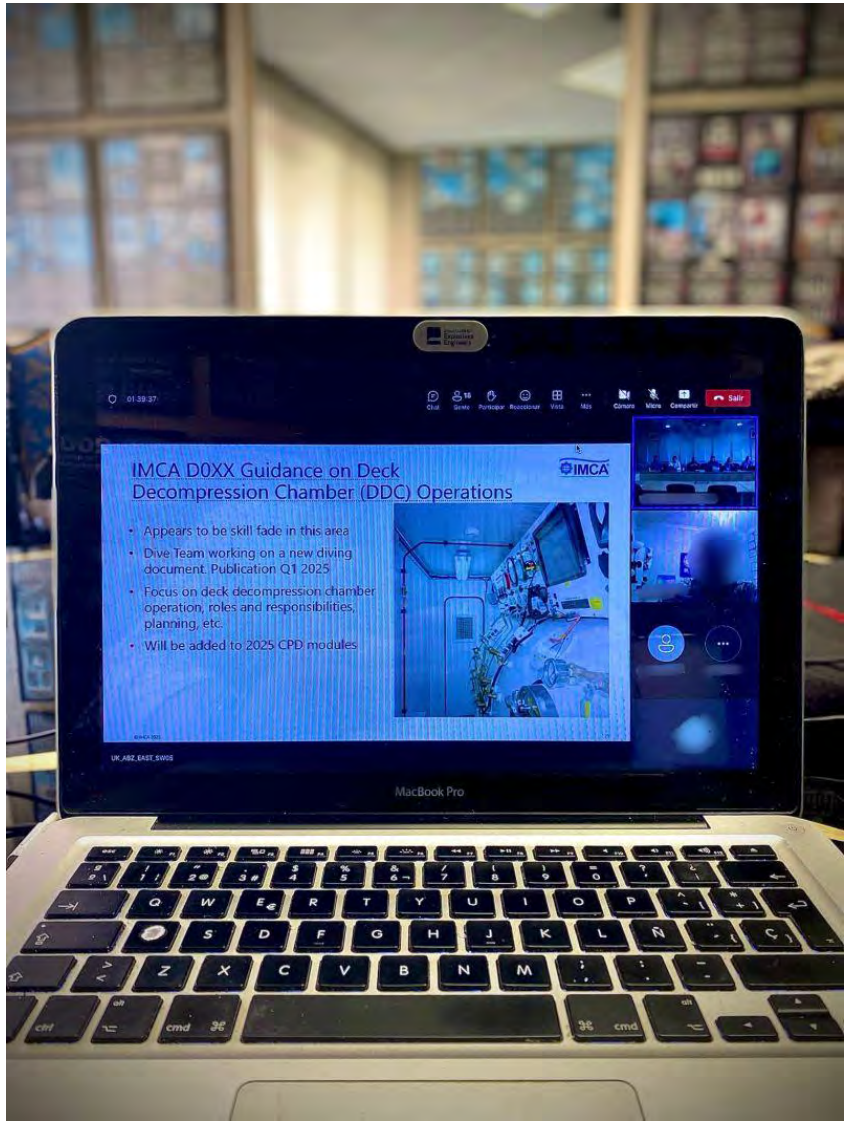
- IMCA permanent seat at the IMO (marine wing of the United Nations)
- Prescence in European Parliament
- High level meetings with IOGP



# The future?

# Safety, Medical, Technical and Training forum

- Thinking of getting involved with IMCA?
- SMTT meets three times a year (online and occasionally in person)
- No commitments, very few actions
- katie.kidd@imca-int.com



# Diving / ROV SIMOPs

- IMCA aware of incident
- 2026 objective for Diving and ROV divisions

# Lift bag inverter lines

- Challenge by an operator
- DDMC looking at clarifying issues/guidance

# *A major offshore energy company recently stated that 70% of their diving work was inland/inshore.*

- This figure likely to be true for other supermajors (refineries and UWSH make up bulk of diving)

# High fatality rate

- Trinidad and Tobago: High-profile incident
- IMCA's dive team asked by T&T government to assist with investigation provide bench marking for what went wrong
- IMCA aware of 30+ inshore diving fatalities in 2024. Actual figure likely to be higher (non-reporting)

# International Marine Contractors Association

Improving performance in the marine contracting industry

**www.imca-int.com**