



# 4th IMMERSE Transnational Estuary Exchange Lab

**9<sup>th</sup> November 2021, online**

(Version 3<sup>rd</sup> November 2021)

[Register here](#)

## About the fourth Transnational Estuary Exchange Lab

The IMMERSE Transnational Estuary Exchange Labs (TEELs) provide a platform to share practices and progress on the development of solutions for estuarine management issues. The purpose is to advance development and transfer of solutions between those involved in estuary management in the North Sea Region.

The main themes of the fourth exchange lab are **habitat creation**, **ecological effects** of sediment management and **green financing** mechanisms. The three sessions will aim to define healthy estuaries and their wider **societal value**; how IMMERSE measures positively or negatively contribute to estuarine ecosystems and how **nature-based solutions** can enhance sediment management strategies, with focus on **intertidal** habitat creation and **mariculture** concepts.

## Specific aims of this TEEL

Estuaries can provide a wide range of ecosystem services that underpin coastal livelihoods and support climate adaptation. However, despite the importance of these ecosystems, they face multiple pressures from man-made interventions to storm surges and rising sea levels.

There is a need for a range of incentives and mechanisms to both mitigate impacts with more sustainable practices and align with or amend conservation goals for these ecosystems, such as the Natura 2000. Involvement and leverage from the private sector are crucial to address these challenges.

Both sessions aim to provide stakeholders with relevant information regarding habitat creation and/or ecological restoration following the IMMERSE objectives: knowledge transfer and acceleration of measure implementation, while increasing cost-efficiency and stakeholder commitment (see project-summary in the [project application](#)).

## Target audience

The main target audiences for this TEEL are those interested in applying blue carbon credits through the development of initiatives to mitigate climate change and support estuarine ecosystem management strategies. These include relevant ministries and agencies; estuary management practitioners; professionals studying carbon emissions, restoration works or climate change footprints; civil society organisations; researchers; and finally private sector representatives looking for opportunities to strengthen their corporate social responsibility initiatives.



## Format

Online

Platform: Zoom

Registration Link: [https://zoom.us/meeting/register/tJEldOmuqDIsHdVyNIV\\_Nylsqp5ZIGwDPOEF](https://zoom.us/meeting/register/tJEldOmuqDIsHdVyNIV_Nylsqp5ZIGwDPOEF)

## Agenda

Times below are in Central European Time (CET). Detailed descriptions can be found from the following page onwards.

Introductory Session		
10:00 – 11:00 CET  (09:00-10:00 UK time)	<i>Setting the scene: Healthy estuaries and their wider societal value</i>	<ul style="list-style-type: none"> <li>• Welcome and introduction to the IMMERSE project</li> <li>• Introduction to IMMERSE TEEL approach and specific goals for TEEL 4</li> <li>• Introduction to thematic sessions</li> </ul>
11:00-11:30 Break		
Interactive Session I		
11:30-13:30 CET  (10:30-12:30 UK time)	<i>Ecological effects of sediment management</i>	<ul style="list-style-type: none"> <li>• Interactive session with plenary introductions and interactive components</li> </ul>
13:30 – 14:30 Lunch		
Interactive Session II		
14:30 – 16:30 CET  (13:30-15:30 UK time)	<i>Green Financing: Blue carbon credits to fund habitat creation</i>	<ul style="list-style-type: none"> <li>• Interactive session with plenary introductions and interactive components</li> </ul>



## Introductory Session

### *Setting the Scene: Healthy estuaries and their wider societal value*

10:00 – 11:00 CET (09:00-10:00 UK time)

#### Aims

This session will be an introduction to the IMMERSE project, partners and topics. The overarching themes of this TEEL are habitat creation, ecological effects of sediment management and green financing mechanisms. The introductory session will explore **definitions, indicators** and the **wider societal value** of ecologically healthy estuaries. IMMERSE lead partner the Department of Mobility & Public Works Flanders (MOW) will introduce the TEEL, guest speakers and the two sessions.

#### Moderator

Frederik Roose, MOW

#### Presentations

10:30 CET (09:30 UK time)

*Flood resilience and nature-based solutions: delivering multiple outcomes*

Dr. Sue Manson, Environment Agency England

10:45 CET (09:45 UK time)

*Native Oyster and Seagrass Restoration*

Andy Jayes, Yorkshire Wildlife Trust



## Interactive Session I

### *Ecological effects of sediment management*

11:30-13:30 CET (10:30-12:30 UK time)

#### Aims

This session will elaborate the issues and challenges faced by estuary interest groups in identifying and mitigating **ecological impacts** of measures. Guest speakers will present examples of ecological impacts considered in **management strategies**, as well as **tools** used to monitor those impacts over time. The presentations will give participants a basis for discussion of **good practices** and **cross-cutting topics**. Presentations will last around 15 minutes, with another 5 minutes as a buffer or for clarification questions. This will be followed by an interactive discussion with the audience. A guest moderator from Deltares will briefly introduce the session, the speakers and facilitate the discussion.

#### Moderator

Marcel Taal, Deltares

#### Presentations

11:30 CET (10:30 UK time)

*Habitat creation in the tidal Elbe*

Dr Elisabeth Klocke, Elbe Habitat Foundation

11:50 CET (10:50 UK time)

*Expected and unexpected effects of managed realignment in an urbanised estuarine environment*

Dr Rodney Forster, University of Hull

12:10 CET (11:10 UK time)

*Morphological management in the Scheldt estuary: Harmonizing ecosystem functions with sediment management*

Yves Plancke, Flanders Hydraulics



## Interactive Session II

### *Green Financing: Blue carbon credits to fund habitat creation*

14:30 – 16:30 CET (13:30-15:30 UK time)

#### Aims

This session aims to present incentives for **nature-based solutions** to multiple pressures such as coastal squeeze and environmental factors such as sea-level rise and biodiversity loss. The role of estuaries as carbon sinks and biodiversity incubators will be discussed. This will include specific **funding mechanisms** such as NEIRF and **blue carbon credits** as strategies to facilitate climate-resilient intervention, creating **long-term value** for the maximum number of stakeholders. Presentations will last around 15 minutes, with another 5 minutes as a buffer or for clarification questions. This will be followed by an interactive discussion with the audience. sPro will briefly introduce the session, the speakers and facilitate the discussion.

#### Moderator

Frederick Bruce, s.Pro

#### Presentations

14:30 CET (13:30 UK time)

*Investing in Nature: Ecosystem Services and Funding Mechanisms*

Andy Slaney, Environment Agency England

14:50 CET (13:50 UK time)

*Estuary Edges: Intertidal habitat creation in UK estuaries*

Amy Pryor, Thames Estuary Partnership and Ben Lamb, Tees River Trust

15:10 CET (14:10 UK time)

*Tees Tidelands – Rewilding the Tees Estuary*

Phil Marshall, Environment Agency England

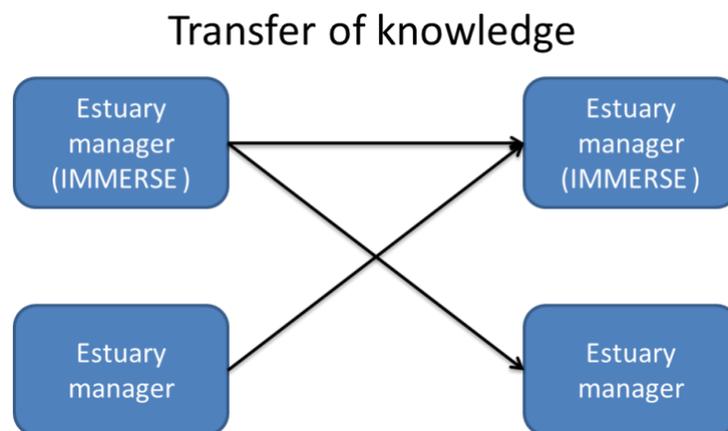


## About IMMERSE

IMMERSE is organising Transnational Estuary Exchange Labs, which are set up as an interactive workshop with the aim to support the project’s objective of improving the quality of estuary management measures by drawing from transnational knowledge and experiences. At the Exchange Lab, IMMERSE partners, North Sea Region estuary managers and relevant stakeholders will explore solutions and test new ideas share experiences together through a variety of discussion formats. More information about the project is available at: <https://northsearegion.eu/immerse/>

## IMMERSE Transnational Estuary Exchange Labs

The IMMERSE Transnational Estuary Exchange Labs provide a platform to share practices and progress on the development of solutions for estuarine management issues. The aim of the TEELs is to facilitate the transfer of solutions, primarily between IMMERSE partners, but also between IMMERSE partners and estuary managers (NSR and beyond) outside the IMMERSE partnership, as shown in this diagram:



The TEELs are critical in activating other organisations to share their relevant expertise and experience, as well as to eventually adopt new solutions developed as part of IMMERSE. This enables IMMERSE to contribute to the Interreg North Sea Region Programme’s objective **to make results available in a way that effectively targets other organisations and enterprises** which could implement the same improvements, thereby multiplying the project’s impact.

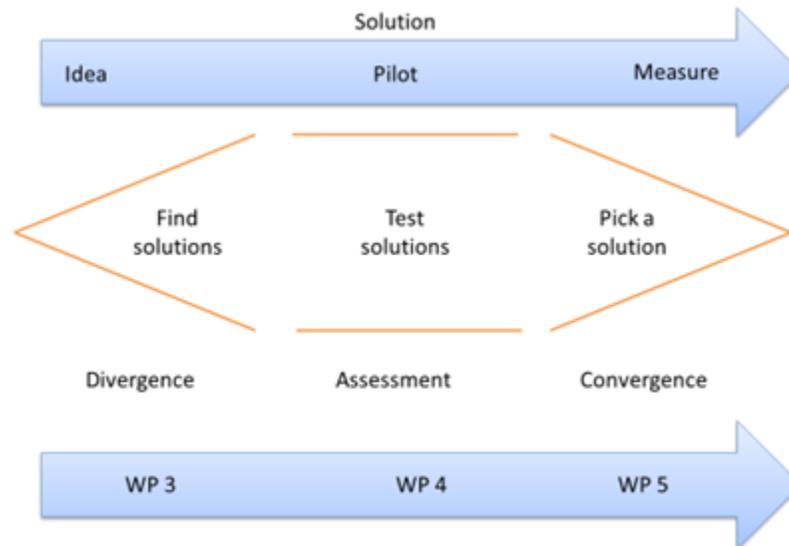
Ultimately, the TEEL should contribute significantly to the desired legacy of IMMERSE, to create a community of practitioners and adopters of the considered solutions.



## IMMERSE approach to developing solutions for estuary management

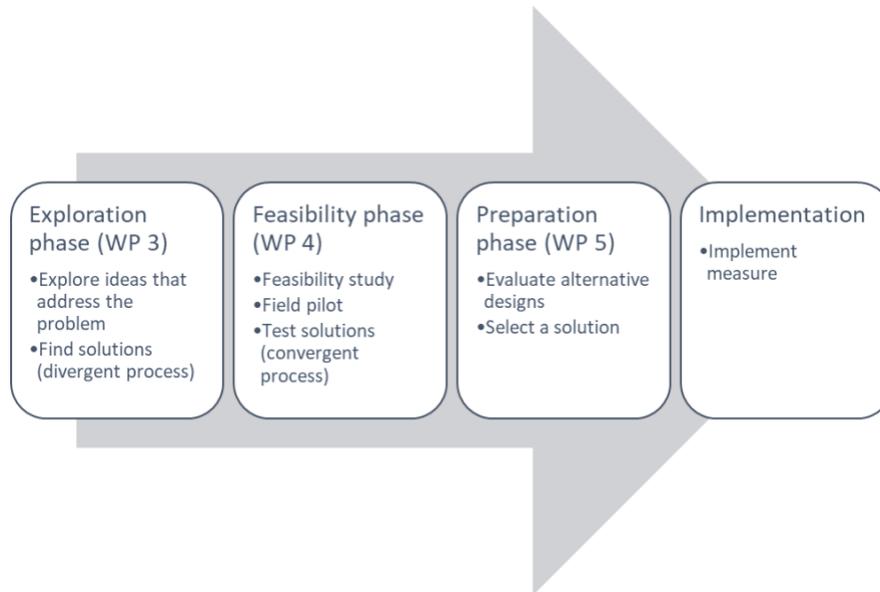
The measures advanced through IMMERSE activities are not only about technology, but are also related to any new approach or method to address an estuarine problem (like a new way of sediment management) or a new way to involve stakeholders (governance).

Different terms are used to address a new solution, depending on the stage of development. This is shown in the following figure:



1. An **idea** refers to a new solution that has just been initiated, showing that it is a potential solution to the problem or the challenge that has to be dealt with. Ideally, multiple ideas can be formulated in parallel (through brainstorming or exploration). Typically, in this stage, the number of potential solutions increases and brainstorming or similar facilitation techniques may be helpful to find more ideas.
2. As ideas become more tangible, it might be desirable to **test or assess** the performance or effectiveness of some alternative solutions. This can be done in an assessment study, a physical scale study or a field study (or pilot), resulting in an evaluation of the alternatives. In this stage, the number of solutions doesn't change, but information is collected on capacity of the solutions to address the problem. Evaluating potential solutions against a common set of criteria can support development of refined alternatives.
3. With the information from the assessment, the solutions are evaluated against some (pre-defined) appropriate criteria, resulting in a selection and/or a ranking of the considered solutions. The most preferred solution can be developed into a **measure** that is ready for implementation. During this last stage, the number of solutions is reduced, and a preferred solution is selected.

The development of solutions during the 3 stages as described above, from idea, to pilot, to measure, is used to give structure to the IMMERSE activities. Three Work Packages correspond to each of the 3 development stages:



These three stages of development are also advanced through activities in cross-cutting work packages on stakeholder integration (WP6) and transnationality (WP7), as explained above.