

Iliad Project to Present 22 Pilot Sites at Barcelona Consortium Meeting

The Iliad consortium will demonstrate case studies of utilising the project's Digital Twins of the Oceans (DTO) technologies to address real challenges across Europe, North Africa and the Middle East.

Barcelona, Spain, December 18, 2023 – The EU-funded [Iliad Project](#), which develops Digital Twins of the Ocean (DTO) to address specific ocean industries and challenges in the European waters, will showcase 22 pilot sites where its innovative technologies are being employed to address different challenges all over Europe, North Africa and the Middle East.

The demonstration of the sites will be done during the annual Iliad consortium meeting, which will take place on December 19th-20th 2023, in Barcelona, Spain.

The pilot sites, of which many have now come to the state of being a minimum viable Product (MVP) that can be demonstrated, showcase technology that has been developed in Iliad to facilitate interoperable twins that can exchange components to create DTO applications.

The pilots' key areas are:

- [Coastal Sediment Transport](#) - At Naissaar's Port in Estonia, an integrated approach using physical measurements and hydrodynamic models will address sediment accumulation challenges in ports.
- [Harbour Safety](#) - A pilot in Varna Port demonstrates DTO technology in combination with augmented reality and citizen science with the objective to minimise weather-induced disruptions in harbour traffic and enhance navigation safety.
- [Ballast Water Monitoring](#) - Assesses invasive species risk in ballast water, aiding cargo ship sustainability and convention compliance in Spain.
- [Fisheries Productivity](#) - A Fishing Suitability Index improves fishing zone identification in the north-western Black Sea as well in the North Sea
- [Ocean Energy Potential](#) - Harness tidal energy, with a focus on accurate models capturing kinetic energy in coastal channels and assessing tidal energy arrays. A similar approach is applied to wave energy.
- [Wind Energy](#) - An interactive tool optimises offshore wind operations, especially Floating Offshore Wind turbines, while another one assesses the feasibility of operations linked to wind energy maintenance using Iliad's data access to metocean data.

- [Jellyfish Swarm Forecast](#) - Developing a Citizen-Science- data-based forecast and online map to anticipate jellyfish swarms, safeguarding ocean activities and mitigating economic impacts.
- [Environmental, Water Quality and Pollution Monitoring](#) - The pilot demonstrates new ways of environmental monitoring through a combination of multi-sensor platforms and ocean models as well as testing of new sensors for microplastic detection.
- [Oil Spills](#) - Using DTOs to detect and predict the fate of oil spills around Crete, in the North Aegean Sea and the Eastern Mediterranean. The pilots combine satellite observations, social media data with advanced oceanography and machine learning.
- [Aquaculture](#) - A pilot for the aquaculture industry in North Africa as well as in Norway will provide operational support for day-to-day planning as well as warning and decision support in case of events that threaten fish welfare and biomass production. A pilot for mussel aquaculture is developed for Italy.
- [Insurance](#) - The Aquaculture Risk Management platform pilot will serve as a holistic risk assessment tool to stakeholders along the Norwegian aquaculture value chain, combining historic, current and projected data.

“The pilot sites will enable us to demonstrate the value of the DTO approach by engaging with a variety of stakeholders and topics,” said Iliad Coordinator **Charalampos Ipektsidis**, from [Netcompany-Intrasoft](#). “The Iliad Project has assembled a broad and diverse user community of existing and new users that are using the project’s innovative technological solutions to address the particular challenges each one of them is facing.”

About Iliad

[Iliad](#) is an EU-funded project which aims to develop and launch a virtual model of the ocean that will provide highly accurate predictions of future developments at global seas.

The Iliad Project, which is comprised of 56 partners from 18 different countries in Europe, the Middle East and North Africa, has been awarded €17 million the funding as part of the EU €1 billion [European Green Deal](#).

Iliad is developing representations aimed at creating virtual representations of the ocean, integrating Earth Observation data, models, and digital infrastructures to forecast

the marine environment's future. With a goal to establish a cost-effective, interoperable, data-intensive Digital Twins of the Ocean.

For more information <https://www.ocean-twin.eu>

For updates follow us on [LinkedIn](#), [X](#), [Facebook](#) and [YouTube](#).

Contact Person

Kostantinos Thivaivos

Email: Kostas.THIVAIOS@netcompany.com

Phone: +32 2 238 1798

The poster features a dark blue background with a glowing green grid pattern. At the top left is the Iliad logo. Below it is a green button with the text 'General Assembly'. The main title 'Demonstrating 22 Pilot Digital Twins of the Ocean' is centered in white. Below the title, the dates '19-20 December 2023' and location 'Barcelona Spain' are listed. At the bottom left, the website 'www.ocean-twin.eu' and social media handle '@ocean_twin' are provided. At the bottom right are icons for Facebook, Twitter, LinkedIn, and YouTube. The background is decorated with various circular icons representing different ocean-related digital twin concepts, such as wind turbines, ships, and water droplets.

Iliad

General Assembly

Demonstrating 22 Pilot Digital Twins of the Ocean

19-20 December 2023
Barcelona
Spain

www.ocean-twin.eu
[@ocean_twin](#)

f t in y