

ANNUAL REPORT 2016

UNDERSTANDING DREDGING



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CEDA ANNUAL

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REPORT 2016



MESSAGE FROM THE PRESIDENT AND THE GENERAL MANAGER

2016 was an interesting year, in many ways, and for CEDA it was an outstandingly positive one with a few 'firsts'. We established the Dredging Management Commission, made a huge contribution to WODCON XXI, and ran a series of foundation and practitioner-level webinars. We were invited to add specialist input to the revised Spanish Dredged Material Guidelines and raised our profile further in the Iberian region with our first Iberian Conference in Lisbon. Plus, we ended the year participating in the kick-off meeting of an EU-funded pilot project that will see an MGO dredger converted to LNG/ MGO dual fuel.

Finally, we were delighted to be able to honour the outstanding achievements of CEDA Past President, Anders Jensen, with the first CEDA Lifetime Achievement Awards. It was presented as part of the inaugural IHS DPC Innovation Awards, launched in 2016, to recognise innovation and achievement in the dredging and ports construction industry.

Just a few of the year's many highlights included the following:

 The inaugural meeting of the Dredging Management Commission (DMC) in September, in Delft, the Netherlands. The gathered group agreed to start work on a range of topics including: optimising a dredging strategy for ports, waterways, coastal and flood protection; contract management simplifications; and monitoring and promoting the development of state-of-the-art dredging technology.



Polite Laboyrie President



Anna Csiti General Manager

- WODCON XXI: CEDA members contributed 30 papers, out of more than 120 presented at the four-day event, and two of those received awards for best paper. Also, two CEDA region projects were honoured in the first WODA Environmental Excellence Awards.
- CEDA Environmental Commission was privileged to be part of a seminar, and consultative process, that will feed into the revision of the Spanish Dredged Material Guidelines that covers beneficial use of sediment. Apart from the excellent opportunity to input into the amendments, it also provided a great source of useful examples for the new CEDA Working Group which will be producing a CEDA Information Paper on the topic.
- At the invitation of Portuguese and Spanish professionals in our field, CEDA co-hosted a very successful conference with the Portuguese Engineers Association (OE), in Lisbon, in October. The CEDA Iberian Conference: Dredging for sustainable port development attracted more than 120 participants, and addressed key topics relevant to the success of port dredging, and sediment management projects, in the Iberian Peninsula.
- A lot of preparatory work went into laying the foundations for publications which will see the light of day in 2017.

You can find out more about these activities, and more, in the pages of this Annual Report.

CEDA exists, in part, to provide a forum for knowledge and information exchange, and to raise the profile of the dredging profession throughout our region. For updates, on forthcoming activities such as CEDA Dredging Days 2017, visit the CEDA website, and read the printed CEDA News and our regular e-newsletters.

Finally, we'd like to thank our corporate and individual members, who support our activities by joining working groups and commissions, attending our events, and helping CEDA achieve so much every year. Thank you all and we look forward to the opportunities that 2017 will bring to our industry.



ABOUT CEDA

CEDA is an established authority and the leading independent forum for the professional dredging community, and associated industries, in Europe, Africa and the Middle-East. It represents dredging professionals and organisations, from government, academia and business, in the region and fosters and promotes the understanding and advancement of dredging to the wider community. It is a recognised reference point for high-quality specialist knowledge on all aspects of dredging and provides a multidisciplinary network for professional contacts.

Drawing on the collective knowledge of its members, and as an impartial organisation, CEDA regularly gives expert advice to government and international regulatory bodies. CEDA members are representative of consultancies, research and educational institutions, port authorities, government agencies, dredging contractors, designers and builders of dredging vessels, suppliers of ancillary equipment, and organisations providing a whole range of related services.

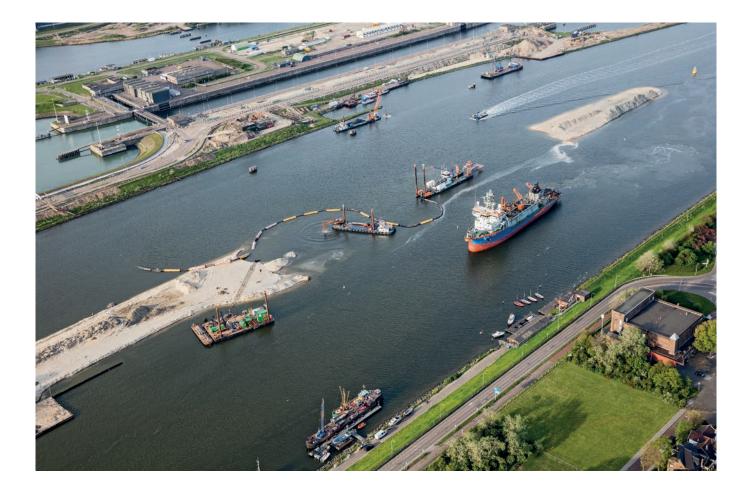
Mission

CEDA's mission is to be the independent, easy-to-access forum for the professional dredging community and the wider associated industries in Europe, Africa and the Middle East. Through its knowledge transfer and exchange programmes, products and services, CEDA enables the professional development, and corporate and personal success, of its members. It fosters technological innovation and advancement of best practice in all dredging-related activities. It promotes the contribution of dredging to sustainable aquatic environment and infrastructure.

CEDA's scope includes all fields related to dredging such as land reclamation, marine and fluvial construction, offshore energy, fluvial and deep-sea mining.

Vision

CEDA's vision is to be essential to the professional dredging community and the wider associated industries and to be universally recognised for its professional expertise and balanced views.



Position

CEDA is part of the World Organisation of Dredging Associations (WODA) and is responsible for Europe, Africa and the Middle East. CEDA's two sister associations, WEDA (Western Dredging Association) and EADA (Eastern Dredging Association), serve the Americas, and Asia, Australia and the Pacific region respectively.

A number of international and national organisations, both professional and trade, operate in dredging and related fields. The graphic below shows those international organisations with which CEDA has regular contacts and co-operates on projects of common interest.

MEMBERSHIP

One of CEDA's distinctive strengths lies in its diverse membership. CEDA members, corporations, organisations and individuals come from many fields and include project owners, commissioners of large infrastructure projects, dredging contractors, equipment manufacturers, consultants, academics and regulators. The graphic and list below illustrate the diversity and the geographical spread of CEDA's members.

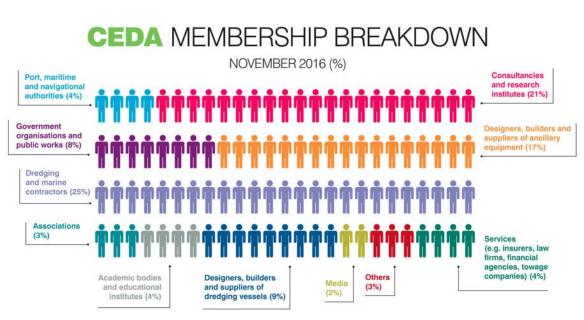
Countries of origin

Argentina	Greece	Portugal
Australia	Guinea	Qatar
Bahrein	India	Russian Federation
Belgium	Indonesia	Spain
Canada	Iran	Sweden
China	Ireland	Switzerland
Cyprus	Italy	Taiwan
Croatia	Malaysia	United Arab Emirates
Denmark	Morocco	United Kingdom
Finland	Netherlands	USA
France	Nigeria	
Germany	Norway	

At the end of 2016, CEDA had 484 individual members, including 17 students, 5 starters, 36 retired members and 10 university or college lecturers. Unfortunately, the number of individual members continues to decrease (in the previous year there were 452).

The number of corporate members has also fallen. At the end of 2016 we had 117 corporate members, 4 members less than in 2015.

Attracting new members and retaining existing ones is a challenge. We strive to put extra effort into bringing new members into our community, and all members are encouraged to be good ambassadors for CEDA.



Composition of CEDA's membership by main area of activity.



New corporate members

In 2016 we were delighted to welcome 9 new corporate members in the CEDA community as listed below.

- Administration des Ports Guinee Bissau
 Guinee Bissau
- Agence Iklil Com Morocco
- ANPMorroco
- Dumez
 Morocco
- Geomil Equipment BV
 The Netherlands
- Hydrogeo SARL
 Morocco
- Industrial Tomography Systems plc United Kingdom
- Cost Engineering Consultancy B.V.
 The Netherlands
- Polytechnical University 'Peter the Great' Russia







Cost engineerinG



"CEDA IS DRIVEN BY ITS

CEDA VOLUNTEERS: CEDA'S PILLARS

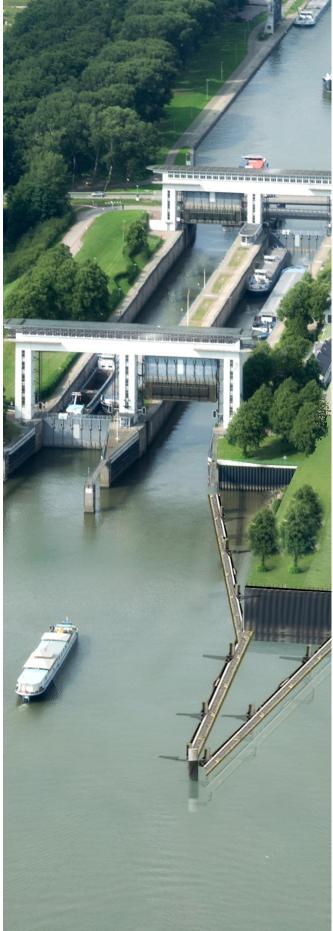
CEDA is driven by its members, many of whom provide their time and expertise voluntarily. The growth of the association is based on their enthusiastic and dedicated work; they are the true pillars of CEDA.

NATIONAL SECTIONS

Areas or countries with many CEDA members can set up a regional or national CEDA section to support internal networking at regional or national events. These sections are the smallest clusters through which CEDA members can become part of the wider CEDA network and, through WODA, be connected to the global network of professionals who share the same interest in dredging and marine construction. The chairs of these sections are CEDA ambassadors who help newcomers swiftly and easily become part of the CEDA community.

In 2016, CEDA's national sections continued to offer a successful series of meetings and site visits on topical subjects. Altogether, CEDA's four national sections held 14 well-attended meetings, site visits and events over the year. Members can see many of the presentations on the appropriate national section pages of the CEDA website.







African Section





Mulud Abudib Chair

Khadija Legliti Secretary

In 2016 we focused on attracting new members, which is essential to the continued revitalisation of the Section. We're pleased with what we have achieved so far, and we are particularly delighted to welcome 4 new corporate members to the section. (See the list on page 8 of this report.)

Last year we were also pleased to host the CEDA Board meeting at the end of September, at Drapor, where the CEDA-AS Secretariat is based.



After the Board meeting, Drapor hosted a site visit to a sand mining site near the town of Azemour where the river Oum Rabia meets the ocean. The sand is used for construction purposes.

Mulud Abudib Chair, CEDA-AS



During a very pleasant evening, Board members also had the opportunity to enjoy local food and culture generously sponsored by Drapor in Casablanca.

Belgian Section



Jos Smits Chair



Christel Goetschalckx Secretary

2016 was another busy year in which we had three events and said farewell to our Chair.

New Year's Reception

On January 26th, the Belgian Section welcomed 2016 with a New Year's Reception and General Assembly in the Red Star Line Museum in Antwerp. Following the keynote speech of CEDA President, Polite Laboyrie, participants were treated to a guided tour of the museum. During the Assembly, the outgoing Chair, Eric Van den Eede, handed over the chairmanship, and Frederik Roose and Elias Van Quickenborne joined the Section's Executive Committee. As the new Chair, I'd like to take this opportunity to thank Eric for his years of service to our section, and to CEDA as a whole, and to welcome the new Executive Committee members.

Club Evening: Dredging - a part of estuarine management

On April 19th, at our traditional location in Hotel Beveren, René Colman (IADC) spoke about the dredging



The New Year's Reception took place in the Red Star Museum, where a guided tour was also part of the programme.

industry in general, and more specifically on the ecosystems services project. At the same event, Prof P. Meire presented a very interesting review about the Scheldt Basin Estuary, with a focus on the management of the ecological system and the 'anthropocene' influences on such systems.

Club Evening: Coastal zone management

The club evening on October 11th was held in Fort Napoleon, Ostend, which was very appropriate given the subject matter. The session on coastal zone management started with Marc Roche (Federal Government) who spoke about the regulation and control on sand-winning activities in the Belgian North Sea. He was followed by Annelies Bolle (IMDC) and Steven Poppe (DEME) who spoke about the coastal defence works in Ada, Ghana - a smart design with a budget-friendly solution. Ada is probably the largest African beach nourishment programme, in the region, and was completed in early 2016. All phases of the project were discussed - from conceptual design, modelling and physical tests over detailed design, right through to completion.

Jos Smits Chair CEDA-BE



Incoming Chair Jos Smits (IMDC) thanks outgoing Chair, Eric Van der Eede (Waterwegen en Zeekanaal), for his outstanding work for the Section.



Dutch Section



Johan Pennekamp Chair



Yvonne Duivenman Secretary

The Dutch Section (CEDA-NL) focusses on disseminating knowledge, and creating a platform for networking, in the Dutch dredging industry and associated professional communities.

In 2016 CEDA-NL organised six meetings in our yearly programme. As always, the topics were carefully chosen to engage, inform and add value for a large audience, and the turnout at every event has proved a testament to the programme's great success. Again, the participation and interaction of young professionals in the CEDA community was a priority. We're proud to have been able to welcome an even greater number of young professionals to our events. CEDA-NL was also pleased to be able to host events in collaboration, and with the great support of, Deltares, Royal Boskalis, Wärtsilä and Royal IHC, and we're grateful to them for their continued support of our meetings. Our collaborations with Dutch branch associations of shipbuilders, KNVTS, and IRO, have also gone from strength to strength. During the year CEDA-NL meetings included:

- 26th January: The maintenance of the Dutch coast, with its many functions, is a topic of continuous attention for the Dutch government. As a result, there are a number of initiatives, developments and strategy adaptations, aimed at enhancing the efficiency of the coastline maintenance. At the January meeting, hosted by Deltares, new developments were presented by 4 speakers: Quirijn Lodder, of Rijkswaterstaat, Laura Vonhögen-Peeters, of Deltares, Jelle Bakker, of Royal Boskalis Westminster and Erik van Eekelen, of Van Oord Dredging & Marine Contractors and EcoShape.
- 12th March: With the oil and gas market in peril, offshore renewable energy is gaining more and more momentum. In a comprehensive meeting, hosted in association with IRO, the Dutch branch association for offshore energy, we covered the topic of offshore wind. The event started with a European overview given by Ruud Bruijne, the Rijksdienst voor Ondernemend Nederland (RVO). Bart Jan van Burgel, Royal IHC and Edwin van de Brug, Van Oord Offshore Wind Projects, continued with a presentation on technical advances on cable lay vessels and logistics around monopile foundations.
- 21st April: Our April meetings traditionally focus on a topic that concerns both the dredging and shipbuilding industries. This time the presentation and discussions were on the introduction of dual fuel in dredging vessels. Three presentation covered the developments: Jan Gabriel, DEME, and Erik van de



The joint meeting with IRO always attracts over 100 participants and is always a big success.

Blom, Royal IHC, talked about the newly-built duel fuel LNG TSHD for DEME at the Royal IHC shipyard. Didier Daems, Royal Shell, spoke about 'LNG: the fuel for the maritime sector', and finally, Dick Heidelberg, Wärtsilä, covered the key points of interest of dual fuel engines for dredging vessels.

- 9th June: This meeting was a visit to the dredging site of the BeauDredge in Harderwijk. The urban housing development of this brownfield site was such that the most well-equipped dredging method proved to be the subsurface suction method of the BeauDredge. Before the excursion to the actual dredging site Kees de Boer, Royal Boskalis, Catharinus Jelsma and Frank Brouwer, both of the Municipality of Harderwijk, introduced the finer details of this amazing project.
- 29th September: As guests of Wärtsilä, in Schiedam, we were able to further explore the topic of LNG in the dredging industry. Frans Harteveld, Wärtsilä, talked about the LNG advantages followed by Alcuin de Weert, Anthony Veder Shipping, who discussed the gradual and successful introduction of LNG fuel in their merchant fleet over the last 10 years. Suzanne Vos, TNO, presented a study, conducted for the Rijkswaterstaat, in which fuels for maritime uses were benchmarked against each other with reference to their environmental impact.
- 15th November: At an event hosted by Royal IHC, in Kinderdijk, we heard about the reuse of dredged material during three presentations. Elbert Besseling, Netics, talked about how the reuse of dredged material is being taken up on an industrial scale. Leendert Bourgonjen, GroningenSea Ports, showed how a sustainable sediment management approach works in the maintenance dredging of their ports. Finally, Erik van Eekelen, Van Oord Dredging & Marine Contractors and EcoShape, presented 'Living Lab for Mud' as a Dutch knowledge development for international use.

CEDA-NL is one of two founding members of the Maintenance in Dredging Society and three meetings were held, under its banner, in 2016:

- 14th March: 'Corrosion on board'
- 6th June: 'Engine maintenance necessities'
- 14th November: 'Sustainable conservation'

Johan Pennekamp Chairman CEDA-NL



The BeauDredge got lots of attention and enquiries.



Yvonne Duivenman and Mark Luchs from the CEDA Secretariat waiting for registered participants to arrive.



Sharing a nice meal and some drinks is always part of the CEDA-NL club evening programme – perfect for catching up with colleagues, friends and the industry's latest news.



UK Section



Nicola Clay Chair



Katherine Coldwell Associated Societies Executive

This report summarises the activities of the CEDA British Section in 2016.

Overview

2016 was another good year for CEDA UK. Membership increased to 78 individual members, by year-end, reflecting the continuing success of the membership drive. Once again, the CEDA UK Committee made a particular effort on membership, during the December technical seminar, and charging an attendance fee for non-members which included a year's CEDA membership certainly helped.

We continued our commitment to the regions by holding our May technical seminar in Newcastle, in the north of England. This was very well received by members based outside of London and we're looking forward to a visit to Wales for our 2017 regional technical seminar.

I'm delighted to announce that in 2016, we delivered our first site visit for several years, more details below.

The CEDA UK Committee members continue to actively participate in meetings and we're very excited about our 2017 events programme. In recognition of the considerable time commitment that Committee members give to CEDA UK, and the difficulties of balancing work pressures, we've agreed to reduce the number of committee meetings and events we deliver each year. For 2017, we'll hold three Committee meetings, in addition to the John Sargent Lecture, and two technical seminars. Site visits will be planned as opportunities arise.

CEDA UK members are contributing to the new version of the "Dredging for Sustainable Infrastructure" book led by CEDA Environment Commission. Finally, the CEDA UK Committee welcomed Polite Laboyrie, CEDA President, and Anna Csiti, CEDA General Manager, to our December Committee meeting, technical seminar and drinks reception. We hope that Polite and Anna enjoyed their visit and look forward to seeing them at future CEDA UK events.

Events and Activities

Three half-day technical seminars were held in 2016.

The Maritime Northern Powerhouse

In May, CEDA members gathered in Newcastle for our second regional technical seminar. We were delighted to meet around 50 attendees from the northern maritime industries, as well as representatives from the Marine Management Organisation, based in Newcastle. Bordered by Liverpool and Manchester to the west, and Newcastle and the Humber to the east, the northern ports and waterways have a major role to play in delivering wider UK economic objectives. The seminar was based around the concept of rebalancing north-south economic prosperity and attracting investment into northern cities and towns. The event brought together the key maritime players, in the Northern Powerhouse, to showcase the importance of ports and inland waterways to economic growth and the future prosperity of the area.

Dredging for Flood Prevention and Response

Our September technical seminar focussed on how dredging can reduce the risk of flooding and contribute to a response after a flood event. Around 30 attendees were presented with a range of case studies from the Somerset Levels, Cumbria and Scotland, and speakers were drawn from regulators and statutory advisors.

Dredging 2016-17: A review and forward look

Our showcase December seminar reviewed 2016 – which turned out to be an exciting and uncertain year for the UK! The CEDA UK Committee brought together those involved in all aspects of dredging, and marine development, to share the year's highlights and consider what 2017 might hold. Presentations covered activities of the CEDA Environment Commission, a review of recent research projects, and an overview of future port and dredging projects, as well as policy changes. The session ended with a discussion about what Brexit could mean! The seminar was followed by our Christmas drinks reception and around 50 guests enjoyed the stimulating presentations and the opportunity for some informal networking.



Nicola Clay, CEDA-UK Chair (Royal HaskoningDHV) welcomes attendees to the half-day seminar in December.

John Sargent Lecture: The Suez Project

The latest Suez Canal expansion was the topic of our John Sargent Lecture for 2016. Jaap Dekker, Project Director of the Challenge Consortium and Dirk Draulans, Project Director of the DEME/Great Lakes Consortium, introduced this large-scale project to the audience. Over just 12 months, the \$8.2 billion investment saw 45 dredging vessels move up to 1.7 million m³ of dredged material per day (over 250 million m³ in total). The project included the construction of a 35km-long new canal section, plus 37km of deepening, and widening, to the Great Bitter Lakes and Ballah by-passes. Jaap and Dirk explained that, in order to complete the incredibly ambitious one-year project, on time, they had to mobilise the world's largest dredging fleet. This, combined with efficient management of the associated logistic and organisational requirements, resulted in the new channel being opened, on schedule, by the Egyptian President, on 06 August 2015. The Committee would like to thank Jaap and Dirk for taking the time to explain this exciting project to us.

Site Visit to Capital Dredging Project, Portsmouth Naval Base

In September, Boskalis Westminster hosted a CEDA UK visit to the current 3 million m³ capital dredging project at Portsmouth. The Boskalis Project Manager, Gerrit-Jan van den Bosch, gave a presentation and guests enjoyed a boat tour of the harbour. The project, in the Portsmouth Naval Base, includes capital dredging of the approaches, harbour entrance, turning basin and berth pocket, and will enable the new Queen Elizabeth Class aircraft carriers to operate from the port. The works are being undertaken using a combination of backhoe dredgers, trailing suction hopper dredgers, and

crane barges from the Boskalis fleet. The site visit was well-attended with over 60 attendees.

CEDA Input to Legislation

CEDA UK takes an active interest in the development of national and European legislation that may affect the dredging industry. Since June 2016 the focus of the UK has been on what Brexit may bring and how that could affect maritime industries. There remains considerable uncertainty and CEDA UK will maintain a watching brief as we move through 2017.

There was no progress with CEDA UK's CEDA Beneficial Use Liaison Group in 2016 but I hope to be able to report on developments during 2017. Nick Smith continues to represent CEDA UK in discussions with Defra on inland dredgings. In the UK, CEDA attends the UK Water Framework Directive/Marine Strategy Framework Directive Navigation Sector Group which provides a forum for the navigation industry and government to liaise over the progress with these pieces of legislation.

Committee members have continued to play an active role in wider CEDA activities. Will Shields and Michael Costaras represent the Committee on the CEDA Main Board and Andrew Birchenough remains involved with CEDA's Environment Commission.

Future Events

In 2017 the Committee is planning several interesting site visits depending on project progress. Details will be provided when the visits are confirmed so please look out for our updates.

The 2017 John Sargent Lecture is currently being finalised.

Our technical seminars in 2017 will include:

- May: Dredging & Marine Infrastructure in Wales (title to be confirmed), in Cardiff
- October: TBC







Liaison with Kindred Organisations

The Committee has continued to liaise with kindred organisations including PIANC, the Federation of Dredging Contractors (now 'dormant'), AINA and of course, the CEDA Main Board. We're represented on the ICE Maritime Panel by Payam Foroudi, and we continue to work with the ICE as part of its knowledge sharing programme. CEDA continues with its official observer roles in the London and OSPAR Conventions.

Personnel

Adrian Gasgoyne and Ben Elstob of Land Water were elected as Committee Members at the 2016 AGM. Alan Gerrett stepped down from the CEDA UK Committee and was replaced by Jean-Baptiste de Cuyper of DEME. All members have made a strong commitment to CEDA UK through attendance at meetings and leading technical seminars and events. I would like to thank the Committee members for their continued dedication to CEDA UK and enthusiasm for our activities. I look forward to, and appreciate, the continued input from all Committee Members during 2017. I would also like to thank Kath Coldwell for her support in providing our Secretariat and look forward to working with Kath, and her ICE colleagues, in the coming year.

Nicola Clay Chair CEDA-UK



Snapshots of a very well attended and successful site visit.

EVENTS

In 2016 CEDA was delighted to be able to run a range of international events – from a very specialised seminar, and face-to-face to virtual meetings, and to contributing to a worldwide congress.

CEDA Environment Commission Seminar to inform Spanish Guidelines 23 May 2016, Puertos del Estados, Madrid, Spain

CEDA Environmental Commission (CEC) was invited to take part in a one-day seminar on best practice in dredged material management. The event on 23rd May, in Madrid, Spain, was hosted by Puertos del Estado and its outcomes will feed into the revision of the Spanish Dredged Material Guidelines.

The current version of the Spanish Guidelines has been endorsed by CIEM (Interministerial Commission on Marine Strategy) and is at an intermediate phase before its approval as a Royal Decree. This final stage of the revision work allows for slight modifications to the relevant sections of the Guidelines, and in particular to Annex VI on beneficial use, so the CEC was particularly pleased to accept the invitation to be involved. At a well-received and very lively event, a specially invited audience of Spanish and CEDA international experts in dredged material management, some of which were involved in developing the Spanish Dredged Material Guidelines, shared their knowledge and challenges. Presentations covering sustainable solutions from technical, economic and environmental angles, fuelled the debate and panel discussions. Delegates represented organisations including government agencies, port authorities, consultants and dredging contractors. Among them were 35 experts from Spain, from 12 port authorities and 6 other organisations, including Puertos del Estado, CEDEX and Magrama. The event was in Spanish and English and the translators did an outstanding job providing simultaneous translation throughout.

In his welcome address, Álvaro Rodriguez Dapena, Director of Puertos del Estado, set the scene for the day which was chaired by CEDA President, Polite Laboyrie (Witteveen+Bos – The Netherlands). In a series of excellent talks, experts from the host country, and CEC, discussed current practice and lessons learned. Using case studies, from a number of European countries, the speakers looked at how others have made beneficial use of dredged materials, worked with the natural environment, and dealt with the challenges presented by contaminated sediment.



Snapshots of the seminar in Madrid. Top row from left: Henrich Röper (Hamburg Port Authority – Germany), Olga Sanchez (Port of Aviles - Spain), Rebecca Gardner (Anchor QEA – USA).





Members of the WODA Board who played a key role in WODCON XXI at their meeting in Miami (I to r):) Cees van Rhee, Secretary/Treasurer CEDA (TU Delft – the Netherlands), Ram Mohan, WEDA Outgoing Chair (Anchor QEA – USA), Robert Ramsdell, WODCON XXI Papers Committee Chair, (Great Lakes Dredge & Dock Company – USA), Craig Vogt, WEDA Environment Commission Chair (Craig Vogt, Inc. - USA), Capt. David Padman, EADA Chair (at the time Port Klang – Malaysia), Capt. K.Subramaniam, EADA Secretary General (EADA Secretariat c/o Port Klang – Malaysia), Polite Laboyrie, CEDA President (Witteveen+Bos – the Netherlands), Anna Csiti, CEDA General Manager (CEDA Secretariat – the Netherlands), John Dobson, EADA Treasurer (EADA – Australia), Frederik Roose, CEDA Environment Commission Chair (Ministry of Flemish Community, Division Maritime Access – Belgium), Marcel Hermans, WEDA Incoming Chair (Port of Portland – USA), Tom Cappelino, WEDA Executive Director (WEDA Executive Offices – USA).

CEC speakers were: Rebecca Gardner (Anchor QEA – USA), Pol Hakstege (Hakstege Consultancy – the Netherlands), Henrich Röper (Hamburg Port Authority – Germany), Grazyna Sapota (Maritime Institute Gdansk – Poland) and Anna Csiti (CEDA the Netherlands).

In the last session, the CEC presented the findings of its review of the Spanish Guidelines along with specific suggestions for amendments. In the very lively panel discussion that followed, the audience shared their thoughts on the suggestions and these will be processed by the Working Group for the amends to the Spanish Dredged Material Guidelines.

The presentations are available for CEDA members in the Resources section of the CEDA website, www.dredging.org.

Members of the CEC were pleased to have such an excellent opportunity to exchange knowledge, and provide input into the amended Spanish Guidelines and Annex VI. As an added bonus, the event was also a source of useful examples for the new CEDA Information Paper on Beneficial Use of Dredged Materials (see page 25 in this report).

World Dredging Congress XXI: Innovations in dredging 13 17 June 2016, Miami, Florida, USA

The World Dredging Congress and Exposition (WODCON) is organised once every three years by WODA, the World Organization of Dredging Associations. It is the most important and anticipated event for dredging professionals worldwide. WODCON is the only global event dedicated exclusively to dredging and hydraulic construction. It provides a unique platform for researchers and practitioners from industry, academia and government to meet and discuss the latest developments.

First formed in 1967 in New York, and held throughout the world since then, these conferences cycle between the three affiliated dredging associations WEDA, CEDA and EADA. In 2013, CEDA hosted WODCON XX in Brussels, and in 2016, WEDA hosted WODCON XXI in Miami. The next WODCON will be hosted by EADA in Shanghai, China in 2019. More than 120 papers were presented in Miami, in four parallel sessions during the four-day event. 30 presentations were by CEDA authors, and peer-reviewed by the CEDA Technical Papers Committee (Cees van Rhee, Delft University of Technology and Dirk Roukema Blue Pelikan, the Netherlands; Marc Sas, IMDC, Belgium; and Anders Jensen, DHI, Denmark). Two of the CEDA papers received prestigious awards at the event:

- Klaas Slager and Mark Winkelman of Damen Dredging, the Netherlands, were given the Dredging Contractors of America (DCA) Award, for their paper 'On the relation of maximum ball passage and recirculation losses in dredge pumps'
- François Dekeuleneer, and co-authors Luc Goiris and M. van der Hoeven of Dredging International, Belgium, received the Young Authors Award from the International Association of Dredging Companies for their paper 'LuXeal – the easy to handle aquitard'



Klaas Slager (Damen Dredging – the Netherlands), right, with the certificate for the DCA best paper award. With him, from left, Marcel Hermans, WEDA chair (Port of Portland – USA), and Michael Gerhardt, DCA general manager.

CEDA's contribution to the WODCON XXI programme also included a joint presentation by CEDA President, Polite Laboyrie (Witteveen+Bos – the Netherlands) and CEDA Environment Commission Chair, Frederik Roose (Ministry of the Flemish Community Maritime Access Division – Belgium). Their presentation was on 'Dredging projects - adaptive environmental management and related monitoring procedures'. It summarised the main points of the two closely linked CEDA papers published in 2015: The position paper 'Integrating adaptive environmental management into dredging projects' and the information paper 'Environmental monitoring procedures'. In addition, Frederik Roose co-chaired the WODA Environment Commission panel on sustainability, during which panellists and delegates shared their views on sustainability and what it means in relation to dredging projects.



Erik van Eekelen (Van Oord – the Netherlands), centre, received the Environmental Excellence Awards on behalf of both project teams from Craig Vogt, WODA and WEDA Environment Commissions Chair (Craig Vogt Inc. – USA), right. On the left, Ram Mohan, outgoing WODA and WEDA President (Anchor QEA – USA).

WODCON XXI also saw the presentation of the first WODA Environmental Excellence Awards. Four awards were presented in two categories: 'Environmental Dredging' and 'Dredging for Coastal Reinforcement'. We're pleased to say that CEDA members took home two of these prestigious awards in the 'Dredging for Coastal Reinforcement' category.

- The Project Team for Medmerry Managed Realignment, Medmerry, UK, won the first prize for 'Dredging for Coastal Reinforcement. Project Team members were Mackey, Environment Agency, RSPB, Arcadis, and Jacobs.
- The Project Team for Hondsbossche and Pettemer Sea Defence, the Netherlands, won the Silver Environmental Excellence Award. Project Team Members were the consortium ZSNH Combinatie Van Oord/Boskalis.



CEDA Iberian Conference: Dredging for sustainable port development

27-28 October 2016, Portuguese Engineers Association (OE), Lisbon, Portugal

In October 2016, we co-hosted a very successful conference, with the Portuguese Engineers Association (OE) in Lisbon. The CEDA Iberian Conference: Dredging for sustainable port development, had over 120 participants, and addressed key topics relevant to the success of port dredging and sediment management projects, with a focus on the Iberian Peninsula.

"Portuguese and Spanish professionals in the field of dredging and port construction initiated this event, inspired by increasing environmental and societal demands on the preparation and implementation of marine infrastructure projects. CEDA was delighted to accept the invitation to organise this unique gathering" – said Polite Laboyrie, CEDA President (Witteveen+Bos – the Netherlands).

In his closing statement, Conference Chair, Stefan Aarninkof, Professor of Coastal Engineering at Delft University of Technology, the Netherlands, said "This was



Those, who made it happen – the Technical Programme Committee. From left: Teresa Sa Pereira (Port of Lisbon – Portugal), Rita Ramos (Port of Lisbon – Portugal), Stefan Aarninkhof, Conference Chair (Delft University of Technology – the Netherlands), Anna Csiti (CEDA the Netherlands), Alberto del Pino (Dravosa – Spain), Polite Laboyrie (CEDA/Witteveen+Bos - the Netherlands).

an outstanding conference. ... The presentations, the lively discussions, as well as the technical visit and the photo contest, clearly demonstrated that going beyond the scope of the traditional dredging project is becoming a growing movement. Project stakeholders are increasingly seeking and achieving innovative partnerships. In particular, the achievements in beneficially re-using sediments, arising from dredging projects, for creating and enhancing wetlands, valuable habitats for many birds and with high recreational value, are truly remarkable."



"This was an outstanding conference"- Professor Stefan Aarninkhof Conference Chair (Delft University of Technology - the Netherlands).

True to tradition, the conference offered plenty of opportunities outside the formal sessions for participants to talk business and relax and have a good time together.

Conference presentations are available to CEDA members in the Resources section of the CEDA website, **www.dredging.org**. There's also a great selection of photos in the photo gallery.

CEDA is grateful to the supporting organisations for their generous help.



For a selection of great photos with conference highlights please see the Special Feature on pages 32-37 in this report.

IHS DPC Innovation Awards

10 November 2016, London, UK

CEDA supported the first IHS DPC Innovation Awards held in November 2016, in London, UK, where companies and organisations were honoured for their innovative contributions to the dredging and port sectors. Many of them were CEDA members and included: Damen, DEME, DHI, HR Wallingford, Jan De Nul, Royal Boskalis, Royal IHC and Wärtsilä.



Winners at the IHS DPC Innovation Awards 2016 (Photo: IHS/Dean O'Brien)



Three individuals were also awarded and all three of them are active in, or connected, to CEDA:

Of the awards given on the night, CEDA was pleased to be able to honour past-President, Anders Jensen, Danish Hydraulic Institute (DHI), with the first CEDA Lifetime Achievement Award, for his services to CEDA and the industry. The Award recognises an individual who has had a significant – and long-term – impact on the field of dredging in his or her professional career. The winner will also have made an important contribution to the advancement of CEDA and will be still professionally active. The CEDA Board of Directors had the honour of choosing the winner.

CEDA President, Polite Laboyrie said, "The great number of CEDA members, who through their drive and unselfish commitment have contributed to CEDA's success throughout the decades, have made choosing the receiver of the CEDA Lifetime Achievement Award difficult - especially for this inaugural award. The CEDA Board has made the nomination criteria extremely stringent."

Craig Vogt (Craig Vogt, Inc. – USA), Chairman of our sister association, the WEDA Environment Commission, and a corresponding member of the CEDA Environment Commission, won the IHS commendation for services to the industry award.

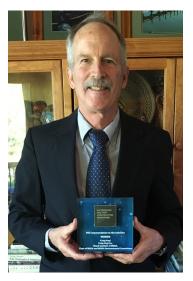
Sina Saremi (DHI – Denmark), member of the Young CEDA Commission and the CEDA Environment Commission won the rising star award.

We congratulate all of them for their outstanding contribution to the advancement of dredging.

CEDA commends its official magazine, IHS DPC, for the initiative. It's important to recognise, and encourage, those who change the industry through new ideas, processes, technology or equipment, and we are looking forward to supporting IHS DPC Innovation Awards 2017.



Anders Jensen (Photo: IHS/Dean O'Brien).



Craig Vogt (Photo: IHS/Dean O'Brien).



Sina Saremi (Photo: IHS/Dean O'Brien).

Webinars

CEDA covers a geographically vast region and, as part of our primary mission to include our most distant members in knowledge transfer and exchange, we continued our webinar programme, in 2016, with 7 outstanding events.

We started in February, when Gerard van Raalte, (at the time Hydronamic/Boskalis – the Netherlands) presented a webinar entitled 'Adaptive management for dredging'. The for experienced engineers provided more in-depth knowlwebinar was largely based on the CEDA position paper entitled 'Integrating adaptive environmental management into dredging projects'. The paper was prepared by a CEDA Working Group that was chaired by Mr. van Raalte.



Gerard van Raalte, presenter of the webinar on adaptive management.

We continued with a series of six, hour-long webinars on 'Dredging equipment and technology', spread over a period of 7 months, with the last event in December. The series focused on the two work horses of the industry, the the Resources section of the CEDA website. cutter suction dredger (CSD) and the trailing suction hopper dredger (TSHD). They were presented by two internationally-renowned authorities on the subject, Professor Dr. ir. Cees van Rhee and Associate Professor Dr. ir. Sape Miedema of the Delft University of Technology.

Prof. van Rhee started off the series with two foundation-level presentations on the working principles of each vessel. Each webinar provided an excellent introduction for engineers, scientists, and other professionals in the field, working on dredging projects. The programme continued with four practitioner-level presentations focusing on particular aspects of the two dredgers. The higher level events edge on specific aspects of each vessel. These events were presented by Dr. Miedema and covered: 'Production estimation based on specific energy in sand, clay and rock'; 'An overview of slurry transport models'; 'Flow regimes diagrams in slurry transport'; and 'The sedimentation process in a TSHD'.

Each webinar in the series included a 15-minute live Q&A at the end, and participants had plenty of opportunities to ask questions and interact with the speakers.

We were very pleased with the number of registrations (120-150 for the adaptive management, and the foundation level events of the dredging technology series, and 50-75 for the practitioner level events) and the level of active participation at each event.

The webinar recordings and presentations are available in

The webinars were presented with support of CEDA corporate member, Deltares , the Netherlands. We are in particular grateful to Johan Pennekamp and Roderick Hoekstra for their support.



Cees van Rhee Sape Miedema Presenters of the seminar series on dredging equipment and technology.



Webinars offer excellent learning opportunities at the comfort of one's own desk.



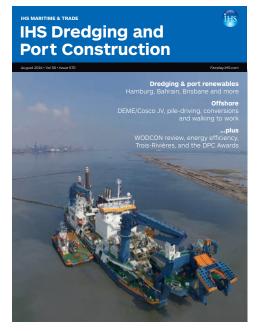
SERVICES

In addition to providing a platform for learning, knowledge and information exchange, and networking, CEDA also offers a variety of other services to members. In particular, it publishes resources in print and online. It also gives corporate members the opportunity to present themselves online and at events.

Publications

CEDA's official magazine, IHS Dredging and Port Construction - DPC

Every CEDA member receives, as a benefit of membership, a subscription to IHS Dredging and Port Construction (DPC), the official magazine of CEDA. This specialised monthly publication keeps the readers informed of the latest developments in the sector and is helpful in identifying appropriate business partners. DPC also keeps readers up-to-date on the activities of CEDA and its sister associations, EADA and WEDA. CEDA members have access to the online version of DPC and can browse or download the archives.



All CEDA members receive the print magazine DPC and have access to the online version.

Subscribers to IHS Dredging and Port Construction including all CEDA members – can benefit from enhanced features such as:

- Access to the IHS Sea-web[™] news module: www.sea-web.com/news
- Digital magazine: maritime.emags.ihs.com



Excellent response to call for members to the Working Group on Beneficial Use of Sediment. In the photo (I to r): Pol Hakstege (Hakstege Consultancy – the Netherlands), Helmut Meyer (Federal Waterways and Shipping Agency – Germany), Roeland Lievens (Boskalis – the Netherlands), Marco Wenseen (Port of Rotterdam – the Netherlands), Arjan Wijdeveld (Deltares/TU Delft – the Netherlands), Dafydd Lloyd Jones (Marine Space – UK), Chris Schalm (Ministry of Environment and Infrastructure /Rijkswaterstaat – the Netherlands), Anna Csiti (CEDA Secretariat – the Netherlands), Frederik Roose (Ministry of the Flemish Community Maritime Access Division – Belgium), Rebecca Gardner (QEA – USA), Colin Scott (ABPMer – UK), David Tenwolde (Dredging Marine Offshore Services – the Netherlands), Ivo Pallemans (Jan De Nul – Belgium), Nick Buhbe (Greatecology – USA).

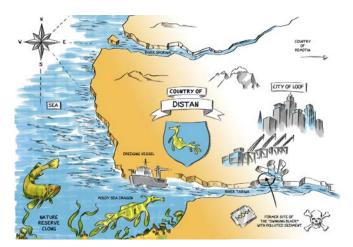
In preparation

In 2016 the CEDA Environment Commission (CEC) prepared the groundwork for a number of planned publications . A brief overview is below.

CEDA information paper 'Beneficial use of dredged sediments'. CEC has prepared and issued the terms of reference for a CEDA Working Group to produce this paper. It will highlight recent advances and best practices in the beneficial use of sediment in the context of sustainable development, and will use case studies to highlight new lessons learned. It will consider strategic approaches to beneficial use and the use of the environmental flows (for both water and sediment), and the sustainable relocation concept, as a part of beneficial use, that is consistent with sustainable development. We've had an excellent response to our call for members for this Working Group, which consists of 19 experts from 8 different countries, including the WEDA and EADA regions, and represents the entire cross section of CEDA's membership. The group started work in January 2017 and aim to publish their paper in early 2018.

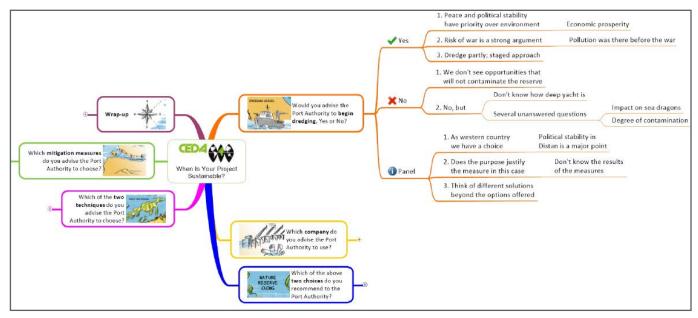
CEDA information paper **'Sea-floor integrity'** (working title). The Marine Strategy Framework Directive (MSFD, 2008/56/EC) establishes a framework within which member states shall take the necessary measures to achieve, or maintain, good environmental status (GES) in the marine environment by the year 2020 at the latest. GES is determined on the basis of a set of 11 qualitative

descriptors. Descriptor 6 is sea-floor integrity, for which the requirement is that: 'Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.'



The fictitious City of Loof provided the scene for the CEDA Dredging Days 2015 interactive session. The case specially designed to mirror real-life challenges was used to stimulate debate and creative thinking about sustainability in dredging projects.

The dredging community is familiar with the other qualitative descriptors of importance for dredging works and marine construction (such as D7 Hydrographic conditions and D11 Underwater sound and other forms of energy) but there is more uncertainty around the descriptor sea-floor integrity. The CEC has therefore decided to set up a Working Group on Sea-floor Integrity (WGSI) to prepare a CEDA information paper on this MSFD Descriptor and its related criteria and methodological standards. CEC has finalised the terms of



The results of the debate were recorded real-time in a mind map.



reference for this working group which has been issued in January 2017.

Work area on the CEDA website: **Deep-sea mining**. This is a relatively new area for the dredging community, where more and more CEDA members are active. It became clear during CEC discussions that there is a substantial amount of knowledge available on different aspects of the subject. It was agreed to collate that knowledge and make it available, in a structured manner, to members on the CEDA website. In 2016, the Task Group completed approximately 80% of the work.

Report about CEDA Dredging Days 2016 interac-

tive session on sustainability. During CEDA Dredging Days 2015 the collective knowledge of the audience was harnessed in a lively and highly engaging session about what sustainability means in the context of (navigation) dredging projects. They also discussed how to apply this concept in the different phases of a dredging or marine construction project, and how we know if a project is designed sustainably. In 2016, the CEC worked on a paper, published in early 2017, that summarises the highlights and outcome of the debate. CEDA-IADC handbook 'Dredging for Sustainable Infrastructure' (working title). During 2016 the foundations were laid for the proposed content, structure and main messages of the book. The Editorial Advisory Board reached a stage where they felt it was time for a second workshop to get



Members of the Editorial Advisory Board and lead authors at DHI, Copenhagen, Denmark, during work sessions held in 2016. (From left to right): Jamie Gardiner (Royal HaskoningDHV – UK), Mark van Koningsveld (Van Oord Dredging and Marine Contractors – the Netherlands), Anders Jensen (DHI – Denmark), Stefan Aarninkhof (Delft University of Technology / at the time Boskalis – the Netherlands), Ida Brøker (DHI – Denmark), Rene Kolman (IADC – the Netherlands), Mark Lee (HR Wallingford – UK), Polite Laboyrie (Witteveen+Bos – the Netherlands), Marcel van De Parys (Jan De Nul – Belgium), Chris Adnitt (Royal HaskoningDHV – UK).

feedback from the target audience. The workshop, to be held in early 2017, would help them ensure that they were on the right track and that this was the book the audience had been waiting for. The aim is to present the book during CEDA Dredging Days 2017. During last year Polite Laboyrie (Witteveen+Bos – the Netherlands) took over the role of the Editorial Advisory Board chair from Anders Jensen (DHI – Denmark).

Digital services

CEDA websites and e-newsletters

The two CEDA websites, www.dredging.org and www.cedaconferences.org, as well as the CEDA Newsletter, are the most effective ways to keep members, and other stakeholders, informed about CEDA's activities. They also facilitate the sharing of dredging knowledge and information. More and more employees of CEDA corporate members are opening personal accounts to allow them to bypass the CEDA contact points for their organisations and directly access CEDA e-notices, e-newsletters, and the members area of the website.

CEDA proceedings online

The proceedings section of the CEDA website now contains over 1050 CEDA conference and congress papers, all of which have been peer-reviewed. These are available in the Resources Section (Resources > CEDA publications online) and are readily accessible to CEDA members free of charge.

The online proceedings are also available to non-members who can access any full paper for €20.00.

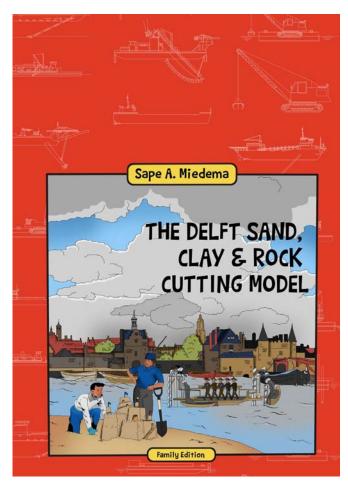


We've digitised many of the papers from our historic proceedings and made them available on our website.

Publications by others

Visitors to the Resources section of the CEDA website can find publications that have been kindly made available to us by members and supporters. In 2016 we added three books by Dr. ir. Sape Miedema (listed below) and they were used as reference material for the series of webinars on dredging equipment and technology (see page 24 in this report).

- Introduction Dredging Engineering, Miedema, S.A. (2016)
- The Delft Sand, Clay and Rock Cutting Model, Miedema, S.A. (2016), Delft, Delft University Press
- Slurry Transport: Fundamentals, A historical overview and the Delft head loss and limit deposit velocity framework, Miedema, S. A. (2016)



This book, along with several others, is available to download from the CEDA website.

Presentations online

A range of presentation files from international and CEDA national section meetings are also available for members on the CEDA website along with the webinar presentations (the latter do not require member login at the moment).



One of the presentations at the CEDA-NL meeting.

Social media

The number of our followers and engagement levels on Twitter (@CEDAdredging) and LinkedIn keeps growing which is encouraging. In 2017 we intend to further expand our reach and to enable members, and non-members, to connect, share ideas, and keep up-todate more easily.



The number of followers, who engage with us on social media, continues to grow. Are you a member of the CEDA LinkedIn group? Do you follow us on Twitter? Make sure you're part of the discussion.



Those interested in dredging can communicate, start debates and network with each other, on four LinkedIn groups - CEDA, Young CEDA, CEDA-UK, and CEDA Adaptive Management. Each group allows members to connect, and have meaningful dialogue, with like-minded professionals and associates in the industry.

Services to corporate members

Corporate members of CEDA have the opportunity to promote their products and services directly to the membership. They can also reach a broader audience through publishing commercial white papers on the CEDA website, which we distribute via the CEDA e-newsletter and our social media channels including LinkedIn and Twitter.

The list of corporate members on the CEDA website, which includes hyperlinks to the companies' own websites, is one of the most frequently visited pages of our site.









SPECIAL FEATURE: WODA STATEMENT ON MITIGATING AND ADAPTATING TO CLIMATE CHANGE

WODCON XXI, June 2016, Miami, FL, USA

The World Organization of Dredging Associations(WODA) issued an official 'Statement on Mitigating and Adapting to Climate Change' at the opening session of the World Dredging Conference (WODCON) XXI in Miami, Florida.

As Ram Mohan, President of the Western Dredging Association and host of the 2016 gathering, announced, "The WODA statement reflects the commitment of the international dredging and maritime construction industries to confronting the serious challenges that climate change presents to the well-being of the global community and the planet".

Hundreds of coastal cities all over the world, such as New York, Hong Kong, Shanghai, Miami and Mumbai to name a few, are threatened by the rise in sea level caused by climate change.

The dredging professional community has unique expertise to find innovative solutions to the increasing necessity for coastal protection. With that in mind, WODA members felt it appropriate to issue a statement reflecting their concerns and offering their cooperation to join other international organizations with a similar focus. It will take a joint effort from a broad base to mitigate the potentially catastrophic results of climate change.

The WODA's full statement can be read on the next page.



Køge bay Beach Park, Denmark: A scheme which combines flood protection, recreational beaches and marinas. A dike is hidden in the man-made dunes and runs around the marinas protecting the hinterland (From CEDA Information Paper (2012): Climate change adaptation as it affects the dredging community. Available on www.dredging.org)



CENTRAL DREDGING ASSOCIATION EASTERN DREDGING ASSOCIATION WESTERN DREDGING ASSOCIATION

14 June 2016

World Organization of Dredging Associations Statement on Mitigating and Adapting to Climate Change

Noting the significance of the December 2015 UN Paris Climate Change Agreement, the World Organization of Dredging Associations (WODA) agrees that concerted and timely efforts for climate change mitigation and adaptation are crucial to reducing risks to people, and to safeguarding human social and economic well-being and the ecology of the planet in the near and long term.

The members of WODA*are committed to:

- Increasing energy efficiency and managing carbon in relation to dredging projects, including reduction
 of carbon emissions and creating carbon sinks through habitat development;
- Contributing to enhanced resilience and reducing risks to the world's shorelines, coastlines, inland, estuarine and marine water resources, waterways, infrastructure; and
- Advancing innovation, dredging knowledge, and best practices and sharing these to support the above actions.

The members of WODA recognize that:

- Dredging and sediment management are essential to maintaining and improving our quality of life, economic well being, and ecosystem health.
- An integrated, holistic approach to carbon management in relation to dredging projects is needed:, optimization of dredging processes, innovations in the design of dredging vessels, the use of alternative fuels, as well as the use of sediment to support carbon sequestration offer opportunities that should be further developed.
- Adaptation measures for climate change need to be based on a well-informed approach that makes appropriate use of surveying, monitoring, and adaptive management.
- Natural systems and nature-based infrastructure (e.g., beaches, dunes, barrier islands, wetlands, and reefs) serve a critical role in supporting resilient coastal systems. Dredging and sediment management that support natural systems and nature-based infrastructure is a key component of adaptation strategies, policies, plans, and actions.
- Flexible, evidence-based, and science-informed regulatory frameworks are essential for the timely and efficient implementation of innovative solutions.

Acknowledging the challenges facing nations around the globe to mitigate and adapt to the effects of climate change, WODA members will collaborate with a wide range of other professional groups, kindred associations, and stakeholder groups to identify, share, and implement effective solutions that benefit communities, the economy, and the environment.

Ram K Mohan

Ram Mohan, PE, PhD Chairman WODA WODCON XXI, Miami, Florida, USA 14 June 2016

* WODA is a broad-based organization representing all segments of the dredging community.



SPECIAL FEATURE: CEDA IBERIAN CONFERENCE: DREDGING FOR SUSTAINABLE PORT DEVELOPMENT 27-28 OCTOBER 2016, LISBON, PORTUGAL HIGHLIGHTS IN PICTURES

The participants



The Conference had over 120 participants, most coming from the host country, and addressed key topics relevant to the success of port dredging and sediment management projects, with a focus on the lberian Peninsula. In the background, the conference venue, the beautiful building of co-organiser, the Portuguese Engineers Association (OE).

The welcome words



Welcoming delegates to the conference, Polite Laboyrie, CEDA President (Witteveen+Bos – the Netherlands) said that CEDA was delighted to accept the invitation to organise this unique gathering and work together with the Portuguese Engineers Association (OE) to make it a success.

The Conference Chair



In his opening address, Stefan Aarninkhof, Conference Chair, Professor of Coastal Engineering at Delft University of Technology, the Netherlands, stressed that going beyond the scope of the traditional dredging project is becoming a growing movement. The conference programme. Professor Aarninkhof guided us through the two intensive, programme-packed days putting each element of the programme into context with respect to sustainability in dredging.

The local driver behind the conference



Teresa Sa Pereira (Port of Lisbon – Portugal) was one of the local experts who initiated the conference and played an indispensable role in making it happen.

The technical presentations

The 15 well-curated, excellent presentations, by experts from eight different countries, showcased highly innovative solutions, and pro-active approaches, and offered valuable lessons to take home. The speakers covered concepts and strategies for sustainability; developments of ports and coasts; sediment management; and environmental management and monitoring. Some of the speakers are shown below.



Jasper Fiselier (Royal HaskoningDHV – the Netherlands) spoke about using the ecosystem approach to define the CO2-balance of dredging projects.



Steve Gilbert (The Royal Society for the Protection of Birds (RSPB) – UK) using case studies from the UK convinced the audience that nature conservation and industry can be in harmony.



Luís Portela (National Laboratory for Civil Engineering (LNEC) – Portugal) spoke about the changing paradigm in dredging in Portuguese ports.



Olga Sanchez (Port of Aviles – Spain) talked about port expansion that meets economic, environmental and social objectives.



Rebecca Gardner (Anchor QEA - USA) presented innovative solutions for managing contaminated sediments.



Koen Sweers (Dravosa – Spain) summarised lessons learned in relation to sustainable dredging in Spanish ports.



CEDA Iberian conference highlights

Young CEDA pitch talks

There was a special Young CEDA Pitch Talk session of 3 fast-paced and sharp presentations. Young professionals, representing Dravosa, HAL Maritime and Boskalis, had the opportunity to present their ideas to an expert audience and get immediate feedback and encouragement. The presentations by Peter de Looze and João Fernandes were broadcast live on Periscope and are available on Twitter at @CEDADredging (date 28 October).



João Godinho (at the time of the project with Dravosa – Spain) spoke about sustainable nourishment of a dark sand beach.



Peter de Looze (HAL Maritiem – the Netherlands) spoke about why data is the new oil.



João Fernandes (Boskalis – the Netherlands) talked about strategies for reducing the impacts on port development and presented the Portsmouth Design and Construct case.

Lots of interaction and good discussions



Getting ready to share knowledge







Exchanging contacts.



Swapping ideas over lunch.





Enjoying a glass of wine and making connections in the beautiful OE building.

...both inside and out, the magnificent OE building provided a very pleasant, enjoyable backdrop to sessions.



CEDA Iberian conference highlights

The technical visit



The technical visit to Caparica beach was hosted by the Portuguese Environment Agency.



There was of course a lot of opportunity to discuss what we saw and heard, to make new contacts, and to take photos.



Our guide was Celso Aleixo Pinto (Portuguese Environment Agency – Portugal) (centre) who explained in detail how the Agency worked closely with the Port of Lisbon Authority to devise a dredging plan, using dredged sediments from maintenance dredging, to successfully mitigate erosion problems on the beaches. The visit was a great opportunity for participants to hear from those involved.

Sustainable ports photography contest

Participants of the site visit were invited to capture in photos the concepts, ideas and approaches presented during the conference, and the best pictures were entered into a photo competitionor-ganised by Young CEDA. 31 photos entered the competition and Young CEDA shortlisted 10. In addition to adding an interactive element, the photo competition also sought to stimulate further thinking and discussion. Each shortlisted photographer was given one minute to pitch their work to the audience which voted for the winning photo.



Elisa Silva (Algarve University – Portugal) pitching her photo while her fellow contestants wait their turn.



The winning photo and the pitch: "The coast is safe, so I can sleep".

Sustainable development of ports and coastlines is not just about clever engineering and supporting nature development. It's also, if not mainly, about society... about the people. So this picture, doesn't show any beach, coastal structure, or special marine flora... only a man resting on a bench on the coastal boulevard. It highlights the social aspect of the Costa da Caparica project.



"It is so typically you, Gerard, winning a Sustainable Coasts Photography Contest with a picture without even a small stretch of water on it!" said Stefan Aarninkhof when he presented the prize.

The award ceremony was broadcasted live on Periscope and it's available on Twitter at @CEDADredging amongst the CEDA tweets (date 28 October).

The winner, Gerard van Raalte (GRA Consultancy – the Netherlands) as he makes his pitch. Gerard also presented the CEDA Information Paper: Adaptive management for dredging during the conference



REPORTS FROM THE COMMISSIONS

CEDA currently has 5 active commissions that report to the Board. Their reports are listed here in alphabetical order.

CEDA Communications Commission (CCC)



Will Shields Chair



Deborah Rowe Secretary and Content Editor

Following his appointment to the main CEDA Board in November 2015, Will Shields, Boskalis Westminster, has also agreed to chair the Communications Commission (CCC).

In addition, Deborah Rowe, Sheba Marketing, has been appointed as the secretary and content editor, to help ensure that CEDA's external communications are effective, efficient and of a consistently high quality. The corporate members' survey carried out in 2015 confirmed that members generally felt that CEDA provided many of the right activities to help them in their daily roles and professional development. However, the same survey revealed there was also an overwhelming agreement that we should be publicising more about what we do. Essentially, members wanted to hear more about CEDA activities and wanted to be able to share details with their colleagues.

You may have already noticed various changes in how we let you know about our activities, with an increase in social media activity and regular news and e-newsletters. Hopefully you will also have seen the first of our sixmonthly printed newsletters, which has been distributed to members for use at events and in corporate areas. The newsletters are an addition to existing communications and provide brief updates on events and activities of CEDA. Any feedback about the newsletters would be positively welcomed and will help us ensure we provide the most appropriate information for CEDA members.

CCC is also working closely with social media advisors to ensure we work together efficiently to provide clear and integrated communication through our website, LinkedIn and Twitter. Anna Csiti deals with the social media postings, and reporting, on behalf of the CCC.

These communication channels will continue alongside our regular e-newsletters and special circulars on specific current topics, produced as required.



A revitalised and enthusiatic CCC at their meeting hosted by Tideway in Breda, the Netherlands (I to r): Will Shields (Boskalis Westminster – UK), Deborah Rowe (Sheba Marketing – UK), Martin van Ommen (Royal IHC – the Netherlands), Kathleen De Wit (IMDC - Belgium), Nicolas Hibert (Dredging International – Belgium).

The Communications Commission will work closely with each CEDA commission and National Section. Each commission has been asked to propose a representative to provide updates, and activity reports, to the CCC for internal and external distribution.

Other actions for the Commission include the preparation of standard tools to help CEDA ambassadors communicate CEDA's work. Tools will include information cards and CEDA formatted PowerPoint slides that can be dropped into presentations to promote CEDA.

Since the reactivation of the Communications Commission in July 2016, the first full meeting was held at the CEDA Secretariat in Delft. The next meeting is scheduled in Breda early 2017, hosted by Tideway, T he Netherlands.

We would like to thank DEME for their considerable effort in producing this Annual Report.

Will Shields Chair CEDA Communications Commission

Dredging Management Commission (DMC)



Polite Laboyrie Acting Chair

It's a great pleasure for me to report that our new commission is "alive and kicking"- particularly as this was one of the first actions I took on as CEDA President.

The idea has been around the CEDA Board for a while but it only took shape properly last year. Members told us, during the corporate members' survey, that they would like CEDA to do more on contracting and that gave us the final impetus.

Acting on the recommendation of the Strategy Commission, the Dredging Management Commission



(DMC) was set up to provide a forum for initiating and facilitating discussions, innovations and questions from the dredging community, on the management of dredging works in the broadest sense. Its aim is to bring together all stakeholders related to dredging management works, and to be:

- the discussion platform,
- the focal point of contact
- the initiator of knowledge development

By doing so, the DMC aims to encourage mutually beneficial improvements and solutions for all involved.

With 13 initial members, DMC had its inaugural meeting in September 2016, at the CEDA Secretariat in Delft. From the first moments there was a lot of energy in the room. The vast amount of knowledge and expertise around the table, the enthusiasm, and the willingness to work together, was clearly tangible. Working in the relaxed and constructive manner, that typifies CEDA commission meetings, the group agreed to start



The Dredging Management Commission during their inaugural meeting at the CEDA HQ in Delft (I to r): Claus Iversen (Femern Baelt – Denmark), Arjan de Heer, Young CEDA (Witteveen+Bos – the Netherlands), Guido Kaschel (Hamburg Port Authority – Germany), Koos van der Geer (Van Oord Dredging & Marine Contractors – the Netherlands), Bert Visser (Rijkswaterstaat – the Netherlands), Anna Csiti (CEDA – the Netherlands), Johny van Acker (Dredging International – the Netherlands), Andre van Hassent (Port of Rotterdam – the Netherlands), Polite Laboyrie (Witteveen+Bos – the Netherlands).



work on:

- optimising a dredging strategy for ports, waterways, coastal and flood protection
- contract management simplifications
- monitoring and promoting the development of the state-of-the-art dredging technology for the future

Four months on, at the time of writing this report, DMC has 18 members and more detailed plans to move forward work focusing on the following four points in the context of contracting:

- Contract types / procurement / division of responsibilities / competitive dialogue as a tool to achieve earlier involvement of the contractors
- Information about the work area (e.g. soil / objects / currents / traffic)
- Regulations / thresholds / requirements from permits / identification and overview of stakeholders, including relevant regulators/authorities and NGOs
- Technical possibilities (e.g. regarding material to be dredged / environmental aspects / emissions)

For the time being I am chairing the Commission. It's expected that someone from the group will take on this responsibility shortly (perhaps by the time this report is published...).

Polite Laboyrie Acting Chair Dredging Management Commission

Educational Activities Commission (EAC)



Cees van Rhee Chair

The remit of this relatively young Commission is to strengthen CEDA's role in the creation, dissemination and exchange, of high-quality, unbiased, relevant and timely knowledge and best-practice. In 2016 we explored the opportunities for further co-operation with ICE Publishing. We looked at the feasibility of developing a bespoke portal, containing a curated collection of dredging-related articles from ICE Publishing journals and magazines, which would be accessible for CEDA members. We also worked with the Strategy Commission and agreed to create a dedicated portal for members, on the CEDA website, where potential research partners would be able to connect and talk to each other.





The Educational Activities Commission is also looking into how we can extend and/or modify our existing content platforms, and tap into the collective knowledge of our members, to share our learning opportunities more widely. The interactive session, such as those run at key events including CEDA Dredging Days, our webinars (see page 24 in this report), and the LinkedIn discussion group on adaptive management, are all results of our efforts thus far.

Cees van Rhee Chair, Educational Activities Commission

CEDA Environment Commission (CEC)



Frederik Roose Chair

For CEDA Environment Commission (CEC) the past year has been a cocktail of continuing regular activities and dealing with new challenges. The activities of CEC can be grouped under three main headings:

- Publishing information on environmental topics
- Contributing to CEDA's conferences and events
- Environmental policy work

Publications

CEC selects relevant topics and defines terms of reference for a CEDA information or position paper. A working group is then established by inviting CEDA members to bring in their relevant expertise and to produce the publication. This process gives CEDA members the opportunity to share available expertise and knowledge on a wide variety of topics. An overview of publications and works in progress is given in the Publications section of this report (See pages 25-27) and the website.



CEDA Environment Commission during the 2016 autumn meeting in Balatonfüred, Hungary. (I to r): Erik van der Blom (IHC – the Netherlands), Marijn Huijsmans (Witteveen+Bos – the Netherlands), Joël I'Her (Cerema – France), Daan Rijks (Boskalis – the Netherlands), Tom Matthewson (HR Wallingford – UK), Marc Huygens (DEME – Belgium), Klavs Bundgard (Sweco – Denmark), Pieter de Boer (Rijkswaterstaat – the Netherlands), Grazyna Pazikowska-Sapota (Maritime Institute Gdansk – Poland), Sina Saremi (DHI – Denmark), Anna Csiti (CEDA – the Netherlands), Bence Csiti (Budapest University of Technology and Economics – Hungary), Frederik Roose (Ministry of the Flemish Community Maritime Access Division – Belgium), Valeri Penchev (CORES Ltd – Bulgaria), Alessandra Feola (ISPRA – Italy), Henrich Röper (Hamburg Port Authority – Germany) and Michael Shilin (Peter the Great Polytechnical University St Petersburg – Russia).



Contribution to CEDA's conferences and events

In 2016 CEC members featured in several activities during WODCON XXI (13-17 June in Miami, USA) and CEDA's Iberian Conference (28-29 October in Lisbon, Portugal). (See pages 18-22 and 32-37 for details of both events.)

CEDA held a seminar on dredged material management on 23 May 2016, in Madrid, in collaboration with Puertos del Estado. The aim of the seminar was to exchange knowledge and to share best practice on beneficial use of dredged material and management options, for contaminated sediments, in accordance with national laws. The output from the seminar will help to inform the revision of the Annex on beneficial use of dredged material, in the Spanish guidelines on dredged material management. Several CEC members were invited to share their expertise during the seminar. CEDA presentations were given by Rebecca Gardner, Pol Hakstege, Henrich Röper, Grazyna Sapota and Anna Csiti. CEDA also provided specific comments on the current version of the Spanish guidelines pointing out possibilities for improvement. The CEDA contribution was very well received and the seminar was a big success.

Environmental policy work

A key task of CEC is to develop and implement CEDA's environmental policy and represents CEDA at meetings of international conventions, and other regulatory forums,



Chantal Martens (centre) (Ministry of the Flemish Community Maritime Access Division – Belgium), newly appointed MSFD NAVI Chair briefs members of the CEC during their meeting hosted by IMDC, Antwerp, Belgium, on the latest developments relating to the Directive, just before moving on to the MSFD Strategic Co-ordination Group meeting in Brussels, later in the day. To her right: Grazyna Pazikowska-Sapota (Maritime Institute Gdansk – Poland), Helmut Meyer (Federal Waterways and Shipping Administration, Germany); on her left: Mark Bollen (IMDC – Belgium).

such as the London Convention and Protocol (LC/LP) and the Oslo and Paris Convention (OSPAR).

At the LC/LP consultative meeting in September 2016 Andy Birchenough (CEFAS – UK) presented the WODA Statement on Mitigating and Adapting to Climate Change (2016). They provided the link to the online version as well as to the CEDA Position paper 'Climate Change Adaptation as it Affects the Dredging Community' (2012). Laura Lallier (eCoast – Belgium) attended OSPAR's Environmental Impacts of Human Activities Committee (EIHA) meeting on CEDA's behalf and presented the CEDA Information paper on 'Monitoring Procedures'.



Laura Lallier (eCoast - Belgium) represented CEDA at the OSPAR EIHA 2016 meeting. Pictured here during the CEC site visit to 'Kieldrechtsluis' near Antwerp, hosted by IMDC.

A number of EU Directives are relevant for dredging and related activities, including the management of dredged sediments. As a stakeholder CEDA is involved in the implementation process of the Marine Strategy Framework Directive (MSFD) and is chairing the MSFD NAVI group, providing input to the EU on this legislative process.

The MSFD provides the legislative basis, and processes, for EU Member States to establish national marine strategies to achieve, or maintain, Good Environmental Status (GES) of their marine waters. In preparation for the revision of the Descriptor Manuals (Commission Decision 2010/477/EU) the MSFD NAVI submitted comments to the Commission during 2 feedback rounds in 2016. The final drafts have been presented to the European Parliament and Council for approval.

One of the elements of the Marine Strategies is the development of a Programme of Measures designed to achieve or maintain GES. According to the MSFD,

Programmes of Measures may include the use of permits, licenses and authorisations. Member States had a deadline of 31 March 2016 to report their Programmes to the Commission. In view of the assessment, of the reported Programmes of Measures, the Commission organised a workshop (7-8 April, Brussels) to gather data on the use of authorisation, permitting and licensing procedures, and their contribution towards reaching GES. Two MSFD NAVI members had the opportunity to share their insights during the workshop: Jan Brooke, PIANC representative (Independent Consultant – UK) and Dafydd Lloyd Jones, CEDA representtaive (Marine Space – UK).

About CEC

In 2016, CEC welcomed 5 new members: Grazyna Pazikowska-Sapota (Maritime Institute Gdansk, Poland), Tom Matthewson (HR Wallingford, UK), Marc Huijgens (DEME, Belgium), Alessandra Feola (ISPRA, Italy) and Sina Saremi (DHI, Denmark) as representative from Young CEDA.

The spring meeting of CEC was held in April 2016 in Antwerp, Belgium and was hosted by IMDC. The autumn meeting was hosted by CEDA in Balatonfüred, Hungary, with the aim of catching up with CEDA EC members



Sándor Baranya (Budapest University of Technology and Economics – Hungary) talks about sediment challenges in the Danube river basin, in particular the Hungarian stretch, and how they are dealt with, as well as about ICPDR's Danube Sediment Project.

from the Danube area and the activities of ICPDR (International Commission for the Protection of the Danube) where CEDA is a non-governmental observer.

Frederik Roose Chair, Environment Commission

OSPAR Commission's EIHA Committee clarifies terminology relating to dredged material – and CEDA played a role

The terms 'dumping', 'disposal', 'placement', 'relocation' and 'deposit' are commonly used in connection with the management options of dredged material, in practice and often interchangeably. There has been some confusion even in the OSPAR commission's annual reports on dredged material. The point was raised by CEDA (Laura Lallier, eCoast, Belgium) in the framework of the EIHA 2016 meeting, and discussed as part of the Expert Assessment Panel (EAP) on dredged material. CEDA participated in this discussion, explaining our point of view and, as a result, we have contributed towards a clearer understanding of the existing terminologies.

In conclusion, the EAP at EIHA 2016 has agreed on the following use of terms: **Dumping** is the legal term used in the OSPAR Convention and is described as "... the deliberate disposal of waste, or other matter...". **Placement** is described as "...anything else beyond mere disposal...". **Deposit** (ref. Revised OSPAR Dredged Material Guidelines, 2014) is an overarching term to describe dumping and placement.

Aligned with the above definitions, EIHA 2016 changed the original title "OSPAR Annual Reports on dumping of wastes and other matter" to "OSPAR Annual Reports on dumping and placement of wastes and other matter" with a footnote stating that "Placement in this report only relates to dredged material, i.e. placement of dredged material for beneficial uses." The introduction further clarified that "This report will deal with the disposal of dredged material at sea (dumping within the Convention), beneficial use (placement as defined in the Convention), and with confined disposal facilities (dumping within the Convention)."





CEDA representatives at international forums



Andy Birchenough Cefas, UK • LONDON CONVENTION • OSPAR



Pieter de Boer Ministry of Infrastructure and Environment, Netherlands • EU WASTE DIRECTIVE

Chantal Martens

Ministry of Flemish

Maritime Access,

• EU MARINE STRATEGY

 EU MARINE STRATEGY DIRECTIVE STRATEGIC CO-ORDINATION GROUP
 EU MARINE STRAT-EGY DIRECTIVE WORKING GROUP
 ON PROGRAMME OF MEASURES, ECONOMIC AND SOCIAL ANALYSIS

DIRECTIVE NAVI (CHAIR)

Community,

Belgium



Vera Breitung German Federal Institute of Hydrology, Germany • INTERNATIONAL

COMMISSION FOR THE PROTECTION OF THE RIVER DANUBE



Tom Matthewson

- HR Wallingford, UK OSPAR INTERSES-SIONAL CORRESPON-DENCE GROUP
- MARINE STRATEGY DIRECTIVE



Dafydd Lloyd Jones Marine Space, UK • EU MARINE STRATEGY

DIRECTIVE WG GES

EU MARINE STRATEGY
DIRECTIVE NAVI



Henrich Roeper Hamburg Port Authority, Germany

- EU WATER FRAMEWORK
 DIRECTIVE NAVI
- EU MARINE STRATEGY DIRECTIVE NAVI



Frank Thomsen DHI, Denmark

- EU MARINE STRATEGY DIRECTIVE, TECHNICAL SUBGROUP UNDERWA-TER SOUND
- OSPAR INTERSES-SIONAL CORRESPON-DENCE GROUP NOISE



Thomas Vanagt eCoast, Belgium • ospar



Strategy Commission (CSC)



Wim Klomp Chair

The primary focus of the Commission was to implement the action from the corporate members' survey performed in 2015. The main conclusions from the survey were that:

- two subjects were identified as needing more attention: contracts and river dredging.
- input from biologists would benefit the CEC.
- more effort should be put into communications and it was suggested that regular, properly formatted, fourpage newsletters about CEDA activities might be a good solution.

One of the main areas of interest of the newly-formed Dredging Management Commission is the subject of contracting and it will be given more prominence in CEDA activities and publications.

There have been no recent events organised on river dredging, however, the Strategy Commission will look at how this subject can be explored, possibly through webinars, as a session in the forthcoming CEDA Dredging Days, or through another event. The interface of biology and dredging is mostly felt in underwater sound, sustainable dredging and seafloor integrity. To better address the topic the Environmental Commission is inviting a marine biologist to join the committee.

There is some progress on the communication to the members. CEDA has contracted a communication advisor to support the board, and the commissions, in communicating with our members and other stakeholders. The four-page printed CEDA News has been initiated and a first issue was published at the end of 2016. CSC also advised the Board on action concerning conference organising companies that use the CEDA brand, or falsely claim association with CEDA, in promoting their events. CEDA has actively informed members of recent misuse of the CEDA brand in order to reduce the likelihood of members being misled.

CSC is planning to set-up a web-based portal, with the Education Activities Commission, to facilitate research. It will enable problem owners, problem solvers and potential project partners, to get together and connect more easily. The aim will be to make it easier for companies to find each other in projects sponsored by EU, or other governmental organisation, where research institutes and universities are requested to work with companies, and end-users, for innovation and new developments in the industry.

Wim Klomp Chair, Strategy Commission



The Strategy Commission prepares for the CEDA Board meeting at Tideway, Breda, the Netherlands (round the clock): Wim Klomp (Royal HaskoningDHV- the Netherlands, Jan Vandenbroeck (S.D.I. – France), Peter de Looze (Hal Maritime – the Netherlands), Polite Laboyrie (Witteveen+Bos – the Netherlands).



Young CEDA Commission (YCC)



Peter De Looze Chair

Young CEDA is pleased to have had another successful year engaging students and supporting young professionals in the dredging and marine construction industry.

Commission members have met many students and young professionals during our events, and National

Section club evenings, and through social media. We currently have around 500 members in the Young CEDA LinkedIn group.

Organised events during the year included seminars in Delft and Enschede which gave attendees a flavour of what it was like to work in the industry. They heard from three enthusiastic speakers, from leading organisations, who talked about their experiences, at the start of their careers, and the opportunities available in the sector.



Young CEDA in Kinderdijk, hosted by IHC

Royal IHC very kindly hosted a guided tour of their shipyard, in Kinderdijk, where they are building the megacutter Helios for Boskalis and 2 of the 3 LNG powered hopper dredgers ordered by DEME. As part of the tour, the Young CEDA group was given an extensive on-site preview of the self-propelled megacutter Helios and a chance to see an LNG hopper on the slipway. A fantastically full day ended with networking, and drinks, and for many people it was their first time aboard a dredging vessel.

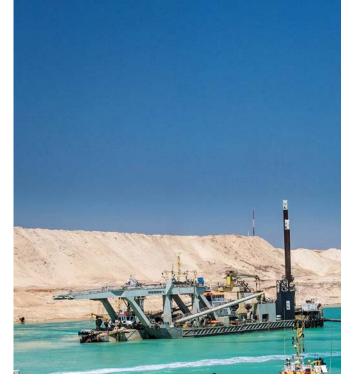
The German Section organised a boat trip through the harbour to the dredging spots in Port of Hamburg. The trip was attended by young professionals, and students from several universities in the country, who wanted to learn about the dredging activities in the harbour.

Young CEDA organised a dedicated session of quick-fire presentations at the Iberian Conference in Lisbon. The sessions gave three speakers the opportunity to present their research during a '20-slides in 5 minutes' presentation. Each was strictly timed and, with well-defined subjects, the presenters kept their pace and the audience's attention. (Please refer to the Special Section about the conference in this report on page 34)





Up close and personal in a cold Hamburg...





...and a bit warmer on the boat.



Dear Arjan, Thank you!

You have been an enormous asset to CEDA and the young professionals amongst our members. The CEDA Board is committed to securing a bright future for the dredging profession, as a whole, as well as to the Association. These two things go hand-in-hand and can't be achieved without engaging young people and engendering in them an interest and enthusiasm about dredging. Young CEDA is an essential platform to help us achieve that and that's why we're so grateful for the work you have done during your term. From the moment you took over the role, at WODCON XX in June 2013, until stepping down, during the CEDA Iberian Conference in October 2016, you have lead your fellow Commission members to do great things for Young CEDA.

We can't list everything that Young CEDA has achieved during your term, as it's such a lot, but here are just a few of the highlights.

- Young CEDA has expanded its geographical reach by engaging enthusiastic young people on the Young CEDA Commission (YCC) and by organising well-attended and very successful Young CEDA meetings. Seminars and site visits have run regularly in a range of countries including Belgium, Germany, Denmark, Netherlands and the UK.
- As a member of the Dutch Section's Executive Committee, you took on organising and hosting CEDA-NL meetings when the subject was particularly interesting to our young members.
- You made sure that Young CEDA was represented on all CEDA Commissions and Paper Committees.
- Attracting 60 students to CEDA Dredging Days 2015, and making them feel at home, was just one of the many highs that Young CEDA has reached in supporting and encouraging students to participate at CEDA events.
- YCC has kept looking for new initiatives that will help students and young professionals to advance their careers. The acclaimed Young CEDA Pitch-Talks, first held at CEDA Dredging Days 2015 and again at the CEDA Iberian Conference, are now a tradition.
- With your lead, YCC was always ready to help when asked, for instance with the Interactive session at CEDA Dredging Days 2015 and organising and running the 'Sustainable ports photo contest' at the CEDA Iberian conference – another success.

You were very much involved in finding the next Chair and ensuring that Young CEDA is in good hands. The way you handed over the job, and passed on your knowledge and experience to Peter, your successor, is commendable. We hope that you'll always be actively involved in CEDA.

The CEDA Board



The outgoing chair, Arjan de Heer (Witteveen+Bos – the Netherlands) (left) and Peter de Looze (Hal Maritime – the Netherlands) at the CEDA Iberian Conference in Lisbon, Portugal.



General organisation

Young CEDA remained well-staffed during 2016 with representatives from the Netherlands, Belgium, Germany, Denmark and the United Kingdom. Commission representatives took part in several other CEDA commissions notably, the Education Activities Commission, the Strategy Commission and national club evenings. Two Young CEDA Commission meetings were held during the year. The first in Copenhagen was combined with a visit to DHI, while the second was held at Witteveen+Bos in Rotterdam.



Young CEDA Commission in Copehagen in the spring (I to r): Arjan de Heer (Witteveen+Bos – the Netherlands), Stefan Bruggeman (Jan De Nul – Belgium), Friederike Lehne (Hamburg Port Authority – Germany), Nicolas Hibert (DEME – Belgium), Sina Saremi (DHI - Denmark), Camille Kapela (Egis – France), Christoph Tiggesbäumker (Hamburg Port Authority – Germany), James Spragg (Boskalis Westminster – UK), Kris Breusch Lundbye (Rohde Nielsen – Denmark), Johanna Jensen (Rohde Nielsen – Denmark)



... and with further new members in Rotterdam in the fall (I to r): Sarah Audenaert (DEME – Belgium), Jaco den Hoed (IHC – the Netherlands),), Nicolas Hibert (DEME – Belgium), Joris Santermans (IMDC – Belgium), Arjan de Heer (Witteveen+Bos – the Netherlands), Peter de Looze (Hal Maritime – the Netherlands), Jort van Wijk (IHC – the Netherlands), Christoph Tiggesbäumker (Hamburg Port Authority – Germany), Aled Jones (Boskalis Westminster – UK), Stefan Bruggeman (Jan De Nul – Belgium), Sina Saremi (DHI - Denmark), Camille Kapela (Egis – France). During the year the board welcomed new members but we also said farewell to some existing members including our chairman Arjan de Heer. Incoming chairman Peter De Looze thanked them all during the last board meeting in Rotterdam.

Peter de Looze Chair, Young CEDA





FINANCES

Balance sheet 2015

Expenditures		Income	
Office and governance	52,8	Membership fees	
Staff	128,9	- Individual members	34,9
		- Corporate members	208,7
Environment Commission	3,7		
Young CEDA	-1,8	Interest and exchange.	0,5
Services and DPC subscription	45,0	Income events/sponsoring	0,0
National sections			
- African Section	7,2		
- Belgian Section	12,7		
- British Section	5,3		
- Netherlands Section	11,3		
Promotion CEDA and its Corporate Members	22,9		
Provisions	0,0		
Total	288,0	Total	244,1
Result			-43,9
Reserves			455,7

Figures

Individual CEDA members:	484,0
Corporate CEDA members:	117,0
National section meetings:	14,0
Expenditures 2015:	288,0
Budget 2015:	294,9





OBJECTIVES FOR 2017

Our programme of activities within Young CEDA and the National Sections, and our work with the International Conventions and groups within the European Commission, are very important to the work that we do. We look forward to taking those activities to the next level in 2017. Here are just some of the initiatives that we are developing and working on:

- Now that the new Dredging Management Commission is up and running, we're looking forward to seeing some results on their work on contract management simplifications, including an interactive session, during CEDA Dredging Days 2017, which should provide many lessons to take home.
- Once again, we're committed to making our flagship conference, CEDA Dredging Days, a very valuable event for all participants – young and more experienced. Both in terms of learning and networking opportunities, in the inspiring, constructive, open and friendly atmosphere that typifies CEDA conferences; and in providing that special experience that only events with a passionate community behind it can offer.
- We're going to launch a dedicated section on our website. A one-stop knowledge source on various aspects of deep sea mining, relevant to dredging professionals, which will include legislative, environmental and technical aspects.

- The CEDA Working Group on Beneficial Use of Sediments will started its work in January 2017 and will do the majority of its work during the year. Their output, a CEDA Information Paper and a Position Paper, will be published in 2017.
- We're going to issue a call for a new Working Group to produce a CEDA Information Paper on 'Sea-floor integrity' (working title). The dredging community appears to be less familiar with this Descriptor of Good Environmental Status (GES) of the Marine Strategy Framework Directive, and this information paper will help members by summarising relevant knowledge about it.
- Last, but by no means least, we hope to be able to show participants of CEDA Dredging Days 2017 our new book 'Dredging for sustainable infrastructure', which we're producing and publishing in co-operation with the International Association of Dredging Companies (IADC).

We have many plans for the year ahead and we fully appreciate the role of our members in meeting our objectives. We value your input so please let us know if there's anything that you would like us to do and if you would like to get involved with any of the ongoing CEDA initiatives. Contact the CEDA Board with your thoughts and feedback – we're always keen to hear from our members.

The CEDA Board



ORGANISATION



Members of the CEDA Board (I to r): Jan Vandebroeck (SDI – Société de Dragage International "S.D.I." sa - France), Johan Pennekamp (Deltares – the Netherlands), Anders Jensen (DHI – Denmark), Polite Laboyrie (Witteveen+Bos – the Netherlands); second row: Frederik Roose (Ministry of Flemish Community, Maritime Access - Belgium), Claudia Flecken (Hamburg Port Authority – Germany), Michael Costaras (HR Wallingford – UK), Miloud Abudib (Drapor – Morocco), Anna Csiti (CEDA – the Netherlands), Ida Brøker (DHI – Denmark); third row: Andre Kik (Royal IHC – the Netherlands), Cees van Rhee (Delft University of Technology - the Netherlands), Wim Klomp (Royal HaskoningDHV – the Netherlands), Daan Rijks (Boskalis – the Netherlands), Arjan de Heer (Witteveen+Bos – the Netherlands), Dirk Defloor (DEME – Belgium), Will Shields (Royal Boskalis Westminster – UK).

CEDA Board of Directors

CEDA is governed by the Board of Directors, which generally meets twice a year. Elections are held every two years. After the most recent election in November 2015, the Board of Directors is made up of 17 members from 7 countries.

CEDA Annual General Meeting

The Annual General Meeting (AGM) in 2016 took place on 27 October at the Headquarters of the Portuguese Engineers Association (OE), in Lisbon, Portugal. It followed the first morning of the CEDA Iberian conference (for more see the Special Section about the conference in this report on page 32-37).



Polite Laboyrie, CEDA President (Witteveen+Bos – the Netherlands), tells about the year at the 38th Annual General meeting during the Iberian conference in Lisbon, Portugal.



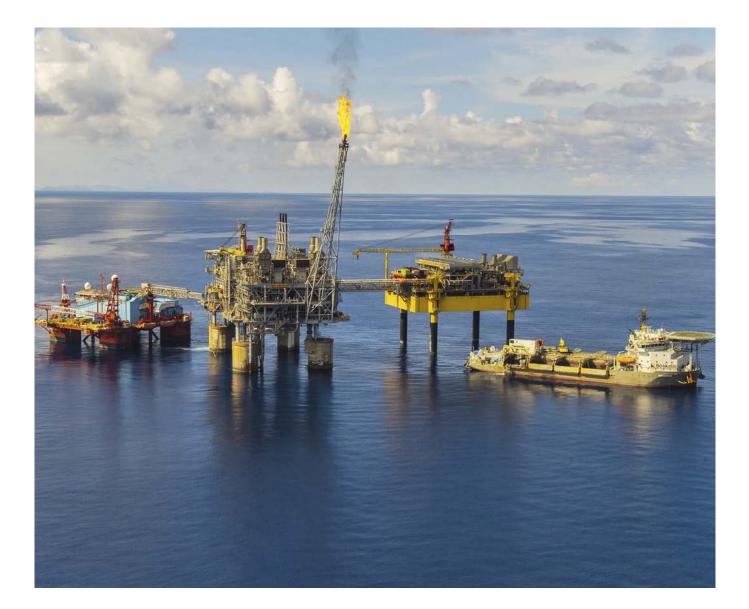
CEDA Secretariat

The day-to-day management of CEDA is carried out by a permanent secretariat based in Delft, the Netherlands. In 2015 CEDA employed two staff members with 1.63 full-time equivalents: Anna Csiti, general manager and Yvonne Duivenman, administrative assistant. Mark Luchs, MSc student at the Delft University of Technology, supported the Secretariat on a part–time basis. The main areas of work for the secretariat include (but are not limited to):

- Planning, managing, executing and supporting, the execution of various CEDA projects;
- Overseeing, organising and assisting, CEDA activities including CEDA Dredging Days, seminars and conferences;

- Supporting the Board of Directors and the various CEDA commissions;
- Acting as CEDA's contact point for other related organisations, individuals and national sections;
- Developing and maintaining the online presence of CEDA;
- Managing CEDA's financial and operational administration;
- Membership administration;
- Acting as the secretariat for the Dutch Section.

In addition to the central CEDA Secretariat, every national section organises its own national secretariat.







CEDA VOLUNTEERS

A word of thanks is due to all the volunteers who work for the benefit of CEDA. We pay tribute to all those silent and sometimes not so silent workers who give up their free time to contribute to CEDA's successes. In many cases, their employers allow them to do part of this work in their company's time, so we express our gratitude to those companies too.

In 2016 the staffing of CEDA's voluntary-based units was as follows:

Standing bodies

Board of Directors

Elected members

Miloud Abudib, Drapor Marocco (Chair African Section) Ida Brøker, DHI, Denmark Michael Costaras, UK Dirk Defloor, Dredging International (DEME), Belgium Kathleen De Wit, IMDC, Belgium Claudia Flecken, Hamburg Port Authority, Germany Andre Kik, Royal IHC, the Netherlands Wim Klomp, Royal HaskoningDHV, the Netherlands (Chair Strategy Commission) Polite Laboyrie, Witteveen+Bos, the Netherlands (President) Johan Pennekamp, Deltares, the Netherlands (Vice-President, Chair CEDA-Netherlands Executive Committee) Cees van Rhee, Delft University of Technology, the Netherlands (Secretary/Treasurer, Chair Educational Activities Commission, Chair Technical Papers and Committee CEDA Region - WODCON XXII) Daan Rijks, Royal Boskalis Westminster, the Netherlands Will Shields, Royal Boskalis Westminster, UK (Chair Communications Commission) Jos Smits, IMDC, Belgium Jan Vandenbroeck, S.D.I. (DEME), France **Ex officio members**

Arjan de Heer, Witteveen+Bos, the Netherlands (Chair, Young CEDA until October 2016) Peter de Looze, Hal Maritime, the Netherlands (Chair Young CEDA since October 2016) Frederik Roose, Ministry of the Flemish Community, Belgium (Chair Environment Commission, CEC)

General Manager Anna Csiti, the Netherlands

Alternates to Board Members

Thibault van Craen, S.D.I. (DEME), France
Helmut Meyer, Federal Waterways and Shipping
Administration, Germany
Dirk Roukema, Blue Pelikan, the Netherlands
Martin van Ommen, IHC Dredgers, the Netherlands

Dredging Management Commission

Johny Van Acker, Dredging International (DEME), Belgium Anna Csiti, CEDA Secretariat, the Netherlands Katheleen De Wit, IMDC, Belgium Murat Ege, AECOM, Qatar Koos van der Geer, Van Oord Dredging & Marine Contractors, the Netherlands Andre van Hassent, Port of Rotterdam, the Netherlands Claus Iversen, Femernbelt, Denmark Anders Jensen, DHI, Denmark Camille Kapela, Egis Ports, France (Young CEDA representative) Guido Kaschel, Port of Hamburg, Germany Polite Laboyrie, Witteveen+Bos, the Netherlands (Acting chair) Bas van Maren, Deltares, the Netherlands Henry Odunsi, Earth Info Services, Nigeria Daan Rijks, Royal Boskalis Westminster, the Netherlands Hilco Timmer, Witteveen+Bos, the Netherlands Bert Visser, Rijkswaterstaat, the Netherlands Mark Winkelman, Damen Dredging, the Netherlands Charles Wilsoncroft, Knowles, UK

Environment Commission - CEC

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