MICRO

“Microplastics is it a threat for the 2 Seas Area?”

Stakeholder meeting, 10 September, Ostend

2 Mers Seas Zeeën
INTERREG IV A
FRANCE - ENGLAND - VLAANDEREN - NEDERLAND

“Investing in your future”
Crossborder cooperation programme
2007-2013 Part-financed by the European Union
(European Regional Development Fund)

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Stakeholdersmeeting
T0: Intro Johan- how and what is micro + movie
T1: Microplastics in the environment - Myra
T2: Impacts of microplastics in marine life - Ika
T3: Microplastics as vector in the marine ecosystem – Lisa
T4: SocioEconomic Impact of microplastics- Thomas
T4: Conclusion and discussion- Johan
Drink + (further)networking

What is Micro?

Some ‘Project history’

Idea to work around microplastics

ICES meetings
WGBEC: Dublin, Vigo
WGAGFM: Bangor

+ need for coordinated action

Opportunities

* Public awareness of marine litter problem

* New legislation- MSFD-descriptor 10 marine litter

DIRECTIVE 2008/56/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 17 June 2008

establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

Finance

Menu

Ingredient 1 :Idea: Microplastics

Ingredient 2:
Opportunity:
Concern + legislation

Ingredient 3:
Need for coordinated action- not one country

Next: how to finance

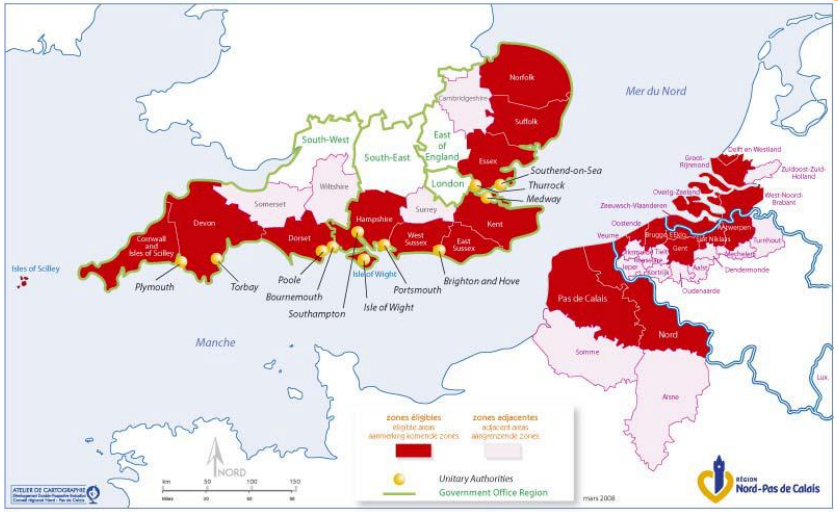
Funding

Interreg IV A 2Mers Seas Zeeen

ERDF- European Regional Development Fund

Possibility of coordinated action at the 'Two Seas'-

North Sea and France Manche



Programme

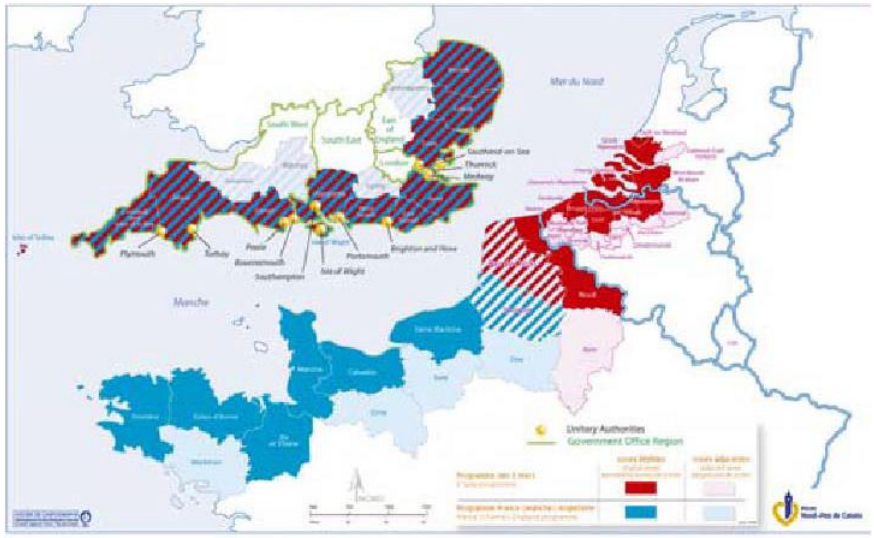
The INTERREG IVA 2 Mers Seas Zeeën Programme promotes crossborder cooperation between the coastal regions of 4 Member States: France (Nord-Pas de Calais), England (SW, SE, E), Belgium (Flanders) and The Netherlands (South coastal area).

The 2 Seas crossborder Operational Programme was approved by the European Commission in September 2008 and has a budget of €167 million community funding (ERDF) for the period 2007-2013. The Programme has three priority themes as well as a common priority with the France (Channel) – England INTERREG IVA Programme.

Priority 1: Creating an economically competitive, attractive and accessible area
Priority 2: Promoting and enhancing a safe and healthy environment
Priority 3: Improving quality of life
Priority 4: Common priority with the France (Channel) – England programme.

Interreg2Seas

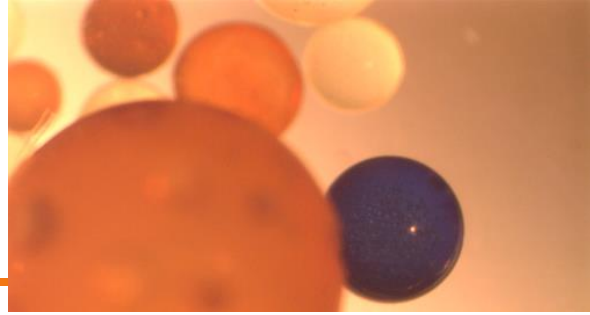
Priority 4: Common priority with the France (Channel) – England programme.



MICRO-project: Partners

Partners- 4 Member countries represented

What?



- Interreg 2 Seas project
- Priority 4:

  Common priority with the France (Channel) – England programme

  c. Develop specific strategic projects considered as priorities upon the proposal of the authorities responsible for both Ops
- **5 partners**:

  - Institute for Agricultural and Fisheries research (ILVO, BE)
  - Centre for Environment, Fisheries and Aquaculture science (CEFAS, UK)
  - Stichting Deltares (NL)
  - l'Institut Français de Recherche pour l' Exploitation de la Mer (IFREMER, FR)
  - Centre National de la Recherche Scientifique (CNRS, FR)

MICRO-project: different activities

Risk/Hazard assessment

Of MicroPlastics problem

Sampling/Monitoring

Effect/Impact

Additional effect

SocioEconomics aspects

MICRO-project: different activities

Movie

http://www.ilvo.vlaanderen.be/micro/EN/Communication/Film/tabid/9099/Default.aspx

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Discussion

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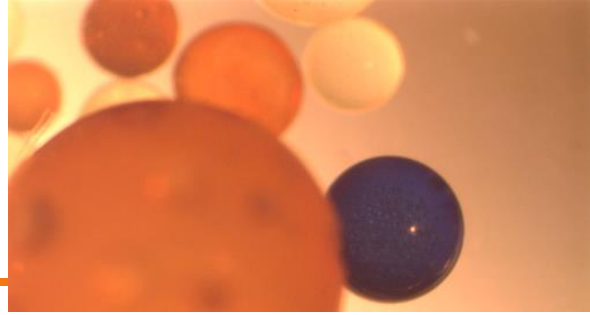
Major Findings

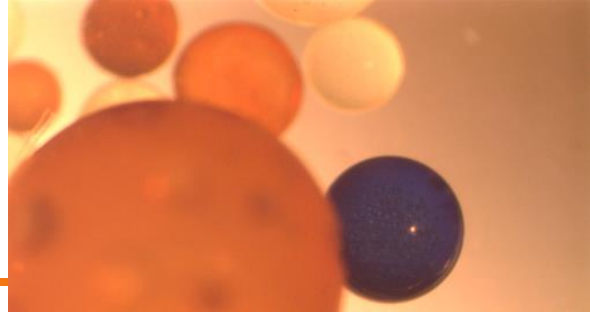


Major findings:

- Modeling of the presence and accumulation of microplastics in the marine environment and analysis of the transport of microplastics in the environment.
  - field data, for model
  - Model: transport/distribution to the whole area
  - Hotspot in sediment: coastal area, harbor,

- Determination of the biological effects of plastic particles on marine life and marine environment and the biological effect of the chemical load of microplastics on marine life.
  - MP ingested by different organism: Mussel, Oyster, shrimp, fish
  - Food safety concern
  - Effects on oyster on reproduction (lab studies)/field relevance- to be further investigated

Major findings

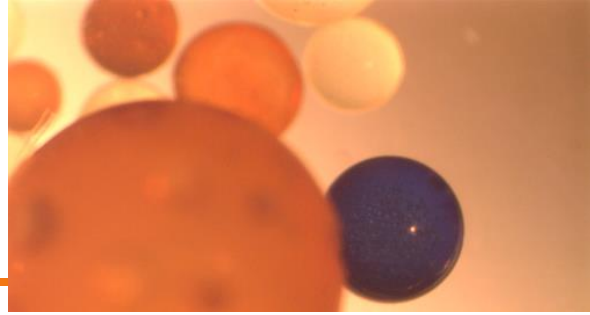


Impact of microplastics in some applied cases/on economical relevant activities.

- Collateral damage from MP
  - Chemical vector: evidence for minimal contributive effects
    - *Pcb + PAH/MP*
  - Bacterial vector:
    - Indication – vector for pathogens (field)
    - Transport of Vibrio to oyster- Identified hazard (lab)

- SocioEconomic aspects
  - Potential major impact on mussel/oyster aquaculture

You as a stakeholder....



- Why are you here? What is your incentive?

- Are you worried/relieved by the outcomes of MICRO?

What aspects of microplastics do you think we as researchers should focus on in the (near) future? You agree with the recommendations or do you have some others?
Environmental versus human health impact

We know plastics are there, it is time for action to reduce or clean, not for another scientific impact study

- How to tackle the problem - What do you see as the most promising actions: prevention/mitigation? What is feasible and realistic according to you?
  - Alternative versus restriction?

    Use of alternative materials: New/Natural/Biodegradation
    Public awareness: media/ human risk
    Limitation on plastic: use/ production

- 'Responsibility: government- waste water treatment or

  Citizen clean beaches?
  Citizen- Pollutor pays?

- **Thanks for your attendance and attention**

- Questions/info
- Johan.Robbens@ilvo.vlaanderen.be
- www.ilvo.vlaanderen.be/micro