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# MINUTES of EDTC 2022 ANNUAL MEETING

## Marseille, FRANCE



**Place:** Salle Bourse, Chambre CCI

**Date:** 22-23 September 2022

### AGENDA

#### **22<sup>nd</sup> September 2022, Thursday**

<b>15:30-16:15</b>	EDTC Board Meeting (Novotel Hotel)	<b>EDTC Board</b>
<b>18:30-23:00</b>	<b>DINNER<sup>1</sup></b>	<b>All</b>

#### **23<sup>rd</sup> September 2022, Friday, General Assembly Salle Bourse, Chambre CCI**

<b>09:30-09:35</b>	Welcome	
<b>09:35-10:00</b>	Introductory presentations by Host Country and Safety and Security Information	<b>Host</b>
<b>10:00-10:10</b>	EDTC Admin Matters	<b>Secretary Akin S.</b>
	Apologies EDTC membership Summary	<b>Toklu</b>
	Treasurer report	<b>Phil Crombie</b>

<b>10:10-10:40</b>	Chairman's report Summary of actions from 2021	<b>Chairman Jörn Ryberg</b>
<b>10:40-11:00</b>	<b>COFFEE BREAK</b>	
<b>11:10-12:30</b>	Work groups activity on "Principal on new directive"	
<b>12:30-13:30</b>	<b>LUNCH</b>	<b>All</b>
<b>13:30-13:50</b>	Reports from the Medical Subcommittee	<b>Jurg Wendling</b>
<b>13:50-16:30</b>	National reports Saint-Sulpice Eric-FRANCE Pasquale Longobardi-ITALY Bjarne Sandvik-NORWAY Øyvind Loennechen-NORWAY Jörn Ryberg-SWEDEN Philip Crombie-UK Peter Sieniewicz-UK	<b>Members</b>
<b>16:30-17:00</b>	<b>COFFEE BREAK</b>	
<b>17:00-17:20</b>	Elections	<b>All</b>
<b>17:20-17:50</b>	Any other business, Next Meeting	<b>All</b>
<b>17:50-18:00</b>	Closing remarks	<b>Chairman Jörn Ryberg</b>

## 24<sup>th</sup> September 2022, Saturday

**09:30** Visit & Lunch at INPP

### HOST

Eric Albier FRANCE

## THOSE PRESENT

### EXECUTIVE BOARD

<b>Name:</b>	<b>Representing:</b>	<b>Note:</b>
Jörn Ryberg	SWEDEN	Chairman
Akin Savas Toklu	TURKEY	Secretary
Phil Crombie	UK	Treasurer
Jean Lelievre	FRANCE	Member Executive Board
Jurg Wendling	SWITZERLAND	Member Executive Board

### PARTICIPANTS

### COUNTRY

Amanda Sordes	AUSTRALIA
Thomas Gaisberger	AUSTRIA (Online participation)
David Parkes	CANADA
Margo Purru	ESTONIA
Jean Lelievre	FRANCE
Saint-Sulpice Eric	FRANCE
Frank Werner	GERMANY
Leo Lagarde	IDSA
Massimo Becherucci	ITALY
Pasquale Longobardi	ITALY
Martin Heer	NORWAY (Online participation)
Leif Morten Rasch	NORWAY
Øyvind Loennechen	NORWAY

Martin Heer	NORWAY (Online participation)
Jabulile Mhlophe	SOUTH AFRICA
Dziurla Bartosz	POLAND (Online participation)
Bartosz Rutkowski	POLAND (Online participation)
Bulelwa Huna	SOUTH AFRICA
Jörn Ryberg	SWEDEN
Daniel Larsson	SWEDEN
jurg wendling	SWITZERLAND
Andreas Achermann	SWITZERLAND
Pieter-Jan van Ooij	THE NETHERLANDS
Akin Savas Toklu	TURKEY
Philip Crombie	UK
Steve Forman	UK
Peter Sieniewicz	UK
Ana Maria Paun	? (Online participation)

<b>GUESTS and OBSERVERS</b>	<b>COUNTRY</b>
Bjarne Sandvik	NORWAY
Ulrik Junge	NORWAY

<b>APOLOGIES FOR ABSENCE</b>	<b>COUNTRY</b>
Hans Cuylits	BELGIUM
Roland Vanden Eede	BELGIUM
Pavel Macura	CZECH REPUBLIC
Knud-Helge Andreassen	DENMARK
Aleksei Usanov	ESTONIA
Claus Mayer	GERMANY
Brian Murphy	IRELAND
Vitalijs Zaharovs	LATVIA
Andrejs Cernavskis	LATVIA
Joar Gangenes	NORWAY
Veronika RYBÁROVÁ	SLOVAK REPUBLIC
Jordi Desola	SPAIN
Mats Hagberg	SWEDEN
Ali Uzunoğlu	TURKEY
Salih Murat Egi	TURKEY
Phil Bryson	UK

## **WELCOME ADDRESS**

The Chairman Jörn Ryberg opened the EDTC 2022 meeting welcoming members. He thanked the host, Eric Albier, for organizing the Annual Meeting in Marseille and invited him to give an introduction along with safety and security information. Akin S. Toklu, EDTC Secretary, was then invited to make his presentation on admin matters.

## **EDTC ADMIN MATTERS**

The Secretary, Akin S. Toklu informed members about the previous meetings noting the date and place of EDTC annual meetings. He listed the countries that are represented in EDTC but haven't organized any EDTC Annual Meetings. The secretary asked members to volunteer if they were able to host the 2023 Annual Meeting. He asked members to check their contact details on the EDTC website members area and inform the secretary if any revisions were needed. The Secretary listed new members, apologies for absence, participants and guests as seen in Annex 1. He asked all participants, including members participating online, to introduce themselves mentioning their country and category.

Akin S. Toklu informed participants about the numbers of countries in EDTC, members and vacant memberships. He asked members to nominate new members for any vacant positions.

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The Secretary finished his report by thanking the host for organizing the EDTC 2022 Meeting. He invited treasurer Phil Crombie to give a report.

Phil Crombie stated that the EDTC balance is approximately 20.200 Euros. He explained the purpose of balance is to contribute towards host costs and to cover some strategic expenses such as inviting important guests. He noted that he chased payments back to 2019 and wrote to those members who had outstanding payments. He reminded members to make clear their country and representative when making any bank transfers.

Further details of the secretary and treasurers' reports can be seen in Annex 1.

## **CHAIRMAN'S REPORT**

The Chairman, started his report by stating that it is the time for a new EU directive. He continued by explaining the structure and purpose of EDTC. He explained the methods to reach EDTCs' aim and introduced the EDTC Board that meets quarterly online with a fixed agenda. He listed the Board achievements as; digital meetings with members, meeting of Medical Subcommittee, meeting with EU Commission Unit Health and Safety, meeting with EU parliament politicians and providing information to all members.

The Chairman presented statistics on commercial fatal diving accidents and made the point that the current fatality rate is not acceptable. He noted that the number of fatal diving accidents reported in 2022 was 12 to date. He also gave the statistics on diving fatalities for the previous years as seen in Annex 2. He added that there is tragedy behind each fatality. He stated the problem is not just in Europe, but World-wide by giving the example of fatalities in salmon farms in Chile. He added that the oil & gas industry had developed significantly in Europe over the years and increased their safety standards. IMCA has been providing guidance and good standards for this sector. The Chairman noted that almost all fatalities within the industry come from the in-shore/near-shore diving sector. He mentioned the 17 goals of "Agenda 2030" decided by United Nations for Sustainable Development. He noted that 8<sup>th</sup> goal of Agenda 2030, "Decent work and economic growth" is relevant to the diving industry.

The Chairman informed members about the work of EDTC with the EU and EC so far. He stated that Directive 2005/36/EC updated in 2016 lists diving as a regulated profession. He emphasized the current huge differences in legislation of different member countries and stated the need for EU Directives to be implemented by national laws. The Chairman summarized the meeting he had attended with The European Commission, DG Employment, Social Affairs and Inclusion, Unit Health and Safety in March 2022 and the subsequent statement from them that said "Please note that in principle we have not foreseen at this stage to put forward specific initiatives as regards Occupational Safety and Health (OSH) related to commercial diving". He suggested EDTC being proactive instead of being reactive and proposed to be help politicians understand the diving industry and its problems. He noted political awareness is necessary to enable the changes and added that the EDTC has made the EU parliament aware of the facts. Three questions have been sent to the commission; 1. Can the Commission state whether the zero vision also includes commercial divers in the EU? 2. Does it intend to submit a directive on harmonized health and safety standards for commercial divers in the EU to prevent work-related deaths in line with vision zero? 3. Does the Commission plan to present guidelines for vocational training and certificates for commercial diving in the EU? The European Commission, has not implemented diving within the EU Strategic Framework on Health and Safety at Work for the coming 7 years and made the previously noted statement done during the meeting in March 2022.

The Chairman summarized the previous two inventory works as detailed in Annex 2. He explained to members about the frame that workgroups will work on after his report to create common principles of commercial diving to dive in a safe manner and to be educated to perform and conduct the actual works, also in a safe manner. He emphasized the necessity of EU directive to be implemented by national laws. He noted that for decent work all individuals (freelancers), employers, employees and clients should have responsibilities. After the principles are clarified

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EDTC can ask the EU for a new directive that will be a framework to be implemented in national legislation.

Further details of the chairman's report can be seen in Annex 2.

## **WORK GROUPS ACTIVITY**

Four workgroups came together, each group delegated a chairman and discussed on creating common principles of commercial diving safety.

## **REPORTS FROM WORKGROUPS**

### **Workgroup 1 – Eric Saint-Sulpice**

Eric Saint Sulpice from France summarized the result of discussion done by the Workgroup 1. He described a diver as a worker that operates in unbreathable conditions, that normally lead to death. Therefore, he stated it has to be considered if an alternative to the dive can be chosen (ROV or any different other solution). He stated that the diver has the right to refuse the work if he feels himself in danger, and shall not be fired for this reason. He explained that it requires a fitted and reliable personal and collective equipment / organization / environment to be able to breathe and work properly and added the equipment must be in accordance to standards. The organization must take in consideration all the aspects (means diver training / team training / size of the diving team / environment limits / Contractors). As any dangerous work, risk analysis is the basis, and has to be undertaken by qualified person. All this should be in an approved European regulation that contractor will be forced to comply with, defining all these points.

### **Workgroup 2 – Amanda Sordes**

Amanda Sordes from Australia presented the result of the discussion in Working Group for basic guidance for EU countries on commercial diving 2 as follows;

Step 1 must be to have an overarching National Law mandating “safe systems of work” for diving work.

This National Law shall include requirements to have:

- Clear delineation of responsibilities (particularly between client and contractors)
- Competence requirements (for workers AND supervisors, including medical certificates and work qualifications)
- Risk Management framework
- Audit schedule (including Planned Maintenance System)

Good practice suggests that this National Law should be interpreted into Guidance Documents (could be Codes of Practice or Standards). These documents are usually non-binding but following them ensures compliance with national law. They are written in plain language and specific to different sectors of the industry. Committees of experts should be tasked with their redaction and include industry representatives, training organizations, unions etc (as many subject matter experts as possible). This step ensures clarity for all affected by the regulatory framework, creates a feedback loop between workers and government officials and address regulatory loopholes.

Other points for consideration

- Guidance documents should be living documents, reviewed regularly to include latest safety trends and track industry best practice.
- It is considered important to include diving as a profession at the national level to ensure appropriate inclusion and representation into all debates regarding labour management (unions should also be encouraged)
- The formalisation of reporting lines (if possible) to ensure appropriate lessons learnt from safety incidents particularly fatalities and significant near-misses. Trend analysis is closely linked to an improvement in WHS practices.

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### **Workgroup 3 – Phil Crombie**

Phil Crombie has presented the feedbacks from Workgroup 3 as follows;

#### **Basic safety directive**

Overall consensus was that any new directive needed to put duties onto “clients” of diving projects. Their duties would cover the safety and competence of contractors, supervisors, divers, self-employed and volunteer divers. Anyone affected by the “undertaking”. Diving medical should also be covered in such a directive as it is felt that many fatalities arise from medical conditions. Supervisor competence was also felt to be an issue – and maybe formal competence assessment of diving supervisors should be a requirement. Discussions included the demographic of divers – generally young men with little risk awareness. The problem is countries across Europe already ignore EU directives for safety. E.g., Working places directive – unsafe work sites, lack of enforcement etc. This is causing frustration – and at least if there were client duties, there would be an improvement due to the exposure to legal risk. One suggestion that was received well by the group, would be a requirement for enforcing authorities to have some sort of basic competence in diving – otherwise there will be no competent enforcement.

#### **Basic certificates for diving**

The group felt this was the wrong wording and should be “competence” rather than “certificates”. There was concern that any directive would either have too low or too high requirements and could make free movement a problem – if too low, some countries would not be happy, and likewise if too high! Following various discussions it was felt that this was less of an issue – as there is already an EU directive that is in force – i.e. the professional qualifications directive. If this was widely understood and followed it allows for the free movement of divers, and assessments of their competency where there is doubt in the original qualification. The directive should be used effectively – maybe competence of enforcing authorities would help this issue.

### **Workgroup 4 – Jurg Wendling**

Jurg Wendling has presented the feedbacks from Workgroup 3 (included members from Norway, Italy, Netherlands and Switzerland) as follows;

He reported that they analyzed actual situation and practice in our four countries as to the regulatory frame, unregulated practices and free movement issues.

#### **Norway**

The regulation covers all kinds of commercial diving regulated by two ministries, offshore by the Energy Directory, inshore/inland by Internal Affairs. While offshore is very well regulated (Norsoc norm integrated) since many years, this activity does not produce major problems. In inshore diving however there are some “open gaps”. Commercial inland diving includes also scientific diving, coast guards have a separate regulation, but shellfish diving, which is quite important in Norway, did not have a specific regulation until now. In the future it will be inside the commercial inland diving regulations. Also, freelancers are not really under the regulation, which is a major gap.

#### **Italy**

In Italy regulation is complex. As an umbrella they have a national norm about industrial diving which is quite in line with EDTC standards. The norm is strong, describes health and safety issues in detail, certifications, competences for all kind of compressed air work. It is therefore also valid for high pressure tunnelling works. Regulation includes a national labor act, however application regulations are issued by each region separately because they are autonomous in this field. Accordingly, there are differences within Italy when it comes to training, competence and medical examinations. In contrast, fire guards are managed by the Ministry of Interior and also for police divers another ministry is responsible, for Carabinieri the Defense Ministry and

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the Economic Ministry for coast guards. Freelancers are not considered a major problem, because the clients are also under the regulation and so the abuse of doing things unsafe because they are out of the regulations is not observed.

### Netherlands

One ministry is covering regulations of most kinds of diving like commercial diving, fire fighters, scientific and offshore, which are under the Ministry of Social Affairs and Labor. A separate regulation covers nurses for hyperbaric treatments in hospitals. A major problem are freelancers in commercial diving because the client is not really responsible for the application of the regulations, because the regulation covers only employed people.

### Switzerland

We have one regulation for all kinds of hyperbaric activities, including diving of all kinds, compressed air work in tunnels and hyperbaric oxygen units of hospitals. Switzerland has no offshore industry, but inland (including mixed gas and saturation in altitude), police, scientific and recreational diving for those who are employed. The weak point is that regulation is very general and there are exceptions. Just those who perform the most risky dives, the police, are exempted from all safety relevant rules (no standby, no need of communication, no surface traceability, no onsite chamber when doing long deco stages, while this is obligatory for all other divers). Another important open gap are freelancers. They are doing a lot of jobs in harbors of the lakes and installations in rivers. They can do this legally as long as the client does not make any prescriptions. As our regulation only covers employed workers, clients are not obliged to demand health and safety measures and risk assessment from a contracted freelancer, who works on his own risk. This produces a distortion of the market as, evidently, freelancers will be much cheaper than organized diving companies. It is a known problem of unfair competition and undue risk seeking, but our authorities have not the attitude to control all these activities police-like. Also, the mentioned problem is rather one of a fair market covered under the labor inspectorate while health and safety is covered by a workers insurance health and safety executive (SUVA). Swiss regulators do not have control over all diving and hyperbaric activities, as only major complex operations have to be announced (not approved).

### In conclusion:

Activities of self-employed divers not or not sufficiently covered by regulations, and, in some countries, clients not being responsible for health and safety of contracted workers, is resulting in market distortion (unfair competitors) and, on the other side, unnecessary exposure to risks for those who are not under the regulation. A future EU-directive should make clients responsible for safety of any contracted diving operators, be it employed or self-employed people. A second point to be part of such a directive should be that all regions within a country and all countries within the European area should follow the same safety at work and health maintenance principles, that should be defined in a consensus standard (for instance a norm like in Italy). A first step would be to have an English translation of national regulations of all countries available. This only will make free movement easier. A third issue would be to provide all regulatory authorities with information about diving exposures, incidents and accidents.

## **REPORT FROM THE MEDICAL SUBCOMMITTEE**

Jürg Wendling, the chairman of EDTC Medical Subcommittee stated that EDTC MedSub has discussed, together with about 100 hyperbaric specialists of all continents, all the chapters of the EDTC Fitness to Dive Manual. After 10 years of online discussions, this group comes to a consensus version, ready for being published in the revised version of the EDTC Fitness to Dive Manual. Beforehand, the EDTC Fitness to Dive Standards, which represent the first section of the manual, had to be accepted by the Medical Subcommittee (only the EDTC medical delegates as a group).

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This happened recently in Prague during the EUBS Annual Scientific Meeting on 2<sup>nd</sup> September, 2022. A few minor corrections were proposed and integrated into the final version.

He added that the EDTC MedSub warmly recommends to all EDTC members to take note of the results and to endorse the final version as the "Standards for Medical Assessment of Working Divers, Revision 1".

Jürg Wendling noted that EDTC MedSub also communicated to the British High Pressure Compressed Air Work group of BTS regarding the revision of manual, who's recommendations are normally implemented into the guidelines of the International Tunnelling Association ITA - AITES. These tunnelling specialists welcome the initiative, however wished to clean the text too much "diving", thus adding "hyperbaric work, diving or compressed air work, work under pressure, etc.". This are only semantic changes and the medical subcommittee has accepted respective changes in the document.

The final version of "Standards for Medical Assessment of Working Divers, Revision 1" was approved by EDTC General Assembly.

## **NATIONAL REPORTS**

### **FRANCE (Eric Saint-Sulpice)**

Eric Sain-Supice has given a report that covered the period of September 2021-September 2022 and stated the situation inshore is even worse. He reported 3 diving accidents with serious injuries and death as the detail is seen in Annex 3. He stated that the bad situations in French field such as lack of experienced divers, very low rates and excessive difficulties due the cost of life in France may cause more accidents. He added the French field is not attractive at all, for young divers, as well as for experienced divers because of poor incomes. He noted that divers are still sleeping in their van or cars in France they accept poor contract terms. He added the French diving level is decreasing despite the three schools because new divers do not stay long enough in the field to increase their diving skills that is a serious problem for companies. He made a comment that casualties are inevitable with the current rates that are insane. He described the unions' job to keep the pressure on companies who do not pay enough. On the other hand, he stated that companies are in a difficult situation because it is very difficult to hire experienced divers, it's getting worse and worse especially for specific jobs with access difficulties like in nuclear power plant. At the end of his report Eric Sain-Supice announced an expo to commercial and professional divers, that will be held on 6th -9th January 2023 in Paris. See Annex 3 for detail.

### **ITALY (Pasquale Longobardi)**

Pasquale Longobardi presented statistics on medical assistance at diving sites provided in 20 Nations by Dive Doctors Italy. He has listed the name of the diving contractors and diving sites. He added the list of medical situations that casued 10 medical evacuation in 13 years. He gave detail about the different project as the detail seen in Annex 4. He added the information about the saturation and decompression procedures for an operation done at an altitude of 1457 meters, in Italy. After he shared his experiences, he listed take home messages as: The divers must maintain an adequate level of fitness. All divers have to be aware regarding the importance of sufficient support of food and fluids prior to and during a dive. Health staff on diving worksite must be trained according to DMAC & IDMEB guidance. Where available, telemedicine access needs regular checks from outside to make sure it works when needed. See Annex 4 for detail.

### **NORWAY (Øyvind Loennechen)**

Øyvind Loennechen started his presentation by defining the task of Petroleum Safety Authority Norway that acts as both a directorate and as a supervisory agency. He listed the tasks as developing maintaining (renewing) of regulation, giving professional advices, following up the compliance of industry, guidance and dissemination of information. He detailed jurisdiction of. PSA that includes petroleum activities, electrification of installations, offshore windfarms as seen in Annex 5. He mentioned about the new reporting requirements for Surface supplied diving at shore-based petroleum facilities and expected name change of regulation of offshore diving activities next year, and about the new industries; offshore windfarms, mineral extraction and



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fish-farming. He informed the participants regarding the diving related contacts in PSA. He gave some statistics regarding Norwegian professional diving activities in 2021. He noted there was no Covid-19 case reported in saturation for 2021, although there were few cases reported amongst the surface personnel onboard at DSV's. Øyvind Loennechen mentioned about the incidents in 2022 to date and diver training in NYD. Please see the detail in Annex 5.

### **SWEDEN (Jörn Ryberg)**

Jörn Ryberg reported that national regulation in Sweden is to be changed. He stated that since the number of the personnel in national authority is less, they also want to lessen the document. Therefore, they planned to put all "specialist" in one regulation. The authorities took all guidance away since they think guidance should be provided by employers, not by the authorities. This situation caused a gap that should be handled and it is a concern for employers and union. The presentation can be seen in Annex 6.

### **UK (Philip Crombie)**

Philip Crombie started his report by describing the structure of diving specialists in HSE and continued by defining mission of HSE. He listed the missions as, advice and guidance, inspection, investigation, enforcement, safety case assessments (offshore), schools and HSE diving qualifications, medicals, support to other agencies and equipment standards. He detailed the diving group proactive and reactive activities as seen in Annex 7. He introduced supporting guidance, approved codes of practices. He shared statistics regarding accidents and incidents in the period between 01.04.2021 and 01.04.2022. There was no major injury or at work diving fatality in this period. He updated diver training after giving detail about complaints and enforcement notes. He summarized the changes for the schools and in legislation/procedures. More detail can be seen in Annex 7 including cases updates and recent news.

### **UK (IMCA- Peter Sieniewicz)**

Peter Sieniewicz presented an industry update and noted that IMCA had seen a very large increase in work activity in the oil and gas sector. He also stated that windfarms are also drawing resources from the oil and gas industry exacerbating the shortage of both personnel and marine assets. Companies were now reporting a shortage of diving and marine personnel in all disciplines, including a significant shortage of qualified offshore diving supervisors. He stated that IMCA's current code The International Code of Practice for Offshore Diving (IMCA D014) covers all marine energy diving operations (oil & gas and renewables), but after pressure from industry, IMCA is exploring the possibility of expanding the code to cover all diving operations including (nearshore/inshore diving) carried out by IMCA Members. He explained justification for this work as seen in Annex 8.

## **ELECTIONS**

The Secretary announced that there were two nominations for the positions of Jürg Wendling from Switzerland and Phil Crombie from UK, in EDTC Board. The nominations were Jürg Wendling and Phil Crombie. They were re-elected as EDTC Board members.

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

The Netherlands was announced as the host country for EDTC 2023, although some details have not been clarified yet. The Chairman noted that the Board will work on a plan-B, in case the host has to change. 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 2022 Annual Meeting. He asked Eric Albier to give details about the next day's program. Eric Albier informed the members regarding the social program on Saturday, 24<sup>th</sup>

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September 2022. The Chairman closed the meeting hoping to meet all members next year during Annual Meeting, more likely in the Netherlands.

Compiled by Akin S. Toklu



# EDTC Secretary Report

Akın Savaş Toklu





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





YEAR	HOST	YEAR	HOST
2000	UK	<b>2011</b>	<b>FRANCE</b>
<b>2001</b>	<b>BELGIUM</b>	2012	NORWAY
<b>2002</b>	<b>FRANCE</b>	<b>2013</b>	<b>TURKEY</b>
2003	SWITZERLAND	2014	SPAIN
<b>2003</b>	<b>AUSTRIA</b>	2015	POLAND
<b>2004</b>	<b>TURKEY</b>	2016	ESTONIA
<b>2005</b>	<b>BELGIUM</b>	<b>2017</b>	<b>AUSTRIA</b>
2007	PORTUGAL	2018	ROMANIA
<b>2008</b>	<b>ITALY</b>	2019	SWEDEN
2009	DENMARK	2020	ONLINE
2010	CZECH R.	<b>2021</b>	<b>ITALY</b>









# EDTC 2023 ANNUAL MEETING







**FINLAND**  
**LATVIA**  
**LITHUANIA**  
**MONTENEGRO**  
**SLOVAK REPUBLIC**  
**SLOVENIA**  
**THE NETHERLANDS**



25 Countries, 6 Organization, 9 Correspondents

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## PROTECTED: MEMBERS AREA

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# APOLOGIES FOR ABSENCE

NAME	REPRESENTING
Hans Cuylits	BELGIUM
Roland Vanden Eede	BELGIUM
Pavel Macura	CZECH REPUBLIC
Knud-Helge Andreasen	DENMARK
Aleksei Usanov	ESTONIA
Claus Mayer	GERMANY
Brian Murphy	IRELAND
Joar Gangenes	NORWAY
Veronika RYBÁROVÁ	SLOVAK REPUBLIC
Jordi Desola	SPAIN
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Ali Uzunoğlu	TURKEY
Phil Bryson / Steve Forman	UNITED KINGDOM







# LIST OF PARTICIPANTS

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Thomas Gaisberger	AUSTRIA	Jabulile Mhlophe	SOUTH AFRICA
David Parkes	CANADA	Bulelwa Huna	SOUTH AFRICA
Margo Purru	ESTONIA	Jörn Ryberg	SWEDEN
Jean Lelievre	FRANCE	Daniel Larsson	SWEDEN
Saint-Sulpice Eric	FRANCE	jurg wendling	SWITZERLAND
Frank Werner	GERMANY	Andreas Achermann	SWITZERLAND
Leo Lagarde	IDSA	Pieter-Jan van Ooij	THE NETHERLANDS
Massimo Becherucci	ITALY	Akin Savas Toklu	TURKEY
Pasquale Longobardi	ITALY	Salih Murat Egi	TURKEY
Martin Heer	NORWAY	Philip Crombie	UK
Leif Morten Rasch	NORWAY	Peter Sieniewicz	UK/INTERNATIONAL





## NEW MEMBERS

NAME	REPRESENTING	CATEGORY
Danilo Mijajlovic (New member)	MONTENEGRO	Industry
Carla d'Espiney Amaro (Francisco Gamito Guerreiro)	PORTUGAL	Medical
Bogdan Cristian Ion (New member)	ROMANIA	Medical
Damir Podnar (New member)	SLOVENIA	Industry
Joakim Andersson (Carl-Johan Djurstedt Holm)	SWEDEN	Government
J.D. (Jur) van Kasteren (New member)	THE NETHERLANDS	Government







## GUESTS

NAME	COUNTRY
Cedric Parodi	FRANCE
Luca Ponticelli	ITALY
Bjarne Sandvik	NORWAY
Ulrik Junge	NORWAY
Sahin Kosar	TURKEY





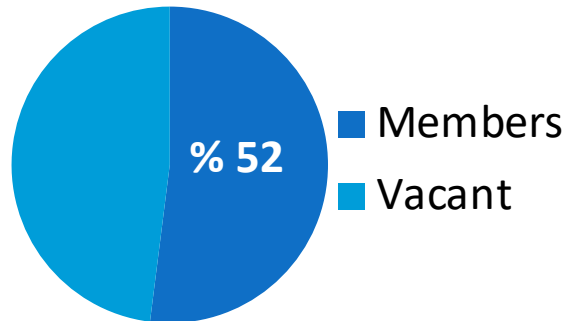
## MEMBERSHIP FACTS IN NUMBERS

- The # of member countries 25
- Expected # of members 100
- Current # of members 61
- # of vacant positions 39
  - Government 12
  - Industry 5
  - Medicine 5
  - Union 17

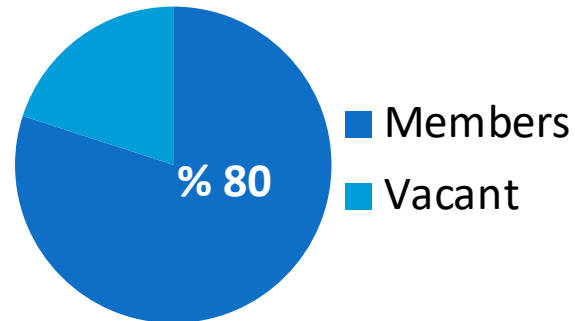




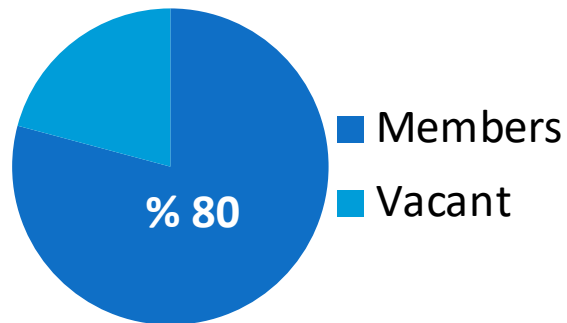
## GOVERNMENT



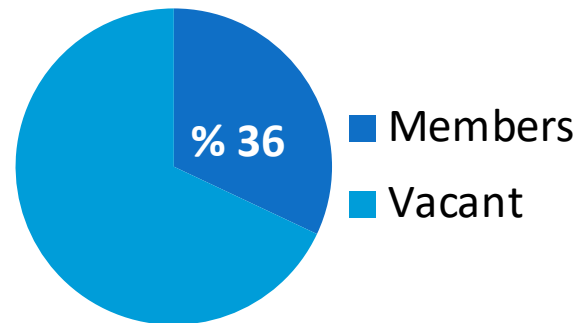
## INDUSTRY



## MEDICINE



## UNION





# **MEMBERS NOMINATED FOR EDTC BORAD MEMBER ELECTION**

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**Jürg Wendling  
Phil Crombie**

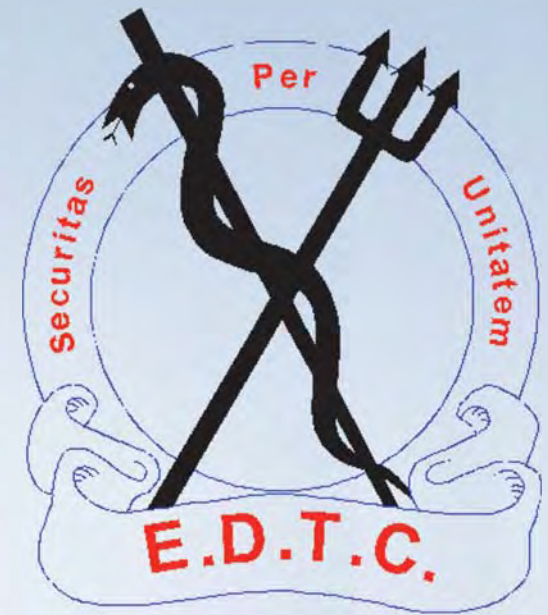


# EDTC Annual Meeting 23 September 2022

“Time for a new directive”

## Content

1. EDTC Profile - Aims & Objectives – executive board
2. A reminder
3. Agenda 2030 - European Framework Directives
4. Inventory made by EDTC – first and second
5. The way forward





# 1. European Diving Technology Committee (EDTC) Profile

EDTC is a not-for-profit organization - formed 1973. Today EDTC has representation within 25 European (geographical) countries. This year we are greeting new members from several countries.

## Purpose

Safer Commercial Diving,

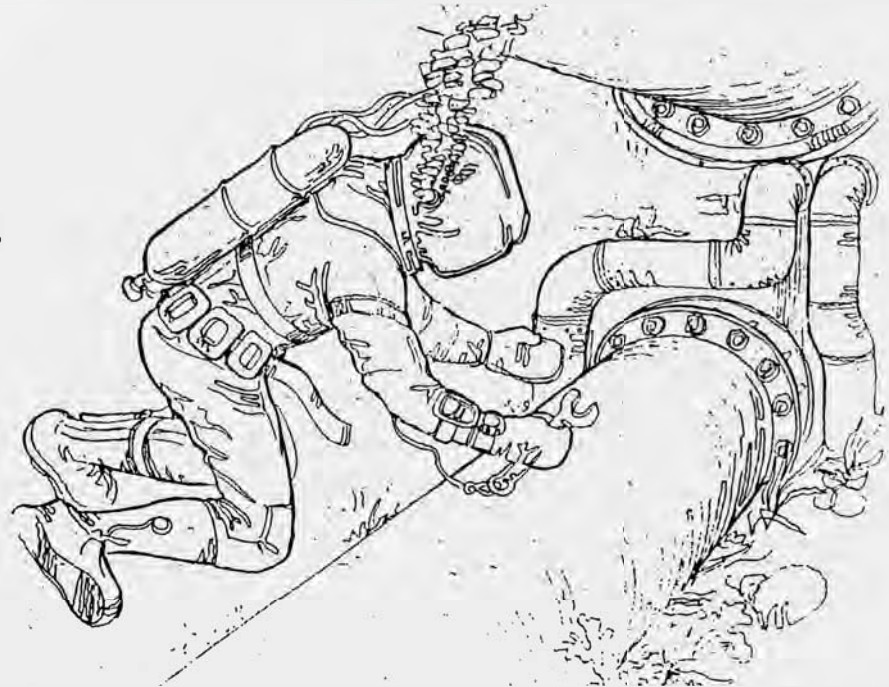
- Through Unity, Strength (*Securitas per unitatem*).

## Representation

- Membership - entire geographical Europe,
- Medical,
- Industry,
- Government,
- Labour Unions.

## EDTC reach its aims by

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







# 1. The executive board of 2022



Akin Toklu



Jean Lelievre



Jürg Wendling



Jörn Ryberg



Pasquale  
Longobardi



Philip Crombie

## Efficient quarterly board meetings using MS Teams.

### Fixed agenda:

1. Welcome and opening comments by 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 2021 - 2022

1. Digital meetings with members,
2. Meeting re. specific medical topics (med sub.com),
3. Meeting with EU Commission, Unit Health and Safety,
4. Meeting with EU parliament politicians,
5. Providing information to all members.

## 2. European Commercial Diving –

A reminder why we all are doing this work



The diving industry – Expensive knowledge

***This situation is not acceptable !***

- Diving Industry - Statistics of fatal accidents,
- Little Governmental information,
- Collected by voluntary individuals,
- 1960 – 1999 – 815 fatal accidents occurred,
- 2000 – 2019 - 773 fatal accidents occurred.
- 2020 – 2021 – Covid and little or no information
- **2022 – until March – at least 6 fatal accidents**

The clear answer is that there is a lack of consistency over Europe. The fact that people are doing things like they are “at home” and are not aware of the common basic safety manners, is probably one of the most common reasons for the fatalities.

2000	38
2001	29
2002	27
2003	21
2004	37
2005	38
2006	34
2007	45
2008	50
2009	50
2010	74
2011	74
2012	69
2013	46
2014	48
2015	28
2016	44
2017	17
2018 - 2019	27
2020 – 2021 – Covid	–
2022	12

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



## 2. Not only Europe

a **REMINDER** why we all are doing this work



The entire diving industry – Expensive knowledge

**44 divers have died working on Chilean salmon farms in the past 20 years.**

The mounting death toll - including a fatality last week, is slammed as 'unacceptable' by critics, who allege shoddy industry working practices and divers being pressured to work beyond healthy norms.



Local critics say reform is long overdue.

There have been **238** recorded incidents involving slight or serious injuries and deaths of divers working in the Chilean salmon industry in the past nearly 19 years.

***This situation is not acceptable and behind each figure is a tragedy!***



## 2. Oil and gas has made their lesson

### Offshore - Reactive to the situation

- Previously, EDTC had its focus within the offshore Oil & Gas industry. This sector has developed significantly in Europe over the years and, with safety and best practice remaining as the focus of everything that is done, its now considered as a very safe and mature undertaking.

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

### In-shore / near-shore

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

The activities are from almost all countries throughout entire Europe.

Unfortunately, almost all fatalities within the industry comes from the sector of in-shore/near-shore



# 3. Agenda 2030 - a tool for the diving industry



The 17 goals - decided by UN - a plan of action for people, planet and prosperity



Does agenda 2030 has any thing to do with the Diving Industry?

The answer **YES** is obvious. Further, freedom of movement for workers is a policy chapter of the “acquis communautaire” - cumulative body of European Community laws.

The goal 8 – “decent work...” is a fundamental requirement for diving as a profession.



### 3. European Commercial Diving

#### Directive 2005/36/EC – updated 2016

- Diving – a regulated and industrial profession since 2016,
- Education of divers should be the same or equal,
- Evaluation has to be performed by authorities.

#### Directives versus National Legislation

EU Directives should of course be transposed and implemented into national law in the Member States. Unfortunately, there are huge differences.



#### News during 2022

- **EDTC made new inventory during 2021/2022 – still huge variation within regulations over the countries and obstacles to the free movement,**
- **European Commission, DG Employment, Social Affairs and Inclusion, Unit Health and Safety - EMPL.B.3 has in March 2022 stated:**

*“Please note that in principle we have not foreseen at this stage to put forward specific initiatives as regards Occupational Safety and Health (OSH) related to commercial diving”*

## 4. EDTC - Proactive instead of Reactive



- Helping the politicians 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. This also creates some challenges

### EDTC process and well defined milestones





## 4. First inventory done by EDTC in 2017 - 2018

### Complex undertaking

- 22 countries to investigate,
- 9 delegates within the workgroup,
- Division of workload.

### Achievements

- Workgroup with great commitment,
- Spreading knowledge about the difference in Europe.

### Results

- Answers from 18 of 22 countries,
- More than 80% hit range,
- Large variation all over Europe
- Cross reference made to existing approved documents



Division of countries to investigate

## 4. First inventory done by EDTC



	Existing regulations	Only in general terms	Under development	Basic regulations	No regulations
Offshore / inshore diving	14 only inshore 4 Offshore			4	4
Safety-Quality-Risk management	7	4	3		4
Organisation-duties-responsabilities	6	5		4	3
Health issues	9	2		4	3
Training-certification-competence	8	2	2	4	2
Operations-HLRA-LMRA	10	1		4	3
Diving Systems-equipment	8	5	1	2 (no reference to PPE directive)	4

The inventory was made by EDTC and presented to SLIC 22 March 2018 and confirmed during 2019 by SLIC

Conclusion - Creating a common basis is of urgent and significant value.



## 4. The second inventory done by EDTC - 2021

### Results

- Answers from 25 of 28 countries,
- More than 90% hit range of the questions,
- Still large variation all over Europe
- 44% does NOT comply with Directive 2005/36/EC

### Is the Diving Industry reluctant to changes?

Hopefully, the answer is **NO** since changes will come and the Industry needs to be prepared and adaptive.



**There is an absolute need to reduce fatalities within the industry!**

### How can the situation be improved?

It is the view of EDTC that it's now very urgent and of significant prevention value to create a common minimum standard. Too many fatalities within the industry comes from lack of awareness of the fundamental issues and solutions surrounding Commercial Diving activities.



# 4. The second inventory done by EDTC



1) Free movement - Regulated profession, 2) Agenda 2030 - Decent work and 3) Political awareness.

Use Yes/No within your answers	1. Existing regulations	1. Regulated profession	1. Free movement	2. Agenda 2030 – decent work	3. Political awareness
Does your country have a regulation according to <b>Directive 2005/36/EC</b> ?	X	X	X		
If answer to first question is NO, does your country have any regulation that states diving as a “regulated profession”?	X	X	X		
Does your local/national situation create any obstacle for you within you profession?			X		
Does your country have any implementation of agenda 2030?				X	X
Can you identify that Diving as a profession influences other goals within agenda 2030?				X	
Du you experience any challenges or obstacles to exercise your profession within Europe	X	X	X		X
Are any politicians within your country aware that diving is a profession?					X
Are any politicians within your country aware that divers are killed annually when exercising their profession?					X
Do you experience any challenges between local legislations and the overall principle of free movement?	X	X	X	X	X



## 4. The second inventory done by EDTC

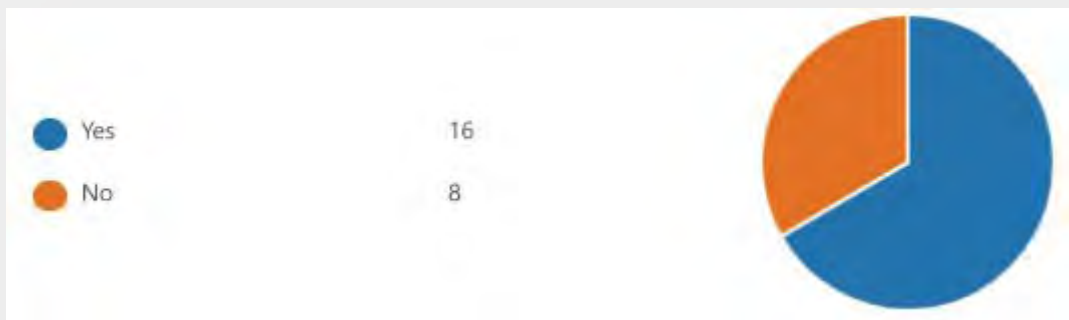
Diving as a profession – related to Agenda 2030

Does your country have any implementation of agenda 2030 ?



60 % - No or don't know

Diving is related to the goal “decent work and economic growth”, does the profession relate to other goals within the Agenda 2030?



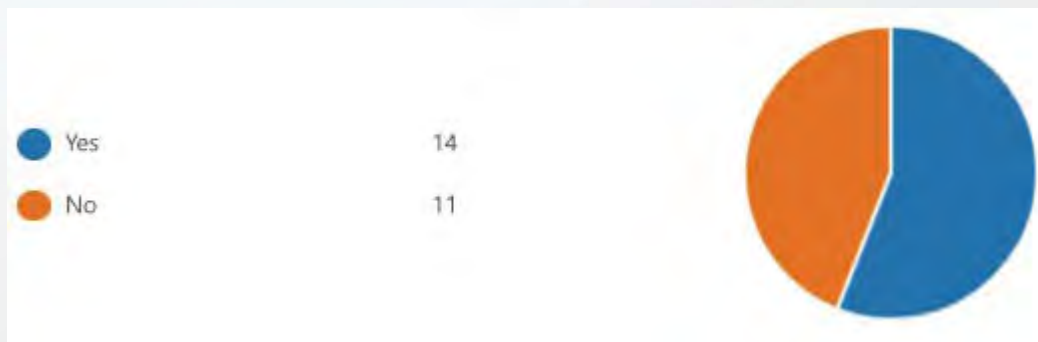
64 % - Acknowledge that Diving as a profession are closely related to the UN global goals!



## 4. The second inventory done by EDTC

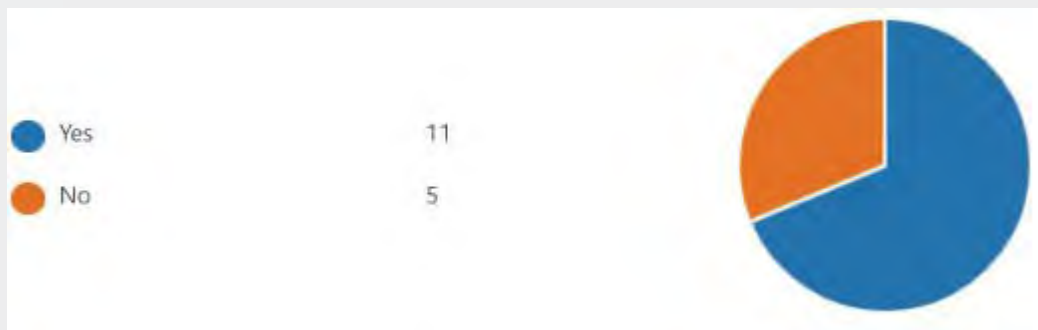
### Questions related to Diving as a profession

Does your country have a regulation according to Directive 2005/36/EC ?



44 % - No regulation according to Directive 2005/36/EC

If NO to first question, does your country have any kind of regulation for Diving



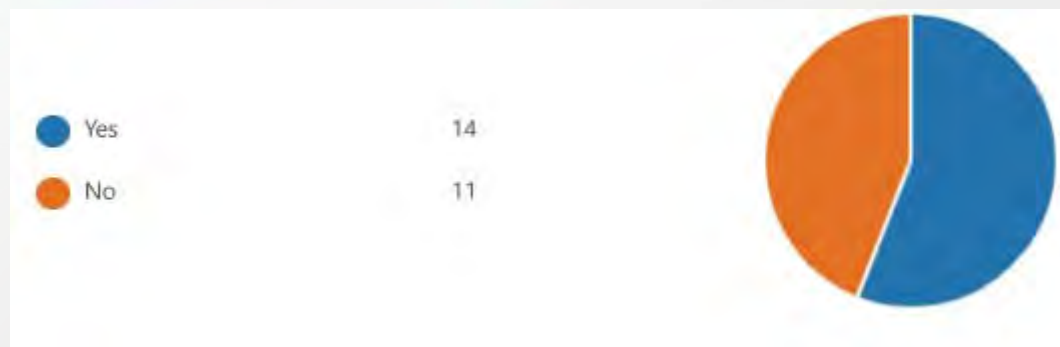
20 % - No regulation at all  
NO change since 2018 – even worse!



## 4. The second inventory done by EDTC

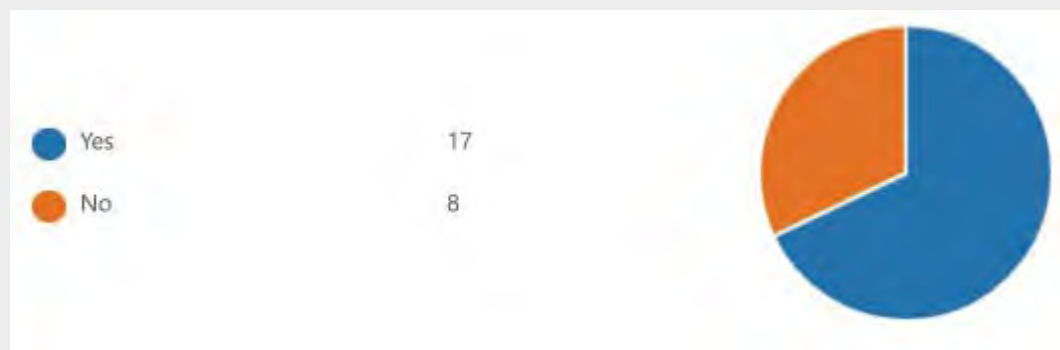
### Questions related to Diving as a profession

**Do divers in your country experience obstacles to practice their profession within Europe ?**



**44 % - Obstacle to practice their profession within Europe**

**Do divers within your country experience any challenges between local legislation and the overall principle of free movement ?**



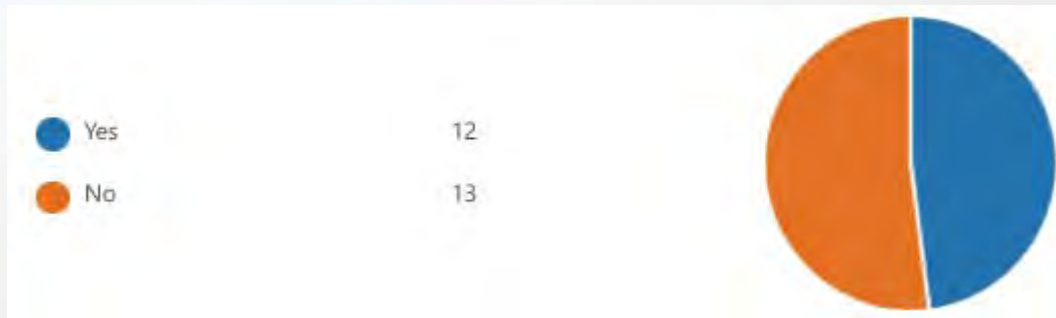
**32 % - Inconsistency within European legislations**



## 4. The second inventory done by EDTC

Questions related to political awareness about Diving as a profession

**Are any politicians within your country aware that diving is a profession ?**



**52 % - Politicians don't think of diving as a profession**

**Are any politicians within your country aware that diving as a profession includes fatal accidents annually?**



**60 % - Of European politicians are not aware that divers are killed annually during practicing their profession**

# 5. The way forward



## Three elements

1. Free movement / Regulated Profession – vast differences and implementation
2. Agenda 2030 – “Decent work” - Diving – a profession including hazards
3. Political awareness

## What did the new inventory confirm?

Political awareness is necessary to enable change

- The EU parliament has now been made aware of facts!



### 1. Free movement

#### ACTIONS:

- Inventory 2017
- Inventory 2021

### 2. Decent work

#### ACTIONS:

- Guidance 2018

### 3. Political

#### ACTIONS:

- SLIC 2019
- EDTC inventory 2021
- New Directive 2023?



# 5. The way forward



- A common basic platform for whole of Europe is urgently needed.

This is acknowledged by SLIC, EDTC, EU parliamentarians, European Workers Unions and European Employers associations.

- The facts are in place – statistically proven by EDTC
- The UN goals (agenda 2030) relate to Diving as a profession
- The need of an umbrella document is met – EDTC guidance

Two (2) significant facts to create a new directive are met:

- 1) The individual has to be trained to dive in a safe manner and
- 2) The individual has to have a vocational training to perform and conduct the actual works, also in a safe manner

**THE MISSING PART IS – COMMON GUIDANCE FOR ORGANISATIONS**



## 5. The way forward – what's the obstacle?

**EDTC has made EU parliament politicians aware,  
3 questions has been sent to the commission:**

1. Can the Commission state whether the zero vision also includes commercial divers in the EU?
2. Does it intend to submit a directive on harmonized health and safety standards for commercial divers in the EU to prevent work-related deaths in line with vision zero?
3. Does the Commission plan to present guidelines for vocational training and certificates for commercial diving in the EU?



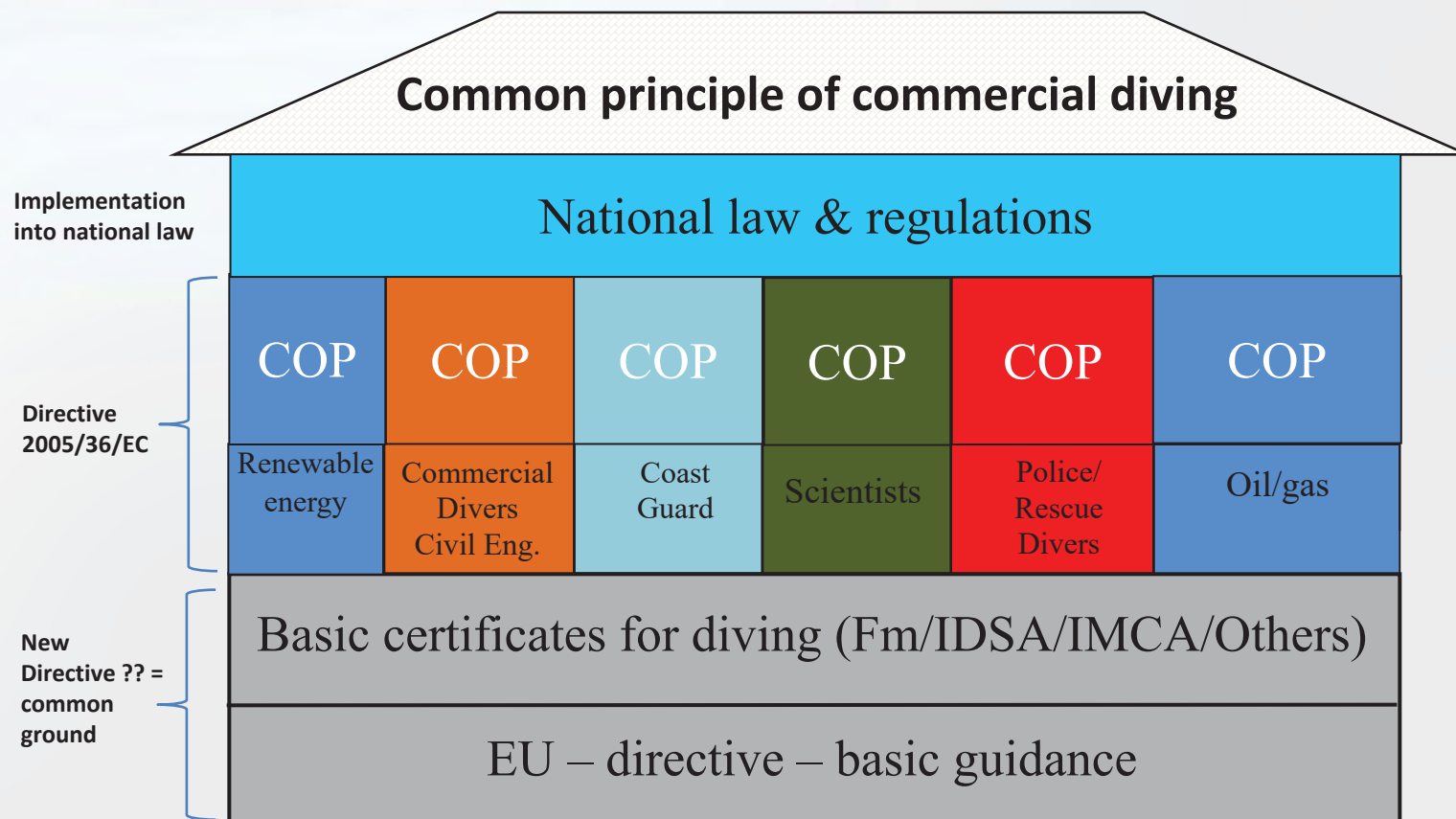
**European Commission, has not implemented diving within EU Strategic Framework on Health and Safety at Work for the coming 7 years:**

***“Please note that in principle we have not foreseen at this stage to put forward specific initiatives as regards Occupational Safety and Health (OSH) related to commercial diving”***





## 5. The way forward – solid foundation



### Aim of discussion

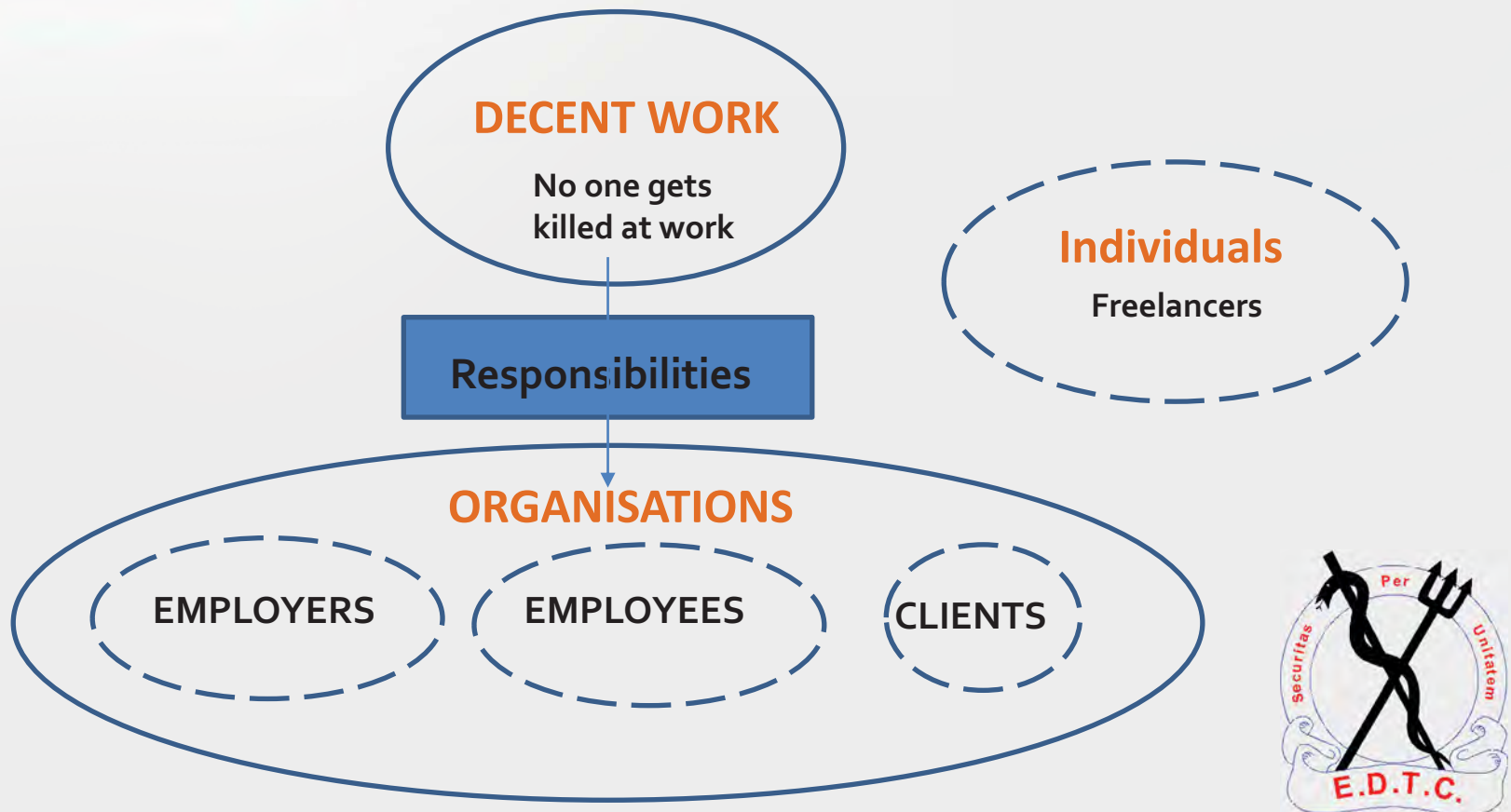
What would /should be included (basic elements) of all commercial diving re. to organisations and the items below:

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

## 5. The way forward - Definition of high level principles

- Responsibilities from individuals to organisations needs to be defined

The principles are needed to enable creation of the basis for a EU directive "the foundation"  
The industry then needs to leave the detail level



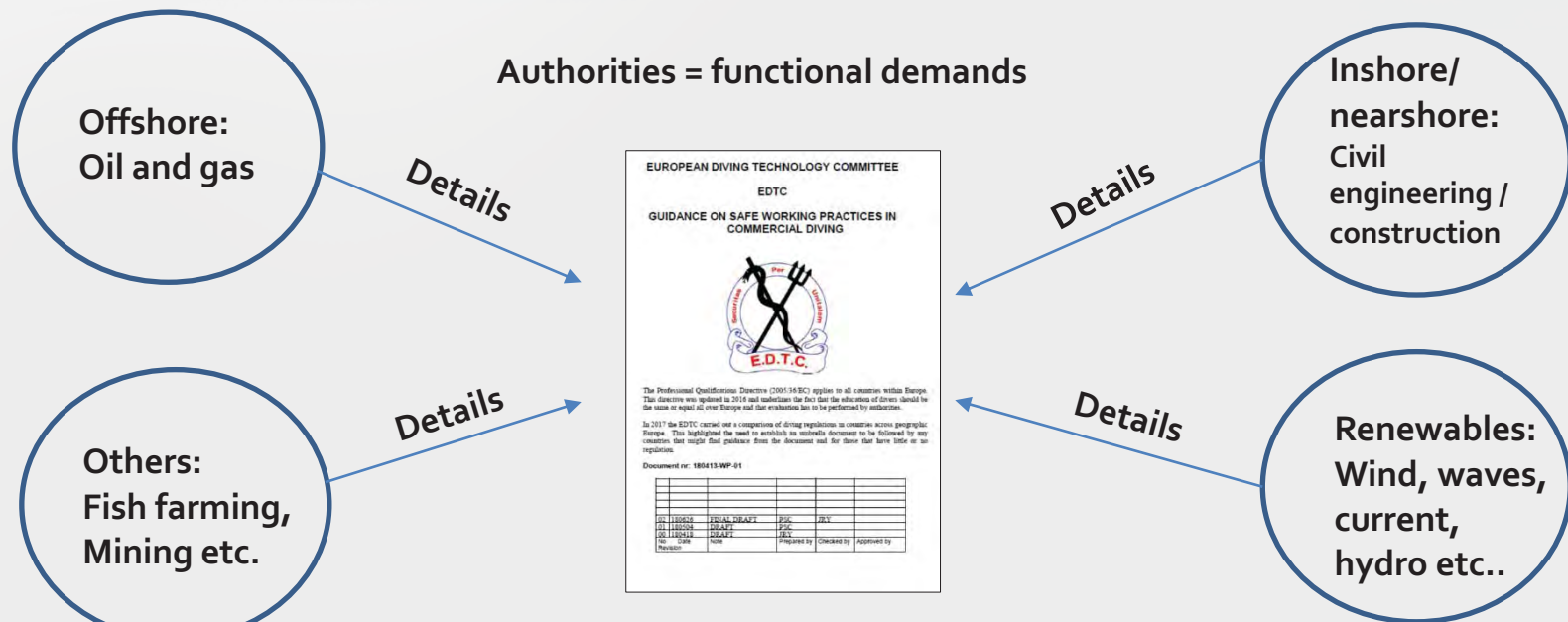
# 5. The way forward



## Proactive instead of Reactive

- The profession is not only to dive – that is the way to go to work

Co-operation between authorities and the different fields of industry is of great importance to create this understanding of principles within all its elements.



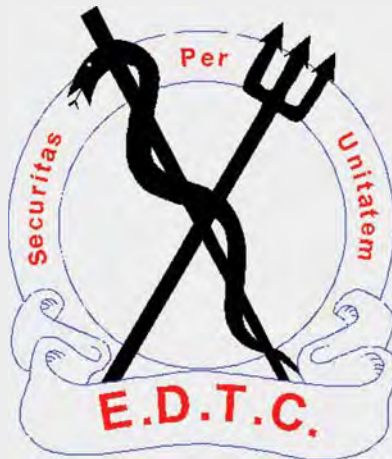
EDTC Documents = functional guidance and basis for a new directive

# Summary

- EDTC provides an independent non-for-profit forum,
- EDTC inventories - confirmed by SLIC – states the facts,
- EDTC documents can give functional guidance,
- **A new directive is needed now.**

Any questions ?

EDTC Chairman - Jörn Ryberg    E: [jorn.ryberg@marcon.se](mailto:jorn.ryberg@marcon.se)





# EDTC ANNUAL MEETING MARSEILLE

FRENCH REPORT SEPTEMBER 2021 / SEPTEMBER 2022

THE SITUATION INSHORE





# 3 ACCIDENTS WITH SERIOUS INJURIES AND DEATH

- UNFORTUNATELY TWO DIVERS HAVE BEEN INJURED AND ONE KILLED  
-ONE IN DUNKERQUE IN SEPTEMBER 2021 IN THE ENGIE DK6 FACILITY  
DIVER HAVE BEEN TRAPPED DURING 25 MINUTES ON A PUMPING UNIT.  
THE TEAM TOOK TOO MANY TIME TO MAKE ONE THE TWO PUMP TO  
BE STOPPED BY ENGIE

THE DIVERS SUFFERED A VERY SERIOUS PSYCHOLOGIC TRAUMA, IT WAS  
THE SECOND SERIOUS ACCIDENT OF HIS SHORT CAREER, HE ALMOST  
DROWN IN ROTTERDAM FEW MONTHS BEFORE





- ANOTHER SERIOUS ACCIDENT TOOK PLACE APRIL 19TH 2022 IN PIERRE BENITE DAM CLOSE TO LYON A DELTA P DUE TO A SERIOUS LEAK ON ONE OF FIVE GATES KNOWN BY OTHER DIVING COMPANIES AS WELL AS THE DAM STAFF.

DIVER'S UMBILICAL GOT SUCKED DOWNSTREAM WITH THE DIVER'S FOOT ALSO TRAPPED DURING MORE THAN THREE HOURS BEFORE THE DELTA P GOT REMOVED

PERMANENT INJURY ON HIS FOOT WITH KNOCKED OUT TOES

- UNFORTUNATELY ONE DIVER DIED IN VILLEFRANCHE SUR MER FEBRUARY 28TH 2022  
HE WAS USING AN AIRLIFT IN 17 METERS . THE DIVER WAS FOUND WITHOUT HIS BAND MASK  
AFTER ASKING TOPSIDE TO STOP THE AIRLIFT. THE RESCUE HAS BEEN DONE IN SCUBA DESPITE A  
SECOND UMBILICAL ON THE DIVING SITE



The background of the slide is a light gray gradient, decorated with numerous realistic water droplets of various sizes. Some droplets are at the top, some at the bottom, and some on the right side, creating a fresh and clean aesthetic.


# MORE ACCIDENTS TO COME

## THE FRENCH FIELD BAD SITUATION

LACK OF EXPERIENCED DIVERS, VERY LOW RATES AND  
EXCESSIVE DIFFICULTIES DUE THE COST OF LIFE IN FRANCE.  
THE FRENCH FIELD IS NOT ATTRACTIVE AT ALL, YOUNG DIVERS QUIT AS  
WELL AS EXPERIENCED DIVERS BECAUSE OF POOR INCOMES



# COMPANIES AND CLIENT RESPONSABILITY NOT ONLY

- DIVERS ARE STILL SLEEPING IN THEIR VAN OR CARS IN FRANCE THEY STILL ACCEPT POOR CONTRACT TERMS. THE SITUATION DOESN'T CHANGE IT'S EVEN WORSE, 12 EUROS MORE OR LESS FOR BEGINNERS, A SHAME.
  - THIS IS WHY WE ARE VERY PESSIMISTIC
  - THE FRENCH DIVING LEVEL IS DECREASING DESPITE THE THREE SCHOOLS BECAUSE NEW DIVERS DO NOT STAY LONG ENOUGH IN THE FIELD TO INCREASE THEIR DIVING SKILLS  
THIS IS A VERY SERIOUS PROBLEM FOR COMPANIES
- 

# RAISING RATES THE ONLY WAY

- THE FRENCH RATES ARE INSANE AND CASUALTIES ARE INEVITABLE

OUR UNION JOB MUST KEEP THE PRESSURE ON COMPANIES WHO DO NOT PAY ENOUGH.

COMPANIES ARE NOW IN A DIFFICULT SITUATION BECAUSE IT IS VERY DIFFICULT TO HIRE EXPERIENCED DIVERS, IT'S GETTING WORSE AND WORSE ESPECIALLY FOR SPECIFIC JOBS WITH ACCESS DIFFICULTIES LIKE IN NUCLEAR POWER PLANT.





6 TO 9 OF JANUARY 2023 PARIS EXPO  
PORTE DE VERSAILLES PAVILLION 4  
COMMERCIAL AND PROFESSIONAL DIVERS !



EDTC Assembly  
Marseiile, 23rd September 2022

## **Dive-Doctors Italy**

### **Medical Assistance of Working Divers**



**Pasquale Longobardi MD**

*Institute for Life Sciences, Scuola Superiore Sant'Anna (SSSA)  
Pisa (I) - Affiliate Researcher*

*AA Fondazione Mistral- President*

*Centro iperbarico Ravenna (I) - Medical Director*

[direzione@iperbaricoravenna.it](mailto:direzione@iperbaricoravenna.it)







# Dive Doctors Italy statistics

Medical assistance at diving sites provided in 20 Nations

2009-2022



# Dive Doctors Italy statistics

6,132 days of medical assistance (DMP)  
1,732 days of Nurse Diving Specialist (NDS)  
1,883 days of telemedicine.  
€3,2 million paid for this health service.



Diving Contractors	Diving sites
CNS International	Caspian Sea
Grup Servicii Petroliere – GSP	
Micoperi	Israel
Marine Consulting	Italy (Trentino)
RANA Diving Contractor Ltd	Gabon, Equatorial Guinea, US Virgin Islands





# Soft Tissue Progressive Necrotizing Infection

**MEDEVAC  
(#10 in 13 years)**



**€17,000**

**DSV cost: €170,000 per day including  
standby tug + HRF onshore**



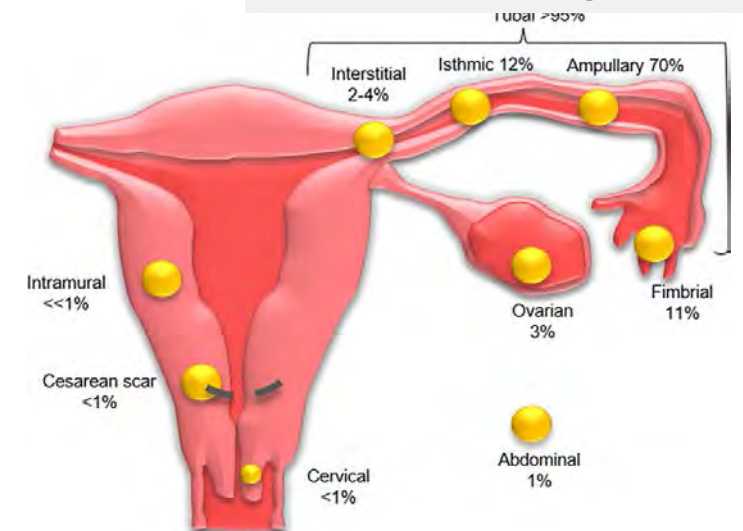
**Heart attack**



**Crush injury**



**Malaria**



**Ectopic pregnancy**





# Shah Deniz 2 & CGLP Projects in the Caspian



90 people (35 divers)

## Saturation system

18 man Total Capacity  
4x 3man + 1x 6man DDCs &  
2x TUPs / medical treatment chambers

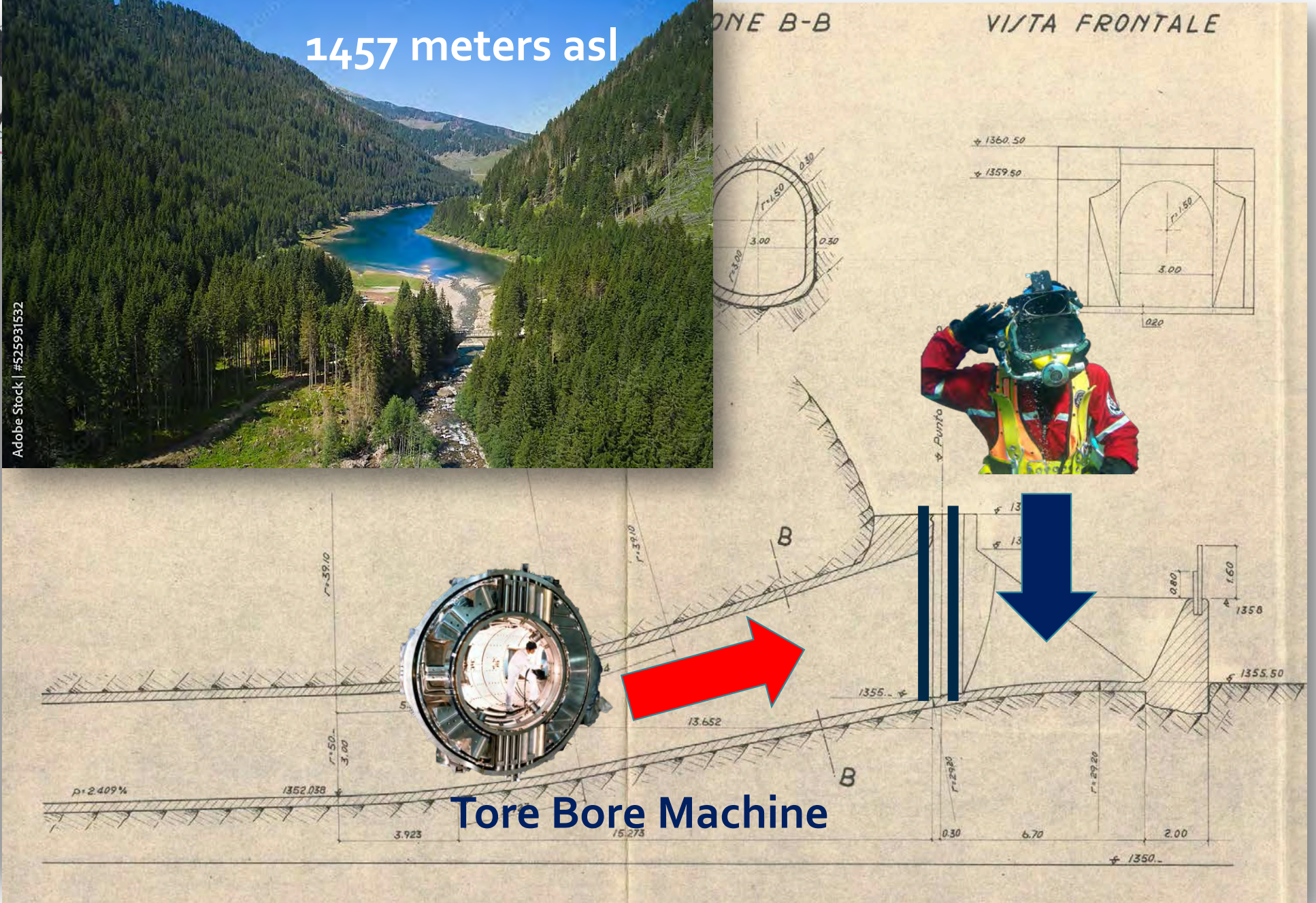
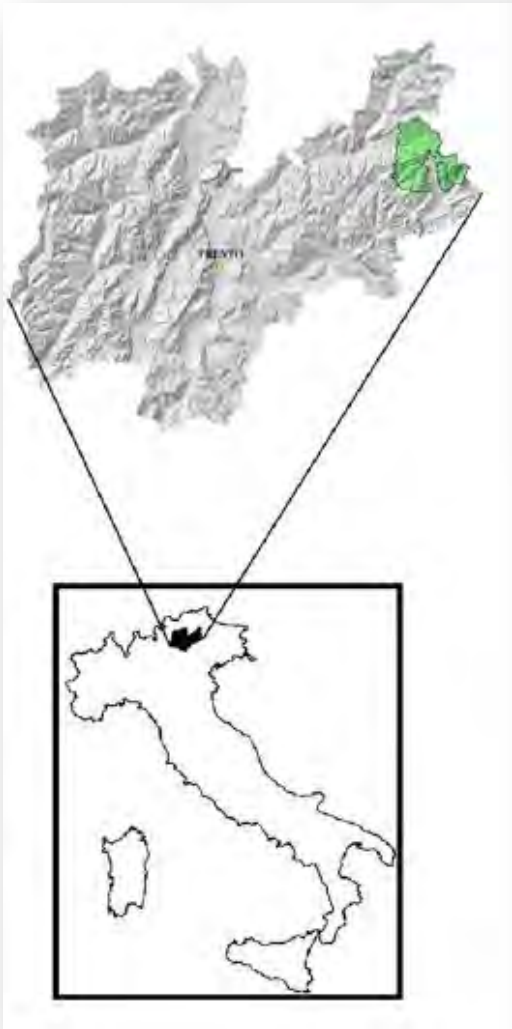


July 5, 2022

1,054,890	Man hours worked
221,132	Saturation Man Hours
1481	Bell Runs







The storage depth was 75 m and the working depth was 81-83 m.





## Saturation procedure

According to the **USN Diving Manual rev.7** and the **NORMAM Manual**, the procedures for the altitude **saturation were recalculated** (by Fabio Faralli MD) **for the altitude of 1457 meters above the sea level**. Excursions has been verified adopting the **ZHL16A algorithm** and, as regards the ascent, the concept of the **Extended Oxygen Window (EOW)**. The result, however conservative, does not, however received **no experimental validation**

**Partial gas pressures in the saturation plant:**  $ppO_2$  0.44 - 0.48 ATA

**Bell:**  $ppO_2$  0.50 ATA

**Lock out:**  $ppO_2$  0.6 - 0.8 ATA

**Bail out:**  $ppO_2$  0.6 - 1.4 ATA

**Decompression:**  $ppO_2$  0.50 ATA; from 15 m to the surface maintain 21%  $O_2$ , max 23%

**Emergency Blend:** 0.16-1.2 ATA (ie Heliox 80/20 and 90/10)

**Therapeutic gas:** 1.5-2.8 ATA (100%  $O_2$ ; Heliox 44/56; Heliox 72/28)



## Decompression procedure



The **decompression rate** has been **modified for the altitude**. In the first part of the saturation, **upwards excursions are not permitted**.

**Wait at least 8 hours after the last excursion** before to start the decompression.

**The decompression starts from the storage depth.**

For technical reasons **last stop is possible at 1 m for 200 minutes and then surfacing in 5 minutes.**

Decompression procedure	
Depth (meters)	Ascent rate (meters/hour)
Up to 15	1
15 > 3	0.6
3 > surface	0.3



## Storage Depth: 76 meters

(comparison between the altitude and the standard procedure at sea level)

	Downward Deepest Excursions (meters)	Upward Shallowest Excursion (meters)
Dive Doctors Italy 1457 m a.s.l.	9 (14 exceptional)	9 (12 exceptional)
USN Diving Manual	25	22
NORMAM	9 (18 exceptional)	9 (18 exceptional)

Fabio Faralli MD





The first saturation lasted **17 days**.  
The **team** consisted of two divers, a Supervisor, and a Life Support Technician (LST).  
On the worksite, two **doctors** (on alternating shifts) performed the pre and post-saturation medical checks, constant health surveillance and the recording of safety data. **No significant incident or event to report.**





## Take home messages

- The divers must maintain an **adequate level of fitness.**
- All divers have to be aware regarding **the importance of sufficient support of food and fluids** prior to and during a dive.
- **Health staff on diving worksite must be trained according to DMAC & IDMEB guidances.**
- Where available, **telemedicine access needs regular checks** from outside to make sure it works when needed.





**Dive Doctors Italy**  
On site and 24-hour  
Telephone Medical Support  
and Service for Tunnelling  
and Working Diving

Contact: Gian Luca Baroni  
E-mail: [baroni.g@libero.it](mailto:baroni.g@libero.it)  
M +39-335-7016831



The medical assistance at diving  
worksite is an **investment for a**  
“**decent work**” rather than a cost.

**E-mail:**  
[direzione@iperbaricoravenna.it](mailto:direzione@iperbaricoravenna.it)

**Enjoy the EDTC Assembly**

# IDRCF National Report Norway

September 21st & 22nd 2022, Petroleum Safety Authority Norway





**Develop and  
maintain (renew)  
regulations**

**Give  
professional  
advices**

**Follow up  
industry  
compliance**

**Guidance and  
dissemination  
of information**

PSA Norway acts as both a  
Directorate and as a  
Supervisory agency



Regulations



Supervision

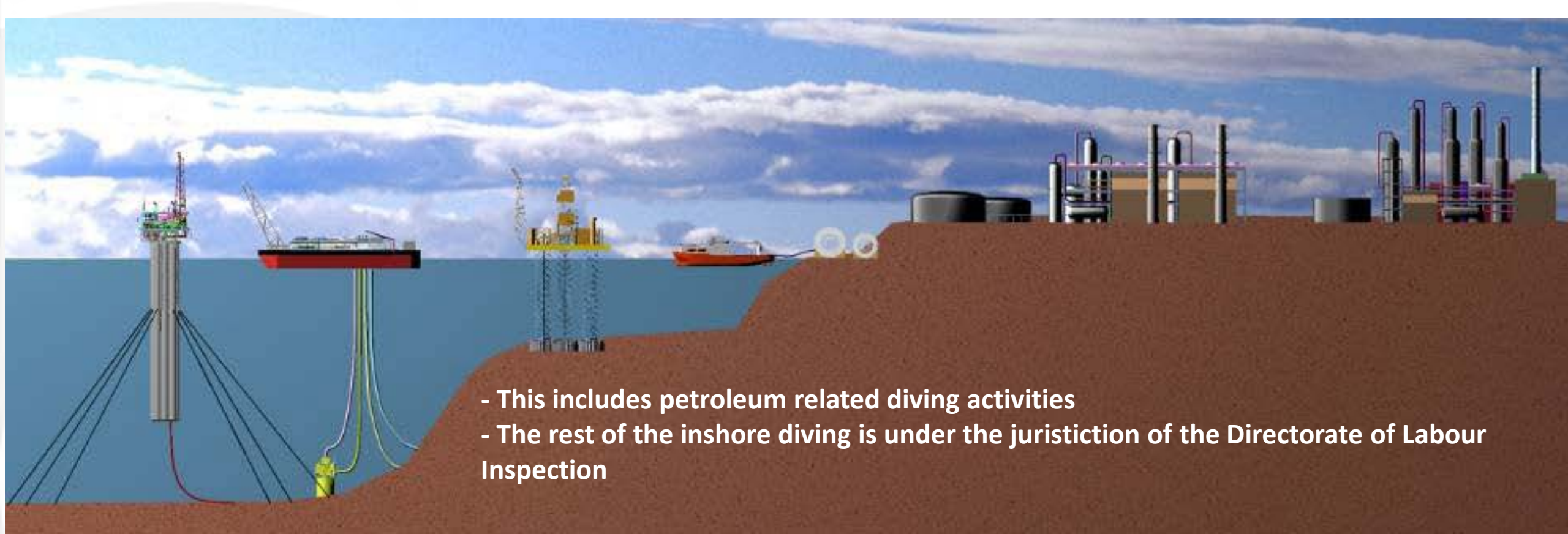


Technical subjects

# PSA jurisdiction

**All of the petroleum activities**

**..including the 8 landbased facilities  
..facilities related to electrification of installations  
..offshore windfarms – regulation ongoing**



- This includes petroleum related diving activities
- The rest of the inshore diving is under the jurisdiction of the Directorate of Labour Inspection



# Changes

**New reporting requirements for Surface supplied diving at shorebased petroleum facilities**

**Expected name change end of year → regulation of offshore diving activities.**

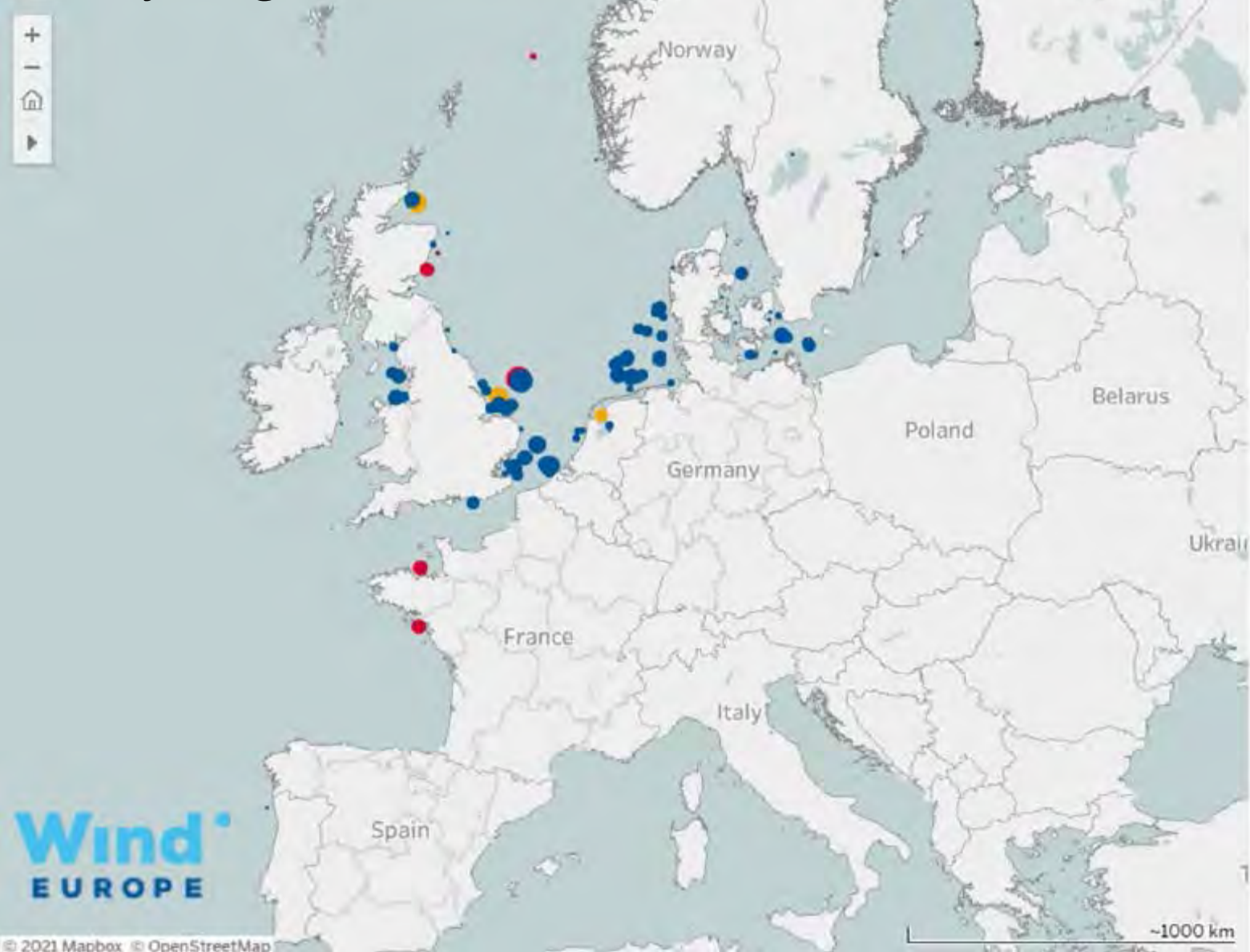
**New industries**

- **Offshore wind – mandate given to PSA. Regulation under development**
- **Offshore mineral extraction – mandate given to PSA. Regulation not started yet.**
- **Offshore fishfarming – under discussion**





# Safety regulation for offshore wind under tripartite development



Country	MW connected	Turbines connected
UK	11,021	2,355
GERMANY	7,689	1,501
NETHERLANDS	2,749	568
DENMARK	2,308	631
BELGIUM	2,261	399
SWEDEN	192	80
FINLAND	71	19
IRELAND	25	7
PORTUGAL	25	3
SPAIN	5	1
NORWAY	2	1
FRANCE	2	1

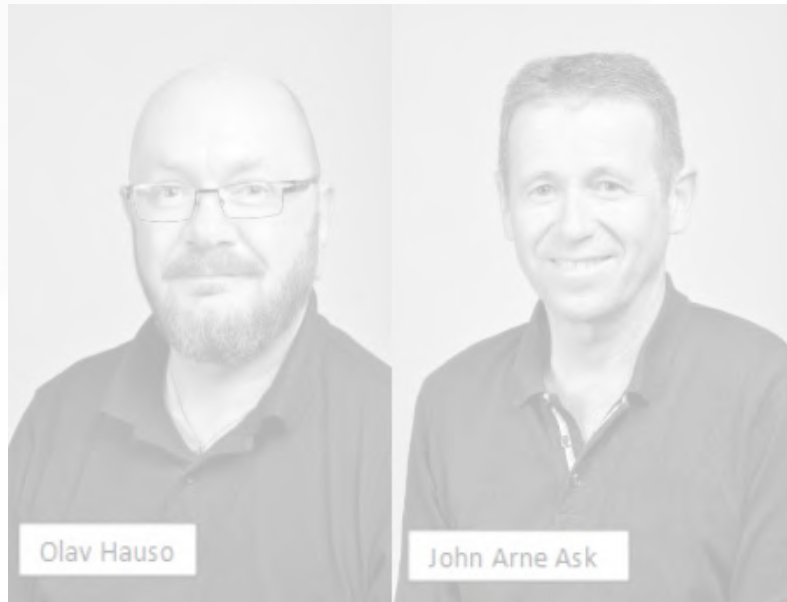
Status update 01/07/2021



# Inhouse generation change

## Diving related contacts in PSA – current situation

### Gracefully retired 2021



### Will retire 2022

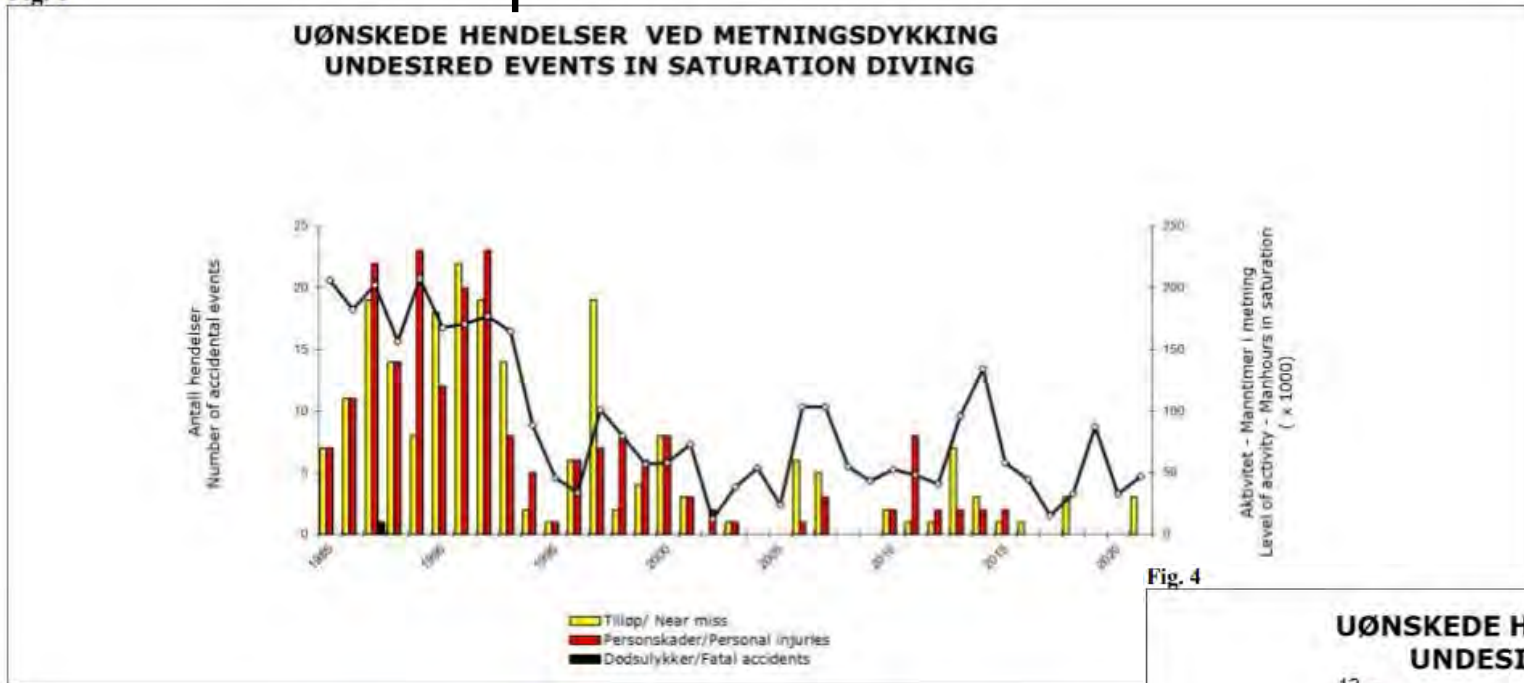


### Up and coming



# DSYS report 2021

Fig. 1



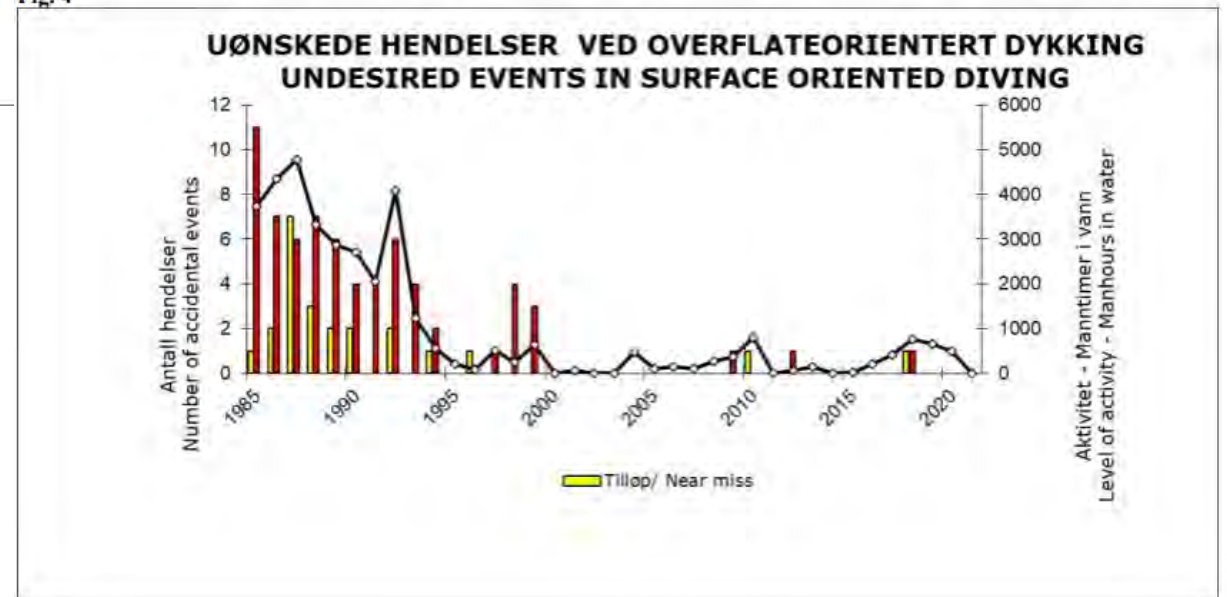
In 2021 it was reported 46.754 manhours in saturation diving on the Norwegian Continental Shelf and foreign Continental Shelves under Norwegian jurisdiction. It was reported 3 less serious nearmisses (technical) og 1 confirmed ear infection in saturation diving for 2021.

There was no COVID-19 cases reported in saturation for 2021, however a few cases were reported amongst the surface personnel onboard DSV's. This shows that the barriers put in place by the Contractors has had a good effect.

There was no offshore surface supplied diving performed in 2021.

Onshore petroleum facility diving will be included from 2022.

Fig. 4





# Incidents 2022 to date



1 Nearmiss Daughetracraft diving.  
Personnel exposure to produced water.  
Poor simops control on the Operator side.

1 Nearmiss FPSO whilst Daughetracraft diving.

Uncontrolled movement of FPSO turning 25 degrees while Surface diving underneath in the turret area.

Poor simops control on the Operator side – maintenance on FPSO thrusters caused failure of thruster and loss of position.







To: Contractors Diving Manager  
DSV OCM & Offshore Management Team  
Divers and Diving Support Personnel

The bi-annual questionnaire-based survey "Trends in Risk Level in the Petroleum Activity (RNNP)".

NORCE is an independent research institution contracted by the Petroleum Safety Authority (PSA) Norway to perform a bi-annual survey on "Trends in Risk Level in the Petroleum Activity" on the Norwegian Continental Shelf (NCS), also called RNNP in short. The survey started in year 2000 to measure how the level of risk is developing in Norway's oil and gas industry. It was later extended to land based petroleum facilities in 2006 and further extended to include diving personnel in the petroleum activities in 2018. See <https://www.psa.no/en/technical-competence/rnnp/about-rnnp/> for diving personnel aims to describe the working environment and perceived safety in diving based on the employee's participation.

The RNNP survey for diving personnel aims to describe the working environment and perceived safety in diving operations on the Norwegian shelf based on the employee's participation.

To invite all divers and diving support personnel working on the Norwegian shelf to respond to the survey. The survey will be conducted throughout the year of 2022.

Divers and diving support personnel are asked to answer the questionnaire once for each year.

The RNNP survey for diving personnel aims to describe the participation of diving personnel in diving operations on the Norwegian shelf based on the employee's participation in diving operations. NORCE would like to invite all divers and diving support personnel working on the Norwegian shelf to our bi-annual questionnaire-based survey. The survey will be conducted throughout the year of 2022. Personnel who work on multiple operations during 2022, are asked to answer the questionnaire once for each operation.

Personnel who work on multiple operations during 2022, are asked to answer the questionnaire.

- Surface supplied diver
- Saturation diver
- Dive technician
- Diving supervisor
- Life support technician / Assistant life support technician
- Gasman
- Life support supervisor
- Diving superintendent (Offshore construction manager / Offshore manager)
- ROV operator
- DP operator

- Life support supervisor
- Gasman
- Life support supervisor
- Diving superintendent (Offshore construction manager)
- ROV operator
- DP operator

Divers and diving support personnel can participate by either filling out the paper form or use the web-based survey found at [norceresearch.no/rnnp](http://norceresearch.no/rnnp). The link is also included in the questionnaire's information page.

At the Contractor's management and Offshore Management Team distributes the received survey results to the diving operations through 2022 and encourage all divers and diving support personnel to participate in the survey. Previous survey results can be found here

Divers and diving support personnel can participate by either filling out the paper forms or by completing the questionnaire online. The link is also included in the questionnaire's information sheet.

We appreciate that the Contractor's management and Offshore Management Team distributes the received paper forms on the vessels during the diving operations through 2022 and encourage all divers and diving support personnel working at your site to answer the survey. Previous survey results can be found here: <https://www.ptil.no/en/technical-competence/rmnp/>.

# QUESTIONNAIRE

## TRENDS IN RISK LEVEL ON THE NORWEGIAN SHELF

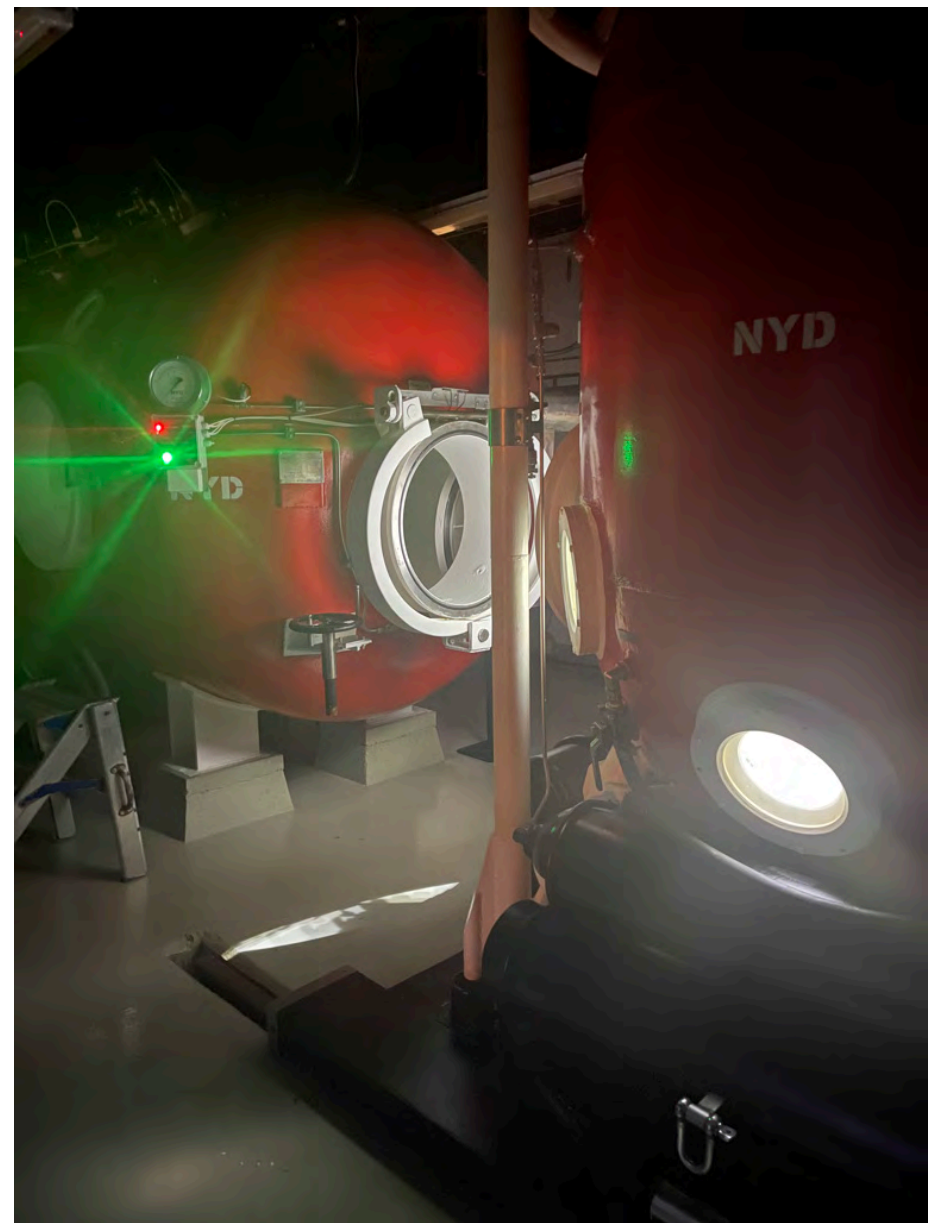




# Norwegian diver training - NYD

## Statistics regarding certification numbers

- 142 PSA Class 1 Offshore air divers
  - Small reduction compared to 2021, however current numbers indicates an increase the next 12 months
- 8 Class 2 closed bell divers graduating shortly
  - 4,5 weeks training at NYD and INPP, in addition to 1 week online learning
- 104 air diving supervisors, which includes first aid as required in NORSOK U103, and NORSOK Leadership as required in NORSOK U100
- 24 air diving supervisors refresher training
- 28 underwater welders qualified to ISO 15618-1:2016
- 110 divers in non-offshore related courses
- 10.000 training dives conducted in total





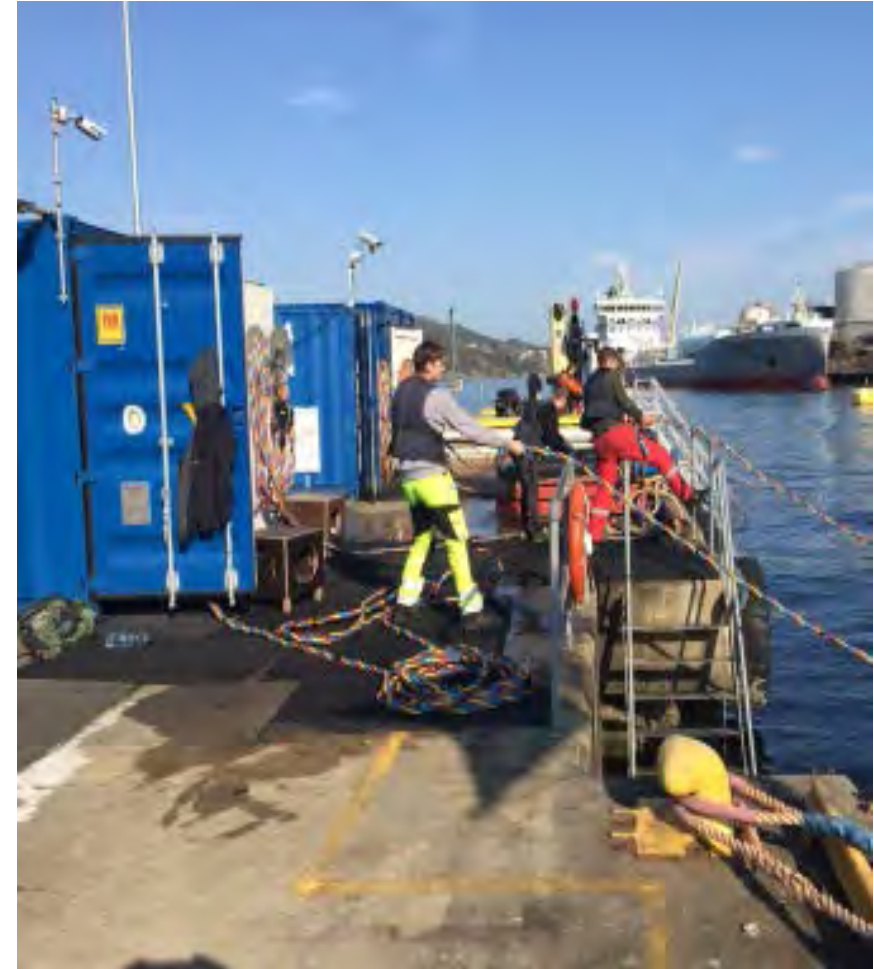
# Norwegian diver training - HVL

## Statistics regarding certification numbers

### Diver training 2021/22

#### The Regional College/Diving School in Bergen (HVL):

- 20 students 1 year vocational education
- 6 students trained to inshore Air diving supervisor (2 weeks)
- 7 Students scientific divers A card (7 weeks)
- 23 students trained to Air diving supervisor – refresher (4 days)
- 14 students trained as rescue divers
- 29 Students Rescue diving supervisors (2 weeks) – postponed
- 6 students First aid for teachers
- 10 Students Dive physicians (qualifying course) 1 week



# PSA auditing norwegian diver training

## **The Regional College/Diving School in Bergen (HVL):**

- October 2021 - Audit performed Class 1 Surface oriented training.

## **NYD Subsea Training Centre**

- October 2021 - Audit performed Class 1 Surface oriented training.
- September 2022 – Audit ongoing Class 2 Closed Bell Mixed Gas training





# Dive Supervisor inshore

Surface oriented dive supervisor qualifications offshore, at landbased facilities and within new energies (wind) under PSA regime.

PSA requirements to Dive Supervisor qualification is (EDTC / IMCA / NORSOK U-100) is firm.

- PSA qualified school / course provider for certification
- trainee joining requirements (kl. 1 / 2), experience and exam
- Advanced first aid (as diver)
- NORSOK Leadership
- DP familiarisation (depending on type of diving and dive system)
- IMCA CPD current
- SD/WEC training, Norwegian Regulation & NORSOK training and familiarisation

New – Norwegian Labour Inspection Authority (NLIA) has launched new competence requirements for Dive Supervision inshore in Norway. PSA and NLIA does not have an agreement for mutual recognition with regards to Dive Supervision nationally nor internationally.

The PSA wants to work with NLIA to clarify level of competence requirements and certificate statuses, including course contents and the course providers.

## Extract

The activities regulations § 21

## § 21 Competence

### Section

Hide 

The responsible party shall ensure that the personnel at all times have the competence necessary to carry out the activities in accordance with the health, safety and environment legislation. In addition, the personnel shall be able to handle hazard and accident situations, cf. [Section 14 of the Management Regulations](#) and [Section 23](#) of these regulations.

Personnel who will carry out bell diving or surface-oriented diving, shall have a valid certificate. The Petroleum Safety Authority Norway appoints suitable enterprises to issue certificates on its behalf. Payment can be charged for issuance of certificates.

Section last changed: 01 January 2011

## Guideline

The requirement relating to ensuring competence implies, inter alia, that requirements are set for the necessary competence, that the competence is verified, and that it is maintained through practice, exercises, training and education.

In order to fulfil the requirement for competence in the area of health, safety and working environment,

a) Chapter 6 of the [NORSOK U-100N](#) standard should be used for **manned underwater operations**,

As regards certificates as mentioned in the second subsection, diving certificates issued by authorities in other countries are accepted if they document that the level of education corresponds with that which is recognised by Norwegian authorities. The reference used by the Petroleum Safety Authority Norway, is the "Diving Industry Personnel Competence Standards", issued by the European Diving Technology Committee (EDTC) in cooperation with the International Marine Contractors Association (IMCA).

MAIN ISSUE 2022

# Capacity and competence – the key to safety

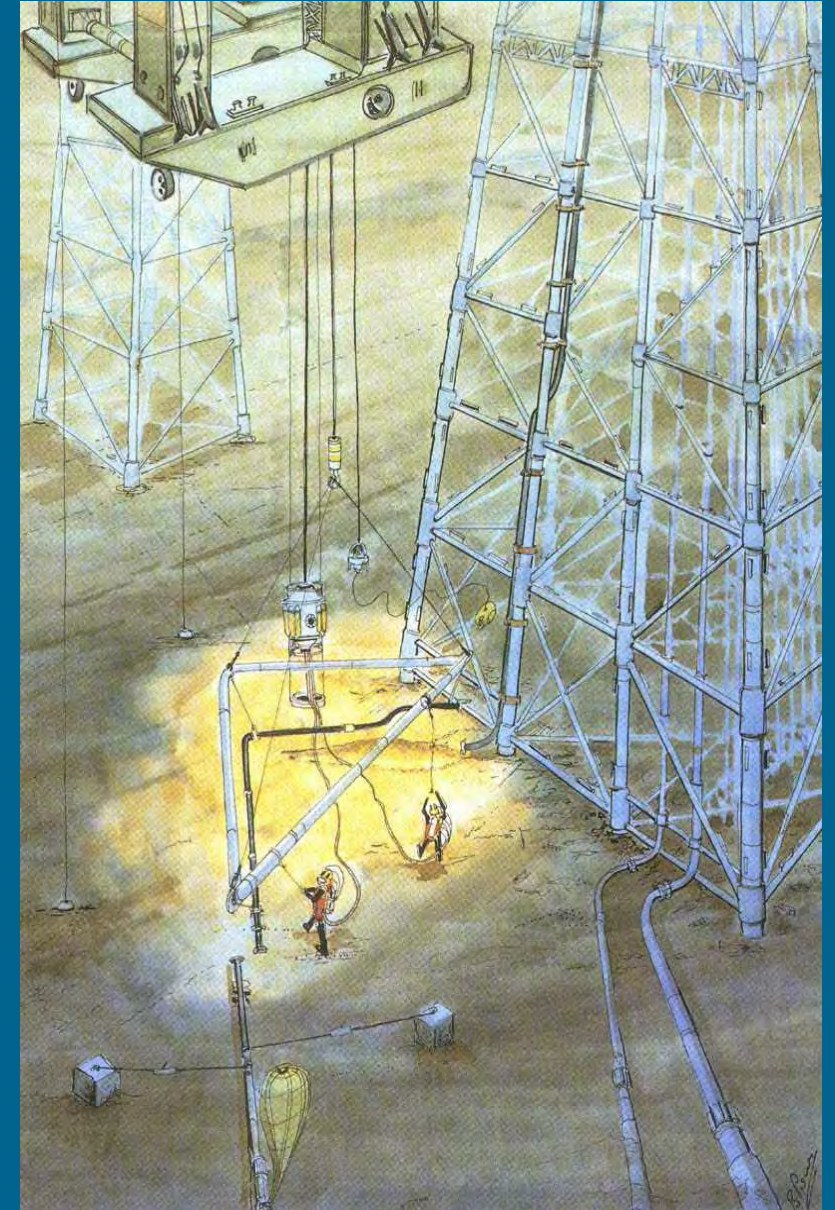


PETROLEUM SAFETY AUTHORITY  
NORWAY



# Focus areas

- **NORSOK U-100 being revised. Many topics of the standard proposed for change.**
  - TUP diving equipment, operations & qualifications – preparation related to new industries offshore
  - Proposed split in bell diver training
- **PSA supports the initiative for common European diving table framework which has been a success on NCS since 1991**
- **Increased focus on Operators competence and management of diving operations through audits**
- **Support, within our remit, to continued diving medical and research competency in the Norwegian diving industry**





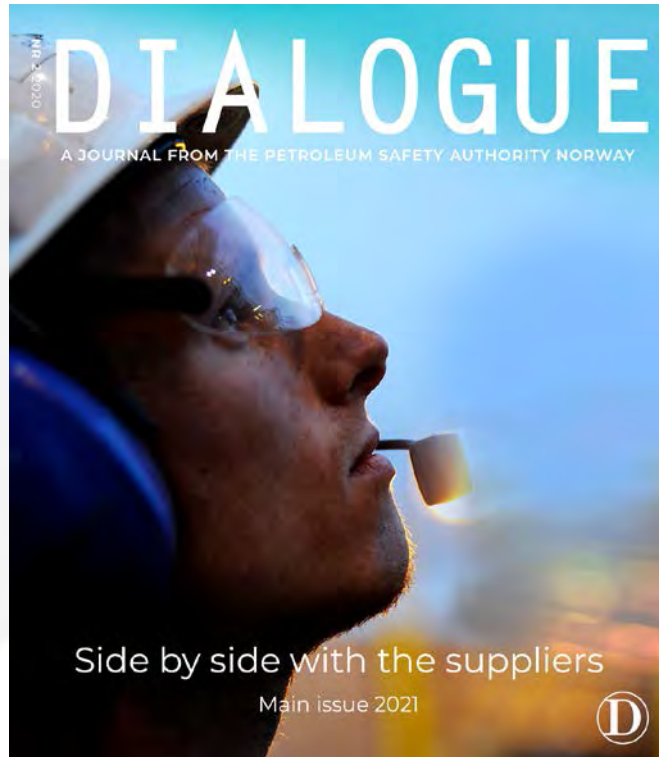
# Focus areas

## PSA Project's

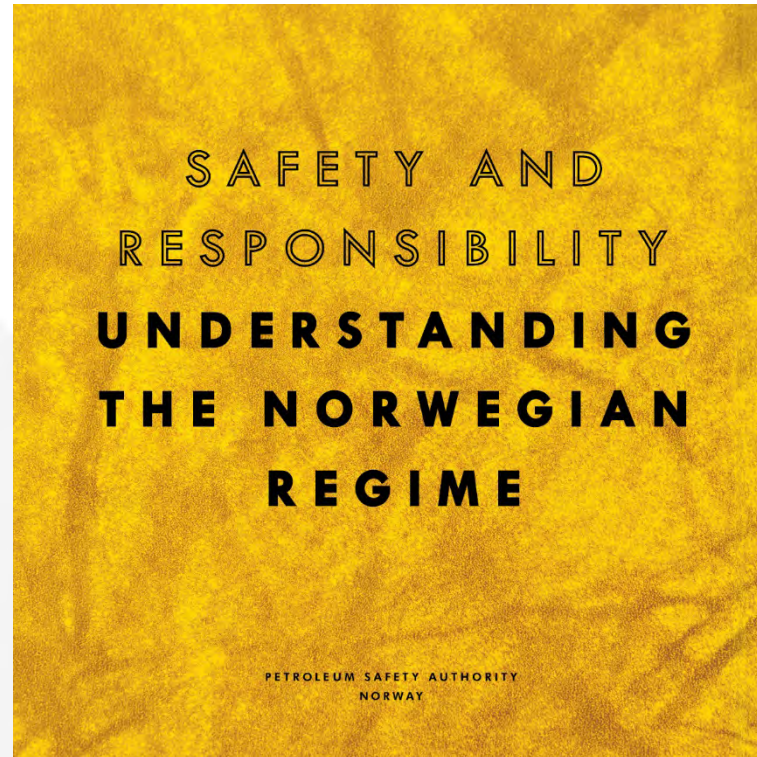
- **Pilot project National Diving Activity and Exposure Register in cooperation with the dive schools**
- **Identifying best Virtual Reality (VR) equipment for use in saturation – HPNS, fatigue, boredom...**



# Publications



Order publications:  
[margrethe.hervik@ptil.no](mailto:margrethe.hervik@ptil.no)



# Films

[Side by side with the suppliers](#)

[How is supervision conducted?](#)

[The RNNP explained in one minute](#)

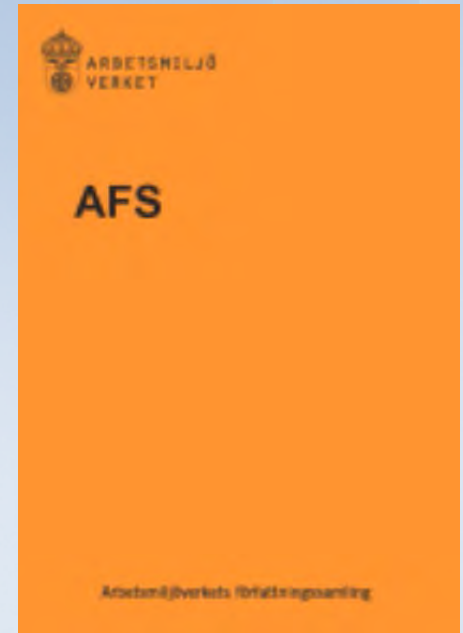
[Stronger spotlight on ICT security](#)



# EDTC Annual Meeting 23 September 2022

## Sweden – National report

- **New frame regulation**
- **A merge of all “specialist” professions**
- **All guidance taken away – leaving big uncertainty**
- **Industry is concerned about size of dive team**



Presented by: Jörn Ryberg

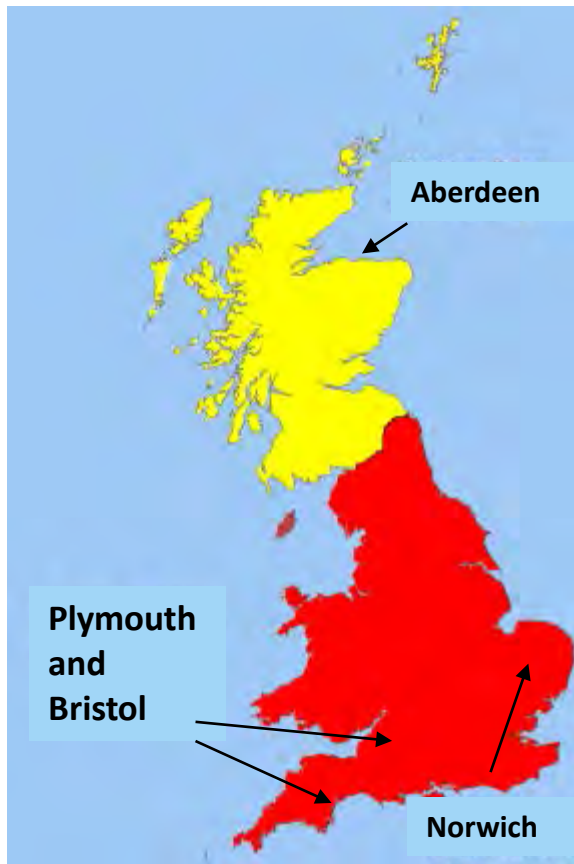
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# UK National Report

EDTC Marseille 2022

Phil Crombie

# Activities in support of training and safety.



- Northern team 1 x Principal Inspector, 2 x offshore (1 vacancy) and 2 x inshore inspectors
- Southern team 1 x Principal Inspector, 3 x offshore and 2 x inland inspectors
- Diving Operations Strategy Team (DOST) 1 x Chief Inspector, 1 x offshore, 1 x inshore inspectors
- POC: [Diving@hse.gov.uk](mailto:Diving@hse.gov.uk)



# What we do

- Advice and guidance
- Inspection: people, equipment, paperwork
- Investigation: incidents and complaints
- Enforcement
- Safety case assessments (offshore)
- Schools and HSE diving qualifications
- Medicals
- Support to other agencies
- Equipment standards



# Diving Group Proactive Activities

- Raise profile/understanding of Diving Regulations, guidance and good working practice
- Visits to diving contractors and clients
- Inspection of commercial diving operations



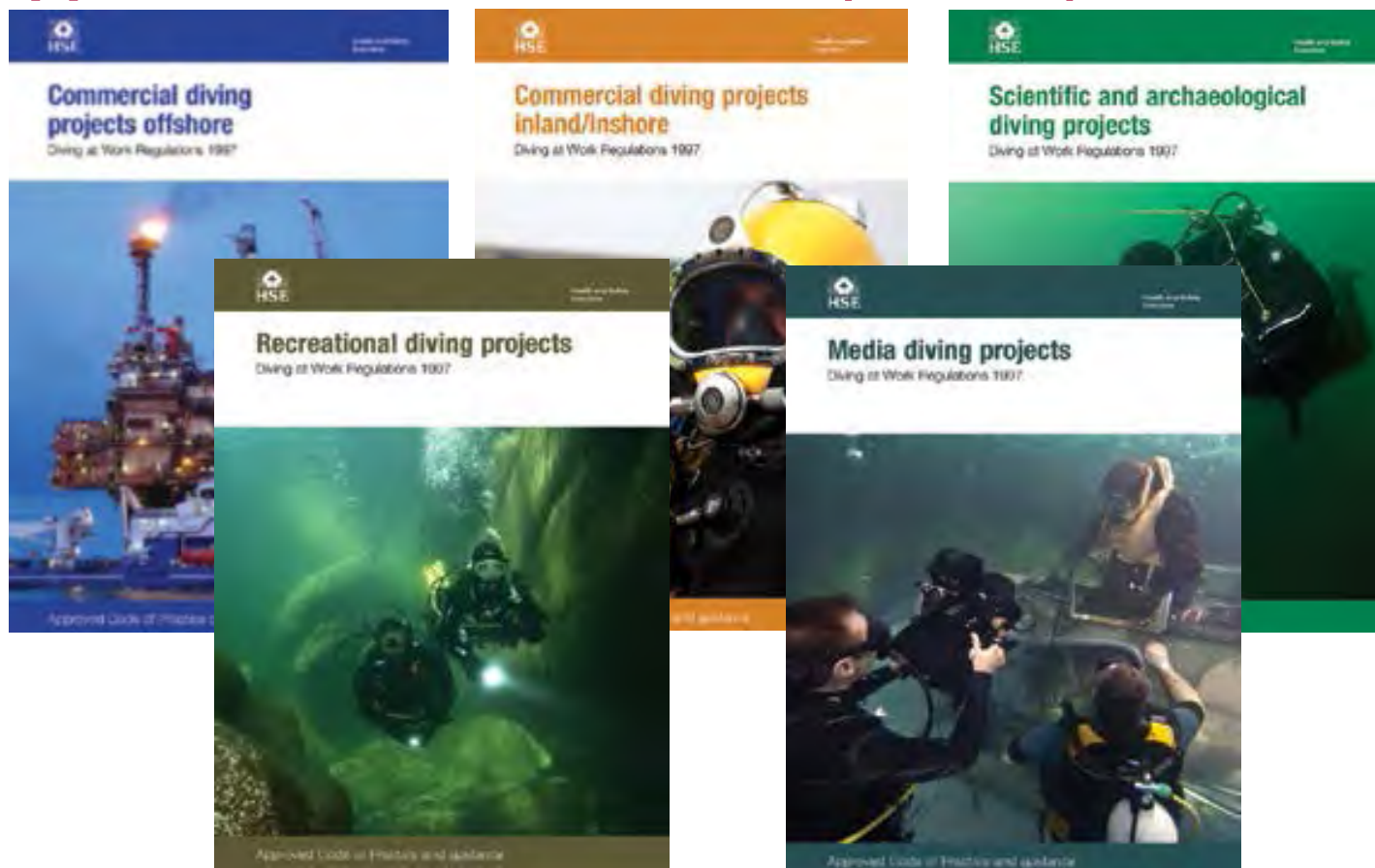
# Diving Group Reactive Activities

- Investigate accidents/ill health (DCI) and dangerous occurrences
- Investigate complaints
- Enforce the regulations



# Supporting Guidance

## Approved Codes of Practice (ACOPs)





# Accidents and Incidents (01.04.21 to 01.04.22)

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- At Work Diving Fatalities – None
- Major Injuries – None
- Forged commercial SCUBA certificate used for media project – now a police matter

# “Over 7 day injuries”

---

## **Inland/Inshore**

DCI x3

Deck crew finger injury deploying downline

## **Scientific diving**

Suspected fracture following fall on rocks carrying diving equipment

## **Offshore**

Health issues x2 – Back injury in bell, Aural Barotrauma

Trapping of finger - rigger

# Dangerous Occurrences

---

## **Police**

Snagged umbilical – standby diver disconnected umbilical and remained with diver during ascent

## **Recreational**

2x Uncontrolled ascents during diver training courses – no injuries

## **Shellfish**

OmniSwivel switch block seized up - Product safety bulletin issued – risk of asphyxiation.

## **Inland/Inshore**

Failure of lifting machinery – “A” Frame for ROV launch failed during trials.

# Dangerous Occurrences - Offshore



## **Closed Bell Issues x4:**

Bell clamp interlock leak.

Bell door mechanism failed.

Bell clamp interlock pin failed to engage.

Storage depth increased from 105m to 125m during trunk equalisation.

**Trapped Umbilical** during dredging operations – structure moved and trapped umbilical. Vessel crane used to lift and free umbilical.

## **Failure of breathing apparatus x4**

Cobra unit – HP hose – contents gauge fell off during preparation.

Water ingress to hat – cable tie found lodged in 2<sup>nd</sup> stage regulator.

Gas escaping from port on bailout 1<sup>st</sup> stage.

Manifold on bailout twin-set failed – contents emptied into bell.



# Complaints

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- Media x1
- Inland/Inshore x6
- Shellfish x2
- Offshore x3
- Recreational x4

# Enforcement notices – IN's

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## **Inland Inshore**

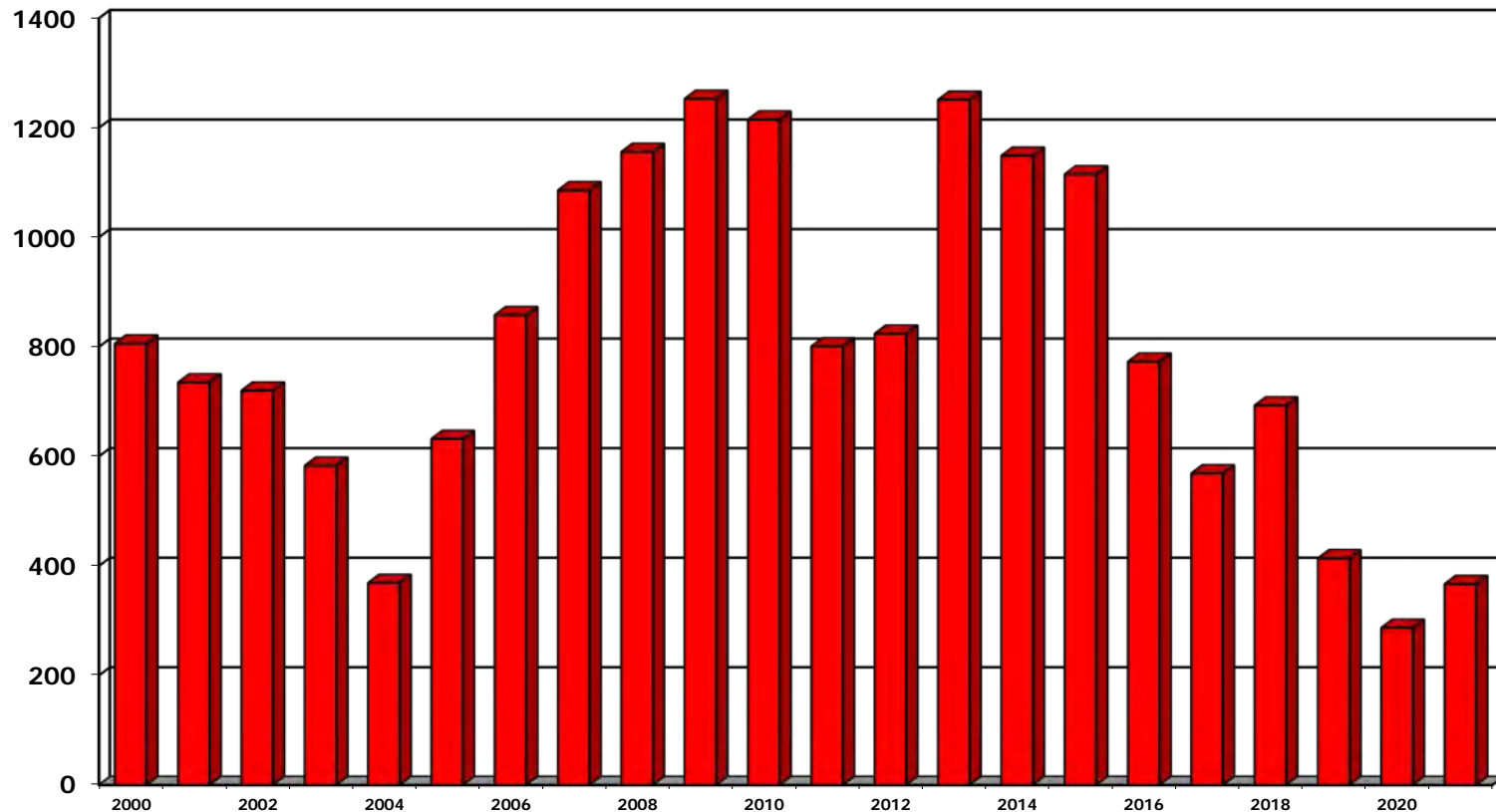
- Poor sanitisation procedures for helmets to prevent spread of COVID
- Inadequate basket for rescuing unconscious diver
- Standby diver not provided
- Insufficient plant and equipment (Recreational kit used)
- SCUBA in nets at fish farms
- 2x insufficient equipment maintenance
- Insufficient emergency O2

## **Recreational**

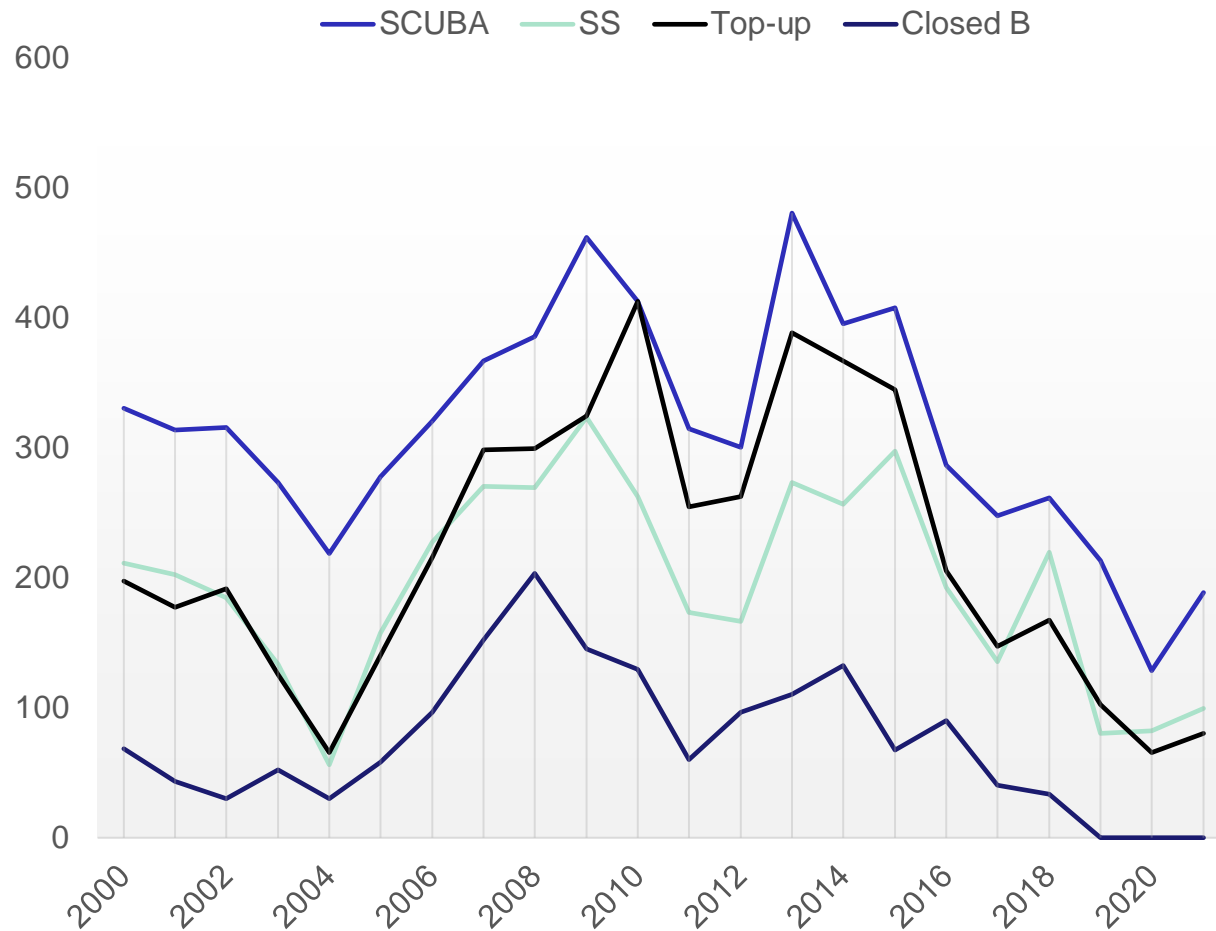
- Team size - No 1<sup>st</sup> aiders or in-water rescue
- No diver recovery device
- No medical
- No risk assessment

# Diver Training Update

Number of certificates issued – 2021 367



# Certificate breakdown





# Changes for the schools.

---

- As of 1<sup>st</sup> Jan 2023 – Extra week to be added to Surface Supply to give more “real world” experience.
- 2x long (shallow) dives per candidate
- Min 90 minutes per dive
- Each candidate to prepare method statement/risk assessment and “supervise” job.
- Simple mid-water task such as replacing a section of chain.

# Changes in Legislation/procedures

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- Shellfish Divers – new guidance
- As of 1<sup>st</sup> November 2022 commercial SCUBA qualification required
- Some allowance for “grandfather rights” but not many applications
- COVID medical advice changed

# Cases update:

- Instructor prosecuted for manslaughter
- PADI Deep Diver course – low on air at depth, went to safety diver's reserve, felt he couldn't breathe
- Team carried out 3 minute safety stop – big question around whether diver was ok at this point.
- Crown court trial
- Jury failed to reach verdict – instructor acquitted
- IPO may have been an issue
- Diver failed to notify of hypertension and had cocaine in his system



Stoney Cove, The National Diving Centre, in Leicestershire (Image: DailyRecord)



## Scuba diver died after instructor 'kept him underwater' for 3-minute 'safety stop'

The dive master, who insisted on a three-minute safety stop at 5m below the surface, denied gross negligent manslaughter in an ongoing trial

By Suzy Gibson & Katie L Wilson, News Reporter  
15:30, 8 Mar 2022



A scuba diver died because his instructor did not take him to the surface quickly enough when he got into difficulties, a jury heard.

Experienced Professional Association of Diving Instructors dive master Nigel Craig is accused of making the wrong decision to proceed with a non-essential three-minute safety stop in Stoney Cove diving centre in Leicester, despite student Richard Stansfield having breathing problems and panicking.

Prosecution James House QC alleged that Craig's conduct resulted in 40-year-old Mr Stansfield suffering a cardiac arrest, which led to his death in hospital later the same day, on Sunday, July 24, 2016, a court heard..

# Recent news

## Diver dies after being injured at Stornoway Harbour

1 September



A diver has died after being injured at Stornoway Harbour on the Isle of Lewis.

The emergency services were alerted to the incident at about 19:15 on Wednesday.

Police Scotland said the 38-year-old man was pronounced dead while he was being taken to Stornoway's Western Isles Hospital.

On 26th August a diver died whilst shellfish diving from the Isle of Islay, Inner Hebrides, Scotland.

On 31st August a diver died whilst working on the Stornoway Deep Water Terminal Project (a new facility to accommodate large cruise ships and marine renewable contracts). The diver was working on the dismantling of the wreck of the SS Portugal.



# The future?

Saturation diver training?

New research project has been launched developing technology for underwater habitation.

## Divers mourn the loss of NDAC

You are here: News & blog / Divers mourn the loss of NDAC

Share this page



One of the UK's most popular inland dive sites, The National Diving and Activity Centre (NDAC), has shut down to the public.

# Questions?

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International Marine Contractors Association

*Improving performance in the marine contracting industry*

# Industry Overview/Near Shore Diving Guidance

Presenter

Peter Sieniewicz

Venue

Marseille, France

Date

23 September 2022

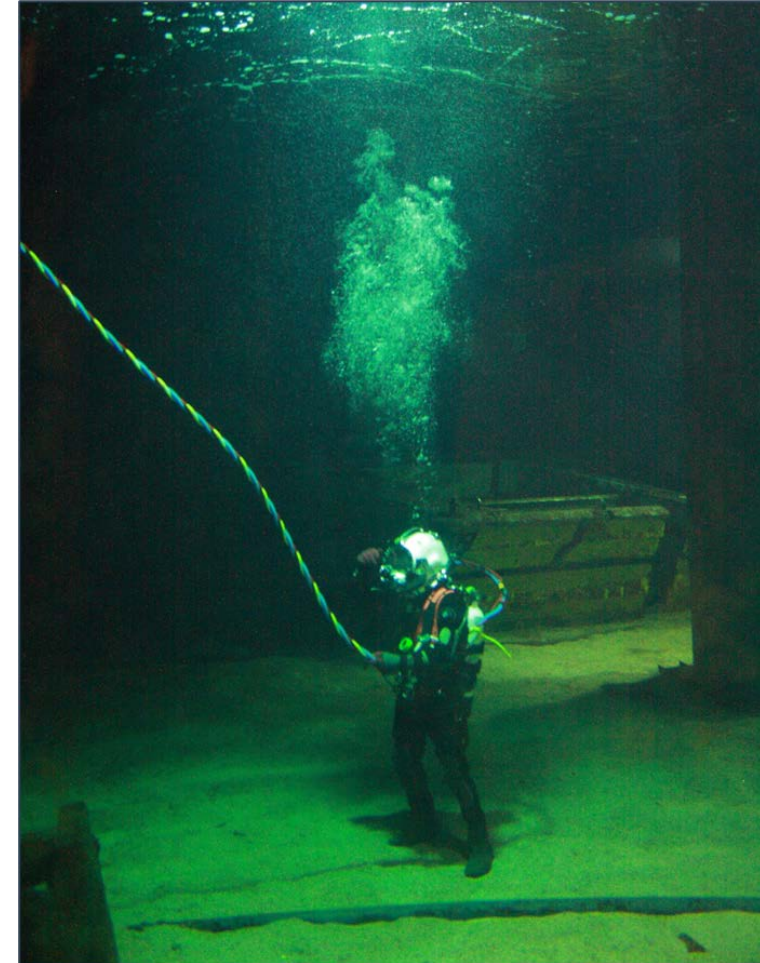


# Industry Update



# IMCA Update

- IMCA is seeing a very large increase in work activity in the oil and gas sector.
- A new market is also emerging, Windfarms. This is also drawing on resource.
- We are now seeing a shortage of diving and marine personnel in all disciplines
- Off particular concern is a shortage of offshore supervisors which has become critical in some areas.
- IMCA has started a mandatory CPD Scheme for all Supervisors.

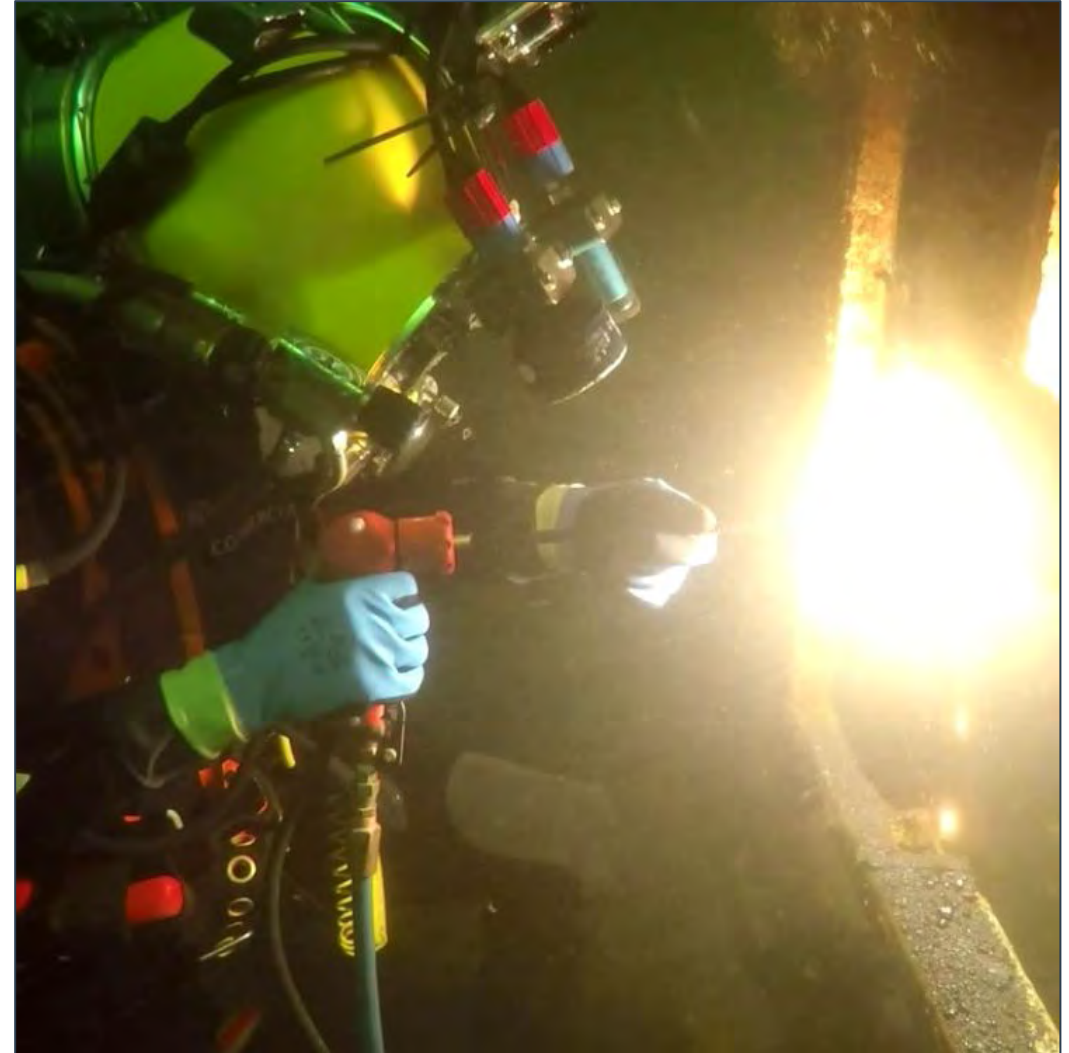




# IMCA Nearshore Guidance

# IMCA ICoP for Marine Diving Operations

- IMCA has started work on expanding the work covered by its diving ICoP (IMCA D 014).
- Instead of confining the guidance to offshore diving, the Code could be expanded to cover:
  - marine energy diving operations (oil & gas and renewables); or even
  - all marine diving (nearshore) carried out by IMCA Members.



# Why?

1. It is difficult to persuade renewable client companies that diving projects on wind farms under construction very close to shore should be treated as offshore diving projects i.e. planned, managed, and conducted the D 014 way.

The expanded D 014 will be a better fit for nearshore renewable work.

2. Many contractor Members of the IMCA Diving are involved in delivering inshore diving projects as well as offshore diving projects.

An expanded Code will mean there is no ambiguity about the acceptability of diving one way offshore and another way inshore. IMCA members will be clear they must always dive the D 014 way everywhere.

3. Some IMCA Members sub-contract the services of inshore diving contractors. These Members will be able to use the expanded D 014 as a benchmark for sub-contracted diving contractors to meet.



# Proposed D 014 Expansion

- Final decision not yet made.
- Issues to consider:
  - Extent of expansion;  
Marine Surveys, EOD, civil engineering construction, salvage?
  - Chamber location in an inshore setting;
  - Acceptable diver qualifications for marine energy and for inshore projects.
- Please have a think about this and let us know if have any thoughts.



Improving performance in the  
marine contracting industry

