

# Federated Marine Spatial Data Infrastructure Pilot 2024

Connecting Land and Sea



Open  
Geospatial  
Consortium

OGC Federated Marine Spatial Data  
Infrastructure Pilot 2024: Connecting  
Land and Sea  
***Call for Sponsors (CFS)***

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# Help Boosting Land and Sea Interoperability

OGC Federated Marine SDI Pilot projects are OGC's largest Collaborative Solutions and Innovation(COSI) initiatives. FMSDI pilots boost research and development to make location data and information more FAIR: Findable, Accessible, Interoperable, and Re-Usable specially in the context of land and sea interface. FMSDI Pilot 2024 provide a unique opportunity for sponsors to tackle location data and processing challenges together with the world's leading geospatial IT experts.

Building on the success and outcomes of FMSDI Pilot Phase [one, two , three](#) and [FMSDI Pilot 2023](#) as well as other [COSI initiatives](#), OGC is now preparing FMSDI 2024. If you are interested in being part of this critical, once-a-year opportunity to shape collaborative innovation activities in Marine domain, please contact contact OGC's FMSDI Pilot Project Director, Trevor Taylor, via the [OGC COSI \(Innovation\) contact form](#) to discuss your organization's challenges before January 19th.

As part of the FMSDI pilot development process, challenges put forth by sponsoring organizations are refined and mapped to a set of work items that OGC member organizations will compete to address. The COSI team, together with the FMSDI sponsors, will then select the most qualified organizations to join FMSDI Pilot 2024. In a collaborative effort, all FMSDI Pilot 2024 participants, sponsors, and the OGC team work jointly to improve interoperability in the Marine Domain data, standards, and processes. Additionally, they identify and address as much as possible the gaps in technology and data.

# Synergistic Effects

Coastlines around the world are undergoing transformations due to climate change, marine pollution, and population growth. This results in habitat loss, sea level rise, and much more. Stakeholders face the challenge of quantifying the rapid changes in the environment affecting dependent ecosystem services. Coasts are complex and dynamic environments that form some of the most important economic and ecological areas. However, [data integration is particularly challenging for coastal environments](#). This is in part because the organizations that manage a country's marine areas are often separate from those that manage its land. This has led to semantic and technical differences between the data and systems that they each create and maintain – differences that can run as deep as their geographical foundations.

The OGC FMSDI Pilot 2024 seeks to improve the interoperability of land & sea data by developing freely available, open solutions to the real-world problems being faced by sponsoring organizations.

Example scenarios that could be addressed by the FMSDI Pilot 2024 include: ports; slow-onset disasters that cross national boundaries, such as cyclones; Arctic coastal areas; small islands; or other scenarios put forth by Pilot Sponsors.

Technologies and applications that could be accelerated by the Pilot include: digital twins for land & sea; marine cadaster; connecting with the Ocean Science community; water column data; or other areas put forth by Pilot Sponsors.

# Suggested Topics

**Digital Twins for Land & Sea:** The intersection of land and sea is a crucial area of interest for many countries worldwide, regardless of whether they are located in data-rich or data-poor regions. This subject builds on previous experiments with OGC and other standards that aim to connect digital representations of both land and sea, and seeks to develop or improve techniques to bridge data gaps in scenarios like storm surges, floods, and more. For instance, the incorporation of connected systems and the inclusion of real-time data from IoT sensors may expose new opportunities and novel applications for the data, which could aid stakeholders in their decision-making efforts.

**Marine Georegulation/Cadaster:** further refine the outcomes from the OGC Marine Limits and Boundaries Pilot, and undergo practical testing of LADM Part 3: Marine Georegulation (ISO/DIS 19152-3).

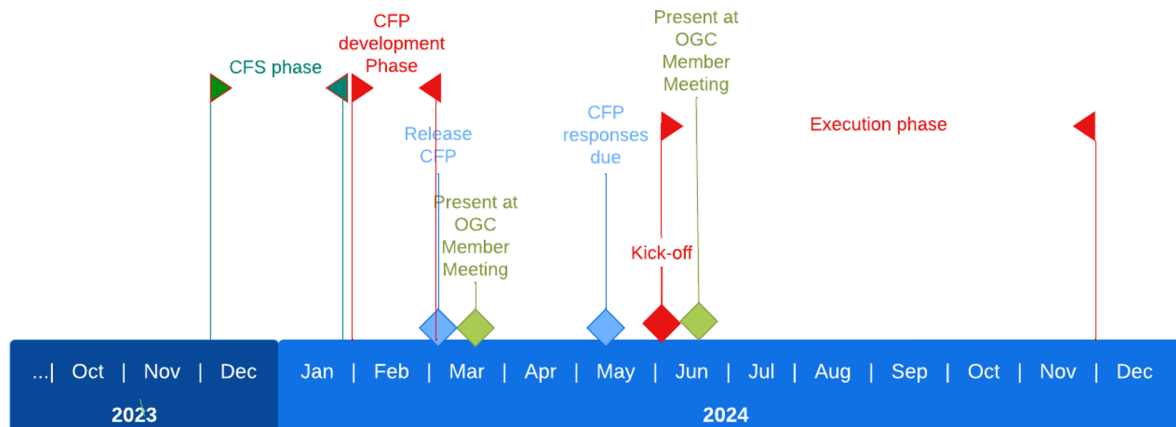
**Connecting with the Ocean Science Community:** explore how to better connect to global Ocean science data and platforms and leverage data concerning ocean biodiversity, ecosystems, predictive sea surface temperature models, and more. Explore potential harmony with the current OGC Open Science Persistent Demonstrator.

**Water Column data:** developing interoperable underwater & water column data gathering practices in support of near-coastal environmental monitoring and/or seabed and sub-seabed resource management.

**or other use cases of interest to Pilot Sponsors.**

# FMSDI 2024 Timeline

The following timeline highlights all major milestones of FMSDI Pilot 2024.



# About the OGC COSI Program

The Open Geospatial Consortium (OGC) is a collective problem-solving community of more than 500 experts representing industry, government, research and academia, collaborating to make geospatial (location) information and services FAIR - Findable, Accessible, Interoperable, and Reusable. The global OGC Community engages in a mix of activities related to location-based technologies: developing consensus-based open standards and best practices; collaborating on problem-solving in agile innovation initiatives; participating in member meetings, events, and workshops; and more. OGC's unique standards development process moves at the pace of innovation, with constant input from technology forecasting, practical prototyping, real-world testing, and community engagement.

OGC Collaborative Solutions and Innovation (COSI) is an innovative, collaborative, and hands-on development and rapid prototyping program that leverages the potential of more than 500 OGC members to find solutions to spatiotemporal information challenges collaboratively.

OGC bridges disparate sectors, domains, and technology trends and encourages the cross-pollination of ideas between different communities of practice to improve decision-making at all levels. OGC is committed to creating an inclusive and sustainable future.

Visit [ogc.org](https://ogc.org) for more info on our work.

# Call to Action

Interested? Please contact OGC's FMSDI Pilot Project Director, Trevor Taylor, via the [OGC COSI \(Innovation\) contact form](#). The first sponsor coordination telephone conferences are planned for late January. If you are interested, please get in contact no later than January 19th, 2024. To download a PDF copy of this Call for Sponsors, please [click here](#).