IMMERSE

1st Transnational Exchange Lab

12 June 2019

Gothenburg, Sweden

Interreg
North Sea Region
IMMERSE
European Regional Development Fund

EUROPEAN UNION

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Program

12 June	9:30-10:40	Plenary: introduction	Oceanen
	10:40	Break	
	11:00-12:30	Break- out session I	Tången, Pater Noster
	12:30	Lunch	
	13:30-15:00	Break- out session II	Tången, Pater Noster
	15:00	Break	
	15:30-17:00	Plenary: conclusion	Oceanen
	18:30	Network dinner	
13 June	8:30-12:30	Site visit Göta Älv	

‘Setting the scene’: introductions to …

+ The IMMERSE project
+ Gothenburg area
+ Sediment management activities in the Port of Gothenburg
+ The IMMERSE approach to Transnational Exchange

Introduction to the IMMERSE project

Frederik Roose
IMMERSE Project Leader
Department of Mobility and Public Works, Flanders, Belgium

IMMERSE Key info

"IMplementing MEasuRes for Sustainable Estuaries"

+ October 2018 – September 2021
+ 11 partners, 6 countries
+ Total budget: 3,7 M euro

Interreg VB North Sea Region programme

+ Priority 3: Sustainable North Sea Region
+ ERDF co-financing: 50%

http://northsearegion.eu/immerse/

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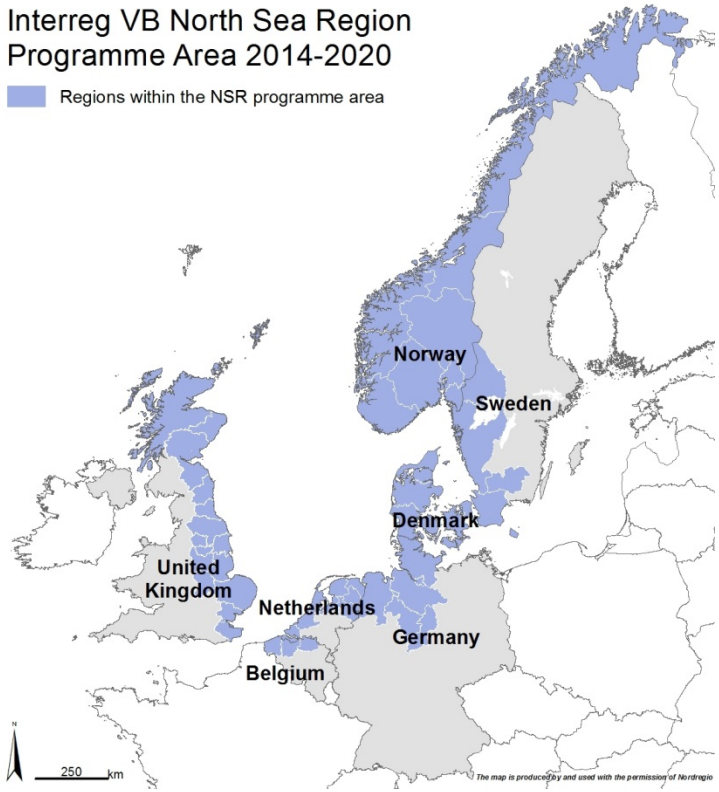
IMMERSE Partners

+ UK
  + University of Hull
  + Tees River Trust
+ Flanders, Belgium
  + Mobility and Public Works
  + De Vlaamse Waterweg
  + Port of Antwerp
+ The Netherlands
  + Rijkswaterstaat



+ Sweden
  + Chalmers University of Technology
+ Denmark
  + Holbaek Municipality
  + Sweco
+ Germany
  + Hamburg Port Authority
  + Bundesanstalt für Wasserbau

Common ground

+ Estuary managers
+ Knowledge institutes (working for estuary managers)
+ Management issues
+ Develop and implement measures
+ Stakeholders
+ Exchange knowledge and experiences

IMMERSE project objectives

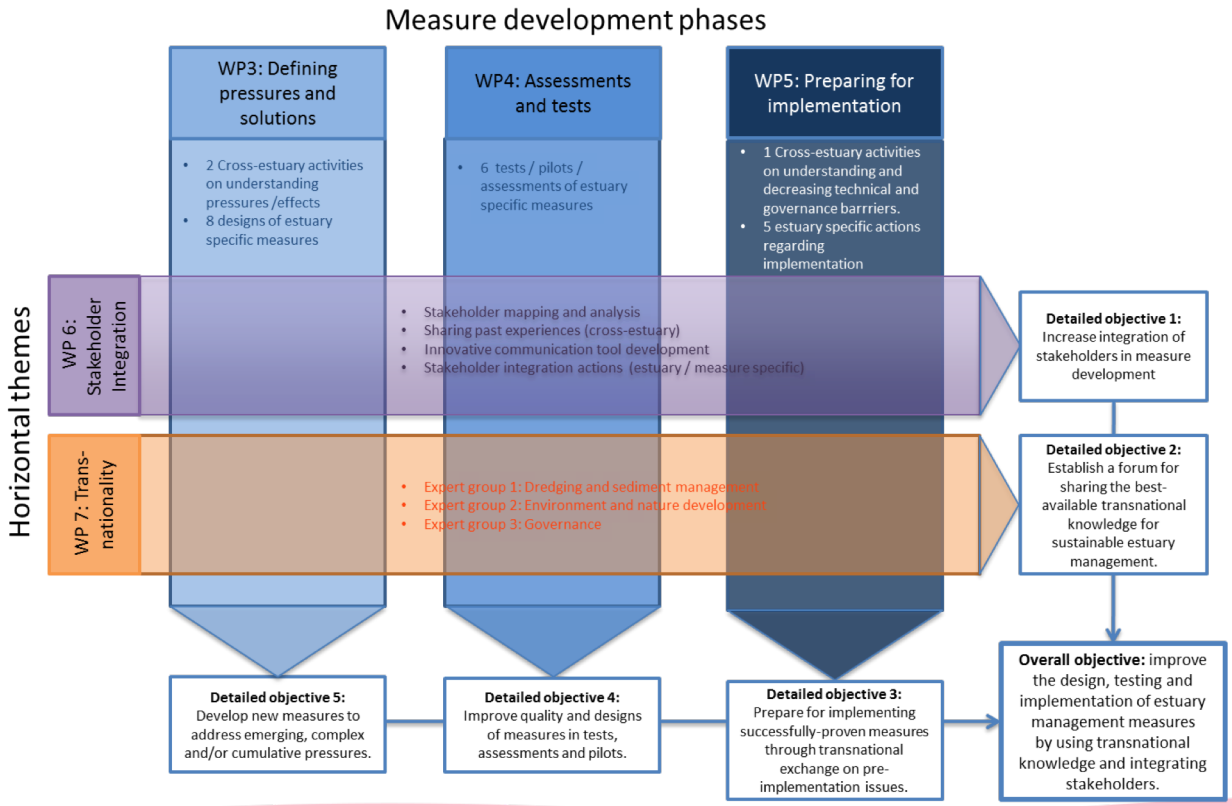
+ Overall project objective

Improve the design, testing and implementation of estuary management measures by using transnational knowledge and stimulating stakeholder integration

+ Project detailed objectives

1. Develop new measures to address emerging, complex and/or cumulative pressures
2. Improve quality and design of measures through feasibility studies and field tests
3. Prepare for implementing successfully-proven measures through transnational exchange
4. Establish a forum for sharing the best available transnational knowledge for sustainable estuary management
5. Increase integration of stakeholders in measure development

IMMERSE project logic



IMMERSE project results

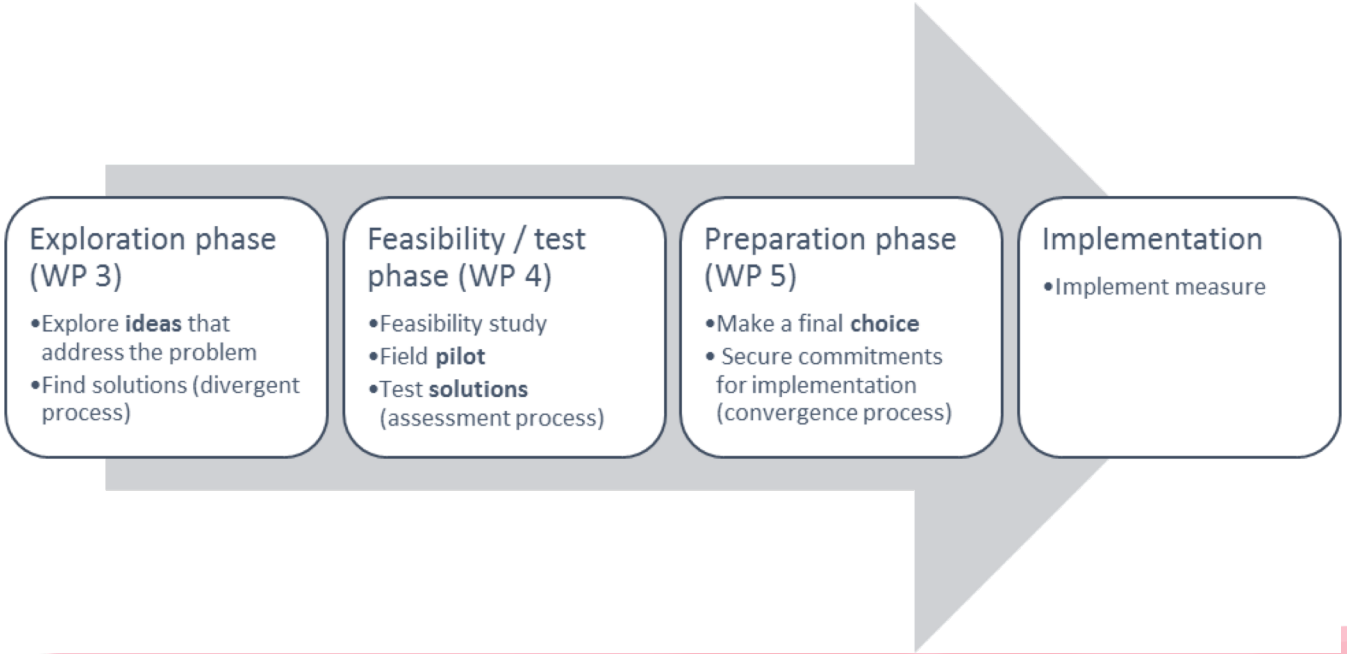
1. Increased potential delivery of measure benefits, resulting from advances in measure development during the project
2. Increased stakeholder acceptance of measure designs and subsequent implementation

IMMERSE will be contributing to the capacity of North Sea region to improve the quality of the environment by

+ reducing negative impacts
+ repairing past damage, and/or
+ promoting ecosystem services and biodiversity

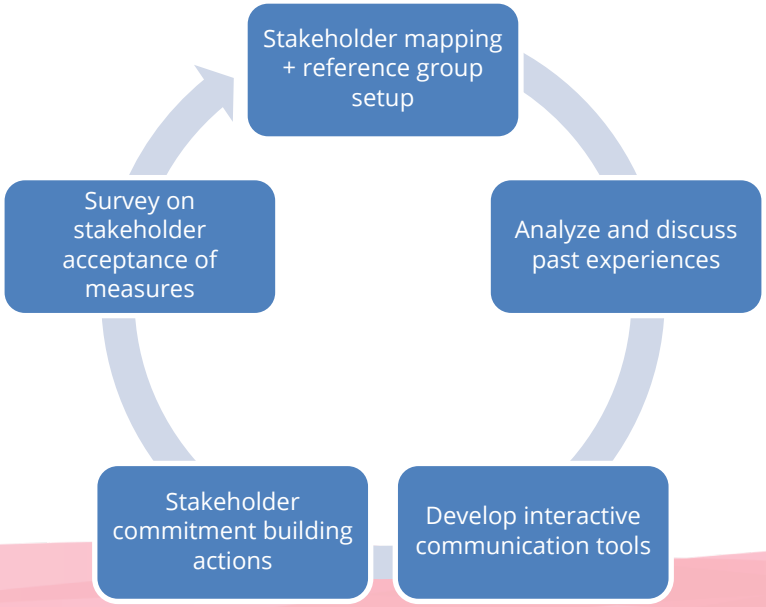
IMMERSE Activities

+ **Development of management measures (WP 3-5)**



IMMERSE Activities

+ Development of management measures (WP 3-5)
+ **Governance - stakeholder integration (WP 6)**



IMMERSE Activities

+ Development of management measures (WP 3-5)
+ Governance – stakeholder integration (WP 6)
+ **Transnational Exchange (WP 7)**

Introduction to Gothenburg Area: "Regulation of Lake Vänern - a challenge for the Göta River and Gothenburg”

Håkan Alexandersson

Regional Authority of Västra Götaland

Introduction to sediment management activities in the Port of Gothenburg

Nikol Nielsen Gulis
Chief of Project Management
Port of Gothenburg

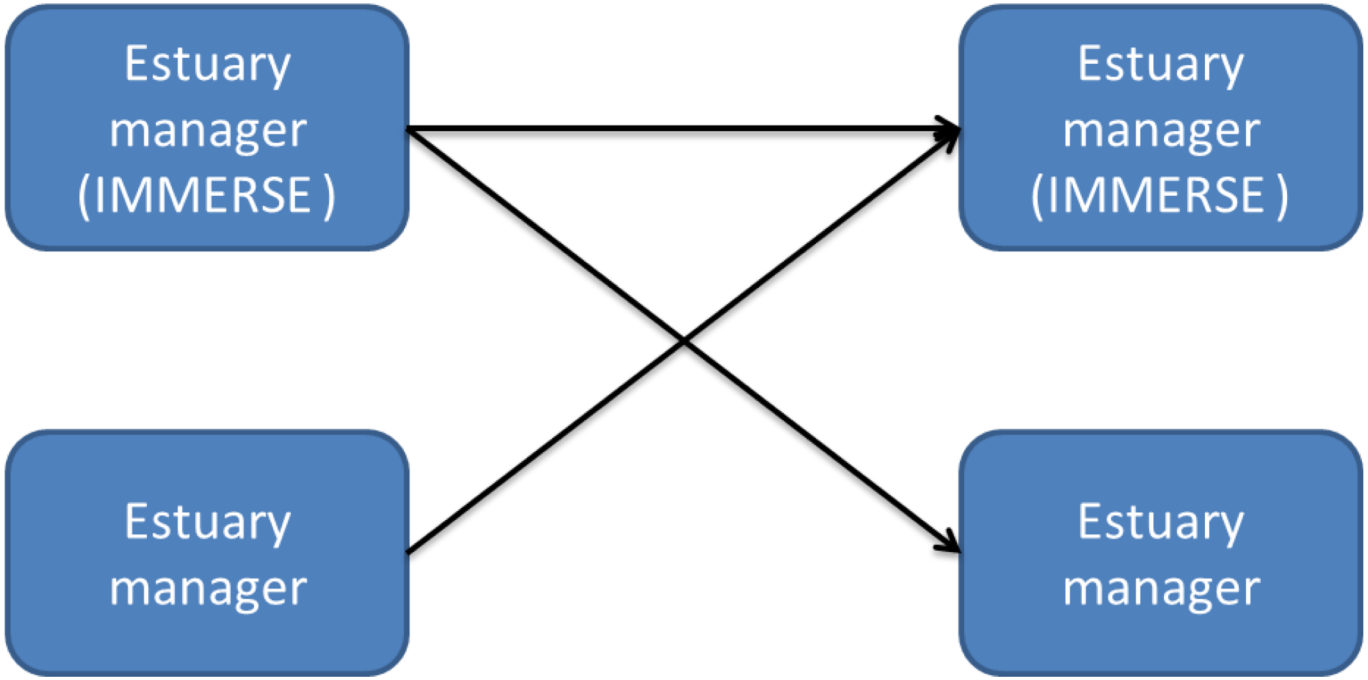
Introduction about the IMMERSE approach to the Transnational Exchange Labs (TELs)

Frederik Roose
IMMERSE Project Leader
Department of Mobility and Public Works, Flanders, Belgium

Objective

+ Transnational Exchange Labs provide a platform to share practices and progress on the development of solutions for estuarine management issues and for collaboration on solutions that are being developed (IMMERSE activities):
    - ✓*The real value of these projects lies instead in validating new approaches and communicating successes to a wider audience …*
    - ✓*A process of experimentation and communication …*

Transfer of knowledge



IMMERSE TEL 1 – Topics

1. Sediment management in the Port of Gothenburg
2. Governance
3. Flood protection in urban areas

IMMERSE TEL 1 – Break-out sessions

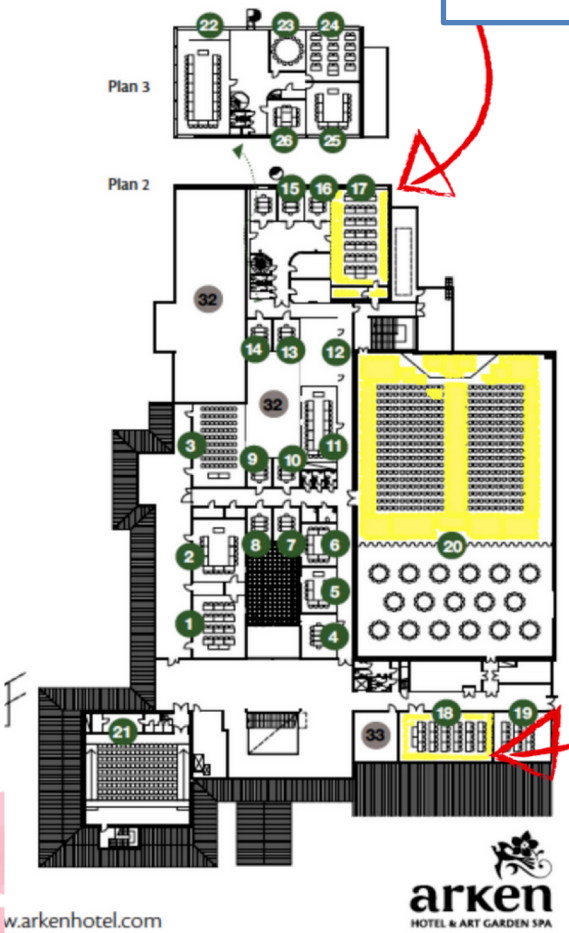
	Room 'Tången'	Room 'Pater noster'
11:00 – 12:30	Sediment management I - Port of Gothenburg	Governance
13:30 – 15:00	Sediment management II – Research on metal recovery	Flood protection in urban areas

BREAKOUT SESSIONS

Governance (11:00 – 12:30) & **Flood Protection** (13:30-15:00) – Pater Noster

Closing Plenary (15:30 – 17:00) & Coffee Breaks - Oceanen

Sediment Management I (11:00 – 12:30) & II (13:30 – 15:00) - Tången



Plenary session: feedback and conclusions

IMMERSE TEL 1 – Break-out sessions

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Sediment Management Breakout Session 1

+ Objective :
+ What is needed, in order to scale up methods for treating polluted sediments, such as those presented in this session, for implementation on a larger scale?
+ What are the possibilities?
+ What are the barriers?

Sediment Management Break out session 1

+ Minimise the volume of contaminated sediments that needs to be treated.
+ In-situ treatment = treat the sediment before dredging.
+ Construction with polluted sediment is maybe not a sustainable solution in the long term.
+ New technologies needs to be trusted

Sediment Management Breakout Session 2

+ What do you think are the most sustainable and innovative technologies or methods to remediate polluted sediments?

Sediment Management Break out session 2

+ No single innovative and sustainable treatment method is available yet! More research is needed.
+ Size-fractionation and concentrations.
+ Treatment trains no single solution!
+ Minimize sources of pollutants .

Governance

+ Involving stakeholders – all think it is important AND challenging
+ Actions to improve stakeholder involvement:
+ Find a good facilitator
+ Should be given a mandate by authorities (for instance region) and funding for the process – should be independent and able to reach all stakeholders
+ Clearly define the problems that need to be solved and communicate to stakeholders at all levels
+ Start meeting stakeholders early on, face to face meetings will help moving forward and getting acceptance

Flood protection

+ There are many challenges which are well known
+ Solutions:

  Technically almost everything is possible, but what is acceptable by society?

  Integrate in urban environments by serving multiple purposes
+ Additional benefits: nature development, recreation, … -> multi-use should be standard
+ Strategies must be adaptable and flexible: foundation for future measures

Next TELs: indicative schedule

#	Time	Venue	Main theme
1	June 2019	Göteborg, SE	Sediment management in the Port of Gothenburg
2	*March 2020*	*TBD, NL*	*Sediment management – Nature based solutions*
3	September 2020	Hull, UK	*Managed realignment: flood protection and nature development*
4	*March 2021*	Copenhagen, DK	Flood protection strategies for local authorities

Introduction to site visit
Thursday 13 June 2019 (8:30-12:30)

Ann-Margret Strömvall

Pilot site and boat trip along the Göta älv Estuary 13 June 2019, 8.30-12.30

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Pilot site and boat trip along the Göta älv Estuary 13 June 2019, 8.30-12.30

+ 08:30 Walk from Arken to quay 751/752 at Arendal
+ 09:00 **Pilot sediment stabilsation project at Arendal**, seen from the quay and from Lyrön **Kristina Bernstén** Marine Geologist COWI and **Eduardo Epifano** Project Manager Port of Gothenburg ~10 min
+ ~09:30 **Start of boat trip with the following contributions at selected locations:**
+ **The history of Gothenburg port. Eduardo Epifano** ~5 min
+ **The River City** – the largest ongoing infrastructure and construction project in the Nordic countries. **Anders Svensson** Architect and Project Manager The River City, Gothenburg City ~5 min
+ **Water quality issues in Göta älv. Monica Dahlberg**, Head of secretariat of Göta Älvs Vattenvårdsförbund (Water quality association of the Göta älv; 13 municipalities, 26 companies, 9 others) ~10 min

Pilot site and boat trip along the Göta älv Estuary

+ **Stormwater contamination problems. Ekaterina Sokolova**, Associate professor at Water Environment Technology, Chalmers University of Technology ~5 min
+ **Landslides risks. Per Bolin** from the Swedish Geotechnical Institute, Manager for the Delegation for the Göta River ~5min
+ The boat turns back at Marieholm
+ **Contaminated sediments and sites. Henrik Bengtsson**, Environmental Protection Officer, The County Board of Västra Götaland ~5min
+ ~11:00 **Light sandwich lunch.** The boat turns back toward the port
+ **Wading sea birds at Torsviken. Eduardo Epifano** ~5min
+ A short trip out to the Gothenburg archipelago
+ ~12:30 **Back and end at Arendal**

TEL Evaluation

Please answer questions on sli.do

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(Also available after the conference)

Networking dinner (18:30)

NETWORKING DINNER

- Start at 18:30
- Beverages at own cost, other costs covered

Arken Restaurant – 1st Floor