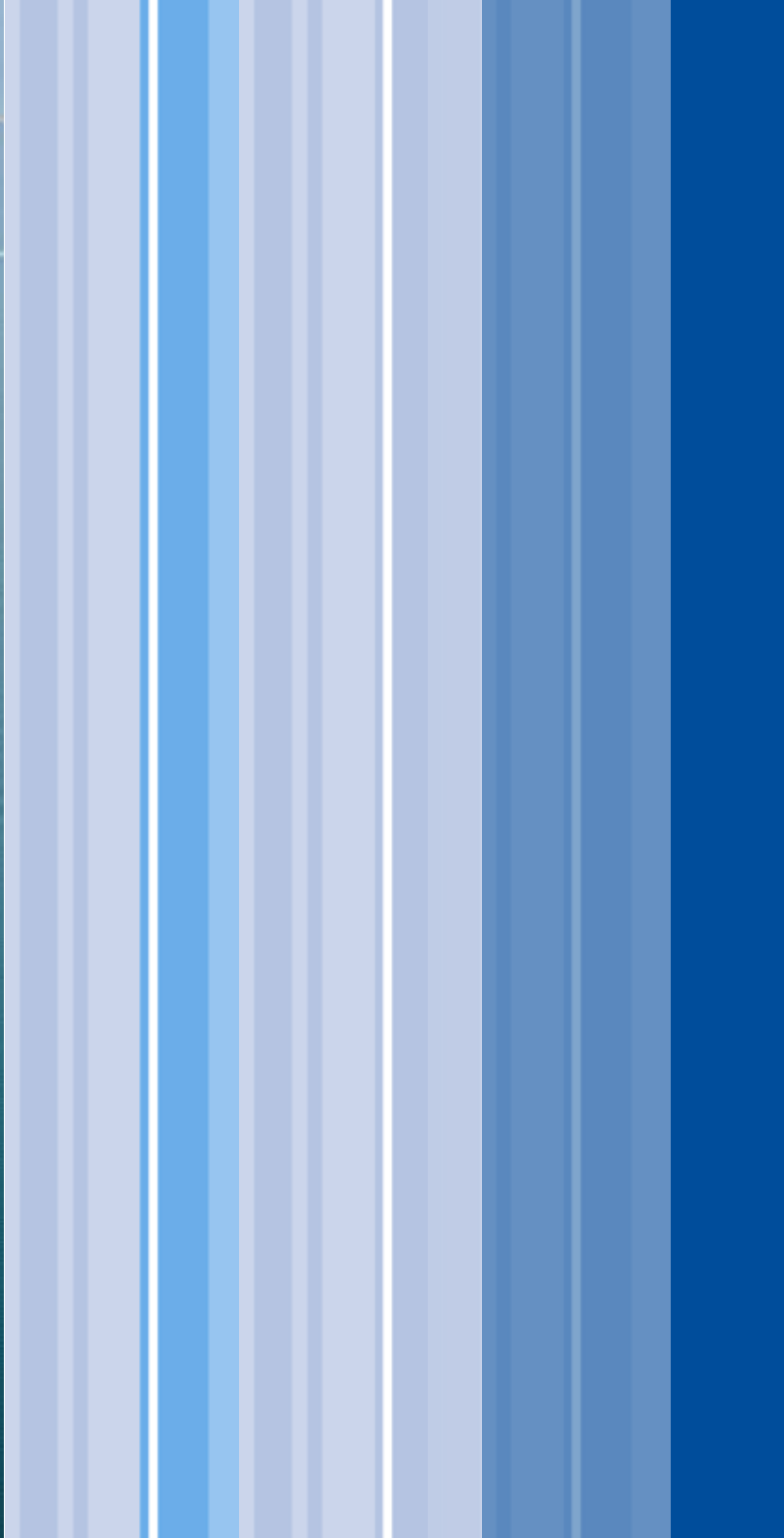


ANNUAL REPORT 2008

# Anticipating challenges



EUROPEAN DREDGING ASSOCIATION



*Photographs published  
with kind permission of  
EuDA members*

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# Anticipating challenges



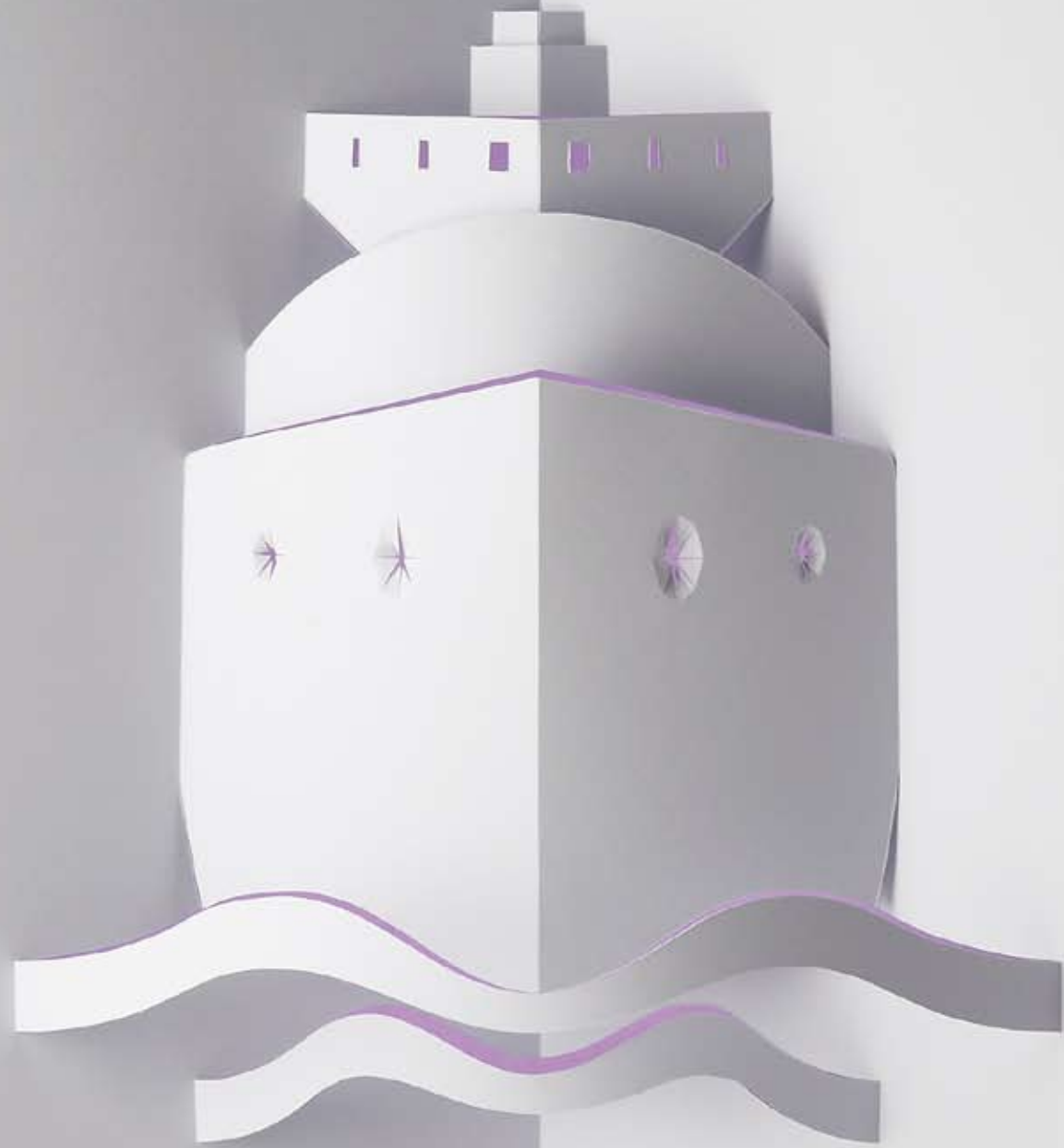
EUROPEAN DREDGING ASSOCIATION



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*“EuDA is the sole and official interface between the European Commission and the European Dredging Industry.”*



# Anticipating, custom policy in our branch

European dredging companies belong to the world top. They are involved in many important projects in Europe and the rest of the world. A steady guide in this success story is anticipating our policy.

Always look beyond the obstacle to avoid problems.

No shortage of challenges in our industry: social and economic competition from heavily subsidized dredging companies, who are not so considerate with employment regulations or safety regulations can disrupt the world-wide market situation.

In the environmental field, addressing the 'Waste Directive', global warming, and meeting emission norms, are highly on the EuDA agenda. Support from the European Commission is essential to safeguard our economic, social, political and environmental level of world-wide market leaders.

We look forward to a future where a free market with equal resources and working conditions will prevail. The European Dredging Association strives to work on projects that benefit both humanity and nature. To maintain a safe cruising speed in all these aspects is our goal!



Our role becomes more important and critical...

M. Stordiau, chairman

EuDA is the sole and official interface between the European Commission and the European Dredging Industry, with member-companies from all over Europe.

In these times of crisis, our role in society may become more important and critical.

As such, we can try to concentrate on the evolutions, opportunities and....threats that may arise in this interface-area.

*Presently three important matters will be influencing our industry, notably:*

- 1) The interpretation of the European State Aid Guidelines*
- 2) The new regulations with respect to emissions by marine vessels*
- 3) The implementation by the non-European countries of the Maritime Labour Convention of 2007 ("Convention of Geneva")*

### **European State Aid Guidelines**

With respect to the interpretation of the exact definition of "What is transport" when applying the State Aid Guidelines, EuDA has conducted a vigorous campaign of sensibilisation.

In our annual report 2007, we have been pleading strongly for a further support of one of the great success stories of the European industry: support the continuous leadership of the European dredging industry in the world.

The European dredging contractors' key competitors are in the Far East, with China at the forefront.

Chinese dredging groups are regionally-based, fully sponsored State concerns with a growing appetite for international work. They have already developed

a strong, growing presence on the African continent. They have clear ambitions to move into free markets for dredging across the world, whilst continuing to benefit from full State support as well from a high demand for dredging works in its home waters (a largely protected market, almost completely closed to European companies).

Thanks to the combined actions and dialogues with ECSA, ESPO and EuDA, the European Commission has accepted our views. In a specific discussion between officials of the European Commission and the Danish government, the higher authorities of the European Commission have accepted that dredgers and non-propelled service vessels (such as pipe laying vessels) are indeed eligible for the European Guidelines for State Aid.

During the first quarter of 2008, Matthias Ruete, Director General for Energy and Transport, issued a request for views on a series of issues concerning the applicability of state aid, including the matters discussed above.

EuDA is extremely thankful that this request for views has been followed by a positive advice.





*“Maritime Labour Convention - MLC, ensuring minimum decent working systems and wages for all seamen.”*



J. Rohde Christensen, vice-chairman



W. Möbius



F.A. Verhoeven, treasurer



F. Heinis



G. Vandewalle



J. van Herwijnen



C.J. van de Graaf

### **The new regulations with respect to emissions by marine vessels**

EuDA is concerned about the global climate change, but it is clear that a too fanatic and too brisk transition has to be avoided.

The developments of policies related to SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions of maritime vessels were closely followed. In this respect, a very successful seminar on the problem of emissions was organised by the Environmental Committee of EuDA.

The conclusions and recommendations of this seminar are published in this annual report.

### **The implementation by the non-european countries of the Maritime Labour Convention of 2007 (“Convention of Geneva”)**

Last but not least, EuDA will plead in 2009 and 2010 for the full implementation by all Nations of the Maritime Labour Convention of 2007.

In 2007, during the Conference of Geneva, EuDA, and in particular the chairman of the Social Committee, played an important role in implementing a universal Maritime Labour Convention, ensuring minimum decent working systems and wages for all seamen of the world.

This action of 2007 was an important step towards a level playing field in maritime businesses worldwide.

It is obvious that all European countries will take over these ILO-recommendations in their national legislation... but it is even more important that the European Commission act vigorously with ILO to convince also all non-European Countries to implement these ILO-rules in their own national legislations....

Otherwise, the aim of a level playing field will remain an illusion.

EuDA will always support and encourage fair competition. We will never give succour to unfair behaviour.

*With our best regards,  
Marc STORDIAU Chairman  
and his colleagues of the Board of EuDA.*



# Anticipating the butterfly effect

At first sight industrial activity and clean environment seem two extremes. But should they be? Our members constantly operate in fragile boundaries that separate both and our target is to respectfully deal with environmental factors.

The European Dredging Association has been campaigning for dredged material no longer to be considered as waste, but rather as a natural material used, amongst others, for land reclamation, provided that the dredging sediments are not eco-toxic. The arguments of the European Dredging Association in amending the Directive were appreciated.

The dredging companies have a distinct policy to develop more environmentally friendly technologies and to find solutions for contaminated sediment. The use of dredged material is indispensable. The dredging industry would generate economic activity thriving alongside unspoiled nature where wildlife can open its wings.



W. Dirks, chairman EuDA Environment Committee

## Environmental Affairs

*by Wouter Dirks,  
chairman EuDA Environment Committee*

*During the year 2008, the Environment Committee, was composed of Gerard van Raalte (Royal Boskalis Westminster NV), Marc Russell (BMAPA), Dirk Poppe (DEME), Erik Mink (Interel) and Wouter Dirks (Van Oord N.V.). The committee met regularly.*

## Emissions

The Environment Committee has put significant effort into getting to grips with the CO<sub>2</sub> reduction issue. This is a major challenge in the light of the European targets to reduce significantly the emission by all transport sectors by 2020.

In this respect, the European Dredging Association organised a Workshop on Emissions called “*Clean Combustion and Greenhouse Gases*”. Some aspects of this Workshop are highlighted further on in this Annual Report.

## Waste Directive

The Environment Committee has successfully contributed to the process of revising the Waste Directive. “Dredged Material” is now no longer defined as *waste* unless it displays hazardous properties.

Since 2006 EuDA cooperated with ESPO (European Sea Ports Organisation), put their hands together in order to amend the European Commission’s proposal. After effective lobbying and with the support of the European Parliament as well as with the help of some Member States, the European Parliament voted in its first reading favourably for the exclusion of dredged material from the scope of the Waste Directive.



Beneficial re-use of dredged material.

continue on page 16

*Dredged Material is now no longer defined as waste unless it displays hazardous properties.*

*“Without prejudice to obligations under other relevant Community legislation, sediments relocated inside surface waters for the purpose of managing waters and waterways or of preventing floods and droughts or land reclamation shall be excluded from the scope of the Directive if it is proved that the sediments are non-hazardous.”*

(Revised Waste Directive 2008/98)



After two years of technical work and lobby activities by EuDA and other organisations, '*dredged spoil*' has now finally been removed from the Waste Framework Directive.

The final compromise text is now included in the Revised Directive which has been published as Directive 2008/98.

The applicable provision for dredged material is:

“Without prejudice to obligations under other relevant Community legislation, sediments relocated inside surface waters for the purpose of managing waters and waterways or of preventing floods and droughts or land reclamation shall be excluded from the scope of the Directive if it is proved that the sediments are non-hazardous.”

The final result should be considered as a good achievement resulting from an efficient cooperation with ESPO. Work remains to be done by the Environment Committee in cooperation with the Member States to ensure that the non-hazardous category is defined correctly.

The challenge will be in the implementation of a

fair and manageable procedure to verify whether 'dredged spoil' is non-hazardous.

### **Daughter Directive Environmental Quality Standards**

The Environmental Quality Standards Directive (Directive 2008/105/EC) was published on the 16th of December 2008.

EuDA and ESPO succeeded to get amendments into the draft text of this Directive, having it accepted through clear arguments that it would improve the practical and the feasible sides of the Directive related to dredging projects and port operations.

ESPO insisted on its wish to exclude ports explicitly, referring to the disproportionate costs while EuDA put significant effort in communicating the technical problems related to this Daughter Directive. In the final text no consideration has been given to some comments made by ESPO and EuDA: dredging activities for maintenance purposes are not taken into consideration for determining the quality of water bodies.

Some technical comments were, however, not taken on board.

Main concerns were:

1. Some standards are too strict or even below detectable limits
2. The Directive does not take into account the dynamic characteristics of coastal and transient waters
3. Substances in the water fraction shall be obtained after elimination of particulate matter from the sample.

We have observed that EuDA was one of the very few organisations who were aware of the need to influence the technicalities of the final text of this Daughter Directive. However, we consider the risk of negative impact on the dredging sector resulting from the Daughter Directive, as very remote. The challenge is now for the Water Directors to come to a practical implementation of this complicated and sometimes “impossible” Daughter Directive.



### **The Maritime Policy and Marine Strategy**


On the 29th of May the Environment Committee of EuDA organised a workshop on Maritime Spatial Planning and Zoning. This addressed one of the actions as defined in the Maritime Policy Blue Book which was presented in October 2007.

The relevance of the subject to the dredging sector is to secure future sources of sand and aggregates for beach nourishment, reclamation projects and the construction industry.


The purpose of developing a marine spatial planning and zoning policy is to guarantee that the seas will be able to provide multiple services whilst the robustness and sustainability of the seas' ecosystems is maintained.

EuDA acknowledges that economic activities shall not impede on the ecological or other functions of the marine environment.

In the UK much progress has been made on this subject. Mark Russell presented the outcome of this process in the UK, which has been laid down in the Marine Bill. It became clear that this process with all stakeholders is extremely complex and time consuming.



*“EuDA acknowledges that economic activities shall not impede on the ecological or other functions of the maritime environment.”*



Wind turbine installation at the C-Power windfarm project at the Thornton Bank off the Belgian coast.



## Maritime spatial planning

**EU Communication has the aim of facilitating the development of MSP by Member States and encouraging its implementation at national and European levels.**

Nicole Schaefer (DG Mare) presented the intentions of the European Commission and explained that the Commission will require the Member States to develop and implement a policy of marine zoning.

## Roadmap for Maritime Spatial Planning

The Communication on a “Roadmap for Maritime Spatial Planning: Achieving common principles in the EU” was adopted by the Commission on 25 November 2008. It provides information on current maritime spatial planning practices in EU Member States. In third countries it outlines the instruments which have impact upon it and sets out key principles underpinning it.

The Communication seeks to encourage a broad debate on how a common approach to maritime spatial planning can be achieved in the EU.

The roadmap is an important product of the EU’s new Integrated Maritime Policy, which the Commission launched in October 2007.



### Example - Germany

- Extension of the German Regional Planning Act to the EEZ in 2004 - driving force: offshore wind energy
- Spatial Plans for the German EEZ North Sea and Baltic Sea
- Plans cover the maritime uses: maritime transport and shipping routes, platforms, pipelines and cables, offshore wind farms, sediment extraction, dumping grounds, military practice areas, aquaculture and natural conservation
- Draft statutory regulation is currently under consultation within the German Government
- Provides only a framework and applies only for the EEZ
- Responsibility for territorial waters lies at federal State level - Therefore: structure to support proper coordination between Lander level and Government level have to be established
- Public consultation is foreseen for Summer 2008
- Maritime spatial planning activities at Federal State level on the way (e.g. Schleswig-Holstein)

### Next steps

- Continuation of stakeholder consultation - exchange of knowledge and best practice
- Study on legal aspects of data and surveillance as well as maritime spatial planning
- Development of road map to facilitate and encourage the further development of maritime spatial planning in 2008
- Examination of the needs and different options, including for zoning, in 2008
- In this respect project funded under the 7<sup>th</sup> framework programme on MSP

### **Why is maritime spatial planning necessary?**

Increased activity on Europe's seas is resulting in more competition between different sectoral interests, such as shipping and maritime transport, offshore energy, port development, fisheries and aquaculture, and environmental concerns. This, in turn, is putting extra pressure on already limited marine space. A more collaborative and integrated approach to decision-making is required to secure the sustainable development of marine areas in a healthy environment.

### **Future developments**

To facilitate the debate on maritime spatial planning, the European Commission will organise workshops in 2009 to discuss the options for implementing maritime spatial planning in the EU and the specific key principles set out in the roadmap. The outcome of that debate will serve as a basis for conclusions and recommendations to be issued by the Commission later in 2009. The role of ecosystems in the management of the marine space will become important. The Marine Strategy Directive in the European Union (COM (2005)050) uses the following language:

*“Environmental status means the overall state of the environment in marine waters, taking into account the structure, function and processes of the constituent marine ecosystems....” There is a clear evolution in EU environmental legislation from conservation objectives to ecosystem-based considerations. At the same time the existing instrument of Environmental Impact Assessment (EIA Directive 85/337/EEC and amended Directive 97/11/EC) is too blunt to fairly assess the potential impact of projects on ecosystems; it focuses on negative impacts, but it does not give sufficient credit to possible positive effects.*



## Air Emissions

Following the UN Climate Change Conference in Bali, Indonesia, 3-14 December 2007 the pressure on all industrial sectors to reduce the emission of GHG gases has increased.

The European Commission is taking a leading role in trying to force the international shipping community to implement GHG reducing measures too (mainly CO<sub>2</sub>). IMO is in a phase of exploring the possibilities whereas the European Commission is trying to force IMO to come to a quick resolution. How fast this process will develop and how it will affect the dredging community is not yet clear.

The Shipping community may be forced into a GHG emission trading scheme or will need to pay emission levies in the future.

Simultaneously the emission requirements on SO<sub>x</sub> and NO<sub>x</sub> emissions under MARPOL are becoming stricter every year. The latest accepted strengthening of MARPOL Annex VI requirements dates from October this year. The main issue is that MARPOL forces ship owners to run their ships in the future on low sulphur fuels. The engine builders are up to the challenge to develop vessels that have low sulphur and low NO<sub>x</sub> emission simultaneously and preferably combined with higher energy efficiency. Equally, the oil industry is under pressure to provide sufficient quantities of fuel in line with the new specifications.

In European ports and countries requirements may be even stricter than those to be fixed under MARPOL. In European ports the emission of Particulate Matter will be playing a role.

Potentially there is a risk for the older vessels in the world dredging fleet, for which it may not be economical to upgrade the engines to the future standards.

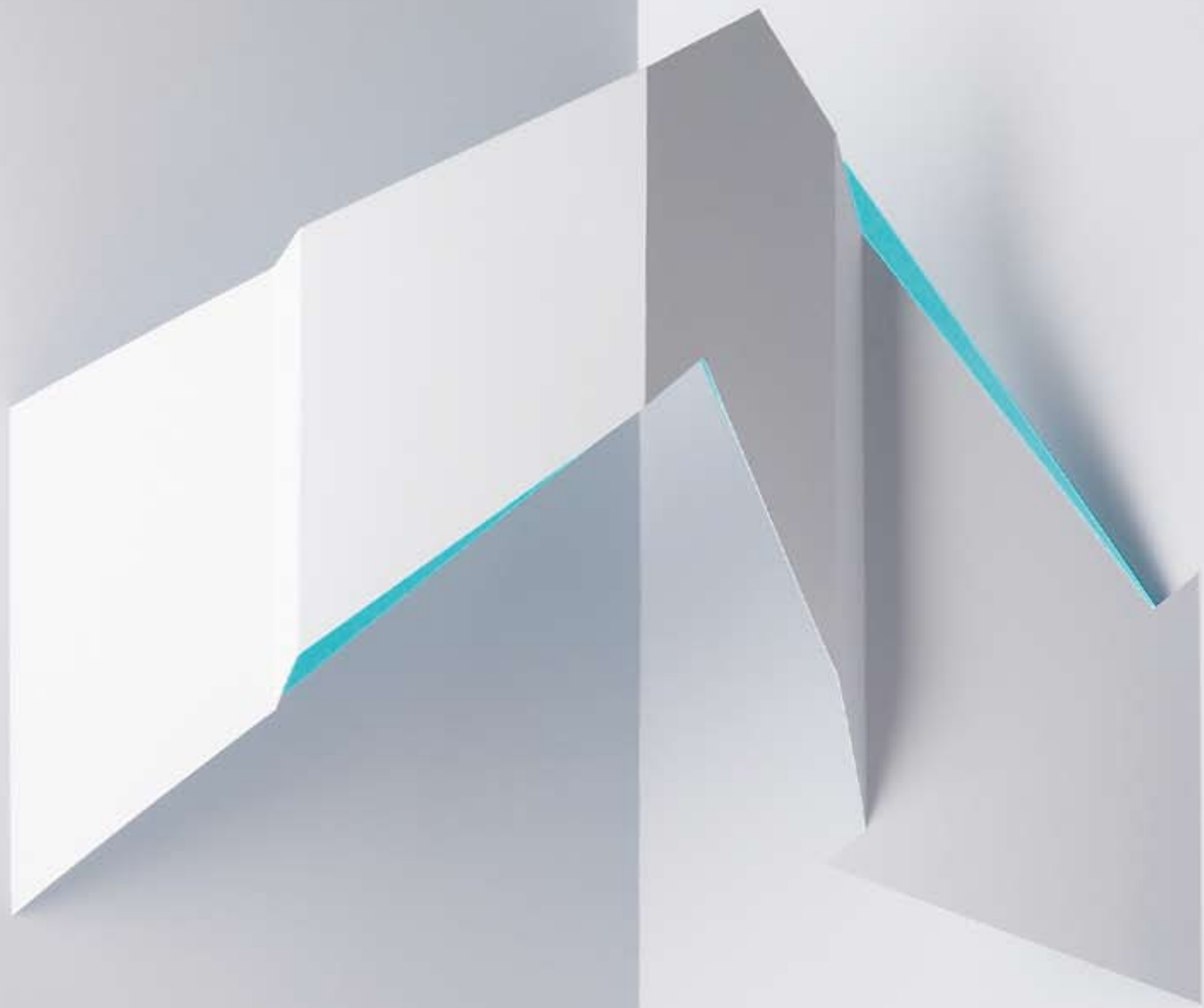
At the Annual General Meeting on the 6th of November the following statement was made by EuDA with respect to SO<sub>x</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions:

- The importance of targets to reduce emissions is acknowledged.
- EuDA will make preparations in the course of 2009 in order to be able to identify its CO<sub>2</sub> production.
- The implementation of instruments to reduce the emission of CO<sub>2</sub> must be done correctly and in a feasible way.
- EuDA will participate in the discussion on CO<sub>2</sub> with all stakeholders and will advise whenever appropriate on relevant subjects.

*“The European Commission is taking a leading role in implementing the results of the UN Climate Change Conference.”*



Members EuDA Environment Committee, from left to the right: Mr. Marc Russell, BMAPA; Mr. Erik Mink, Intereel Cabinet Stuart; Mr. Gerard van Raalte, Royal Boskalis Westminster N.V.; Mr. Wouter Dirks, Van Oord N.V.; Mr. Dirk Poppe, DEME.



# Anticipating the emission issue

The warming up of the globe is a pressing issue. For years Europe has been a pioneer in this matter and tries to convince other countries to follow Europe's politics.

EuDA engages itself with targeted efforts to expel air pollution and to diminish the greenhouse gases. This year the CO<sub>2</sub> expels of the EuDA fleet will be analyzed. Both technical and operational future improvements will help to push back the CO<sub>2</sub> in a cost effective manner.

These efforts will also contribute to a more positive image of the dredging industry. European Dredging Association and its members know that there is no alternative to the global warming risk.

Let us help to reverse the negative trend.

## EuDA Emission Workshop 'Clean Combustion and Greenhouse Gases'

*During the European Dredging Association's Annual General Meeting November 6th, an **Emission Workshop 'Clean Combustion and Greenhouse Gases'** took place at the premises of EuDA.*

*EuDA took the initiative to organise this Seminar with the intention to invite a wide spectrum of dredging and maritime related sectors. The presence of the European Commission, Directorate General Environment was highly appreciated. And so were the attendance and the contributions of the organisations notably ESPO, EUROPIA, ICS, WÄRTSILA, EuDA Environment Committee and Interel Cabinet Stuart.*

*During this one day Workshop, participants were guided through all issues related to  $NO_x$ ,  $SO_x$ , particulate matter (PM) and Green House Gases (GHG).*

*The Workshop focused on 3 main parts:*

- *All issues related to  $NO_x$ ,  $SO_x$ , Particulate Matter (PM) and Green House Gases (GHG). It was of specific interest for those who are dealing with these issues in daily practice to be updated on the latest developments.*
- *An update on the available and future technologies for clean combustion and fuel economy.*
- *Guiding through developments related to Green House Gases produced by the shipping sector and the future legislation that will be implemented to reduce the emission of GHG.*

Maritime shipping is a global industry. The sector includes seagoing vessels that do not directly transport commercial goods, but provide essential services such as offshore supply vessels, salvage and towing and vessels to maintain navigational conditions or to develop marine infrastructure.

Emissions from shipping have come under scrutiny since the early 90's. It started with a focus on  $SO_2$ , which can lead to acidification and poor air quality in coastal zones, followed by pressure to reduce the concentration of nitrogen oxides ( $NO_x$ ) in emissions from shipping.

### NO<sub>x</sub> limits for marine engines

Tier I: 17.0 g/kWh  
valid until 2011

Tier II: 14.4 g/kWh  
2011-2016 in SECA's

SECA's only Tier III: 3.4 g/kWh  
from 2016





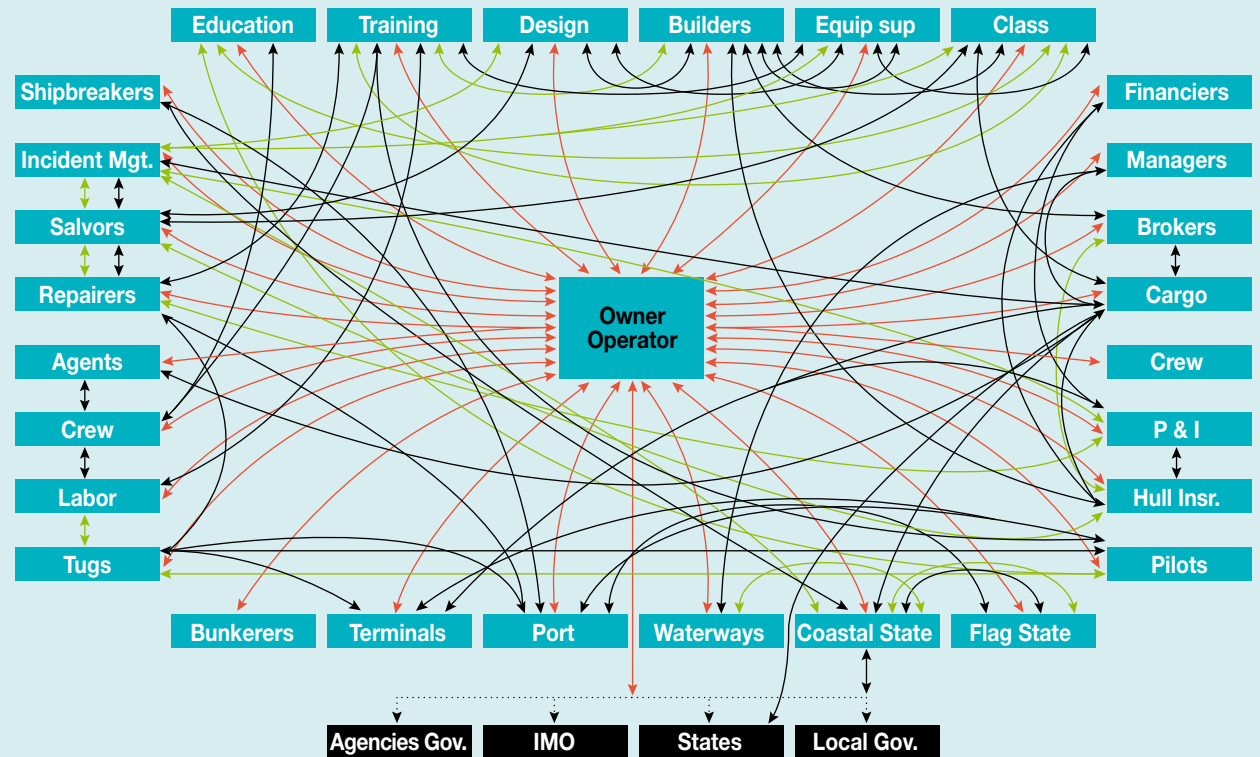
## Workshop Emissions presentation ICS

D. Tongue

### IMO & regional ship air emission developments

- Annex VI entered into force in 2005
- Baltic Sea  
SECA from May 2006
- North Sea/English Channel  
SECA from November 2007  
EU Directive - from August 2007
- Major Revision of MARPOL Annex VI -  
Commenced 2006 and completed  
October 2008
- European Sulphur Directive governs  
emissions in port  
(0.1% S at berth 1 January 2010)
- California (CARB) regulations (0.5 S)
- Various ports are facing new local regulations  
on ship emissions, which are governing  
future expansion and development

### Guidance on best practices for fuel-efficient operation of ships - stakeholders involved



Pollution hanging above cities.



As the global character of the maritime industry requires global measures, the demand to set limits for the concentration of polluting substances in the exhaust gas of seagoing vessels was taken up by the International Maritime Organisation (IMO).

The MEPC 57 agreed amendments confirming the proposed three-tier structure for new engines, which will set progressively tighter nitrogen oxide emission standards for new engines depending on the date of their installation. Tier I applies to a diesel engine which is installed on a ship constructed on or after 1 January 2000 and prior to 1 January 2011 and represents the 17 g/kWh standard stipulated in the existing Annex VI.

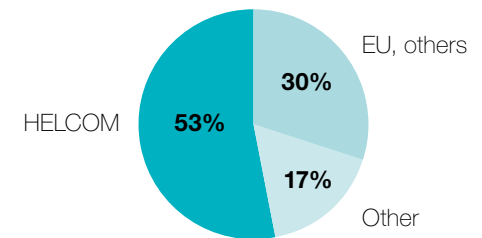
For Tier II, NO<sub>x</sub> emission levels for a diesel engine which is installed on a ship constructed on or after 1 January 2011 will be reduced to 14.4 g/kWh.

For Tier III, NO<sub>x</sub> emission levels for a diesel engine which is installed on a ship constructed on or after 1 January 2016 would be reduced to 3.4 g/kWh, when the ship is operating in a designated Emission Control Area. Outside a designated Emission Control Area, Tier II limits apply. The implication is of course that all new ships operating internationally must then be able to meet Tier III standards. The exception would be vessels built to operate locally, remote from ECAs.

Following intense efforts to find a workable solution

on a matter that had been highly controversial, the (MEPC 57) Committee agreed with a series of progressive standards in the amended regulation 14 Sulphur Oxides (SO<sub>x</sub>) and Particulate Matter (PM) that will result in significant reduction of SO<sub>x</sub> and PM emissions from ships.

Annual ship NO<sub>x</sub> emission (370 kt) by nationality during March 2006 - February 2007

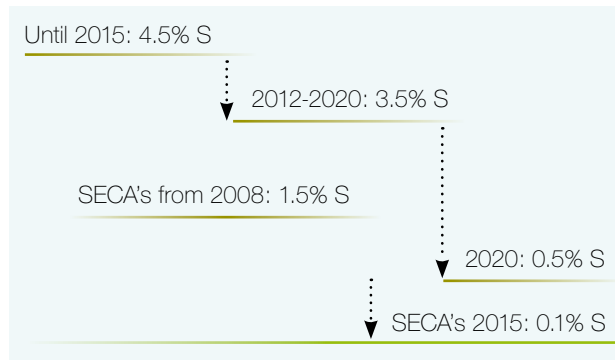


Regulating ship emissions		
	maritime	inland
Pollutants (SO <sub>x</sub> , NO <sub>x</sub> , PM)	IMO and MARPOLANNEX VI	EU Directives
Greenhouse gases - GHG (CO <sub>2</sub> )	IMO?	EU Policy

**The principal elements are as follows:**

- the sulphur limit applicable in Emission Control Areas beginning on 1 March 2010 will be 1.00% (10,000 ppm), reduced from the current 1.50% (15,000 ppm);
- the global sulphur cap will be reduced to 3.50% (35,000 ppm), from the current 4.50% (45,000 ppm), effective from 1 January 2012;
- the sulphur limit applicable in Emission Control Areas effective from 1 January 2015 will be 0.10 % (1,000 ppm);
- the global sulphur cap will be reduced to 0.50% (5,000 ppm) effective from 1 January 2020, subject to a feasibility review to be completed no later than 2018. Should the 2018 review reach a negative conclusion, the effective date would default to 1 January 2025.

**Sulphur limits in marine fuels**



*“The dredging sector acknowledges the importance of the targets to reduce emissions.”*

**Statement by EuDA on the AGM on the 6th of November 2008**

- The dredging sector acknowledges the importance of the targets to reduce emissions but the selection and implementation of regulating measures should be done correctly and in a feasible way.
- The European dredging sector will make preparations in the course of 2009 in order to disclose its CO<sub>2</sub> production.
- EuDA shall actively participate in the discussion on CO<sub>2</sub> indexing and future levy or emission trading schemes. The first aim being to inform the EuDA members on the future consequences of CO<sub>2</sub> indexing and Emission Trading Schemes.
- If necessary EuDA, in cooperation with other branch and professional organisations, will develop a stronger link with IMO through ICS in order to secure that the implementation of GHG regulating measures is done in a way feasible for the dredging sector.

**Participants and invites at the EuDA Workshop 'Emissions' 6th November 2008**

EuDA Workshop involved a wide spectrum of different technical know how from the dredging and maritime related sectors.







W. Dirks, chairman EuDA Environment Committee

During the AGM Open Part, the participants of the Workshop joined the Assembly where EuDA made the following statement:

*EuDA position acknowledged*

- *Importance of targets is acknowledged*

- *The European dredging sector will make preparations in the course of 2009 in order to be able to identify its CO<sub>2</sub> production*

- *Implementation of GHG regulating measures: must be correct and feasible*

- *EuDA will have to participate in the discussion on GHG regulation with all stakeholders*







# Anticipating the rising water

Coastal management is high on the EuDA Member companies' agendas. Headline is the likely impact of the rising water level caused by global warming. Short-sighted and short-term solutions are not an option. On the contrary!

The protection of vulnerable coastal areas requires a thoughtful and visionary approach. An approach that is fully in the line of our members' philosophy notably to analyze the complexity of the impact of the rising water and to offer safe and sound solutions for the protection of people and habitat.

Coastal protection requires solutions which are often transnational; it also demands important investments from governments and industry. EuDA likes to bundle an energetic approach, in which all noses will point in the same direction.

## Coastal defence and riverbank protection

*Climate change and rising sea levels mean that coastal management requires our full attention. Coastal erosion not only concedes land to the sea; it also reduces the capacity of the freshwater basins under dunes in the Dutch coastal area. This has a negative impact on flora and fauna. EuDA members offset this process by means of beach and foreshore replenishment. In this way, we create a balance: a protective buffer for people and society.*

*EuDA member companies are also specialised in protecting coastlines and riverbanks with breakwaters, groins, dams and dikes. World-wide, we design and build coastal defences and riverbank protection along numerous waterways and coasts using the latest technology. The result of continuous research and vast experience.*





*“Climate change and rising sea levels demand our full attention and focus on coastal management.”*



Protecting the shores.

EuDA members have the experience and expertise to help provide solutions to our customers' sustainability dilemmas and to help mitigate some of the potential social or environmental concerns associated with their projects.

Since we work with nature, we place a special emphasis on the environmental issues surrounding our projects.

EuDA members assess and monitor the processes and methods to meet changing conditions.

We commit to sustainable practices, every attempt is made to prevent or limit noise pollution, the contamination of soil, water and air and the creation of waste products. The proper disposal of waste and contaminated products and the efficient use of water and energy are also key commitments for us.



Sandsuppletion, protecting the beaches.

## Case study: Vilufushi, Maldives

### Conservation of coral reefs at Vilufushi, Maldives

*EuDA member Royal Boskalis Westminster restored the island of Vilufushi after being hit by the tsunami. Using an environmentally friendly dredging method and a sound monitoring program, it made sure that the coral reefs around the island of Vilufushi were not affected by the work.*

#### Project

To completely rebuild Vilufushi Island in the Republic of the Maldives and, at the same time, make it bigger by filling the shallow reef around it. Royal Boskalis Westminster was asked to undertake the dredging and reclamation work.

#### Background

The tsunami that hit south-east Asia in 2004 left a trail of destruction in its wake. The natural disaster impacted several countries. One of these was the Republic of the Maldives, a collection of 1,190 small coral islands grouped into 26 atolls. On Vilufushi, houses and infrastructure were destroyed and all residents had to be evacuated. Reconstruction of

the island began in 2005 to make it habitable and safe again. The 'new' enlarged island was ready in February 2007 to start building new homes.

#### In brief the contract (See pictures page 39)

- remove all debris;
- dredge and reclaim 1,000,000 m<sup>3</sup> of coral sand to triple the island's surface area to 62 hectares and raise its height to 1.4 m above sea level;
- construct a 2,000 m rock revetment (wall) around the island to act as a breakwater against waves;
- dredge a new harbor;
- construct a 350 m quay wall from pre-cast concrete;
- construct a 350 m breakwater.

#### Challenges

Vilufushi Island has a rich marine biodiversity and it was imperative to protect the coral reefs and sea grass meadows during dredging and reclamation work.

#### Solution

The dredging works were completely integrated with the environmental measures to reduce the release of suspended solids into the ocean and onto the coral.

These environmental measures were:

- Start dredging and reclamation works after the 4 bunds around the reclamation area were completed and the reclamation area was closed off from the ocean;
- Allow the run-off water to flow through the entire reclamation area before being discharged to the ocean;
- Place the discharge point of the reclamation area in the old, unused harbor, using it as a final settling basin before the run-off water reached the ocean;
- Deploy a silt screen, which was placed in the old harbor around the discharge point of the reclamation area.

To further ensure that adverse effects were minimal, an extensive environmental monitoring plan was implemented that signaled adverse changes to the environment.

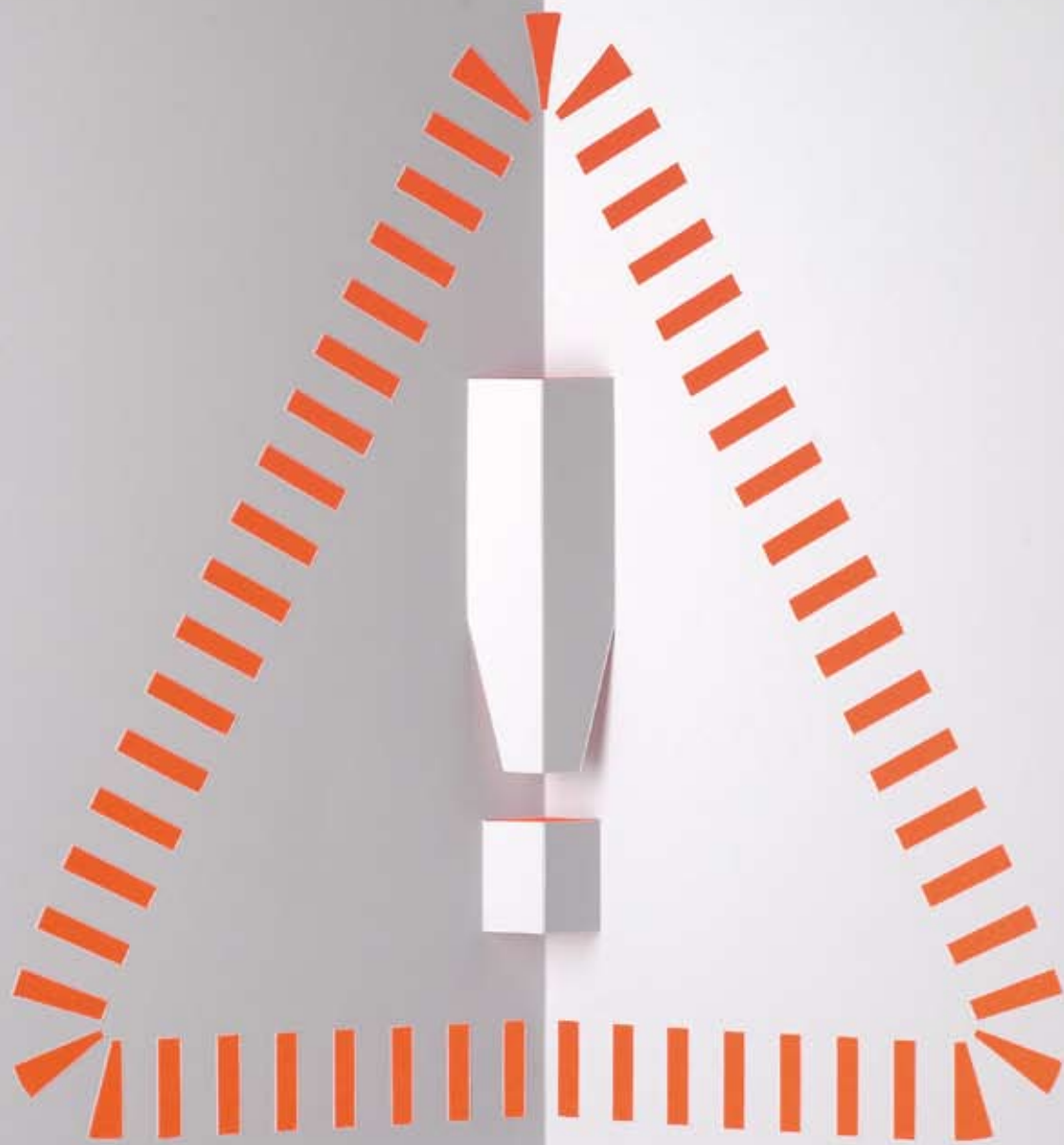
#### Result

Damage to the precious coral on the reef edge was minimal as a result of the extensive mitigation measures and the continuous monitoring of all relevant parameters.



*Conservation of coral reefs at Vilufushi, Maldives.*







# Anticipating threats on sea

The economic crisis that struck the world at large in the last quarter of 2008 is bound to result in increased mobilisation and demobilisation movements of the European dredging fleets. We may indeed witness the shift of major dredging vessels from one area to another and from one continent to another triggered by a growing geographical spread of dredging assignments. The present downturn of mega land reclamation projects in the Middle East, for instance, combined with a significant upturn in Western Europe is but one example of the expected 'geographical shift' of activities and fleets in 2009.

In this respect, EuDA applauds the launch, on 8 December 2008, of the European Union Navy Force 'Atalanta' – EUNAVFOR. This is the first ever EU joint military maritime operation that is executed within the framework of the European Security and Defence Policy (ESDP) and that is covered by several UN Resolutions. The aim of this operation is to tackle the escalating problem of piracy emanating from Somalia and to protect vulnerable vessels in the area of operations in the Gulf of Aden.

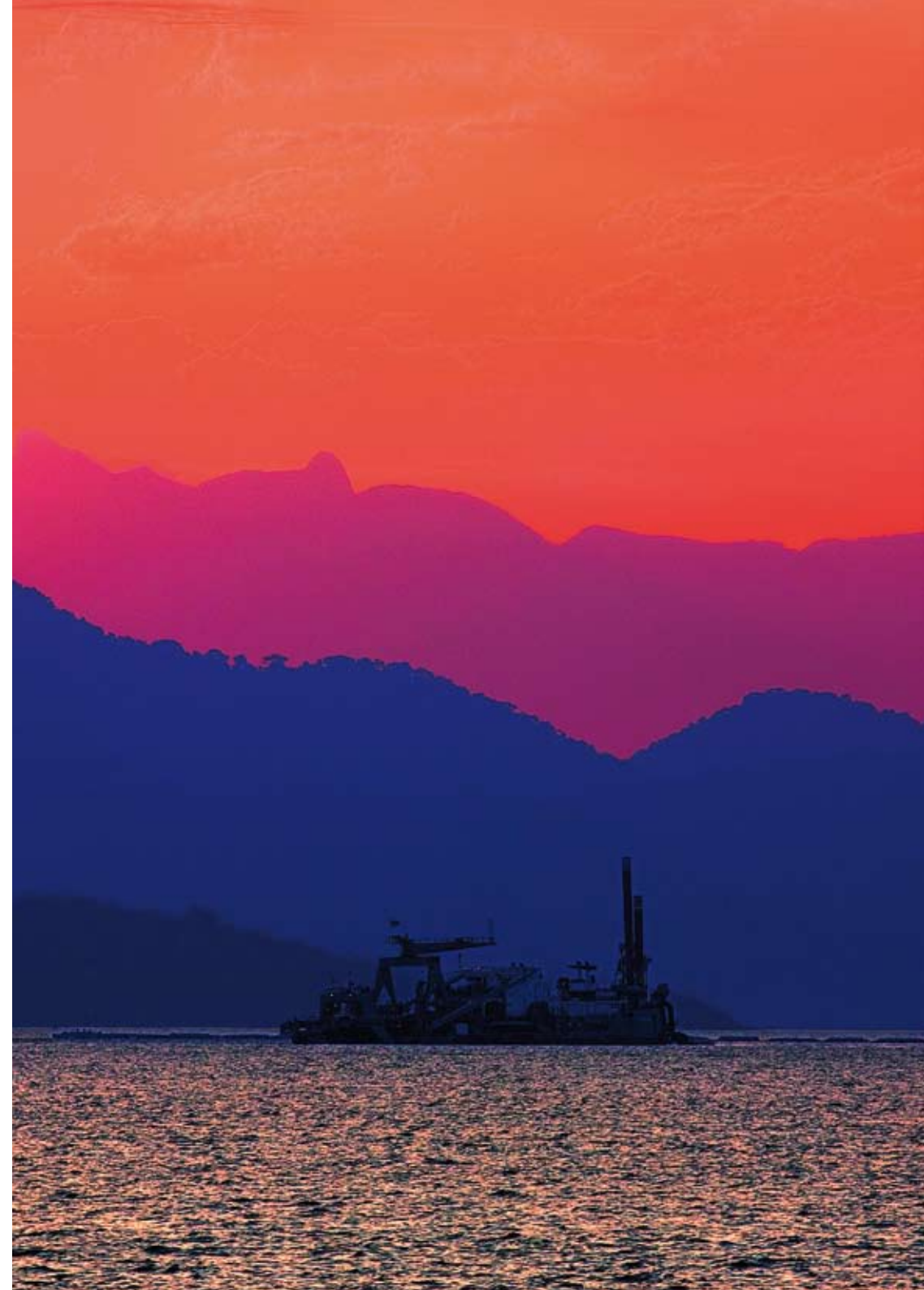
### **Safety of the European dredging fleet and its crews: a priority issue**

EuDA welcomes this joint European initiative and expresses its hopes that it may result in quick and efficient integration of all counter piracy actions and activities within this operation so as to improve security in that area drastically and quickly.

EuDA also hopes that all EU member states will have an equal and fair say within this operation so that every dredging vessel may receive equal and maximum protection when sailing through the piracy-struck area off the Somali coast.

Dredging vessels navigate at considerably lower speed than other transoceanic ships and they have low-lying superstructures, which makes them significantly more vulnerable for piracy acts.

EuDA does hope that these vessels may be given extra attention by the respective military marine forces acting within the EUNAVFOR context.







# Anticipating to protect our human capital

European Dredging Association remains committed to Europe's high standards in terms of safety and working conditions on board its ships and to raise it to a world standard level. This will not only benefit its people but also improve the competitive position of its members.

Dredging companies across the world must operate on an equal footing, both social and economic. The Achilles heel of our companies is the lack of continuity in the labour market of well educated people. EuDA underlines the necessity of good training centres in order to get the finest educated personnel on board of its vessels and to retrain its people in order to stay in the first league.

People are our most important asset and we would like to keep it that way.



S. Hoek, chairman of the Social Committee

## Social Affairs

by Simon Hoek, chairman of the Social Committee

### Report of the EuDA Social Committee

*The Social Committee of EuDA consists of the personnel managers from Royal Boskalis Westminster, DEME, Jan De Nul, Rhode Nielsen, Van Oord and representatives of the Dutch Association of Dredging Companies and the German Association of Dredging Companies. During the year 2008, the Committee had three main items on its agenda:*

- **State Aid for Sea Transport**

Discussions with the European Committee about the scope of the state aid for maritime transport are still ongoing. As far as the reduction of labour costs are involved, the Social Committee advised the EuDA Board to keep a strong position regarding this item.

- **Implementation of the ILO - Maritime Labour Convention (MLC)**

The implementation of the ILO - Maritime Labour Convention (MLC) on European and on National level is closely followed by the Committee and the EuDA Secretariat. Thanks to the close cooperation with the European Community Shipowners' Associations - ECSA, the most important aspects for the dredging industry were taken into account by the partners who were leading the implementation process.

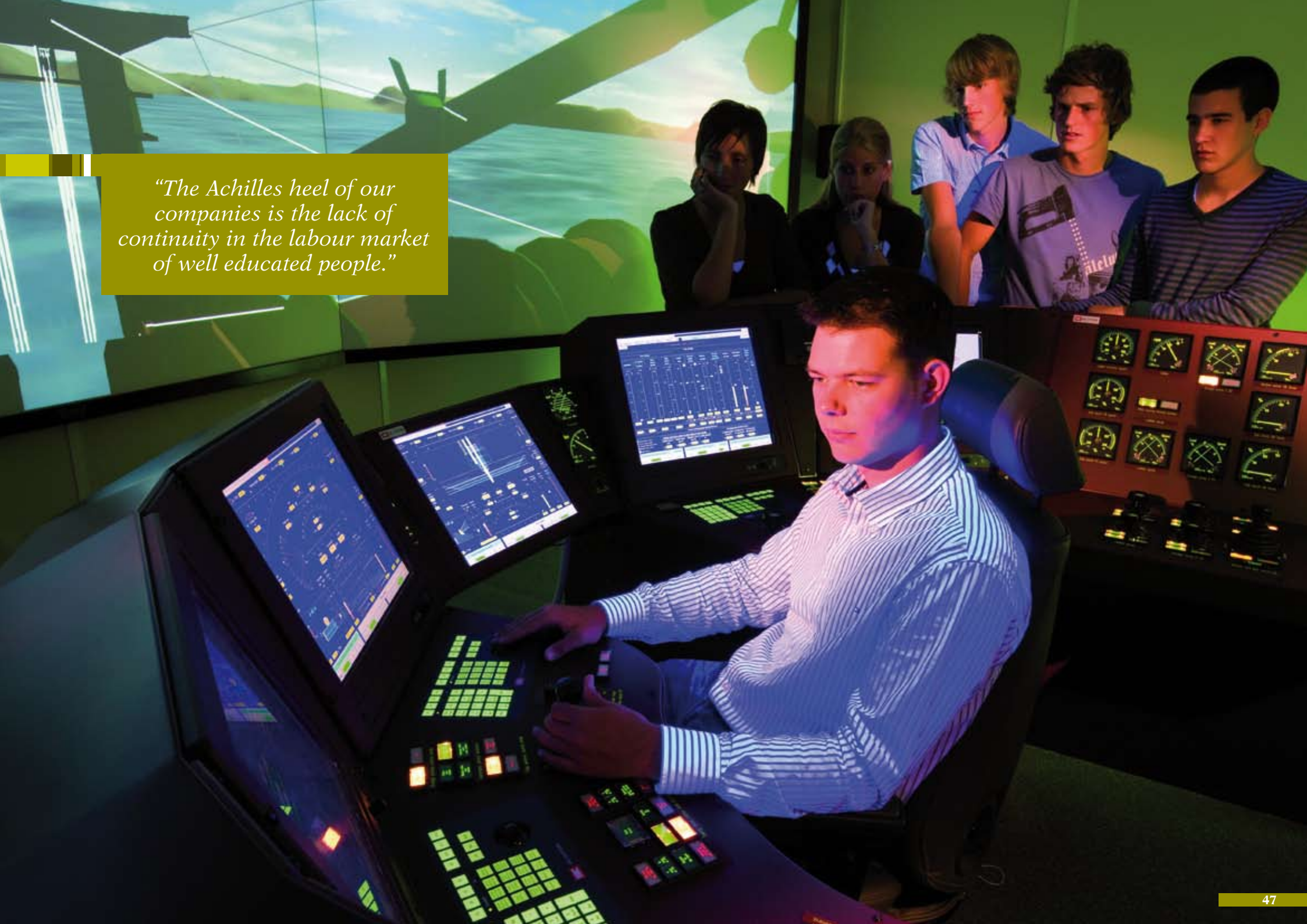
- **STCW**

The third item on the agenda regards another international convention: the Standards for Training, Certification and Watch keeping (STCW). The Committee discussed the developments on world level in respect of the importance for the European dredging industry. The revision process of the STCW is also a lengthy more-year-project which is closely followed.

Thanks to EuDA's associated membership of ISF, the Social Committee was promptly informed about all developments in the world of shipping, as far as social policies are involved.



Members EuDA Social Committee from left to the right  
above Mr. T. van Schaik (Van Oord N.V.), Mr. P. Demoor (DEME) and Mr. M. Weingartner (Möbius).  
below Mr. Ph. Piron (Jan De Nul N.V.), Mr. R. Veenstra (Royal Boskalis Westminster N.V.) and Mr. B. Toft Franzen (Rhode Nielsen s/a).

A man in a striped shirt is seated at a control desk with multiple computer monitors displaying data. Behind him, a group of five young people are looking at a large projection screen that shows a 3D model of a wind turbine. The scene is dimly lit, with the primary light source being the screens and the projection.

*“The Achilles heel of our companies is the lack of continuity in the labour market of well educated people.”*

Inspecting the cutterhead and teeth.





### STCW Code revision brief

The completion of the revision of the STCW Code is nearly within sight, the Sub-Committee on Standards of Training and Watchkeeping (STW) held its fortieth session from 2 to 6 February 2009 at IMO headquarters, London. At this sub-Committee new drafts of the chapters of the code were reviewed and additions were included resulting from various submissions before the meeting. It is anticipated that there will be an intersessional meeting organised for later in the year to review the outstanding work that could not be completed at the fortieth session. The forty-first session set for January 2010 will concentrate on finalising the text prior to the Diplomatic Conference tentatively scheduled for June 2010 to adopt the amendments.

There had been much talk within the industry about the possibility of removing or changing the training requirements in Celestial Navigation, the outcome, however, was for the mandatory existing tables to remain as they are. Some simplifying amendments have been made to Part B, the Guidance. On the Engineering side there was much debate about the removal of the minimum period of 30 months training for Engineers, overall support was for its removal.

With respect to Fitness for Duty and Watchkeeping, attempts are ongoing to harmonise the STCW Code and the ILO MLC 2006 (Maritime Labour Convention 2006) on Minimum hours of rest. At this stage much more progress has to be made, the Employers represented on our behalf by ISF are working hard to ensure that the exceptions provided in the MLC 2006 and the "2 day derogation" are reflected within the revised code. In addition it has been determined that each administration shall establish a mandatory limit of no greater than 0.05% blood alcohol level or 0.25 mg/l alcohol in the breath for

persons whilst performing designated safety, security and marine environmental duties.

There are some certain areas which still have to be discussed and finalised, amongst which are the inclusion of Steam training for Engineer Officers, the addition of competences for Electro Technical Officers or the creation of an Electro Rating, the inclusion of Dynamic Positioning training requirements, training requirements for personnel serving on Offshore Vessels and enhanced Tanker safety training requirements.

*"Training and Education:  
giving the right instructions  
at the right time."*



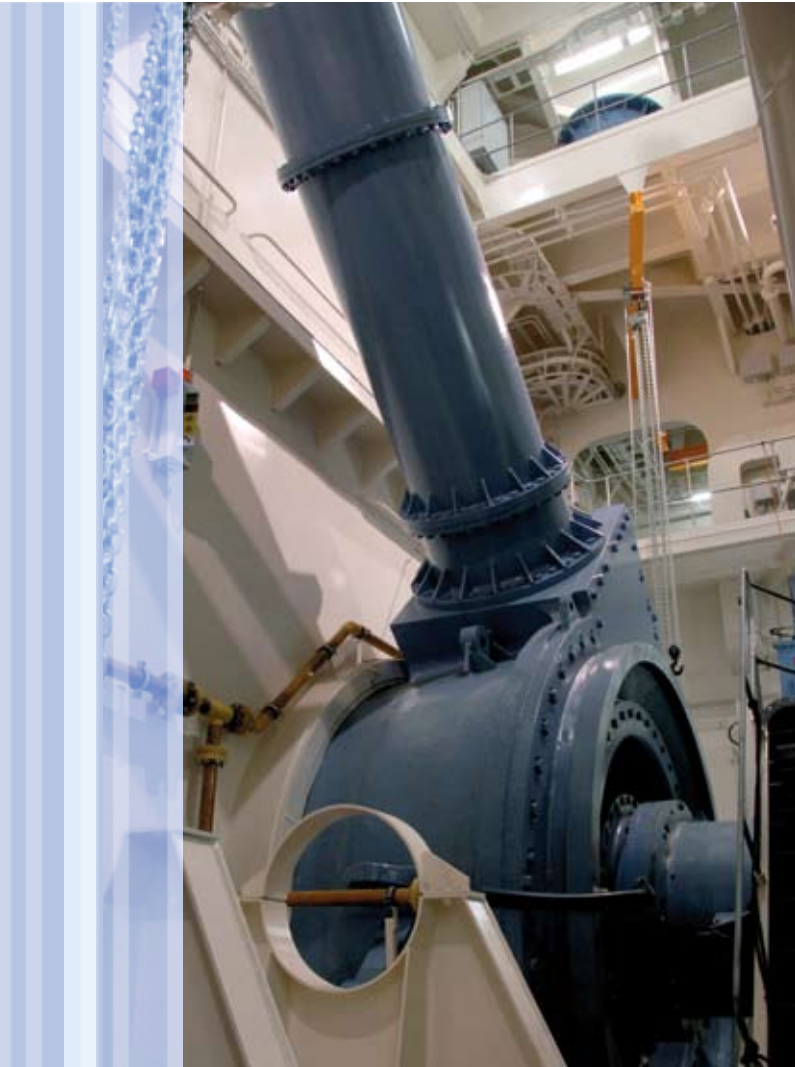


# Anticipating solutions for the future

To stand still is to look backward.

The dredging industry has always had the reflex to look ahead and to anticipate inventively the challenges of the future. This way of doing business is best reflected in the innovative and often revolutionary technical developments in our industry.

The fact that the European dredging industry has a significant share of the world market and is considered as a leading industry, motivates us even more in our conviction to focus on future innovations. Our engineers and ship builders are committed to positively address the climate issues. We have confidence in their expertise and creativity.



*“Our Research and Development departments are closely working with universities and technical institutes.”*

## **Innovation and a growth strategy for the future**

European dredging companies constantly invest in the innovation of their fleet, whether it is in fine-tuning of the mechanisms of hopper dredging technologies or in the developments to improve cutter heads and teeth or in dredging techniques performed in highly sensitive bio surroundings.

Motors and pumps are in our specialism of utmost importance. EuDA members do invest in improving the conditions of global environment by exploring and testing new equipment. We concentrate on growth and development and, therefore, we clearly distinguish ourselves from the competition.

Our Research and Development departments are closely working with universities and technical institutes like University of Delft, Delft Hydraulics, University of Ghent, Danish Hydraulic Institute, ...

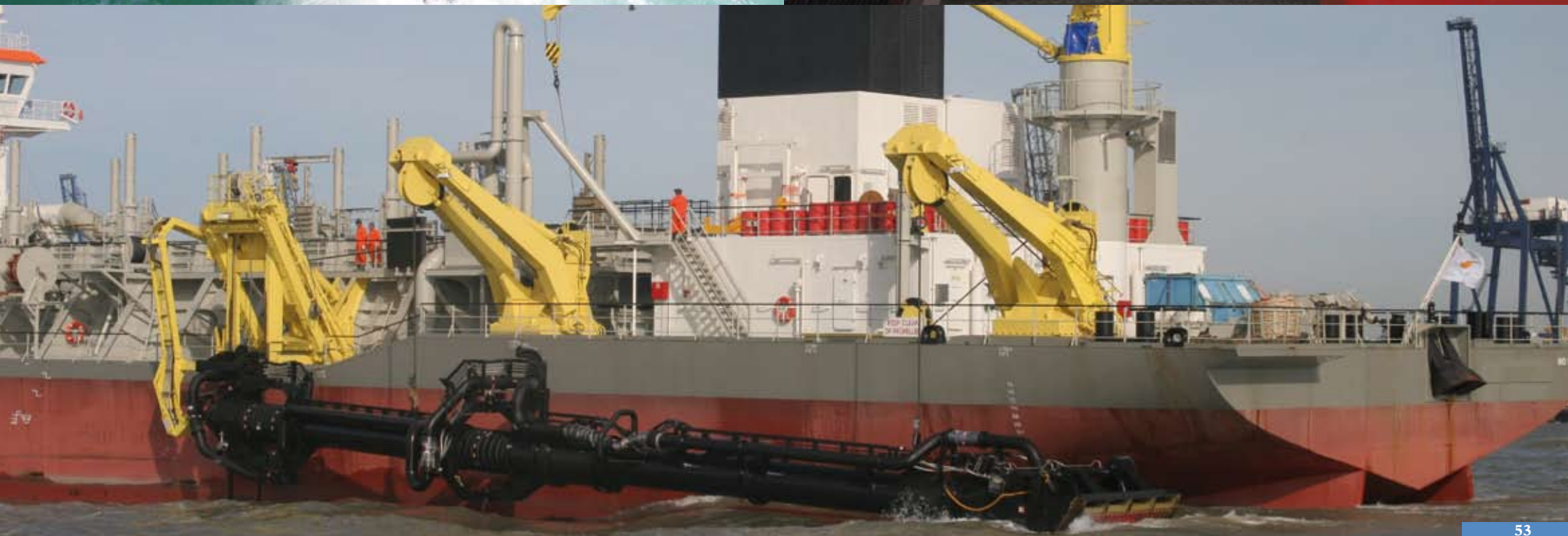
Our companies have a clear individual innovation strategy that results in market introductions of new, profitable products and services.



This type of draghead enables high concentrations in various kinds of soil. Special advantages are the low weight and low trailing forces, especially when a suitable swell compensator system is used.



The ultra-modern vessels have one-man operated bridges. One person coordinates all ship movement and operations. Verbal commands, traditionally given by the navigating officer to the dredging operator, are now incorporated in sophisticated macro-keys. The navigating officer simply activates the macro-keys and the ship performs the programmed commands in the desired way, as if the vessel itself is the dredge operator.



An aerial photograph of the Port of Ras Laffan in Qatar. The image shows a large industrial complex on the left side of the frame, with numerous buildings, roads, and storage tanks. A long, narrow pier extends from the land into the dark blue water. In the water, there is a large, complex offshore platform or structure. The sky is clear and blue. A small white and blue graphic element is visible in the top left corner.

Port of Ras Laffan, Qatar.

**Thank you, Agnès!  
Welcome, Paris!**

*On the 1st of June 2009, an important “relief of the guard” takes place at the EuDA headquarters in Brussels.*

*Agnès de Meester hands on the torch to Paris Sansoglou, who becomes the new Secretary General of EuDA.*



Agnès de Meester and the new Secretary-General of EuDA, Paris Sansoglou.

Agnès de Meester joined EuDA since the early start in 1992, under the guidance of Koos Van Oord and Jean-Jacques De Cloedt, the 2 initial founders and eminent godfathers of EuDA.

During the first 12 years of EuDA, she acted as the policy advisor of Mr. Erik Mink, who, at that time, was the manager of EuDA. Later, when Erik left EuDA, she took over his role and became the EuDA-manager, with Isabelle Gourdin as the new secretary.

Agnès deserves our gratitude for the classy dedication that she demonstrated in representing EuDA during all these years.

On the 1st of June 2009 her successor, Mr. Paris Sansoglou will take over as the new Secretary General of EuDA.

Mr. Paris Sansoglou is an authentic European: he is half Greek, half Belgian, half Dutch and half French!... He is a 200% European citizen. He speaks four languages fluently and knows the in-and outs of the Commission and all European Institutions.

After graduating in 1993 at the Solvay Business School, he worked for several years for the European Commission and for a trade association.

In 2001, he worked as a senior consultant at Ernst & Young Corporate Finance. In December 2004 he joined CESA (the European Shipbuilders Association), where he was the main animator and coordinator of the famous European Technology Platform WATERBORNE, meant to encourage and subsidize modern evolutions and applications in the European shipbuilding and maritime technology-sectors. From this experience, he had deep and interesting contacts with different departments of the European Commission.

The Board of EuDA wishes good luck to Paris in his new and challenging task as the new Secretary General of EuDA. One of his first intentions is to get acquainted with the dredging industry by organizing visits on board of the member/vessels, possibly together with some eminent staff members and civil servants of the European Commission.

The Board

## MEMBERS OF EuDA

### BELGIUM

#### Dredging International N.V.

[www.dredging.com](http://www.dredging.com)

[www.deme.be](http://www.deme.be)



#### Jan De Nul N.V.

[www.jandenul.com](http://www.jandenul.com)



#### Baggerwerken Decloedt en Zoon N.V.

[www.deme.be](http://www.deme.be)



#### Fédération du Dragage Belge A.S.B.L.

[baggerwerken@confederatiebouw.be](mailto:baggerwerken@confederatiebouw.be)



### DENMARK

#### Rohde Nielsen s/a

[www.rohde-nielsen.dk](http://www.rohde-nielsen.dk)



### GERMANY

#### Vereinigung der Nassbaggerunternehmen E.V.

[www.nassbagger.de](http://www.nassbagger.de)



#### Josef Möbius Bau-Aktiengesellschaft

[www.moebiusbau.de](http://www.moebiusbau.de)



### GREAT BRITAIN

#### BMAPA

British Marine Aggregate Producers Association

[www.bmapa.org/](http://www.bmapa.org/)



### IRELAND

#### Irish Dredging Company

[www.boskalis.com](http://www.boskalis.com)



### ITALY

#### SIDRA - Società Italiana Dragaggi SpA

[www.deme.be](http://www.deme.be)





## THE NETHERLANDS

**Baggerbedrijf De Boer B.V. / Dutch Dredging B.V.**

[www.dutchdredging.nl](http://www.dutchdredging.nl)



**Royal Boskalis Westminster N.V.**

[www.boskalis.com](http://www.boskalis.com)



**Van den Herik B.V.**

[www.herik.nl](http://www.herik.nl)



**Van Oord N.V.**

[www.vanoord.com](http://www.vanoord.com)



**Van der Kamp B.V**

[www.vanderkampbv.nl](http://www.vanderkampbv.nl)



**VBKO - Vereniging van Waterbouwers in Bagger-, Kust- en Oeverwerken**

[www.vbko.nl](http://www.vbko.nl)

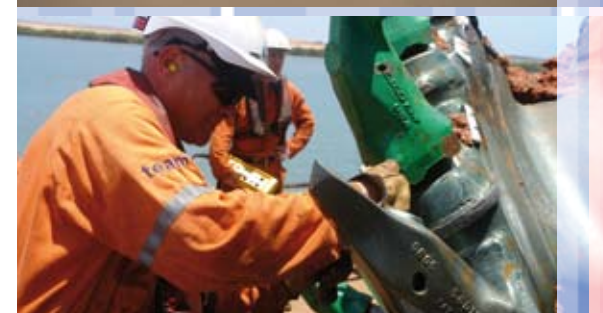
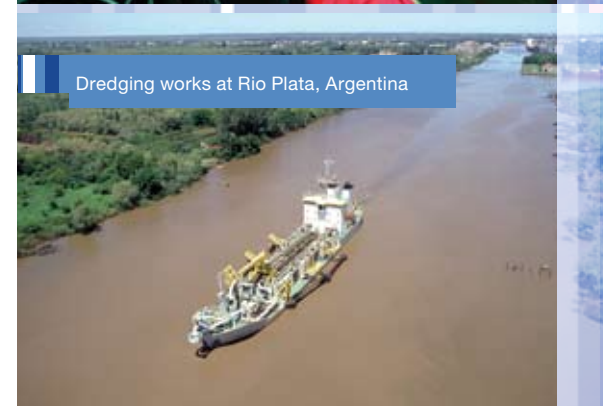


## SPAIN

**FPS**

**Flota Proyectos Singulares**

[www.flotaps.com](http://www.flotaps.com)



The European Union is a unique body. Its members are sovereign states who have pooled their sovereignty in some key areas of government. Like any government, the Union has a legislative and an executive branch and an independent judiciary.

### **How the European Union works - The institutional triangle**

Three institutions are responsible for making policy and taking decisions.

They are

- the Council of the European Union,
- the European Commission, and
- the European Parliament

### **Council of the European Union**

This is the main decision-taking body and therefore the most powerful of the three. It is the voice of the member states, and meets several times a month at minister level. It has both a legislative function, which it shares with the European Parliament, and an executive function, which it shares with the European Commission. The Council meets in specific policy formations: external relations, economic and financial affairs, transport, energy, agriculture, etc. It is commonly called the Council of Ministers. Most decisions are by majority vote, although sensitive issues in areas like taxation, asylum and immigration, or foreign and security policy require unanimity.

At its highest level, the Council meets as the European Council where members are represented by heads of state and government (presidents and/or prime ministers). These summits, held up to four times a year, set overall EU policy and resolve problems that emerge at lower levels.

### **European Commission**

The Commission is independent of governments and represents and upholds the interests of the Union as a whole. It has two essential functions. One is to propose EU policies and legislation and the other is to ensure that the terms of the EU treaties and the laws adopted by the Council and the European Parliament are respected. It is sometimes called the 'guardian of the treaties'.

A new Commission is appointed every five years so that its term is largely aligned with

each five-year mandate of the European Parliament. The Commission members – one from each country – are vetted by the European Parliament before taking office.

### **European Parliament**

Like parliaments throughout history, the European Parliament has had to fight for its right to represent the people. It was first directly elected by EU citizens in 1979. The present Parliament, elected for five years in June 2004, has 785 members from all 27 countries. Parliament's principal function is to adopt, in a process called 'co-decision' with the Council, the draft legislation submitted to them by the European Commission. The Parliament has the power to dismiss the European Commission through a vote of censure.

### **Upholding the Law**

The job of the Court of Justice of the European Communities is to make sure that EU legislation is interpreted and applied in the same way by the member states, so that it applies equally to all. The Court can also rule in legal disputes involving member states, EU institutions, businesses or individuals. The court, located in Luxembourg, is made up of one judge from each EU country.

### **Other institutions and bodies**

In addition to the big four, the European Union has six other main bodies with specific tasks:

- The Court of Auditors, which checks that the EU budget, funded by the European taxpayer, is spent correctly;
- The European Central Bank, based in Frankfurt, which manages the euro and sets EU monetary policy;
- The European Economic and Social Committee and the Committee of the Regions are consultative bodies, speaking for civil society and local government in Brussels;
- The European Investment Bank in Luxembourg, which funds projects in the EU's poorer regions and promotes small and medium-sized businesses.

Created by the Maastricht Treaty, the European Ombudsman investigates complaints against EU institutions from citizens, businesses and other bodies.



*European Dredging Association  
EuDA is a non-profit industry  
organisation for dredging companies  
and related organisations. It represents  
the interests of the dredging industry,  
primarily at the European institutions.*

The European dredging companies represent approximately 8,000 European employees “on land and on board of the vessels” (in direct employment) and more than 30,000 in indirect employment (supply and service companies).

Approximately 750 seaworthy vessels with European flag are servicing the ports and maritime channels worldwide.

The Association:

- will pursue its goals by endorsing policies to create fair and equitable conditions for competition;
- commits to respecting applicable national, European and international rules and regulations;
- commits to operating its fleet safely, effectively and responsibly.

Founded in 1993, the Association serves its members in all kinds of requests related to dredging issues, strongly emphasizing on the Social and Environmental affairs. These issues are followed and organized by the Secretariat and executed by its specialised working groups consisting of experts from the member companies.

**EuDA Secretariat** Agnès de Meester, advisor to the board Isabelle Gourdin, secretary

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