



4th IMMERSE Transnational Estuary Exchange Lab

9th November 2021, online

(Version 31 October 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 theme of the fourth exchange lab is **habitat creation** and the **ecological effects of sediment management**. 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 might 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 their cost-efficiency and enhancing 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 values 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

Draft Programme

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

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



Introductory Session

Setting the Scene: Healthy estuaries and their wider societal value

Aims

This session will be an introduction to the IMMERSE project, partners and topics. The overarching themes of this TEEL are habitat creation and ecological effects of sediment management. Definitions and indicators of healthy estuaries will be discussed, with examples of both positive and negative impacts of realignment and maintenance measures. This will feed into a second session on strategies to incentivize habitat creation into measures in the face of climate pressures such as sea-level rise and biodiversity loss. To put this in context, the wider **societal value** of ecologically healthy estuaries will be presented with specific case examples.

IMMERSE partners at the University of Hull will introduce the TEEL, guest speakers and the two sessions.

Moderator

Frederik Roose, MOW

Presentations

Flood resilience and nature-based solutions: delivering multiple outcomes

Dr. Sue Manson, Environment Agency England

Healthy Estuaries and Habitat Creation on the Humber Estuary (TBC)

Dr. James Wood, Yorkshire Wildlife Trust



Interactive Session I

Ecological effects of sediment management

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 the implementation of measures, as well as the tools used to monitor those impacts over time. The presentations will give participants a basis for discussion of good practices and cross-cutting topics such as stakeholder engagement and multi-actor approaches to estuary management.

Moderator

Marcel Taal, Deltares

Presentations

Habitat creation in the tidal Elbe

Dr Elisabeth Klocke, Elbe Habitat Foundation

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

Dr Rodney Forster, University of Hull

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

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.

Moderator

Frederick Bruce, s.Pro

Presentations

Investing in Nature:

National Policy, Ecosystem Services and Funding Mechanisms

Andy Slaney, Environment Agency England

Estuary Edges: Intertidal habitat creation in UK estuaries

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

Tees Tidelands – Rewilding the Tees Estuary

Phil Marshall, Environment Agency England

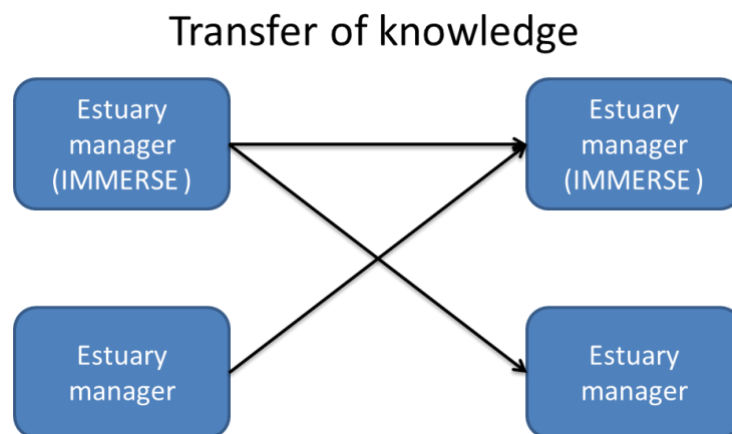


About IMMERSE

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.

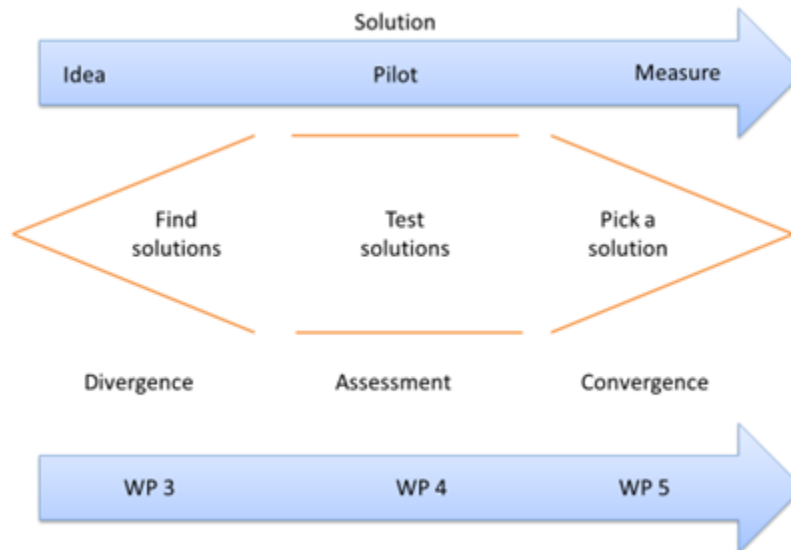
Ultimately, the TEEL should contribute significantly to the desired legacy of IMMERSE, to create a community of practitioners and adopters of the considered solutions.



IMMERSE approach to developing solutions for estuary management

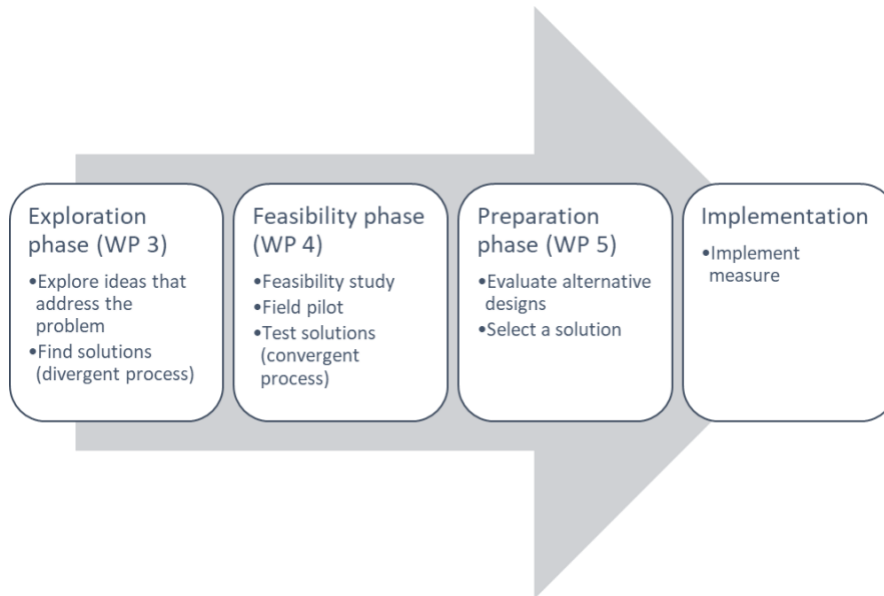
The measures advanced through IMMERSE activities are not only about technology, but are also related to any new approach or method to address an estuarine problem (like a new way of sediment management) or a new way to involve stakeholders (governance).

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.