



EuDA Annual General Meeting

16 November 2010, Brussels

Findings of the Workshop on “Green Innovations keep the European Dredgers at Global Leading Edge”

which took place on We 3rd November 2010 in Brussels

Eugen Jansen

*Environment Committee
European Dredging Association*



Agenda

- Background
- Objectives
- Programme
- Conclusion



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Background

Environmental Awareness

Dredgers have an Impact and take responsibility

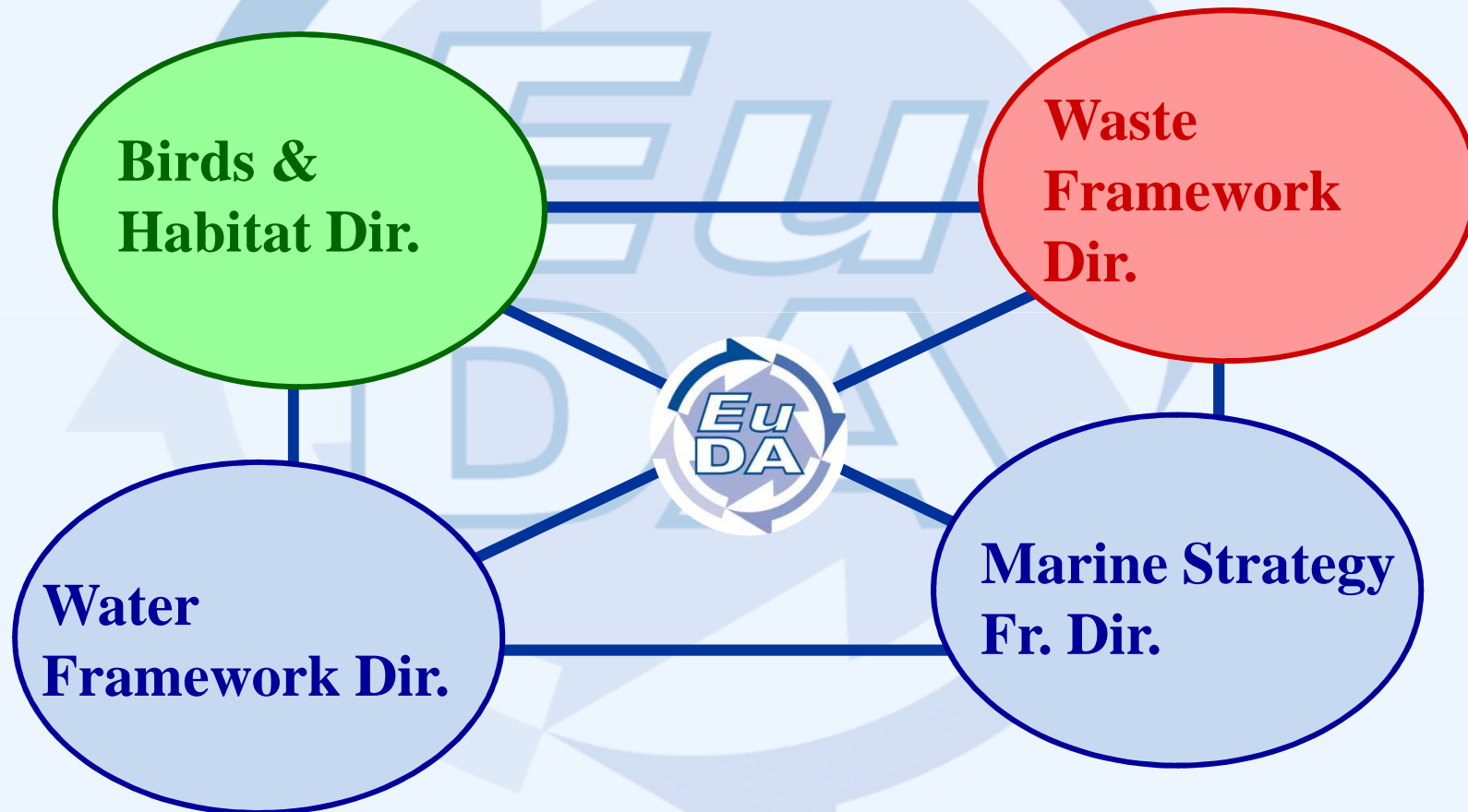
The dredgers focus on

- ⇒ constructive participation in EU legislation
- ⇒ efficient and clean equipment
- ⇒ eco-dynamic design
- ⇒ avoiding adverse effects



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Background





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Objectives

Provide useful insight on:

how to economically apply the ecosystem's approach in marine coastal management;

how to put forces of nature to use in shaping coastal structures and works;

to create a win-win-win situation with positive economical, societal and environmental impacts.



Programme

- ✓ 14.00 – 14.15 **Welcome and Opening**
- ✓ 14.15 – 15.00 **Setting the Scene**
 - ✎ Marine Ecosystems
 - ✎ European Legislation
- ✓ 15.00 – 15.45 **Integrated Coastal Zone Management**
 - ✎ Building with Nature in The Netherlands
 - ✎ Building with Nature in Belgium
- ✓ 15.45 – 16.00 **Coffee Break**
- ✓ 16.00 – 16.40 **Example Cases in Dredging Operations**
 - ✎ Monitoring Programme for Maasvlakte 2
 - ✎ UK Marine Aggregate Levy Sustainability Fund
- ✓ 16.40 – 17.00 **Open Discussion**



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Setting the Scene: Marine Ecosystems

The role of ecosystems in marine environments with a focus on dynamics, stability, indicators, evolution or how the dredging community should embrace the MSD

Prof. Dr. Patrick Meire
University of Antwerp
Ecosystem Management Research Group

Universiteit Antwerpen





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Setting the Scene: Marine Ecosystems

Prof. Meire:

- ⇒ the **ecosystem services concept** is the ideal vehicle to link the priorities of nature and society.
- ⇒ the ecosystem approach represents a **paradigm shift** and has the potential to change the approach to environmental policy development and legislation in a fundamental way.
- ⇒ the ecosystem services concept should be seen by the dredging industry as an **opportunity!** The opportunity consists in both a recipe for a more fundamental understanding of system functioning (and thus support the building with nature concept) as well as an instrument to apply existing environmental legislation in a more flexible manner.



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Setting the Scene: European Legislation





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Setting the Scene: European Legislation

Mrs Snoeren:

Overview of the policy context relevant to the dredgers.

European environmental legislation evolved:

- ⇒ from specific Directives (Bathing Water Directive)
- ⇒ to Framework Directives (Waste, Water, Marine Strategy)

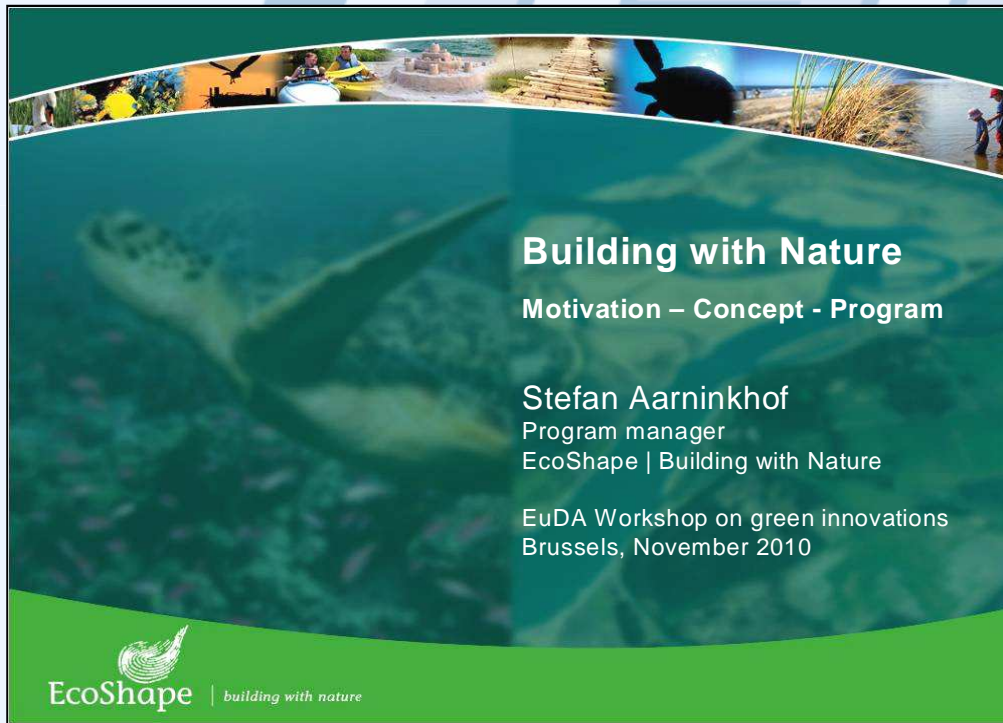
Only a few descriptors directly relevant to dredging.

Integrated Coastal Zone Management policy.



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Integrated Coastal Zone Management: Building with Nature in The Netherlands





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ICZM: BwN in The Netherlands

Mr Aarninkhof:

Change of attitude from defensive (minimise environmental impacts) to opportunity driven (optimise full economic and environmental potential).

Programme ECOSHAPE, 4 main objectives:

- ⇒ Develop ecosystem knowledge;
- ⇒ Apply the concept to real projects;
- ⇒ Sound design rules and norms for application;
- ⇒ Seek acceptance by decision-makers and society at large.

4 pilot projects: sand motor, biodiversity, delta, coastal defense in tropical regions



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Integrated Coastal Zone Management: Building with Nature in Belgium

Flanders Bays
Safe, natural, attractive, sustainable, developing

Vlaamse Baaien
Veilig, natuurlijk, aantrekkelijk, duurzaam, ontwikkelend

Bart Verboomen, Baggerwerken Decloedt & Zoon
(DEME Group)

EUDA 3/11/2010









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ICZM: BwN in Belgium

Mr Verboomen:

Long term vision for the Belgian Coast

Programme Vlaamse Baaien 2100:

- ⇒ Plan integrating coastal protection, economic development and ecosystem services
- ⇒ Respecting natural dynamics of the coast
- ⇒ Consisting of 10 projects
- ⇒ Need for involvement of the decision makers
- ⇒ Need for adaptative management



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Example Cases in Dredging Operations Monitoring Programme for Maasvlakte 2





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Example Cases: Monitoring MV2

Mr Vellinga:

- ⇒ Precautionary principle to protect nature leads to an increased need for research (due to the uncertainty);
- ⇒ Indicators monitored and measured under MV2: juvenile fish & benthos, turbidity & silt transport, algae bloom & shellfish, underwater noise;
- ⇒ New tools developed for modeling silt transport and ecological effects;
- ⇒ The methodologies developed for Maasvlakte 2 and resulting data of interest for dredging and society at large.



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Example Cases in Dredging Operations UK Marine Aggregate Levy Sustainability Fund

Marine
Aggregate Levy
Sustainability Fund
MALSF

www.alsf-mepf.org.uk

Marine Aggregate Levy Sustainability Fund (MALSF)

Green Innovations

Mark Russell

British Marine Aggregate
Producers Association

Richard Newell

MALSF Science Co-ordinator





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Example Cases: UK-MALSF

Mr Russell and Mr Newell:

- ⇒ good information for conservation purposes on the marine resources;
- ⇒ good scientific information on the sensitivity and recoverability of marine habitat;
- ⇒ good information on the noise generated by dredgers;
- ⇒ marine aggregate dredging has a **relatively small footprint** and local impact.



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Conclusion for dredgers

- ⇒ **Ecosystem services** link importance of marine ecosystems and socio-economic benefits.
- ⇒ Ecosystems approach is an **opportunity** for the dredging sector: eco-dynamic design and building with nature, promising and in line with the Marine Strategy Framework Directive.
- ⇒ Building with nature needs **adaptive management** with appropriate monitoring, as it is impossible to predict every impact at first.



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Conclusion for dredgers

- ⇒ **Eco-dynamic design** need more **flexibility** from competent authorities for the **permit conditions**.
- ⇒ Dredging activities have **no significant impact on the Marine Strategy Framework Directive** (4 ‘descriptors’).
- ⇒ A wealth of **data** available on the impact of dredging activities.
- ⇒ **Dredging impact** on the marine environment is **relatively limited**.



Thank you !

- **European Dredging Association:**

148 Avenue Grandchamp, B-1150 Brussels

e-mail: info@euda.be

Tel.: +322 6468183

Fax : +322 6466063

- **Website:**

ww.european-dredging.info