MINUTES of EDTC 2016 TALLINN MEETING

Place: Nordic Hotel Forum, Nordic Hotels OÜ, Viru väljak 3, 10111 Tallinn, ESTONIA
Date: 06-08 October 2016

AGENDA

6th October 2016, Thursday
17:00-18:00 EDTC Board Meeting
Nordic Hotel Forum
19:30-22:00 DINNER
Beer Garden Restaurant

7th October 2016, Friday
09:30-09:35 Welcome
Chairman
09:35-09:45 Introductory presentation by Host Country and Safety and Security Information
Host
09:45-10:15 EDTC Admin Matters
List of Apologies
EDTC membership Summary
Secretary
10:15-10:30 Chairman's report
Summary of actions from 2015 Annual Meeting
Chairman
10:30-11:00 COFFEE BREAK
11:00-11:20 Reports from the Medical Subcommittee
Jurg Wendling
11:20-11:40 Reports from workgroups
"Cooperation of EDTC with EU, SLIC Machex Meeting"
"Updating Competence Documents"
Jörn Ryberg
Olav Hauso
11:40-12:00 Discussion and Decision about future workgroup
Chairman
12:00-13:00 LUNCH
13:00-15:30 National reports
ESTONIA
LATVIA
UK
GERMANY
IDRF
SWITZERLAND
HOLLAND
IMCA
PORTUGAL
TURKEY
CZECH REPUBLIC
NORWAY
Members
Aleksei Usanov
Andrejs Cernavskis
Chris Sherman
Claus Mayer
David Parkes
Jurg Wendling
Leo Lagarde
Peter D Sieniewicz
Rui M. Z. Madeira
Sahih Murat Egi
Ondrej Brozka
Olav Hauso

15:30-16:00 Elections
For the positions of Jörn Ryberg & Pasquale Longobardi, Chairman for the new Board
All
16:00-16:30 Any other business, Next Meeting, Venue and Date
All
16:30-17:00 Closing remarks
Chairman
20:00-23:00 DINNER
Olde Hansa Restaurant

8th October 2016, Saturday
11:00-13:00 Visit to Maritime Museum, Seaplane Harbour
All
## THOSE PRESENT

### EXECUTIVE BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>Jörn Ryberg</td>
<td>SWEDEN</td>
<td>Chairman</td>
</tr>
<tr>
<td>Akin Savas Toklu</td>
<td>TURKEY</td>
<td>Secretary</td>
</tr>
<tr>
<td>Chris Sherman</td>
<td>UK</td>
<td>Treasurer</td>
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<tr>
<td>Jean Lelievre</td>
<td>FRANCE</td>
<td>Member Executive Board</td>
</tr>
<tr>
<td>Jurg Wendling</td>
<td>SWITZERLAND</td>
<td>Member Executive Board</td>
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### HOST

- Aleksei Usanov    | Estonia      |
- Margo Purru       | Estonia      |
- Victor Burovenko  | Estonia      |

### MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>COUNTRY</th>
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<tbody>
<tr>
<td>Akin Savas Toklu</td>
<td>Turkey</td>
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<tr>
<td>Aleksei Usanov</td>
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<td>Andrejs Cernavskis</td>
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<td>Chris Sherman</td>
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<td>Claus Mayer</td>
<td>Germany</td>
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<td>David Parkes</td>
<td>IDRF</td>
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<td>Frank Werner</td>
<td>Germany</td>
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<td>Grzegorz Bernaciak</td>
<td>Poland</td>
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<td>Heer Martin</td>
<td>Norway</td>
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<td>Jean Lelievre</td>
<td>France</td>
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<td>Jorn Ryberg</td>
<td>Sweden</td>
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<td>Jurg Wendling</td>
<td>Switzerland</td>
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<td>Knud-Helge Andreasen</td>
<td>Denmark</td>
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<td>Leo Lagarde</td>
<td>Holland</td>
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<tr>
<td>Margo Purru</td>
<td>Estonia</td>
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<tr>
<td>Olav Hauso</td>
<td>Norway</td>
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<tr>
<td>Peter D Sieniewicz</td>
<td>IMCA</td>
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<tr>
<td>Peter Ric-Hansen</td>
<td>Denmark</td>
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<tr>
<td>Rob Gatt</td>
<td>IDRF</td>
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<tr>
<td>Rui Manuel Zambujo Madeira</td>
<td>Portugal</td>
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<tr>
<td>Salih Murat Egi</td>
<td>Turkey</td>
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<td>Vanden Eede Roland</td>
<td>Belgium</td>
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<tr>
<td>Victor Burovenko</td>
<td>Estonia</td>
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<tr>
<td>Zuzana Andrtova (on behalf of Petr Andrt)</td>
<td>Czech Republic</td>
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GUESTS and OBSERVERS

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Allan Ollema</td>
<td>Estonia</td>
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<tr>
<td>Kaido Pähn</td>
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<tr>
<td>Tago Moldau</td>
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<tr>
<td>Bjarne Sandvik</td>
<td>Norway</td>
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<td>Andrejs Cernavskis</td>
<td>Latvia</td>
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<tr>
<td>Juris Sendelevs</td>
<td>Latvia</td>
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<tr>
<td>Juris Timofejevs</td>
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<td>Vitalijs Cernavskis</td>
<td>Latvia</td>
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<tr>
<td>Maksim Lesins</td>
<td>Latvia</td>
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<td>Ondrej Brozka</td>
<td>Czech Republic</td>
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APOLOGIES FOR ABSENCE

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Alan Bax</td>
<td>IDSA</td>
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<tr>
<td>Carlos Barosa</td>
<td>Portugal</td>
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<td>Daniel Larsson</td>
<td>Sweden</td>
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<td>Eric Albier</td>
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<td>Jacek Kot</td>
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<td>Kurt Machetanz</td>
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<td>Mats Hagberg</td>
<td>Sweden</td>
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<tr>
<td>Pasquale Longobardi</td>
<td>Italy</td>
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<tr>
<td>Petr Andrt</td>
<td>Czech Republic</td>
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<tr>
<td>Pavel Macura</td>
<td>Czech Republic</td>
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<tr>
<td>Philip BRYSON</td>
<td>UK</td>
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<tr>
<td>Richard Benzie</td>
<td>IMCA</td>
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<td>Roger O’ Kane</td>
<td>UK</td>
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<tr>
<td>Tomi Wuorima</td>
<td>Finland</td>
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RESIGNMENT FROM MEMBERSHIP

<table>
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<tr>
<th>Name</th>
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<tr>
<td>Thierry Charlier</td>
<td>BELGIUM</td>
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<tr>
<td>Staffan Littorin</td>
<td>SWEDEN</td>
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After meeting note: Staffan Littorin will stay until further notice as the governmental delegate

WELCOME ADDRESS

The Chairman Jörn Ryberg opened the EDTC 2016 meeting welcoming the members. He thanked Aleksei Usanov and his colleagues for hosting the 2016 EDTC Annual Meeting. Aleksei Usanov informed the members about the city, facilities, safety and security of the meeting venue. He also gave information about the day’s program and activities planned during the meeting.

EDTC ADMIN MATTERS

Apologies: Secretary indicated the apologies had been received as stated above.

EDTC Membership Summary: Secretary reported that Staffan Littorin from SWEDEN, Thierry Charlier from Belgium were resigned. He added the new members as listed below;
Secretary informed the members about the current number of member countries, number of the members and vacant positions as below;

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>The number of member countries</td>
<td>22</td>
</tr>
<tr>
<td>Expected number of members</td>
<td>88</td>
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<tr>
<td>Current number of members</td>
<td>58</td>
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<tr>
<td>Government</td>
<td>11</td>
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<td>Industry</td>
<td>20</td>
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<td>Medical</td>
<td>19</td>
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<tr>
<td>Union</td>
<td>8</td>
</tr>
<tr>
<td>Vacant positions</td>
<td>30</td>
</tr>
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</table>

He also gave information about the passive members who hasn’t been participating to last five EDTC Annual Meetings. He indicated the vacant membership categories from member countries by asking the current members to suggest new members from their country. Secretary emphasized that there are still unpaid membership fees for 2015 and 2016. He added that only 43 % and 34 % of members have paid membership fees for 2015 and 2016 respectively. Secretary reminded that according to the By Law every year there are two members to be elected or re-elected in EDTC Board. He noted that since Chris Sherman leaving EDTC, there will be two positions for the election (positions of Jurg Wendling and Chris Sherman). He announced that the nominations for those positions are Jürg Wendling and Phil Crombie. He also added that Jörn Ryberg was nominated as chairman for the 2017.

**CHAIRMAN’S REPORT**

The Chairman started his report by thanking the host again for the organizing EDTC 2016 Meeting in Tallinn. Then he summarised EDTC profile, aims and objectives. He continued by giving information about the achievements done to date under the titles of undertakings, achievements and issued documents. He also mentioned about European Framework Directive 89/391/EEC. He continued mentioning about the status of commercial diving in Europe by giving some numbers of fatal diving accidents (Please see Annex 1). He asked Chris Sherman to inform the members about the fatal accidents rates. Chris Sherman has given information about the diving accidents occurred between 1996 and 2010. Then Jörn Ryberg talked about international commercial diving companies and internationally mobile employees, mentioning about the difficulties arose from large variety of national regulations and free movement of labor. He gave information about the meeting he joined; SLIC Machex Meeting, that was held on 2-3 March 2016, in Luxemburg, after giving information about The Unit of Health, Safety & Hygiene at Work (HSHW) and Senior Labor Inspectors Committee (SLIC). The questions of “How can an enterprise select a particular diving contractor and on what formal basis?” and “How do enforcement authorities perform an inspection at a dive site?” were posed to EDTC by HSHW. HSHW highlighted the need guidance documents. The chairman informed the members about the update of the PROFESSIONAL QUALIFICATIONS DIRECTIVE (2005/36/EC). He added that the profession of diving was stated as recognized professional qualification in the Ordinance (2016: 157), but hadn’t been notified to the European Commission and entered in the databases yet. The chairman added that during the SLIC Machex Meeting, it was stated by HSHW that they see good possibilities for co-operation and proposed that EDTC could bring forward a “package” for the next steps. Please click here for the Annex 1.
REPORT FROM THE MEDICAL SUBCOMMITTEE

Jurg Wendling reported that EDTC Medical Subcommittee made a meeting during the European Underwater and Baromedical Society Meeting in Geneva on 15.09.2016. He noted that 10 Medical EDTC delegates and guests from Australia, South Africa, USA, European Committee of Hyperbaric Medicine and Pisa participated to the meeting. The topics discussed in Geneva EDTC MedSubCom were noted as European Diving Medical Databank EDMD, the revision of the diving medical education standards and revision of fitness to dive standards. For the full text and outlines of the presentation of Report from the Medical Subcommittee can be reached at Annex 2.

REPORTS FROM WORKGROUPS

Jörn Ryberg mentioned about cooperation of EDTC with EU and SLIC Machex Meeting again as he included in chairman's report. He repeated that EDTC needed more volunteers to be involved in the three workgroups mentioned.

Olav Hauso updated the work of the workgroup that was responsible for updating the personnel competence standards. He gave detail about the work context after reminding the members included in the workgroup (See the Annex 3 for detail). He noted that the document issued in 2003 was still a high level standard/guidance and large part of it was still valid. He described the work group as a "solo work group", but supported by involvement and commenting from HSE/UK. He added late comments had come from IDSA and Italy. He stated that the references to IMCA documents were used extensively. Please see Annex 3 for more detail.

DISCUSSION AND DECISION ABOUT FUTURE WORKGROUPS

Jörn Ryberg has repeated the importance of the tasks of three workgroups previously announced that should be formed as listed below;

**Workgroup 1:** To do an inventory: The objective is to research amongst existing rules/regulations/guidance to avoid re-inventing things and to make cross-references allowing to find the level that can be accepted by us all.

**Workgroup 2:** Create a guidance document: The objective is to create an achievable standard and information package (this can be complementary to the existing workgroup on competence standard),

**Workgroup 3:** To realize the document with EDTC as forum, by inviting SLIC members and/or others (to organize the workshop).

Jörn Ryberg requested members to give their names to the secretary, if there is anyone wish to be volunteer in these workgroups. (For the detail please click here: Annex 1)

NATIONAL REPORTS

**ESTONIA (Alexei Usanov & Victor Burovenko)**

Aleksei Usanov gave brief information about the organizations contributed to the organization of EDTC 2016 Meeting; Baltic Commercial Diving Association, Estonian Underwater Works Producers Association and GT Corporation SE. He reported that Estonian Underwater Works Producers Association was established on 24.04.2012. The organization included 5 diving companies totally having 10 equipped diving stations and about 35 professional divers. He gave information about the capability of the organization and described the main diving works they have been performing. He finally detailed the task and goal of the organization as seen Annex 4. After Aleksei Usanov, Victor Burovenko gave information about the works performed by GT
Corporation SE such as surveys, inspections, repair and restorations, corrosion protections, constructions and reinforcements. Detail can be seen in Annex 4 and Annex 5.

LATVIA (Andrejs Cernavskis)
Andrejs Cernavskis gave information about Latvian Diving Federation. He described the goal and the tasks as; to unite and register all divers of Latvia, to represent divers on federal level in international arena, to work with governmental institutions to set up necessary legislation. He added the detail about the project of Industrial Diving School which will be completed in two years. Please see Annex 6 for more detail.

UK (Chris Sherman)
Chris Sherman gave information about the state of diving industry in UK. He noted that there was a significant downturn in offshore diving industry. He reported two diving fatalities occurred in 2016 which are still under investigation, and 31 diving incidents from 2015/2015. He detailed two prosecutions and one enforcement notice. He added that there were 5 revised Codes of Practice (ACOPs) published in December 2014, that are downloadable at www.hse.gov.uk/diving/. He gave information about new medical standards (MA1) and diving information sheets under revision. He finished his presentation by giving some statistical data about fatalities and major injuries occurred since 1996, and about distribution of divers according to the sector. Detail can be seen in Annex 7.

GERMANY (Claus Mayer)
Claus Mayer mentioned about the cooperation (The Economy Support Institute) between Hyperbaric Training Centre Germany and Hyperbaric Training Centre Austria. He added that in these centres training will be carried out for certifications of Professional Commercial Diver, Hyperbaric Supervisor (Compressed Air and Diving), Hyperbaric Technician, Lock Attendant / Chamber Operator, First Aider, Hyperbaric Welder, Hyperbaric Engineer, Research Diver and Engineer Diver. He finished his presentation by announcing that The Economy Support Institute invited EDTC for the annual meeting in 2017 to come to Linz-Austria. Please see the presentation file in Annex 8.

IDRF (David Parkes)
David Parkes gave information about Diver Certification Board of Canada (DCBC). He described the mission of the Board as providing a national Canadian certification scheme for occupational diving and ROV personnel, based on a single national standard of competency, in order to enhance safety by demonstrating personal competency. He showed the number of different certificates in every year between 2005 and 2015. He also gave the number of different certificates issued in 2016. The board accredited 15 schools. He noted that DCBC certification and accreditation based on Canadian Standards Association Competency & Training Standards and added diving operations guided by the “Occupational Safety Code for Diving Operations”. He reported that eight provinces have adopted the competency standard into regulation (commercial diving community input into regulations) and four provinces have adopted safety standard for diving operations. He finished his presentation showing homepage of DCBC and announced Canadian Underwater Conference and Exhibition that will be held on 26-28 March 2017. Details are in Annex 9.

SWITZERLAND (Jurg Wendling)
Jurg Wendling mentioned about New Swiss diving regulations and saturation diving operation in the Swiss alps. The full text of the presentation is included in Annex 10.

HOLLAND (Leo Lagarde)
Leo Lagarde informed the members briefly that IDSA certified by ISO 9001-2015, and he added that certification process is also finished for the Dutch certification body.
**IMCA (Peter D Sieniewicz)**

Peter D Sieniewicz reported that all the IMCA/AODC Guidance is currently being reviewed. He explained the revision box in the documents together with a feedback button that allowed collecting amendments for the future. He added that when there is a change in documents or a new document, it is notified on monthly basis through IMCA’s newsletter. He has given the list of documents currently being revised (please see Annex 11). He noted that a revision in Divers’ Log Books was proposed and detailed the relevant parts. It was also stated that Diver Medic Course syllabus is being revised, but there will be no radical changes. Syllabus would be altered slightly, updated and made more international. Peter D. Sieniewicz gave some statistical information about dives age and IMCA supervisor schema. He noted that average age is increasing. He mentioned about the work on glossary of diving term being done by ADCI/IOGP/IMCA. The drafted frame of the glossary was shown. He finished his presentation announcing Diving System DESIGN Seminar and Workshop, to be held in Aberdeen on the 9th and 10th of November 2016. The detail about the presentation can be reached at Annex 11.

**PORTUGAL (Rui M. Z. Madeira)**

Rui M. Z. Madeira made a presentation on Portuguese legislation on professional diving. The first regulations were issued on 15th January 1994 and haven’t been changed until 2014. On 1st September 2014 a new law was approved with a new set of rules for professional diving activities and professional divers. He described the categories of divers and competences included in this regulation. He gave information about Portuguese Navy Diving School. He listed qualifications for the classes of inland/inshore diving approved by HSE. He stated that National Maritime Authority is the entity that recognize and certificate qualification on professional diving. He described the structure of Professional Diving Technical Commission that works on conception, coordination, actualization and control of politics and technical guidance in matters of professional diving. He also gave information about the ordinance issued on 13th May 2015, that regulates diving training. He showed the home page of the Maritime Authority (named Capitania On-Line) and examples for cards of certification. He finished his presentation by comparing minimum requirements for diving team and requirements for hyperbaric chamber in the regulation issued in 1994 and 2014. Detail about the presentation can be reached at Annex 12.

**TURKEY (Salih Murat Egi)**

Salih Murat Egi reported that the supervisor certification issue in Turkey was solved. Minimum 10 years of experience and harbor master approved log of dives as a proof of competency are the requirements. He informed the members that Association of Turkish Diving Contractors has been founded an additional organization to the Chamber of Marine Commerce, division of “Underwater and Harbor construction” group. He added that 70% of contractors joined to the organization. He reported that DAN Europe Turkey is offering custom tailored Insurance programs for commercial divers. He finalized his presentation by giving information about project CADDY. Details are included in Annex 13.

**CZECH REPUBLIC (Ondrej Brozka & Zuzana Andrtova)**

Ondrej Brozka made a presentation on legislative progression in professional diving business in the Czech Republic. He stated that diving classified as hazardous occupation until 1990 and there was no regulation till then. In 1990 commercial diving legislatively classified as “free trade” that means diving for business is free, but any person who physically perform diving work must be professionally and medically qualified. He informed the members about Czech Professional Divers Association that was merged in 1993 as an association of businessmen, instructors and professional workers in commercial diving. The changes done in legislation in 2006, for a working divers it became necessary to create the appropriate skills and expertise for working diving. The information about qualification course for the professional diver was given (see annex 14). He detailed the evaluation standard/criteria of qualification. Zuzana Andrtova continued the presentation by giving National Report of Medical Subcommittee EDTC-Czech Republic on behalf of Dr.Pavel Macura. Detail about Czech Republic national report can be reached in Annex 14.
**ELECTIONS**

The Secretary stated that there were two nominations for the positions of Chris Sherman from UK and Jürg Wendling from Switzerland. The nominations for these positions were Phil Crombie and Jürg Wendling. These two members were elected for the Board. Jörn Ryberg was nominated as chairman and he was reappointed as chairman.

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

The host country of the next EDCT meeting was announced as Austria (Linz). The exact date and the venue would be announced later.

Secretary has announced the volunteers for the three workgroups as follows:

<table>
<thead>
<tr>
<th>NAME</th>
<th>WORKGROUP</th>
<th>COUNTRY</th>
</tr>
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<tbody>
<tr>
<td>Martin Heer</td>
<td>2</td>
<td>Norway</td>
</tr>
<tr>
<td>Jürg Wendling</td>
<td>3&amp;2</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Roland Vanden Eede</td>
<td>3</td>
<td>Belgium</td>
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<td>Pasquale Longobardi</td>
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<td>Eric Albier</td>
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<td>Murat Egi</td>
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<tr>
<td>Jörn Ryberg</td>
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<tr>
<td>Veikko Horm</td>
<td>2</td>
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ACKNOWLEDGEMENTS & CLOSING REMARKS

The Board and Members thanked to host for organizing EDTC 2016. Aleksei Usanov informed the member about the visit to Maritime Museum, Seaplane Harbour and asked the members to be ready at 11:00 to be transferred to the Maritime Museum. The Chairman said he hoped to meet all the members next year in Linz.

Report compiled by Akin S. Toklu
The year that has passed

1. EDTC Profile - Aims & Objectives
2. Achievements to date
3. European Framework and SLIC
4. European Commercial Diving
5. Organisations and Responsibilities
6. Diversity
7. Lack of co-ordination
8. The way forward
1. European Diving Technology Committee (EDTC) Profile


Purpose

- Safer Commercial Diving,
- Through Unity, Strength (Securitas per unitatem).

Representation

- Any country within geographical Europe.
- Medical,
- Industry,
- Government,
- Labour Union.

EDTC reach its aims by

- Independent European forum,
- Discussions,
- Standards,
- Guidance.
2. EDTC: Achievements to date

Undertakings
• Independent European forum,
• Fitness to Dive standard,
• If applicable - recommend harmonization.

Achievements
• Pro-active approach,
• Spreading knowledge and guidance,
• Workgroups with great commitment.

Recently Issued Documents
• Personnel Competence Standards (ongoing)
• Training Objectives for a Diving Medicine Physician (2013)

Article 6 of the Framework Directive, states
• The Employer - steps to comply with the "framework“ ,
• The worker - immediately to inform,
• Article 6 - a clear statement,
• View of EDTC - inadequate understanding.

Directive vs National Legislation
• Implemented into national law in the Member States,
• View of EDTC - raising awareness,
• Significant value
  – to understand the issues surrounding
    Commercial Diving activities,
• Enabling better understanding ,
• Specifics in this sector – developing appropriate enforcement regime.

“Its is absolutely clear that the diving community needs to help themselves.”
4. European Commercial Diving

European Commercial diving
• Regulated and industrial profession (Directive 2005/36/EC),
• Demanding systems in many countries,
• Some - very basic or don’t at all.

Commercial diving has many differences from recreational diving which it often is compared with and should therefore not be compared at all with the sector of “sports diving”.

The diving industry – Expensive knowledge
• Diving Industry - Statistics of fatal accidents,
• Little Governmental information,
• Collected by voluntary individuals,
• 1960 – 1999 – 815 fatal accidents occurred,
• 2000 – 2015 - 648 fatal accidents occurred.

EDTC state that by being active within the forum EDTC gives, guidance can be spread in a very quick way even if differences exist amongst the European countries.

The implementation is also enabled in very fast way by the “power of free will”.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatal Accidents</th>
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<tbody>
<tr>
<td>2000</td>
<td>39</td>
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<td>2005</td>
<td>36</td>
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<tr>
<td>2006</td>
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<tr>
<td>2007</td>
<td>43</td>
</tr>
<tr>
<td>2008</td>
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<td>2009</td>
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<td>2010</td>
<td>70</td>
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<td>2011</td>
<td>77</td>
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<td>2012</td>
<td>65</td>
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<tr>
<td>2013</td>
<td>42</td>
</tr>
<tr>
<td>2014</td>
<td>44</td>
</tr>
<tr>
<td>2015</td>
<td>Not known</td>
</tr>
</tbody>
</table>
### 4. Comparison of Fatal Accident Rates

(The statistics are based on fatal commercial diving accidents in the UK between 1996 and 2010)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Fatal Accidents per 100,000 Workers per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Workers in UK</td>
<td>0.5</td>
</tr>
<tr>
<td>Service Sector</td>
<td>0.3</td>
</tr>
<tr>
<td>Construction</td>
<td>2</td>
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<td>Extractive Industries</td>
<td>4</td>
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<tr>
<td>Agriculture</td>
<td>8</td>
</tr>
<tr>
<td>Offshore Diving</td>
<td>20 - 30</td>
</tr>
<tr>
<td>Inshore Diving</td>
<td>30 – 60</td>
</tr>
</tbody>
</table>

Fatal accidents per 100,000 workers per year

Statistics provided by governmental - HSE UK
4. European Commercial Diving

International Commercial Diving Companies and internationally mobile employees

- Large variety of national regulations,
- Standards - guidance to assure safe operations,
- Overall goal of the free movement of labor
- Employee mobility represents a huge challenge.

The Unit of Health, Safety & Hygiene at Work (HSHW) and the Commercial Diving Sector

- European interface – HSHW - Senior Labor Inspectors Committee (SLIC)
- Commercial Diving – on the agenda sometimes,
- Commercial Diving Operations - unique combination of HS issues,
- Unforgiving environment.

HSHW has posed the following questions to EDTC:

- How can an enterprise select a particular diving contractor and on what formal basis?
- How do enforcement authorities perform an inspection at a dive site?
Key Point
Actions and activities of various personnel can affect the safety of diving operations even though they are not members of the dive team.

Organisation types that might inherit responsibilities within a diving project

- Operator or owner (client),
- Principal Contractor,
- Appointed on-site representatives,
- Sub-contractors,
- Installation Manager,
- Vessels or floating structures (Masters),
6. Diversity - Diving operations performed by internationally mobile companies

Commitment grows from many individuals

- Differences within Europe,
- More work will be required within this sector,
- Industry documents that promote “good practice”,
- Further awareness - discussions.

EDTC

- Provide an independent forum,
- Prestige free discussions,
- Common goal - promoting diving as a safe profession.
- The active forum - bridge over the existing gap.

EDTC offers any member this possibility of understanding the different ways to make things happen within the future.

All parties need to work forwards, however to make this happen the community of divers and companies must rely on themselves to make the changes happen – not to ask anyone else or authorities to make the job – the power of free will enables very fast local/national implementation.
The basic challenges as described by the Unit of Health, safety and hygiene at work (HSHW):

1) How can an enterprise select a particular diving contractor and on what formal basis?
2) How do enforcement authorities perform and inspection at a dive site?

The SLIC meeting highlighted the fact that there is huge a lack of knowledge about Diving as a profession at EU level within the SLIC. The conclusion is quite clear; - There are many parties that provide guidance, all with very good intention, and there is "no need for reinventing the wheel but need for co-ordination"

EDTC - the bridging factor and co-ordination
EDTC offers any member the possibility of understanding and the different ways to make things happen within the future.

EDTC can continue in its current format, bridging the existing gap between authorities, organizations and individuals and thereby provide the independent forum for us all.

By participating within the announced workgroups all members are able to contribute, as common Europeans, to co-operate to make diving as a profession safe and prosperous.
Update of the PROFESSIONAL QUALIFICATIONS DIRECTIVE (2005/36/EC)

Professional Diving is since may 2016 a protected profession within Europe. Although the so called “professional card” is only available for certain professions, not too divers. Nor are there any EU common training provisions for divers. There also seems to be some scope to require some validation/approval of knowledge in a particular occupation, the exact extent to which is unclear. However, it must be regulated in the domestic legislation which are related to the profession.

The profession of Diving is indeed stated in the Ordinance (2016: 157) on the recognition of professional qualifications but has not been notified to the European Commission and entered in the databases yet. This is work that University and College Council (UCC) at national level is responsible for and which will be initiated some time later on. Such will always be quite a long time and it will certainly take some time before the profession are in the database..

The way forward

The Unit of Health, Safety & Hygiene at Work (HSHW) has highlighted a need for help to provide more knowledge through guidance documents and reached out to EDTC. This in combination with the fact that professional divers are one of the additional professions within the updated Directive, underlines the situation whereas EDTC has the possibility to create this common basis.

But before this can happen........
Different workgroups
It was stated by HSHW, during the EU meetings this year, that they see good possibilities for co-operation and proposed that EDTC could bring forward a “package” for the next steps.

Package within 3 workgroups

1) To do an inventory
Avoiding re-inventing the wheel, work group 1. The objective is to research amongst existing rules/regulations/guidance to avoid re-inventing things and to make cross-references allowing to find the level that can be accepted by us all.

2) Create a guidance document
The objective is to create an achievable standard and information package, work group 2 (this can be complettary to the existing workgroup on competence standard),

3) Workshop
To realize the document with EDTC as forum, by inviting SLIC members and/or others, work group 3 (to organize the workshop).
Summary

- EDTC provides an independent forum overbridging a gap,
- EDTC achievement has received many positive reactions – guidance,
- The “power of free will” enables fast implementation,
- The principle of “help to help ourselves” enables broad participation.

EDTC Chairman - Jörn Ryberg        E: jorn.ryberg@sse-ab.se
REPORT FROM THE MEDICAL SUBCOMMITTEE TO THE EDTC MEETING OF TALLIN, October 2016

Since last year two major projects were developed, one of them finished and the second one with a consensus to be finished next year. These things have been topic of the meeting of the medical delegates during the EUBS congress in Geneva on September 15th, 2016. Three main topics were discussed and the result of the consensus we achieved is presented at the EDTC meeting in Tallin:

1) European Diving Medical Databank EDMD:
As planned since 3 years and proposed last year the European Diving Medical Databank EDMD is now operative. The aim of this databank and its function as well as the way to log in has been described (see print-outs of the powerpoint attached below). Discussion among the EDTC members noted that in some countries, like Norway, such a databank would not be legal if not controlled by the authorities. Also should not EDTC be responsible for the designation of doctors. We are aware of the problematics, however in most of the countries there is no problem with creation of such a databank, the diving industry was seeking for such a possibility and would welcome the possibility to have access to diving medicine physician addresses and qualifications. EDTC as an organisation has no responsibility for that, the European Diving Medical Certifying Board which is hosted at the Scuola Superiore Sant'Anna di Pisa is responsible for this action. DMAC and the EDTC medical delegates however support the procedure and it would be wishful to have EDTC together with DMAC as supporting organisation visible.

2) The revision of the diving medical education standards:
2011 we performed the first revision of the training standards for diving medicine physicians that we have endorsed together with the partner organisation ECHM European Committee for Hyperbaric Medicine. Due to problems with the feasibility of what we have decided during this first revision some corrections have become necessary. The consensus we found in our discussions has been presented (see powerpoint printout below) and the medical delegates would propose to the EDTC members to endorse this project, so that we can perform the editing together with ECHM by means of the Joint Medical Subcommittee. The final version to be endorsed by EDTC will be presented at the next years meeting.

3) Revision of fitness to dive standards:
The project is going on since two years, had to be frozen because of the other priorities during this year, will however be pushed forward until next meeting, where we try to present a result. We are happy to recognise that IMCA has seen the same problem noting several incidence due to fitness of divers which does not correspond to the certificate and therefore IMCA started a "diver health and medical issues workgroup", which will provide a guidance note during the next months. DMAC and
EDTCmed delegates are integrated in this process and we hope that the guidance note will be in line with our fitness to dive consensus. A second element has been created by the French MedSubHyp society publishing the "Recommendations for fitness assessment of occupational divers" in June 2016. This huge paper of over 200 pages is well referenced and founded, based on evidence by scientific literature and therefore very useful for our process.

See details in print-out of Powerpoint from presentation (page 3-5)

Biel-Bienne, 10.10.2016

Jürg Wendling
Report of Medical Subcommittee

EDTC Meeting 2016
Tallin 7.10.16

EDTCmed Meeting 15.9.16 in Geneva
(during Eur Underwater and Baromed. Society Congress)

10 Medical EDTC delegates participated + guests from AU, ZA, US, ECHM and Pisa

- Eur Div Med Databank EDMD
- Rev 2 of Div Med Edu standards
- Revision of fitness to dive standards

1. Eur Div Med Databank EDMD

- Hosted by Scuola Universitaria Superiore Sant’Anna, Pisa
- Responsible: EDBEM
  Eur Div Med expert board (= certifying b.)
  [Elliott, Brubakk, Meintjes, Vanden Eede, Risberg, Bedini, L’Abbate]
- Supported: by EDTCmed and DMAC

https://edmd.eu

- Helps divers to locate a doctor (MED)
  - for medical examination
- Helps employers
  - to verify fitness certifications
  - to submit medical information on an employee
  - to locate a doctor for operational support DMP

Designation as MED by EDBEM (criteria)

- Successfully passed MED course (diploma) with
  DMAC/EDTCmed approval.
- In case of doubt or irregular curriculum send CV to NC
- Be accredited or legitimated by nat authorities to
  perform medicals of pro divers
- Show adherence to CPD-programm of EDTC/ECHM
- Accept publication of address and qualification on
  EDMD-website
**Designated MEDs**

- Have access to their own data, can/should update any time
- Can insert diver medicals
- Medicals note "type and class of diving", and may have a note on "restriction"
- Types of diving and restrictions are standardised (coop with ZA, AU, US)

**2. Revision of Div Med Edu Standards**

Became a priority because
1. From level 2 diploma (classroom) to certification of competence (standards 2011) a number of skills trainings/experience are needed
   - Planned as 7 day module in Marseille – not feasible!
   - Sat and Bell not considered relevant for > 90% DMPs
2. ECHM, our partner for Edu standards, has defined standards for level „3 doctors“

**Proposals after consensus discussion in Geneva**

a) Certificate of competence DMP needs
   - Diploma of level 1 + 2 course
   - Occ med module (all webbased or diploma course)
   - SSD and prof Div technique (1d pract)
   - Nx and O2-Deco (1d pract + e-learn prep)
   - Onsite recompression treatment (1d pract + e-learn prep)

b) Database should contain a window per DMP showing his specific and advanced experience
   - Checkboxes for advanced training modules:
     - Emergency medicine ATLS & ACLS (standard courses)
     - Med treatment in onsite chamber (pract and e-learn prep)
     - Tech diving and rebreather (pract and e-learn prep)
     - Bell and Heliox diving (pract)
     - Sat diving incl mgp of treatment chamber (offshore, inshore, tunneling)
     - Med support of tunneling (pract and e-learn prep)

**Proposals after consensus discussion in Geneva**

c) Introduce new „level 3 DMP“
   - EDTCmed declared acceptance but wants to define details in cooperation with ECHM, reactivating JMS
   - EDTCmed wants to keep control over designations/criteria (an open unbiased and transparent procedure must be standard)
   - Designation of level 3 by EDMEB

**ECHM proposal for level 3**

- 5 years prof experience in the specific field (diving or hyp)
- incl additional advanced training
- CPD (documented in logbook)
- Involvement in education programmes
- Involvement in research programmes
3. Revision of ftd standards

- IMCA: Diver Health and Medical Issues Workgroup
- French Medsubhyp Society published recommendations for fitness assessment of occ divers
- Webbased consensus discussion continuing – conclusion 2017
Annex 3

EDTC Work Group
Personnel Competence Standards

2003
EDTC Work Group
Personnel Competence Standards

Work Group

- Neil Evans  IMCA
- Philip Crombie  UK
- Alan Bax  IDSA
- Pasquale Longobardi  Italy
- Staffan Littorin  Sweden
- Jean Lelievre  France
EDTC Work Group
Personnel Competence Standards

Work context

- EU Directive on work qualifications – including diving
- 13 years since the document was produced – need for an update
- Prepare a document that will support the Directive as a harmonized understanding of requirements
- Keep a broad perspective on the work of EDTC
- Use references to other recognised organisations and standards
EDTC Work Group
Personnel Competence Standards

Document status

- Document of 2003 used as basis for present work
- Document still to be a high level standard/guidance
- Large parts still valid
- Introduce references to recognised standards for more details
- Shall prepare the necessary basis for guiding training and the comparing of competences, ref the Directive
EDTC Work Group
Personnel Competence Standards

Revision work status

- Up to now very much a “solo work group”, but supported by involvement and commenting from HSE/UK
- Late comments from IDSA and Italy
- Extensive use of references to IMCA documents
- Suggests appendix with bell diver training details from IDRCF (UK, France, Australia, Canada, South Africa, Norway) and the same coming on surface diver training in 2017
EDTC Work Group
Personnel Competence Standards
EDTC Work Group
Personnel Competence Standards
EDTC Work Group
Personnel Competence Standards
EDTC Work Group
Personnel Competence Standards
Welcome to Tallinn!
Safety and common information
Useful information for guests

- http://www.tallinn.ee/eng/ - information about Tallinn
- https://www.visittallinn.ee/eng - main sightseeings
- https://www.likealocalguide.com/tallinn - where to go in Tallinn
TAXI – IF NEEDED

UBER - www.uber.com
TAXIFY – www.taxify.eu
TAXIGO – www.taxigo.com
Dinner at 07.10.2016
Olde Hansa restaurant

- Start at 19.30
- ~ 550 m by walk from hotel
- Medieval quisine
- Group menu
Maritime Museum 08.10.2016

- Buss provided
- Start of journey at 11.00 from Nordic Hotel Forum
WELCOME TO ESTONIA!
ESTONIAN UNDERWATER WORKS PRODUCERS ASSOCIATION


NATIONAL DIVING ORGANIZATION IN ESTONIA

• named an “Estonian Underwater Works Producers Association
• it was established at 26.04.2012
• now it includes 5 diving companies, totally having 10 equipped diving stations and about 35 professional divers
MAIN DIVING WORKS, EXECUTED BY EUWPA MEMBERS IN BALTIC AND SCANDINAVIAN REGION

• U/W TECHNICAL INSPECTIONS AND SURVEYS
• U/W WELDING & CUTTING
• U/W HULL CLEANING & PROPELLER POLISHING
• PROPELLER CROPPING
• U/W CLASSIFICATION SURVEYS AND SHIP MAINTENANCE
• SURVEY, REPAIR & BUILDING OF UNDERWATER STRUCTURES
• U/W SEARCH, SALVAGE and LIFTING
• U/W DEMOLITION
• ROV and SONAR SURVEYS
• ASSISTANCE OF DREDGING AND CABLE WORKS
• 3D SCANNING OF UNDERWATER AREAS
SHIPS MAINTENANCE AND SURVEY
UNDERWATER SURVEY AND TECHNICAL INSPECTIONS
TECHNOLOGICAL OPERATIONS ON MARINE CONSTRUCTIONS IN PORTS
MAIN GOALS AND TASKS

- **Plans for enlargement** – incorporating of Lithuanian diving companies to Baltic Divers Association and also uninvolved Estonian and Latvian companies

- **Labour and safety regulations** – local labor laws and safety standards to be proceeded with harmonization to EC codes

- **Medical service** – further development of health control system and special medical service for divers.

- **Work specifications** – development and harmonization of technical parameters of national technical regulations for special underwater works (like technical inspection of maritime structures or underwater welding) with EC rules

- **Education** – development of common program in Baltics for divers’ education according to standards and codes of EC with participation of European institutes

- **Involving** in European educational programs for education and diver’s skills enhancement
Thank you for your kind attention!

Estonian Underwater Works Producers Association;

Baltic Commercial Diving Association;

GT CORPORATION SE;

Tartu mnt. 65, EE-10115, Tallinn, Estonia
info@gtcorporation.eu
+372 60 10 205
www.gtcorporation.eu
Baltic Commercial Diving Association

Victor Burovenko

Estonian Underwater Works Producers Association

Margo Purro

GT Corporation SE

Aleksei Usanov

Tallinn 2016
GT Corporation SE

IDSA – INTERNATIONAL DIVING SCHOOL ASSOCIATION

Developing and implementation of educational diving standards and programs

Since 11.2014 GT CORPORATION SE
Is a member of IDSA
EDTC – EUROPEAN DIVING TECHNOLOGY COMMITTEE

Developing and harmonization of national and international standards for equipment, education, labour regulation, safety and medical support of divers labour

Since 2009

GT CORPORATION SE

Is a member of EDTC
MAIN SEAPORTS IN ESTONIA

Port of Muuga
(Paljassaare, Vanasadam)

Port of Tallinn
(Paldiski, South and North)

Port of Pänu

Port of Kunda

Port of Sillamäe

Ferry ports
Rohuküla-Helterma

Ferry ports
Virtsu-Kuivastu

Port of Pühu
GT Corporation SE
PERFORMED WORKS
1990 - 2016
ESTONIA. OLD TOWN HARBOUR. MARITIME STRUCTURES OF QUAYS
24/25 SURVEY AND INSPECTION
ESTONIA. OLD TOWN HARBOUR. QUAYS 10-12. SURVEY OF TECHNICAL CONDITION OF QUAYS
ESTONIA. OLD TOWN HARBOUR. QUAYS 10-11 PILE WALLS
RESTORATION WORKS
ESTONIA. OLD TOWN HARBOUR. MARITIME STRUCTURES OF QUAYS 13-16 SURVEY AND INSPECTION
ESTONIA. OLD TOWN HARBOUR (OLD TOWN MARINA BAY).
SURVEY OF TECHNICAL CONDITION OF QUAYS 18-23
ESTONIA. OLD TOWN HARBOUR. M/S VICTORIA I UNDERWATER SURVEY
ESTONIA. MUUGA HARBOUR. REPAIRS OF QUAY 33
ESTONIA. MUUGA HARBOUR. STEEL PILES OF QUAY 13 REPAIR WORKS
ESTONIA. MUUGA HARBOUR. REPAIR AND REINFORCEMENT WORKS OF QUAY 13 CONCRETE STRUCTURES (BEAMS)
ESTONIA. MUUGA HARBOUR. QUAYS 9/10. CORROSION PROTECTION OF STEEL PILES
ESTONIA. MUUGA HARBOUR. QUAYS 8, 13.
CORROSION PROTECTION OF PILE WALL
ESTONIA. MUUGA HARBOUR. SURVEY OF TECHNICAL CONDITIONS OF PORT MARITIME STRUCTURES
ESTONIA. MUUGA HARBOUR. QUAYS 1/2. REPAIR WORKS OF BOTTOM SURFACE OF QUAY’S INTERIM DOLPHIN
ESTONIA. MUUGA HARBOUR. WEST BREAKWATER HEAD. CORROSION PROTECTION OF PILE WALL
ESTONIA. HUNDIPEA HARBOUR. CATHODIC PROTECTION
ESTABLISHMENT OF QUAYS 2-7 PILE WALLS
ESTONIA. PALJASSAARE HARBOUR. QUAY 35.
EMERGENCY REPAIR WORKS OF PILES
ESTONIA. VENE BALTI PORT. QUAYS 4-5.
SUVEY OF TECHNICAL CONDITION
ESTONIA. PALDISKI SOUTH HARBOUR. CORROSION PROTECTION OF QUAY’S 5 CONSTRUCTIONS
ESTONIA. PALDISKI SOUTH HARBOUR. SURVEY OF QUAY’S 4 CONSTRUCTIONS
ESTONIA. PALDISKI SOUTH HARBOUR. DESIGN AND CONSTRUCTION OF SEABED ENFORCEMENT NEAR QUAY 4 RAMP
ESTONIA. KUNDA HARBOUR. REPAIR WORKS OF QUAYS 1-2
FINLAND. PORT OF HELSINKI. QUAY EO2. PILE WALL RECONSTRUCTION WORKS, CORROSION PROTECTION OF STEEL PILES
FINLAND. PORT OF HELSINKI. QUAY EK7 (RAMP). REPAIR AND REINFORCEMENT WORKS OF PILE WALL
GT Corporation SE

FINLAND. PORT OF HELSINKI. QUAY EK6. REINFORCEMENT OF PILE WALL

EUWPA
GT Corporation SE

FINLAND. PORT OF HELSINKI. QUAY EK6 RAMP. REINFORCEMENT OF PILE WALL
FINLAND. PORT OF HELSINKI. QUAY EK7. DISASSEMBLING OF AN OLD PILE WALL
FINLAND. PORT OF PORI. SURVEY INSPECTION OF QUAYS 14-17, 19. EMERGENCY REPAIR WORKS OF QUAY 19
FINLAND. PORT OF TURKU. SURVEY INSPECTION OF MARITIME STRUCTURES
GT Corporation SE

FINLAND. LIGHTHOUSE NORRA STORBADAN. RECONSTRUCTION WORKS
LATVIA. LIEPAJA. UNDERWATER CABLE WORKS IN COOPERATION WITH LATVIAN AND SWEDISH COMPANIES
Thank you for your kind attention!

Estonian Underwater Works Producers Association

Baltic Commercial Diving Association

GT CORPORATION SE
Tartu mnt 65, 10115
Tallinn, Estonia
info@gtcorporation.eu
+372 601 0205
www.gtcorporation.eu
GOALS AND TASKS

• UNITE ALL DIVERS OF LATVIA,
• CREATE DIVERS REGISTER IN LATVIA,
• REPRESENT DIVERS ON FEDERAL LEVEL, INTERNATIONAL ARENA,
• WORK WITH GOVERNMENTAL INSTITUTIONS TO SET UP NECESSARY LEGISLATION,
• MEMBERSHIP IN IDSA, EDTC,
• COOPERATE WITH LIEPAJA MARITIME COLLEGE TO BUILD INDUSTRIAL DIVING SCHOOL IN LATVIA,
INDUSTRIAL DIVING SCHOOL, LIEPAJA, LATVIA.
INDUSTRIAL DIVING SCHOOL, LIEPAJA, LATVIA.
INDUSTRIAL DIVING SCHOOL, LIEPAJA, LATVIA.
INDUSTRIAL DIVING SCHOOL, LIEPAJA, LATVIA

• DIVING SCHOOL AS A PART OF SEA TRAINING CENTER,
• PLANNING TO BILD IN TWO YEARS,
• DIVING COURSES ACCORDING IDSA STANDARDS,
• DIVING SUPERVISOR COURSE,
• DIVING TECHNICIAN COURSE,
• ROW OPERATOR COURSE,
State of the Industry

• Offshore – significant downturn
• Inland/Inshore
  – Economic recovery
  – Renewable energy
• Recreational
  – “At work” legal issues
  – Fitness to dive issues
• Other sectors – Shellfish diving
UK Accidents/Incidents – 2015/16

2 “diving at work” fatalities –

• 11 Feb 2016 – Diving to recover golf balls
• 12 Feb 2016 – Student on HSE Scuba course

Both investigations ongoing
Reported Incidents 2014/15

• 1 Major Injury – recreational (DCI)
• 10 Dangerous Occurrences – 5 Offshore, 2 Recreational, 2 Inland/Inshore, 1 Sci/Arch,
• 5 “Over 7 day” injuries –, 2 Inland, 3 Recreational
• 15 Complaints to HSE
2 Prosecutions 2015/16

- July 2015
  - Shellfish diving boat skipper prosecuted for breaches of DWR97

- April 2016
  - Shellfish diving boat skipper for breaches of DWR97
1 Prohibition Notice

• 1 x Inland/inshore
  – Standby diver not at immediate readiness to provide assistance to the working diver
Changes in legislation, practices and/or arrangements:

• 5 revised Approved Codes of Practice (ACOPs)
• Published Dec 2014
• Available to download – www.hse.gov.uk/diving/
• Diving Information Sheets under revision
• HUET Exemption
• New medical standards (MA1)
Fatalities and Major Injuries since 1996

- Offshore: Fatal = 4, Major = 1
- Inshore: Fatal = 5, Major = 6
- Recreational: Fatal = 20, Major = 40
- Sci/Arc: Fatal = 1, Major = 1
- Media: Fatal = 0, Major = 0
- Police: Fatal = 0, Major = 0
- Military: Fatal = 2, Major = 1
- Shellfish: Fatal = 1, Major = 1

Note: The graph shows the number of fatalities and major injuries for different categories since 1996.
WELCOME TO WIFI LINZ-AUSTRIA

The Economy Support Institute
Wirtschaftsförderungsinstitut Oberösterreich
The Economy Support Institute
Wirtschaftsförderungsinstitut Oberösterreich
The Economy Support Institute
Wirtschaftsförderungsinstitut Oberösterreich

in co-operation with

HTC D
Hyperbaric Training Centre Germany
and
Hyperbaric Training Centre Austria

HTC A
Training will be carried out for everybody who speaks the German or Austrian language and for sure Swiss.

The training courses are:
- Professional Commercial Diver
- Hyperbaric Supervisor (Compressed Air and Diving)
- Hyperbaric Technician
- Lock Attendant / Chamber Operator
- First Aider
- Hyperbaric Welder
- Hyperbaric Engineer
- Research Diver
- Engineer Diver
The Economy Support Institute invites EDTC for the annual meeting in 2017 to come to Linz-Austria

The conference will be held in the building of WIFI Linz
The overnight stay will be in the WIFI Hotel
Sight seeing program: Linz Tour incl. Pöstlingberg
Thank you for your attention

The Economy Support Institute
Wirtschaftsförderungsinstitut Oberösterreich
National Report

Canada
- Federally registered not-for-profit
- Operates under MOA’s with NEB & Offshore Petroleum Boards of NS & NL
- Canada’s national diver certification body
- National and international recognition
- Based on CSA standards (Z275.4 & Z275.5)
- Representative Board of Directors
- Annual Report available on our website
Mission

To provide a national Canadian certification scheme for occupational diving and ROV personnel, based on a single national standard of competency, in order to enhance industry safety by demonstrating personal competency.
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<td>3</td>
<td>3</td>
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<td>RSS Diver</td>
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<td>345</td>
<td>448</td>
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<td>10</td>
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<td>46</td>
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<td>Closed Bell Diver</td>
<td>12</td>
<td>28</td>
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<td>0</td>
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<td>5</td>
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<td>3</td>
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<td>6</td>
<td>4</td>
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<td>Bell Diving Supervisor</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>9</td>
<td>8</td>
<td>15</td>
<td>19</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Diving Safety Specialist</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>15</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>LST/LSS/HCO/Tender/ROV</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>5</td>
<td>16</td>
<td>20</td>
<td>20</td>
<td>6</td>
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<tr>
<td><strong>Total</strong></td>
<td>347</td>
<td>405</td>
<td>511</td>
<td>508</td>
<td>631</td>
<td>756</td>
<td>941</td>
<td>1147</td>
<td>1323</td>
<td>1150</td>
<td>1183</td>
</tr>
</tbody>
</table>
● In 2016, to date we have issued 947 certificates, compared to 820 in 2014
● 879 divers, 61, supervisors, 6 DSS’s
● 722 were initial, 225 were renewals or upgrades.
● 254 Canadian, 628 American, 65 international
14 accredited schools
8 in Canada, 5 in USA, 1 in WI
CDT in Florida & CDA West Indies
Audited 6 schools (2 interim, 2 renewals, 2 new)
- Canadian Standards Association (CSA) has a family of standards relating to occupational diving – CSA Z275
- DCBC certification and accreditation based on CSA’s Competency & Training Standards.
- Diving operations guided by the “Occupational Safety Code for Diving Operations”.
- Standards developed in a similar manner to EDTC standards (regularly reviewed)
- Standards only guidance until legislated by federal or provincial governments
• Major initiative to have provincial and federal governments adopt standards as regulations
• Eight provinces have adopted the competency standard into regulation (commercial diving community input into regulations)
• Four provinces have adopted safety standard for diving operations
• Meeting with federal minister’s staff in Ottawa in two weeks
• Perhaps the European Commission could adopt EDTC standards as regulation?
welcome!

The Diver Certification Board of Canada certifies occupational divers, accredits schools which train occupational divers and presents the annual Canadian Underwater Conference and Exhibition. For more details on the conference please click here.

The Diver Certification Board of Canada (DCBC) is a federally incorporated not-for-profit body which was originally set up to replace the offshore diver certification regime of the National Energy Board and the offshore petroleum boards. DCBC is the only national body which certifies offshore and inshore occupational (commercial) divers in Canada.

The DCBC offers certification to commercial divers and supervisors who can demonstrate that they have sufficient training and experience to enable them to meet the competency requirements of the appropriate section of the Canadian Standards Association (CSA) Competency Standard for Diving, Hyperbaric Chamber, and Remotely Operated Vehicle Operations (CSA Standard Z275.4).

Certificates issued by the DCBC are recognized by Australia (ADAS), France, Norway, South Africa, the United Kingdom (HSE) and the International Marine Contractors Association (IMCA).

The Diver Certification Board of Canada accredits commercial diver training organizations which train to the competency levels described in CSA Standard Z275.4. Accredited occupational diver training organizations can also assess the competency of experienced occupational divers who were not trained at an accredited school.

- Information Note: Benefits of DCBC Certification
- Information Note: DCBC Certificates and Competency

Guideline for Diving Operations at Dams and Other Worksites where Delta P Conditions May Exist

news

- Requirements for the renewal of Surface Supplied Mixed Gas certificates have been revised
- Applicant Caught Using Falsified Logs
- 2016 Canadian Underwater Conference to be in Halifax, Nova Scotia
Canadian Underwater Conference & Exhibition
Man & Machine Underwater

Save the Date
March 26 - 28, 2017
Ottawa, Ontario

Conference Focus
Join your colleagues and industry professionals for exhibits and technical presentations that will address occupational diving operations, as well as ROV & AUV activities across North America.

For information on Sponsoring, Exhibiting or Speaking visit our website:
www.cuce.ca
● Comments?
● Questions?

Diver Certification Board of Canada
208 - 5209 St. Margaret's Bay Road
Upper Tantallon
Nova Scotia  B3Z 1E3
Canada
ANNEX 10

EDTC report 2016 from Switzerland

1) New Swiss diving regulations

In Switzerland, diving and compressed air activities are regulated by an ordinance decreted by the federal council (the national executive). Until now, the ordinance in vigour was from 1961 with paragraphs that were completely outdated while the only useful paragraph was the second-last one saying that the national health and safety authorities (called SUVA) may determine adapted rules if necessary. As there are no major problems with diving works and very very few accidents, the authorities have not controlled diving very intensively and so companies developed a working style at their own discretion, that means also after their own estimation of hazards and risks. No occupational medicine doctors have so far been involved as it was not a requirement.

After preparing a revision by the politicians only without communication until the final draft, a revised ordinance has been approved by the federal council and put into vigour from January 1st, 2016 https://www.admin.ch/opc/fr/classified-compilation/20132746/index.html

New was that from now on each diving operation (and hyperbaric operations) need a risk assessment (HIRA) assisted by a hyperbaric specialist, they need to have
- a project plan before diving operations
- a supervisor responsible for the duty of care during every dive
- a secondary gas supply (redundancy, bailout)
- communication and localisation of divers
- treatment chambers onsite when decompression need is more than 15'.

This makes the Swiss regulations for diving more compatible with the regulations of most European countries and is more or less in line with EDTC standards.

However, a certain category of divers could not accept the new regulation, the police divers of the lakes and fire guard divers, as they traditionally get training by recreational diving instructors (CMAS) and they dive exactly like everybody in holidays with half-mask Scuba gear and safety is "guaranteed" by the BUDDY system. The board of all governmental SAR dives (police and fire guards) has therefore decided to go in strike and refused work declaring that the new regulation would make diving less save than before, even dangerous: to wear a full-face mask would not be feasible in rivers during dynamic diving, as they would probably loose the masks, to be localisable using a signal buoy and to use communication was also not acceptable and, as they have their strong lobby, the responsible minister has accepted an exception for these groups of divers including the recreational diving instructors from the regulation (modification of April 13, 2016 by the Federal Council).
This decision is hard to understand from our view of health and safety management. As described above, health and safety professionals have not a very strong stand in Switzerland, however I will try to make an intervention with support of the occupational medical society and the Swiss Underwater and Hyperbaric Medical Society. The chances to get a change are however minimal.

2) Complex alpine diving operations:

For the second time we have a complex saturation diving operation in the Swiss alps during this year. At the dam of Punt dal Gall (close to St. Moritz in the south-east alps) the outflow of the lake has to be renewed and the divers have to put an obturator of 35 tons. This is performed by 3 saturation operations of 4 weeks each, the depth ranging to 115m. The operation is performed by Hydrokarst, a French company already involved in the mountain lake of Lac d'Hongrin a few years ago with the same equipment.

The interesting innovation is the involvement of the hyperbaric medical team of the University treatment chamber of Geneva. They have developed a video conferencing system and an temporary availability of an onsite doctor, while they are prepared to do medical interventions inside the treatment chamber using many intensive care devices that have only sporadically being used before under such high pressures. The main problem is the access of the doctor if not at site. The helicopter transport is 2 hours under best conditions, when ambulance or road based is necessary it is half a day. The operation is almost finished and no complications have been observed so far.

Jürg Wendling
Chairman medical subcommittee EDTC

October 10th, 2016
ANNEX 11

IDRCF/EDTC Meeting
Peter Sieniewicz, Technical Advisor

Nordic Hotel Forum, Tallinn Estonia
5-8 OCTOBER 2016
AGENDA

• IMCA Document Review
• Proposed Changes to Divers’ Log Books
• Diver Medic Syllabus Review
• Preliminary Divers Statistics
• IMCA Supervisor/LST Applications
• Glossary of Diving Terms JIP ADCI/IOGP/IMCA
• DESIGN Workshop
IMCA/AODC DOCUMENT REVIEW
All the IMCA/AODC Guidance is currently being reviewed

• We have introduced a revision box in our documents together with a feedback button to allow us to collect amendments for the future.

<table>
<thead>
<tr>
<th>Date</th>
<th>Reason</th>
<th>Revision</th>
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<tbody>
<tr>
<td>January 1998</td>
<td>Initial publication</td>
<td></td>
</tr>
<tr>
<td>September 2016</td>
<td>Updated to include information on oxygen shock testing</td>
<td>Rev. 1</td>
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• Changes to or new documents are notified on a monthly basis through IMCA’s newsletter

Governance update
The process of implementing IMCA’s governance programme is moving towards completion. The revised IMCA constitution is being finalized in response to the recommendations from the governance review. An EGM will be held on 10 November to adopt the changes recommended by the Council and OMC. For more details, see here.

Publications
- IMCA D 057: ADCI/IOGP/IMCA diving terms
- IMCA SEL 022/M 194: Wire rope integrity management for vessels in the offshore industry
- IMCA M 203: Simultaneous operations (SIMOPS)
- IMCA D 022: Guidance for diving supervisors
- IMCA M 205/D 046: Guidance on operational communications
- New documents
- Revised documents
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<th>Comments</th>
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<td>AODC 018</td>
<td>Attachment of loads to lifting hooks during diving operations</td>
<td>30/09/16</td>
<td>80%</td>
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<tr>
<td>AODC 047</td>
<td>The effects of underwater currents on divers’ performance and safety</td>
<td>30/09/16</td>
<td>50%</td>
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<td>AODC 055</td>
<td>Protection of water intake points for diver safety</td>
<td>30/09/16</td>
<td>20%</td>
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<td>AODC 058</td>
<td>Diver attachment to structures by means of a ‘weak link’.</td>
<td>30/09/16</td>
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<td>IMCA D 004</td>
<td>Initial and periodic examination, testing and certification of hyperbaric evacuation launch systems</td>
<td>30/09/16</td>
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<td>IMCA D 010</td>
<td>Diving Operations from Vessels Operating in DP Mode</td>
<td>30/09/16</td>
<td>80%</td>
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<tr>
<td>IMCA D 011</td>
<td>Annual audit of diving systems</td>
<td>30/09/16</td>
<td>80%</td>
</tr>
<tr>
<td>IMCA 012</td>
<td>Stainless steel in oxygen systems.</td>
<td>30/09/16</td>
<td>100%</td>
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<tr>
<td>IMCA 020</td>
<td>IMCA scheme for recognition of Diver Medic training; Guidance for training establishments.</td>
<td>30/10/16</td>
<td>35%</td>
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<td>IMCA 032</td>
<td>Cross hauling of bells</td>
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<td>20%</td>
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<td>IMCA 048</td>
<td>Surface supplied diving operations using nitrox</td>
<td>30/09/16</td>
<td>0%</td>
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<tr>
<td>D 0XX</td>
<td>Prevention and Mitigation of Lost Bell Emergencies</td>
<td>30/09/16</td>
<td>60%</td>
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<td>D 0XX</td>
<td>Breathing Gas Supplies</td>
<td>30/09/16</td>
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**Progress:** 56.5%
### Current DDMC

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<th>Withdrawn</th>
<th>Withdrawal recommended</th>
<th>New Documents</th>
</tr>
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<td><strong>Now</strong></td>
<td>9/7/2016</td>
<td>71</td>
<td>31</td>
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<td><strong>Initial</strong></td>
<td>2/11/2016</td>
<td>86</td>
<td>73</td>
<td>13</td>
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Initially 85% required review/revision
Now 43% require review/revision
DDMC document set work programme (Projected Vs Actual)
PROPOSED REVISION OF DIVERS’ LOG BOOKS
Add: Method for Assessment of Physical Fitness / direct or indirect Oxygen Uptake measurement
Add: Achieved result / Oxygen Uptake Value
Since this is now the new measurement for fitness chosen by Authorities (UK / NO). The results must not be considered confidential but should be viewed positive for the diver that he has had this evaluation.

IMCA Diver fitness Work Group will suggest that it has a co-signature from the Diver confirming that he has informed his physician of any conditions that could render him unfit to dive. Should his fitness to dive change for any reason he has a duty inform his employer or the physician.
Points to consider

- Important to note start / finish of saturation period in order to evaluate equal time off which is not equal to the last dive

Blowdown/Decompression Completed (Date)

- Bell run numbers should be logged with each bellrun
- To understand the exposure a total excursion window should be logged.
- Should the drink break be included if so you would need two lockout times?
- Change to storage depth should be recorded currently logged on the next bellrun.
- Should we provide the possibility to log 2 lockouts per dive which would deal with a drink break?

- Should we include any table or treatment protocol.
PROPOSED CHANGES TO DIVERS’ LOG BOOKS

Include: Treatment Protocol

Keep numbering but align left and add period date from-to for each summary line.
IMCA DIVER MEDIC PROGRAMME REVISION
As part of the IMCA/AODC guidance review, Diver Medic Course syllabus is being revised

- Overall the programme has been successful for a number of years, it works, so there will be no radical changes
- Review has taken into account recent DMT experiences
- Syllabus will be altered slightly, updated and made more international
- Additionally revised to reflect current DMAC Guidance
- The draft syllabus has been checked against current national first aid requirements to ensure it meets the requirements for all regulated IDRCF member countries
• The review will include minimum instructional staff requirements and training materials

• In future, all schools delivering diver medic training will be required to deliver part of the practical training within a chamber or simulated chamber facility.

• It has been found that students benefit from training in transmitting medical data and working remotely in a confined space.

• A small working group will be undertaking an initial review prior to its wider circulation
DIVER STATISTICS
DIVER STATISTICS

A member company recently completed research into the age and experience of divers in the North Sea. The last survey was undertaken in 2003 but this year:

• It was found that since the original work in 2003 the age profile of divers had been increasing by four months for every year since then
• Today the average age of a North Sea Diver is 44 with oldest being 64.
• Research carried out during the same period by ADCI in the GOM region also indicated that the average of a GOM diver was also 44 with oldest being 58
• It appears that the age profile of a GOM diver and one in the North Sea is now becoming very similar
• Within the US 75% of all new divers leaving diver training establishments have left the industry within 2 years
• It is hoped that work will be undertaken in the next year to produce a combined report.
IMCA SUPERVISOR SCHEME STATISTICS
# IMCA SUPERVISOR SCHEME STATISTICS

## IMCA Certificates Issued

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<th>2016</th>
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<td>Jan 1–October 1</td>
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<td></td>
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<tr>
<td>Air</td>
<td>61</td>
<td>58</td>
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<tr>
<td>LST</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Bell</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>109</strong></td>
<td><strong>112</strong></td>
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## Applications Received (Period 1 Jan -1 Oct)

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<th></th>
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</thead>
<tbody>
<tr>
<td>Air</td>
<td>143</td>
<td>194</td>
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<tr>
<td>BDS</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>LST</td>
<td>8</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>195</strong></td>
<td><strong>274</strong></td>
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</table>

- Numbers include applications for additional legal modules to upgrade supervisor certificates
• First real JIP between ADCI/IOGP/IMCA.

• A need identified to put together agreed diving definitions for the terminology used by all organisations involved in the international offshore diving industry.

• Will be hosted in the public section of the IMCA website.

• Amendments to the document can be made through the feedback button.

• Moderators from each represented organisation.
## Glossary of Diving Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>A foot of seawater (fsw)</td>
<td>A unit of pressure at sea level generally defined as representing the pressure exerted by a foot of seawater having a specific gravity of 1.027 and is equal to approximately 0.445 pounds per square inch</td>
<td>ADCI</td>
</tr>
<tr>
<td>Actual cubic feet per minute (acfm)</td>
<td>Refers to the actual volume of gas supplied to a diver, bell, etc., at ambient pressure</td>
<td>ADCI</td>
</tr>
<tr>
<td>Additives</td>
<td>Include abrasive (grit) entrainment, abrasive slurry mixtures and chemicals that are added to the flow of high pressure water</td>
<td>IMCA</td>
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</table>
## List of Diving Acronyms

<table>
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<tr>
<th>Acronym</th>
<th>Meaning</th>
<th>Source</th>
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<tr>
<td>AAV</td>
<td>Annulus access valve</td>
<td>IMCA</td>
</tr>
<tr>
<td>ABS</td>
<td>American Bureau of Shipping</td>
<td>IMCA</td>
</tr>
<tr>
<td>AC</td>
<td>Alternating current</td>
<td>IMCA</td>
</tr>
<tr>
<td>ACFM (acfm)</td>
<td>Actual cubic feet per minute</td>
<td>ADCI</td>
</tr>
</tbody>
</table>
DESIGN WORKSHOP/MINI SEMINAR
Diving system DESIGN Seminar and Workshop, to be held in Aberdeen on the 9th and 10th of November 2016

• As part of the document review, IMCA is planning to host a workshop looking at the DESIGN suite of documents over two days. The seminar will also include presentations from Apache Oil and IMCA’s CEO, Allen Leatt.

• The focus of the workshop will be on the proposed changes, updates and corrections to the DESIGN suite of guidance.

• Should you be interested in attending please register via IMCA’s website.
Improving performance in the marine contracting industry
Annex 12

EDTC 2016 Portuguese Report

Portuguese legislation on professional diving

PO Navy Diving School | LtCdr Rui Madeira | Technical Pedagogical Director
Portuguese legislation on professional diving

Agenda

• 1994 Professional Diving Regulations

• 2014 Professional Diving Regulations

  • National Maritime Authority

  • Technical Commission for Professional Diving

  • On-line Harbour Master
PORTUGUESE LEGISLATION ON PROFESSIONAL DIVING

PORTUGUESE EDTC 2016
NATIONAL REPORT

PROFESSIONAL DIVING
REGULATIONS
(RPD)
PROFESSIONAL DIVING REGULATIONS

(PDR)

## Portuguese legislation on professional diving

**Law n.º 12/1994, January 15**

### Divers Categories and Competences

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>Diving</th>
<th>Supervisor</th>
<th>Equipment</th>
<th>Hiperbaric Chamber</th>
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<tbody>
<tr>
<td>Mergulhador Chefe</td>
<td>No limit depth (mixed gas)</td>
<td>40 msw (air)</td>
<td>-</td>
<td>Operate</td>
</tr>
<tr>
<td>Mergulhador 1ª Classe</td>
<td>60 msw (mixed gas)</td>
<td>40 msw (air)</td>
<td>-</td>
<td>Operate</td>
</tr>
<tr>
<td>Mergulhador 2ª Classe</td>
<td>40 msw (mixed gas)</td>
<td>20 msw (air)</td>
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<td>Dive</td>
</tr>
<tr>
<td>Mergulhador 3ª Classe</td>
<td>20 msw (air)</td>
<td>10 msw (air)</td>
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<td>Dive</td>
</tr>
<tr>
<td>Algea catcher</td>
<td>20 msw (air)</td>
<td>20 msw (air)</td>
<td>SCUBA SS – Narguile</td>
<td>-</td>
</tr>
</tbody>
</table>
Diving Schools

- Professional Divers training – Diving Schools

- Requirements for diving schools certification to be determined by dedicated ordinance

- Professional divers courses can be conducted by the Portuguese Navy Diving School
Portuguese legislation on professional diving

PORTUGUESE NAVY DIVING SCHOOL

History

Since 1973
HSE approves the following qualifications for the class of Inland/Inshore Diving.

**Portugal**

Professional divers (mergulhadores profissionais) and the equivalent category (categorias) naval qualifications (mergulhadores da Armada):
- Mergulhador - Chefe - [SCUBA & Surface Supplied to 60m]
- Mergulhador - 1ª Classe - [SCUBA & Surface Supplied to 60m]
- Mergulhador - 2ª Classe - [SCUBA & Surface Supplied to 40m]
- Mergulhador - 3ª Classe - [SCUBA & Surface Supplied to 20m]

In addition, the following qualifications may be used for Surface Supplied, Surface-Orientated Diving Techniques to a maximum depth of 50 metres, but only if the diver also holds the HSE surface supplied (top-up) qualification:

**Portugal**

Professional divers (mergulhadores profissionais) and the equivalent category (categorias) naval qualifications (mergulhadores da Armada):
- Mergulhador - Chefe - [SCUBA & Surface Supplied to 60m]
- Mergulhador - 1ª Classe - [SCUBA & Surface Supplied to 60m]
PROFESSIONAL DIVING REGULATIONS

(PDR)

Law n.º 70/2014, september 1st – Aproves Legal Rules applicable to professional diving throughout the national territory and approves the Regulation of Professional Diving, published as an annex to that diploma.
### Portuguese legislation on professional diving

#### Law n.º 70/2014, september 1st

**Divers Categories and Competences**

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<th>CATEGORIES</th>
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<td></td>
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<td>Mergulhador Chefe</td>
<td>No limit depth (mixed gas)</td>
</tr>
<tr>
<td>Mergulhador Especialista</td>
<td>No limit depth (mixed gas)</td>
</tr>
<tr>
<td>Mergulhador Técnico</td>
<td>50 msw (mixed gas)</td>
</tr>
<tr>
<td>Mergulhador Intermédio</td>
<td>40 msw (air)</td>
</tr>
<tr>
<td>Mergulhador Intermédio</td>
<td>20 msw (air)</td>
</tr>
</tbody>
</table>
National Maritime Authority (NMA)

• Entity with competence for recognition, certification and fiscalization in matters of professional diving

  • Courses and training schools
  • Contractors
  • Equipments, installations and diving platforms
Professional Diving Technical Commission

Conception, coordination, actualization and control of politics and technical guidance in matters of professional diving:

a) The director of NMA;

b) 2 members of the Ministry of Defense;

c) 1 member of the Portuguese Navy Diving School;

d) 1 member of the professional diving schools associations;

e) 1 member of the professional divers associations;

f) 1 member of the professional diving contractors associations;

g) 4 chief divers.
Diving Training

- Minimum requirements for certification of diving schools
- Minimum training requirements for each course
- Regulation for competences recognition
- Documentation
  - Professional diving school certificate
  - Professional diver identification card
  - Professional diver logbook (digital)
Portuguese legislation on professional diving

HARBOUR MASTER ON-LINE
Portuguese legislation on professional diving

HARBOUR MASTER ON-LINE

1994 CARDS vs 2014 Cartões;

Lei 12/94*revogado

Lei 70/14
Card holder had to hold both card and logbook.

Dives and medical inspections were written manually at the logbook.

Lei 12/94* repealed

Medical inspections and diving limitations are automatically registered on the digital logbook.

Fiscalizations is made by reading QR-Code accessing information in real time.

Lei 70/14
## Portuguese legislation on professional diving

### Diving Teams Minimum Requirements

<table>
<thead>
<tr>
<th>Law 12/1994*repealed</th>
<th>Lei 70/2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2pax</strong></td>
<td><strong>4pax</strong></td>
</tr>
<tr>
<td>D&lt;10mts</td>
<td>* Dependent on Risk Management</td>
</tr>
<tr>
<td><strong>4pax</strong></td>
<td><strong>5pax</strong></td>
</tr>
<tr>
<td>10mts&lt;D&lt;20mts AND Tdt**&lt;20’</td>
<td>D&gt;10mts</td>
</tr>
<tr>
<td><strong>4pax</strong></td>
<td><strong>5pax</strong></td>
</tr>
<tr>
<td>20mts&lt;D&lt;40mts AND Tdt**&lt;20’</td>
<td></td>
</tr>
<tr>
<td><strong>5pax</strong></td>
<td><strong>D&lt;10mts AND T&lt;6h</strong>*</td>
</tr>
<tr>
<td>40mts&lt;D&lt;60mts OR Tdt**&gt;20’</td>
<td>(D&gt;10mts OR Tdt**&gt;20’)</td>
</tr>
<tr>
<td><strong>Diving Team</strong></td>
<td><strong>Diving Team</strong></td>
</tr>
<tr>
<td><em>(3 mergulhadores</em></td>
<td>+ 1 DMO</td>
</tr>
<tr>
<td>chefe)* e</td>
<td>1 NURSE</td>
</tr>
<tr>
<td><strong>1 DMO</strong></td>
<td><strong>AND</strong></td>
</tr>
<tr>
<td><strong>1 NURSE</strong></td>
<td><strong>T&lt;2h</strong>*</td>
</tr>
</tbody>
</table>

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\*TIME TO HIPERBARIC FACILITIES

\**TOTAL DECOMPRESSION TIME

---

03.11.2016 Unclassified
## HIPERBARIC CHAMBER REQUIREMENTS

**Portuguese legislation on professional diving**

### Law 12/1994 *repealed*

<table>
<thead>
<tr>
<th>HIPERBARIC CHAMBER in situ, if:</th>
</tr>
</thead>
<tbody>
<tr>
<td>40mts &lt; D &lt; 60mts OR Tdt** &gt; 20’</td>
</tr>
</tbody>
</table>

### Law 70/2014

<table>
<thead>
<tr>
<th>D &lt; 10mts AND T &gt; 6h*</th>
</tr>
</thead>
<tbody>
<tr>
<td>(D &gt; 10mts OR Tdt** &gt; 20’) AND T &lt; 2h*</td>
</tr>
</tbody>
</table>

---

*TIME TO HIPERBARIC FACILITIES

**TOTAL DECOMPRESSION TIME
Portuguese legislation on professional diving

Questions?!
- HSE recognised portuguese qualifications update

- Minimum diving team

- 2 way communication system between scuba diver and diving supervisor

- Minimum training/competences to act as supervisor of Scuba Diving Team

- Use of rebreathers
Supervisor Certification

The supervisor certification issue is solved.

Minimum 10 years of experience and harbor master approved log of dives as a proof of competency
Contractors Association

- Association of Turkish Diving Contractors has been founded
- As an additional organisation to the Chamber of Marine Commerce, division of “Underwater and Harbor construction” group
- 70% of contractors joined
DAN EUROPE Turkey

Offering custom tailored Insurance programs for Commercial Divers
CADDY is taking off:
A combination of ASV and AUV team to guide, protect and help divers is aiming to be efficient especially in Public Safety diving.

http://www.caddy-fp7.eu/
THANK YOU
Ondrej Brozka

Legislative progression in professional diving business in the Czech Republic
Qualification requirements of professional divers in the CR

- Historically diving work classified as hazardous work but until 1990 there was no regulation in this area.
- Since 1990 trade business in diving work is legislatively classified as Free Trade
- Free Trade in this case means that business in working diving is free, but ANY person who physically perform diving work MUST be professionally and medically qualified (Act No. 455/1991)
The Czech professional divers association

- Emerged in 1993 as an Association of businessmen, instructors and professional workers in commercial diving
- Due to gradual changes in legislation (Act No. 591/2006), in the area of health and safety it was necessary to create the appropriate skills and expertise for working diving
Requalification course for the profession Profesional Diver

- Czech Association of divers in cooperation with the Association of Professional Divers Republic on the basis of an Educational project and following submission of professional diving qualifications and expertise gained from the Ministry of Education for the accreditation of the training program "School of Professional Diving" for a retraining course for the profession „Profesional Diver". Until 2006 received a certificate of retraining 206 people
Reasons for creation
Professional qualifications
Diving worker and Diver operator

- Given the situation, when that time began to explore various "certificate" and "qualification" based on the recreational or rescue diving, it was necessary to create a competence or professional qualifications with the Ministry of Labour and Ministry of Education, which will completely comply with the current legislation (Act No. 179/2006 Verification and recognition of further education). Content of professional qualifications was created by Czech professional divers association, Ministry of Agriculture and other invited experts.
Final examinations of professional qualifications Diving worker and Diver operator

- Ministry of Agriculture as Authorized Body issued 6 Authorization Decision for those who fulfill the entry conditions for authorization (equipment, education, professional experience) given by the Evaluation Standard - 6 Authorized persons

- The Final Examination take place in front Commission which is composed of 3 Authorized persons, the Doctor specialist in Hyperbaric Medicine and Control Body (Ministry of Agriculture)

- To the date pass 57 Applicants the Final Examination of professional qualifications Diving worker, but yet no examination of the Diver Operator
Evaluation Standard - Criteria

- Orientation in the regulations, procedures, methods and documentation for performing diving works
- Selecting the appropriate techniques for diving work
- Set up working groups and determine qualification
- Conducting the survey conditions in the workplace
- The choice of equipment according to climatic conditions and environment
- Selecting appropriate assembly diving equipment and techniques of control of technology and equipment divers
- Communication with the working group underwater
Evaluation Standard - Criteria

- Dealing with the critical situations in the workplace
- The management of written documentation about the diving group activities
- The first aid focusing on diving accident
- Implementation of diving work rescue in search, rescue and evacuation of personnel, equipment and material
- Demonstration of diving physic knowledge
Evaluation Standard - Criteria

- Controlling, conducting specialized surveys and elimination of hazardous conditions of objects and equipment underwater
- Documentation of objects and equipment underwater
- Implementation of diving work
- Performing diving work in a confined space without free surface

To pass the Final Examination is required to master at least 80% of each criteria (theory and practice)
National Report of Medical Subcommittee EDTC-Czech Republic (Doctor Pavel Macura)

- In the Czech Republic is now 57 professional divers on full time job with license (final exam of Professional qualification) or requalification from The Czech Professional Divers Association and Ministry of Agriculture, (more details you can find in English on www.appcr.cz)

- On part time job work tens divers (often unfortunately without responding qualification for Diving worker)
Health care is provided by contractual General Practitioners who are experienced in diving medicine and mostly are also divers. If they need, consult diving medicine expert.

Medical examination is practised according to standards EDTC and recommendations of Czech Medical Society Hyperbaric and Aviatic Medicine- (www.cshlm.cz)

In CR diving medicine expert must undertake attestation from hyperbaric medicine, which is licensed by Czech Ministry of Health.
Thank you for your attention

Contact:
Department of Education and Extention Ministry of Agriculture

E-mail: ondrej.brozka@mze.cz
Annex 15

EDTC National report – Norway

EDTC National report – Norway
Activity – and accidents
PSA jurisdiction 2015

UØNSKEDE HENDELSER VED METNINGSDYKKING
UNDESIRRED EVENTS IN SATURATION DIVING

Antall hendelser
Number of accidental events

Aktivitet - Manntimer i metning
Level of activity - Manhours in saturation
(× 1000)

Level of activity - Manhours in saturation
(× 1000)

Tiløp/ Near miss
Personsksader/Personal injuries
Dødsulykker/Fatal accidents
Aktivitetsnivå/Level of activity
IDRCF National report – Norway
Activity – and accidents
PSA jurisdiction 2015

Dødsulykker og Trykkfallsyke ved overflatedykkning
Fatal accidents and decompression sickness in surface oriented diving
EDTC National report – Norway

Diver training
Bergen Regional College-Diver Education
in Bergen (HiB) 2015

- 24 students trained (1 year) to Class I (Competence Class B)
- 9 Rescuediver (Competence Class A+R)
- Extensive construction projects involving building new quays was in large parts completed by the Class 1-students
- Now increased capability with a total of 11 dive stations
- New wet bell with LARS
EDTC National report – Norway

Diver education
NYD 2015

Activity 2015:

- Class 1 surface oriented diving - Completed 3 courses with a total of 144 certified divers
  - 3 classes with 48 students split in 6 groups with 8 divers

- Class 2 Bell diving

- DMT - IMCA approved - Completed one course with 6 certified divers

- Other courses completed 2015
  - Underwater welding
  - Rescue diver course
  - Rescue diver supervisor course
  - Special course for the Norwegian Society for Sea Rescue (RS)
  - IDSA Level 3 course
As an action from the IDRCF workgroup 2015, the prerequisites for bell diver training was implemented in the NORSOK Standard U-100 Manned Underwater Operations, Edition 5 December 2015.
EDTC National report – Norway

Ongoing projects
- Focus on tables for surface oriented diving

**History**

- Report on common decompression tables for surface oriented diving (NPD 1994)
- Knowledge status and a look into the future of decompression of divers (Alf O. Brubakk 2012)
- A comparison of decompression tables for surface oriented diving (NUI 2014)
- Follow-up of the Comparison report with reference to ed ref til NUI rapport (NTNU 2016)
Dive profiles
36(±)msw/35min

- Norwegian NDTT
- US Navy 110 fsw
- German BGV C23 = French MT92
- Canadian DCIEM92
- US Navy 120 fsw
EDTC National report – Norway

Ongoing projects – the background

A comparison of decompression tables for surface oriented diving (NUI 2014)

- Compare surface diving tables wrt
  - Total decompression time
  - Profile of decompression
  - Only in-water decompression, no surface decompr. or Nitrox.

- Relevant sources for comparison;
  - NDTT (Norway)
  - DCIEM (Canada)
  - United States Navy 6 (USA)
  - MT92/BGV C23 (France/Germany)
  - HSE/BTL (UK, only bottom time limits)
  - Technip (Worldwide)
  - Subsea 7 (Worldwide)

- Conclusion:
  It seems evident that the Norwegian Diving and Treatment Tables gives radical advise for decompression from surface oriented diving
EDTC National report – Norway

Ongoing projects

Follow-up of the Comparison report with reference to NUI report (NTNU 2016)

Purpose:

- Provide - and evaluate information from US Navy (NEDU) concerning their rev. 6 tables
- Provide – and evaluate information from the Swedish Navy’s experiences with the use of the USN rev. 6
- Present a current knowledge status regarding theories for the mechanisms involved in decompression
- Clarify how the risk element is used in evaluation of tables

- «What’s what, how and how come»?

Report pending November 2016
EDTC National report – Norway

Ongoing projects

Follow-up of the Comparison report with reference to NUI report (NTNU 2016)

Main points - US Navy Rev 6:
- A theoretical modelling of decompression profiles
- Risk based approach to design of the tables
- No structured feedback from use
- Would like to keep 3 m stop in water
- Would like to promote O2 in water
EDTC National report – Norway

Current focus areas

- Deep sat diving (to max 225 msw) being discussed
- Expecting reception of application for consent to dive October 2016
- Already under attack in media