
# EuDA's 20TH Anniversary Conference

*The European Dredging Industry:*
*A Maritime Success Story !*

**Thursday, 7th November 2013, 10.00**
**in Bibliothèque Solvay, Brussels**

# EuDA 2013 AGM
# Conference Programme

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**The European Dredging Industry: A Maritime Success Story !**

For the past 20 years, European Dredgers have built up momentum and increased their strength and resilience as individual companies but also as a united and reputable sector organisation.

**The Challenges of the Sea**
Thanks to maritime transport, the main vector for globalisation, the world has become an ever closely connected place. As a consequence, more and more economical and social activities take place and further develop along the coasts.

The European Dredgers were very quickly faced with challenges such as increasing demand for space and resources (including offshore energy and marine aggregates) in the context of the increasing need to protect our environment. Thanks to long term cooperation with universities and hydraulic labs and also to continuous investment in advanced and high tech equipment, the European Dredgers have developed innovative solutions and new approaches, integrating nature (both physical and ecological aspects) already at the design phase.

**From "Mud Pushers" to World Leaders**
After 20 years, the European Dredgers are no longer known as the "mud pushers" but as the well respected world leaders in a diversified industry segment of high strategic and economic importance. Their knowledge and capacity has allowed the European Dredgers to tackle innovatively many of the world's new challenges, including the modernisation of ports and their adaptation to the new reality of seaborne trade, the protection and adaptation of coasts to climate change, the procurement of diverse services to the offshore infrastructures.

In its own way, the dredging industry is also a vector of globalisation.

**The Influence of Europe**
With the increasing impact of European legislation and policies on their business, European Dredgers decided to join forces and established in December 1993 the European Dredging Association (EuDA). Since then, EuDA has grown into a reliable and reputable European maritime association, shaping European legislation and policies, focusing on transport, environmental, social or trade issues, as well as international, essentially at IMO and ILO.

In order to celebrate in style this important milestone in the life of an association, EuDA has the honour of having a keynote address by Commission Vice-President and Commissioner for Transport & Mobility, Mr Siim Kallas. He will be followed by eminent speakers presenting the innovative projects by European dredgers around the world.

# CONFERENCE SPEAKERS

## Opening

**Mr Marc Stordiau**
EuDA Chairman

## Moderation

**Mr John Richardson**
FIPRA International

## Keynote Address

*20 years of European Maritime Transport Policy and future perspectives.*

**Vice-President Siim Kallas**
European Commission, Commissioner for Transport and Mobility

## European Dredgers, innovating worldwide

**Europe**:
*Maasvlakte (1) vs Maasvlakte 2, from rocks to sand.*

**Mr René van der Plas**
Port of Rotterdam, Managing Director of Maasvlakte 2 Project

**Americas**:
*Panama Canal Expansion.*

**Mr Rogelio Gordon**
Panama Canal Authority, Executive Manager Dredging Division, Dept. Operations

**Oceania**:
*Dredging's innovative solutions in the expansion of the Port of Melbourne.*

**Mr Gerard van Raalte**
Royal Boskalis Westminster, Hydronamic, Senior Expert

**Asia**:
*Dredging's innovative solutions as alternatives to offshore rigs.*

**Mr Stijn Kenis**
DEME, Project Manager of SARB Energy Islands in Abu Dhabi

**Mr Peter De Pooter**
Jan De Nul, Project Director for the Manifa Field Causeway and Islands in Saudi Arabia

## Conclusions

## Rent-a-Port

**Marc Stordiau**

**EuDA Chairman**
**Managing Director of Rent-a-Port**

Born in May 1946, Marc Stordiau graduated as Civil Engineer at the University of Ghent in 1970 (in Geotechnics, Geology and Hydraulics).

His first employer was CFE (largest Belgian company in Civil Engineering) for which he worked from 1970 to 1978 on the project Management in various large dam, port and road projects in West Africa. He took the opportunity to study the African culture.

In 1978, he was transferred from CFE to DEME where he worked his way up through the hierarchy from 1979 to 2006. He was successively Manager of the Benelux Division, in charge of coordinating the design and execution of sections of the new outer Port of Zeebrugge (1979-1984); then he became Managing Director of DEME, as from 1990 where he was in charge of port extensions in France (Le Havre 2000), Nigeria (Bonny), Italy (various ports), Mexico (various ports), Uruguay (Canal Martin Garcia), Vietnam (Hai Phong), Singapore (Jurong extension), Hong Kong (various extensions), P. Rep. China (Zuhai), etc.

From 2005 till now, he is Managing Director of Rent-A-Port where he is in charge of the coordination and management of various port adaptations in Antwerp, in the Netherlands and also green field ports (design and management) of green field ports in Vietnam, Nigeria, Oman and Qatar.

Besides these activities, Marc Stordiau has been a Member of the Board of the Investment Holding of the Flemish Government (GIMV) from 1992 till 2010. He is Member of the Board of CAP (Consortium Antwerp Port), together with P.A.I. (Port of Antwerp International). He created the Company Ecoterres, together with the Steel Company Cockerill (Arcelor Mittal), to clean contaminated soils, for which he was involved in negotiations of the contract to clean the subsoil of the London Olympics. He is the initiator of the Belgian Offshore windmill Business with 3 concessions of 300 MWatt each: C-Power, Rentel, Seastar. And finally he is Secretary of the Flemish Government Committee for the merger of all marine cables for offshore windmills, the so called “Central Plug Committee”.

## FIPRA International

**John Richardson**

**Special Adviser on Maritime Affairs**
**Former Head of European Maritime Policy Task Force**

John B. Richardson provides consultancy services as Special Adviser on Maritime Affairs with FIPRA International.
He has degrees in chemistry and economics.

John spent 4 years with Unilever, before joining the European Commission to work on environmental policy in 1973.

From 1978 to 1996 he occupied various posts in the External Relations part of the European Commission, finishing his diplomatic career as Ambassador and Head of Delegation to the UN in New York. For three years from May 2005 he headed the Task Force which developed the Integrated Maritime Policy for the EU, adopted by the European Council in December 2007.

John left the European Commission after 35 years service in July 2008, but has retained a keen interest and an extensive network in maritime affairs. He is Chairman of the ESPO award committee and a member of the Board of Trustees of Sail Training International and provides consultancy services through FIPRA. He has been a Member of the Board of the Salzburg Global Seminar for many years.

## European Commission

**Siim Kallas**

**European Commission Vice-President**
**Commissioner for Transport and Mobility**

Born in Tallinn, on 2nd October 1948, Siim Kallas graduated cum laude from the finance and credit department of the University of Tartu in 1972 and continued his studies as a post-graduate student until 1975. He is a visiting professor at the University of Tartu. He is married and has two children.

Appointed Vice-President of the European Commission since October 2004, Siim Kallas served as Commissioner responsible for administration, audit and anti-fraud from October 2004 and is in charge of transport since February 2010. In May 2004, he was appointed as the first Estonian member of the European Commission, working in the field of economic and monetary affairs.

Before joining the Commission Mr Kallas was active in the restoration of Estonian statehood and served as Estonia's Prime Minister, Minister of Finance, Minister of Foreign Affairs and President of the Central Bank. He was elected to the Estonian parliament three times and held the position of the Chairman of the Estonian Reform Party since the party's creation in 1994 until November 2004, after which he became the Honorary Chairman of the party.

## Maasvlakte 2 (2008-2013)

Incentive for economy, environment and quality of life

The Port of Rotterdam is going to become twenty per cent bigger. The extra 1,000 hectares of port and industry area of Maasvlakte 2 will be in full use in 2035, and the largest ocean giants in the world will unload their cargo for the European market efficiently and swiftly. What will the Port for Rotterdam look like then? Where do the benefits for the economy, environment and quality of life come from?

The Port of Rotterdam is and will remain a port of global importance, and there will also remain a long-term demand for square metres directly by the sea. Since container ships keep getting larger and larger, all around the world the transhipment of containers is concentrating increasingly on large ports with deep waterways and good logistic connections. Maasvlakte 2 makes Rotterdam totally ready for the growth in worldwide transport flows. In 2035, the port expansion will have achieved extra transhipment capacity of 17 million containers annually.

The first ships can already moor at the quays of Rotterdam World Gateway (RWG) and Stevedore APM Terminals in 2014 with the commissioning of the terminal on Maasvlakte 2. According tot expectations, in a later phase of the project the expansion of the Euromax Terminal (ECT) will be established. Until 2014, the Port of Rotterdam Authority is working on the first phase of Maasvlakte 2. By that time, 240 million cubic metres of sand will have been applied, and the hard and soft seawalls will be ready. The first 700-hectare port area then has 2.5 km of deep sea quay (-20 metres), the port basins are at their proper depth and the roads, railways and pipelines are ready.

## Port of Rotterdam

**René van der Plas**

**Managing Director of Maasvlakte 2 Project**

René van der Plas (1965) completed his mechanical engineering degree at Delft University in 1988. After that he has worked in miscellaneous line and project management functions. He started his career with Europe Combined Terminals (ECT), and moved to Twynstra Gudde Management Consultants in 1997. With Twynstra Gudde René further specialised in project management.

In 2002 he was named partner.

In 2004, René was appointed as Director Port development and Construction with the Port of Rotterdam. Since then he has been responsible for masterplanning, design and construction of the Maasvlakte 2 Project (2.000 hectares port expansion by means of a land reclamation in the North Sea.) In 2012, René was appointed as Managing Director of the Maasvlakte 2 Project.

## Panama Canal Expansion Programme

The Expansion of the Panama Canal is one of the most prestigious infrastructure projects in the world. The programme is composed of many projects, of which 4 have been attributed to European Dredgers:

### 1. Design and construction of the 3rd set of locks (2009-2014)

It is mainly a civil construction project and dredging works represent less than 5% of the scope. The works entail the construction of two lock complexes, one on the Atlantic Ocean side and another on the Pacific Ocean side. This is to enable Post-Panamax vessels to sail through the Panama Canal. After the works, the vessel capacity of the Panama Canal will be increased by about 50 %.

Each lock complex consists of 3 successive locks, bridging the 28 m difference between the ocean and the Panama Canal. A total of 6 chambers will be constructed, each with a length of 427 m, a width of 50 m and a depth of 30 m. To construct the new locks, 40 million $m^3$ of soil and rock has to be excavated and 5 million $m^3$ of concrete is being poured. The 6 locks will be 6 times the lock of Berendrecht in Belgium, currently the largest lock in the world.

### 2. Deepening and widening of the navigational channel & the north approach channel to the 3rd set of locks at Atlantic side (2009-2013)

Also the new access channels to the new locks need to be dredged and the existing navigation channels need to be widened. In total, about 25 million $m^3$ of Atlantic muck and Gatun rock was dredged for the deepening and widening of the navigational channel and north approach channel to the lock complex at Atlantic side.

### 3. PENAC Project, Excavation and dredging of new North Access Channel to the new Pacific locks (2010-2012)

The PENAC Project is the Pacific Entrance North Access Channel dredging project. This project concerned the excavation, partially dry excavation, partially dredging, of the future northern access channel to the new third set of locks at Pacific side. In order to create the new access channel, 4 million $m^3$ of material of which 2 million $m^3$ of rock is to be excavated. The hard rock needed blasting before excavation.

### 4. Additional dredging campaigns for the Panama Canal Expansion Programme

Additionally, several dredging campaigns needed to be executed alongside the canal, including the dredging of a trench in soft material of 1.1 km long in Lake Miraflores, Panama with variable depth and width for the installation of a cellular cofferdam; the dredging of soft material at the western side of the Panama Canal and offshore disposal of dredged material; and the charter of dredging equipment (hydraulic backhoe dredge and hopper dredger).

## Panama Canal Authority

**Rogelio Gordon**

**Executive Manager Dredging Division, Dept. Operations**

Rogelio A. Gordon started his career in the Panama Canal Commission in 1981. He was assigned to the Mechanical Engineering Section as Mechanical Engineer Trainee in 1983 and was promoted to Supervisor of the Machinery Design Unit in 1987; to Manager of the Engineering Section of the Industrial Division in 1996; to Manager of the Mechanical Engineering Section of the Engineering Division in 1998. In 2008 he was appointed Executive Manager of the Panama Canal Dredging Division.

He obtained his Civil Engineering Degree from the University of Panama in 1980. He has a Master in Business Administration from the INCAE Business School and he graduated from the Executive Leadership Program of the Panama Canal. He is a Project Manager Professional, certified by the Project Management Institute.

Complementary to his college education, managerial and professional studies, he has attended seminars and specialised training in the United States, Canada, England, Holland and Mexico.

## Channel deepening project Port of Melbourne (2003 – 2009)

To maintain its position as number one container and general cargo port in Australia, the Port of Melbourne Corporation (PoMC) proposed a plan to make the port accessible to 14m draught vessels during all tidal phases.

Following the selection of a partner in April 2004 an Alliance Agreement was developed between the port and the selected dredging contractor, i.e, a contract where risk sharing was the norm and advice was provided during the project development phase using the contractor's 'in house' expertise and experience.

Starting with the signing of the Alliance Agreement in May 2004, the dredging contractor actively participated in the planning and preparation for the project.

This led to the following actions:

- Dredging the entrance
- Service pipeline protection works
- Removal of contaminated silt in the Yarra River
- Assisting with the supplementary environmental effects statement (SEES)

## Successful completion

In total 22 million $m^3$ of material were dredged during the project. For the service protection works, 61,000 tonnes of rock were placed with high precision. Both PoMC and stakeholders were fully satisfied with the high environmental performance achieved while the project was completed well within budget and time. The overall success of the project was recognized by the industry through the award of '2010 Project of the Year' by Infrastructure Partnerships Australia.

## Royal Boskalis Westminster, Hydronamic

**Gerard van Raalte**

**Senior Expert**

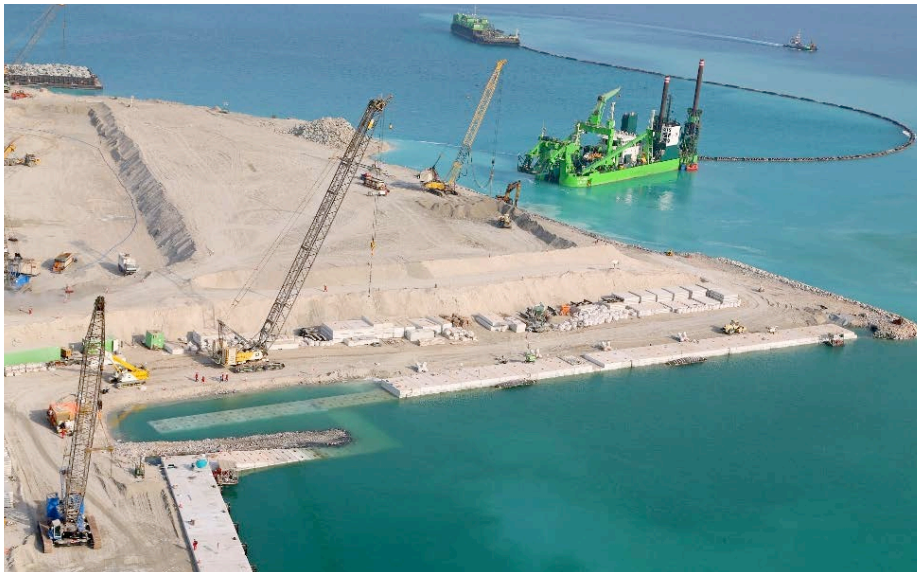
Gerard van Raalte is senior expert with Hydronamic, the in-house engineering company of Royal Boskalis Westminster (Netherlands), one of the world leading dredging contractors.

As senior expert one of his tasks is to bring together all players in a common understanding on the many international projects, where environmental challenges add to the complexity of the projects. This relates to large international tenders and projects in execution, but also applies to project development.

He is a member of the Central Dredging Association's Environment Committee (CEDA) and of the Environmental Committee of the European Dredging Association (EuDA). He frequently lectures on environmental aspects of dredging. He is a regular contributor to PIANC reports (PIANC is the World Association for Waterborne Transport Infrastructure).

Past few years he has heavily been involved with bringing all results from the Building with Nature research programme to the public.

## SARB Artificial Islands



Abu Dhabi (UAE) decided to build two offshore artificial energy islands as part of the Satah Al Razboot Offshore oil field development (Commonly know as SARB Islands). The client ADMA-OPCO, a joint venture company between ADNOC (Abu Dhabi National Oil Company), BP, Total and JODCO (Japan Oil Development Company), acts as the developer on behalf of ADNOC, the sole owner of the field. The offshore islands SARB 1 and SARB 2 have been created 120 km off the coast of Abu Dhabi. The islands support the drilling, production, processing and distribution facilities at the offshore oil field and include their own service ports. The construction works were awarded under a Design and Build contract. This most complex project encompassing every aspect of dredging, marine works, and concrete structures needed an integrated 'total solution'.

## DEME

**Stijn Kenis**

**Project Manager of SARB Energy Islands in Abu Dhabi, UAE**

Stijn Kenis completed his MSc in mechanical engineering in 1991 and a bachelor in Business Economics in 1992, both at the Leuven University.

He joined the DEME Group immediately after his studies and started as a project engineer in The Netherlands where he worked for the construction of the immersed Piet Heintunnel in Amsterdam.

Thereafter, he started an impressive international carrier as project engineer, works manager and later project manager on nearly all continents for medium and large marine projects: Escravos in Nigeria, Cardiff Bay Barrage in the UK, Hsinta Port and Mai Liao Port in Taiwan, Darwin, Townsville, Karumba and Port Hedland in Australia, Pulau Ular and Jurong Phase 4 in Singapore, Hulhumale at the Maldives, Orinoco River in Venezuela, Freeport Harbour in the Bahamas, Pearl Qatar in Doha,Qatar, Durban Harbour in South Africa and Maputo Channel in Mozambique.

Since April 2013, he joined the SARB project team in Abu Dhabi as Project Manager; he JV Dredging International-Medco is executing an extremely challenging offshore project for ADNOC / ADMA-OPCO:
the construction of two artificial energy islands as part of the Satah Al Razboot Offshore oil field development, 120 km offshore the coast of Abu Dhabi, UAE.

## **Manifa Causeway Project** (World Energy Infrastructure Award 2013)

Saudi Aramco decided to build a Field Causeway and artificial Island to exploit offshore oil fields. Covering an area of over 80km² and by far one of the most prestigious projects ever realised in the Kingdom of Saudi Arabia.

25 oil drilling and production islands - each with 10 drilling wells for heavy duty crude oil and able to withstand a 100-years storm, 2 water injection islands, 41km of causeways and roads, a 2.4km long main bridge, 5 short bridges, 8 culvert bridges, 27 escape jetties, 2 berthing facilities and 1 Ro-Ro facility for supply vessels, had to be designed, engineered, procured and constructed. A 9km trench was excavated with 2 shore approaches for pipelines and cables.

Bridges are constructed to preserve the existing fauna and flora. A total of 52 million m³ of sand was dredged, 150,000m³ of concrete was casted on the worksite and 121km of rock revetment was installed, for which 12 million tons of rocks were supplied, partly from overseas. The latest design methods combined with extensive modeling tests, and innovative installation methods for rock revetment, have led to a cost effective construction.

A quality system was set up to guarantee a high quality assessment and control of materials, construction and installation processes. Fully equipped and certified onsite laboratories offered the possibility to intervene in case a negative trend was noticed.

The project is characterised by technical and logistical challenges. Camp accommodation in the desert was built for a workforce of 3,000 workforces with 40 different nationalities. 11 dredgers, 50 auxiliary vessels, 40 barges and pontoons, and 150 heavy construction equipment units were deployed and delivered to the remote working location.

## Jan De Nul

**Peter De Pooter**

**Project Director for the Manifa Field Causeway and Islands in Saudi Arabia**

Peter De Pooter graduated in 1990 with a MSc. in Civil Engineering at the University of Gent (Belgium). He worked for SECO and HAECON in the engineering and construction industry for more than 10 years before joining the Jan De Nul Group in 2003.

Since then he has been working as Engineering Manager on the offshore project Sakhalin II on Sakhalin Island (Russia) and as Project Manager on several large offshore projects in Sudan, Papua New Guinea, Qatar, Canada and Sweden.

From 2007 till 2010, he was Project Director for the Manifa Field Causeway and Islands Construction Project in the Kingdom of Saudi Arabia. Currently he is involved as Project Director for the Wheatstone Solid Ballasting Project in Western Australia.

**EuDA**

Celebrating its 20th Anniversary in 2013, the European Dredging Association ("EuDA") was founded in 1993 as a non-profit industry organisation for European dredging companies and related organisations to interface with the various European Union's ("EU") Institutions and also some International Organizations (such as IMO, HELCOM or ILO). EuDA members employ approximately 25,000 European employees directly "on land and on board of the vessels" and more than 48,300 people indirectly (through the suppliers and services companies). The combined fleet of EuDA's members counts approximately 750 seaworthy EU-flagged vessels.

Dredging activities are not well known by the wider public, but as a matter of fact, the European dredging companies, members of EuDA, are world market leaders with about 80% share of the worldwide open dredging market and a turnover of 7.5bn Euro in 2012. Although 70% of operations take place outside Europe, 90% of the returns flow back to Europe.

The Association serves its members in all kinds of requests related to dredging issues, presently strongly emphasising Social and Environmental affairs. These issues are coordinated by the Secretariat and executed by its specialised working groups composed of experts from the member companies.

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.