

Federal Waterways Engineering and Research Institute (BAW)  
Smile Consult GmbH  
Wadden Sea Forum  
PlanGIS GmbH

## TrilaWatt

Digital hydro-morphological twin of the Trilateral Wadden Sea

2<sup>nd</sup> stakeholder workshop

Hamburg, 16<sup>th</sup> February 2023

# The Research Team

- **Federal Waterways Engineering and Research Institute (BAW)**

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- **smile consult GmbH**

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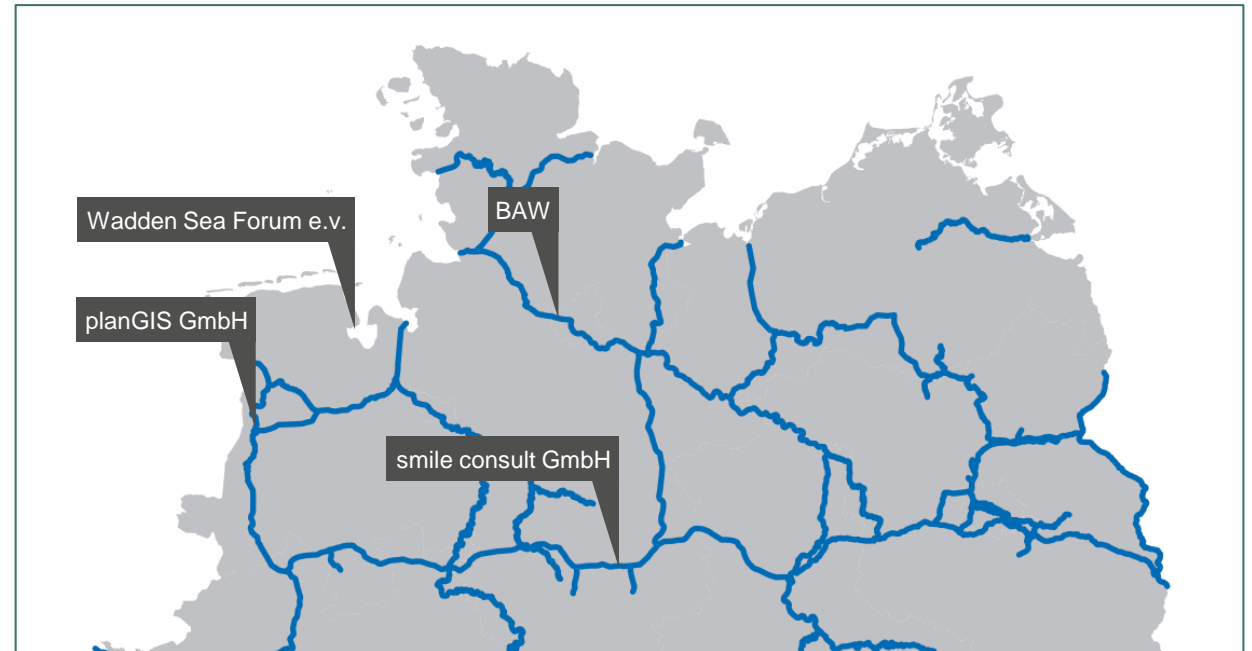


- **planGIS GmbH**

- Kastanienallee 4, 26789 Leer, Germany

- **Wadden Sea Forum e. V.**

- Virchowstraße 1, 26386 Wilhelmshaven, Germany



# Research Objective and Work Packages

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## Research objective:

Our goal is the synthesis of scattered data (A-C) in the Trilateral Wadden Sea area to reliable, high-resolution data products for research, consulting, and governmental policy decision in the period of 2000 to 2020.

### (A) Geomorphology

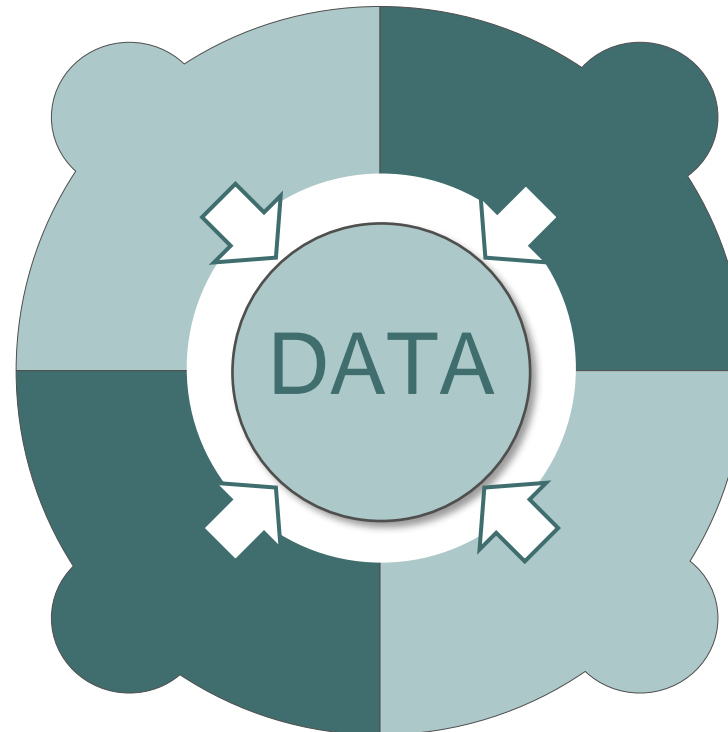
Consistent, annual high-resolution bathymetry data.

### (B) Surface Sediments

Information about likely surface sediments using sediment samples and numerical modeling.

### (C) Physical Oceanography

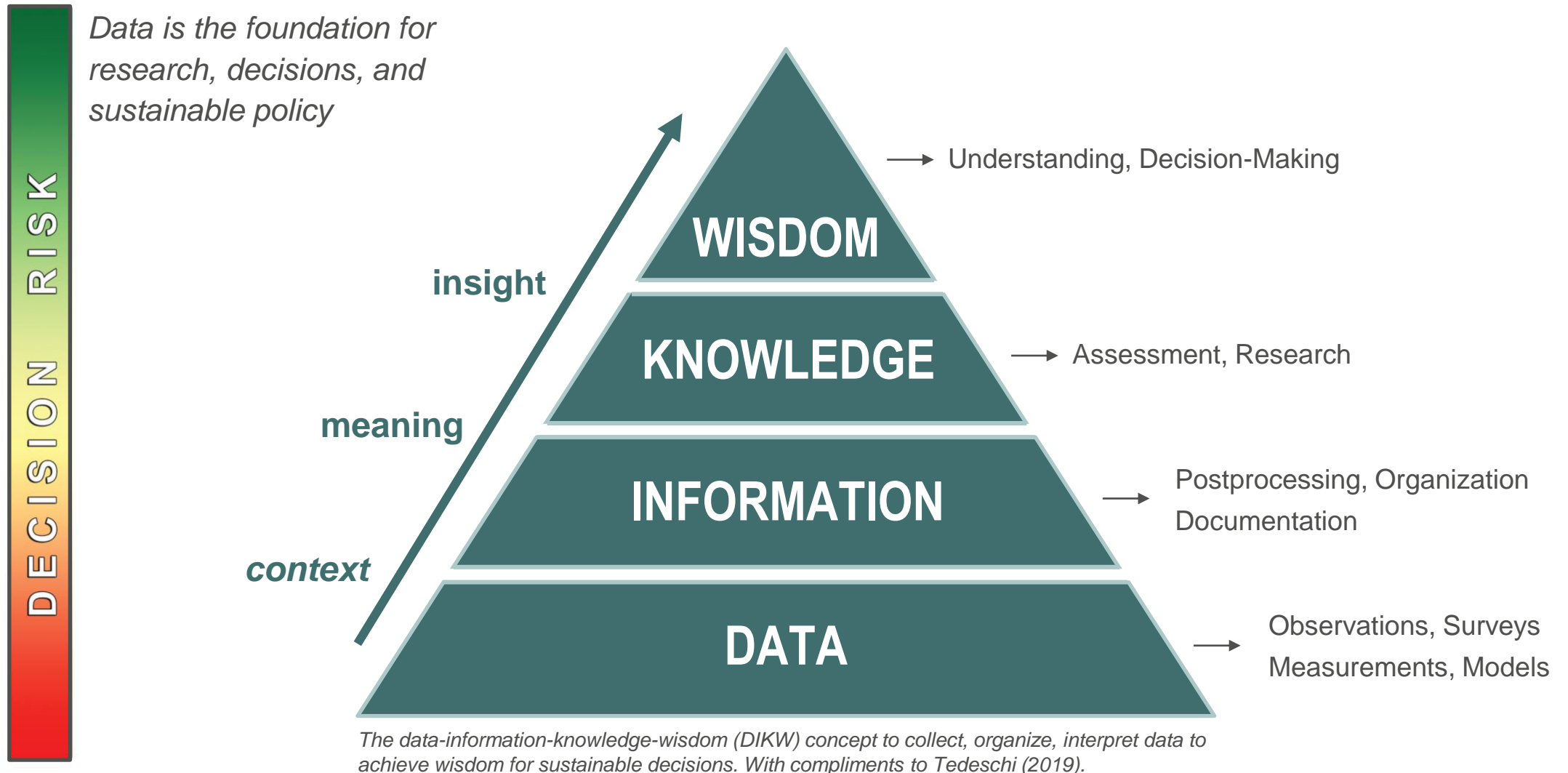
Numerical simulations of the entire North Sea to describe tides, salinity, heat flux, and sediment transport.



### (D) Interactive Webviewer

Enabling users from different background to move efficiently through our big data collection.

# Data Facilitates Sustainable Decisions



# Take-Home-Messages

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- (1) The availability of **consistent data** is imperative to sustainable, efficient decision making
- (2) We create **FAIR bathymetry, surface sediment, and hydrodynamic data** for the Wadden Sea
- (3) Navigation, data-processing and data science will be enabled **on-the-fly** in a **web environment**