EuroSea

Responsible Research and Innovation in Ocean Observing and Forecasting

- 🌊 **Expand your stakeholder networks and learn how to engage effectively**
- 🌊 **Ensure a long-term impact of your R&I results**
- 🌊 **Benefit from the latest approaches in stakeholder co-design in Reseach and Innovation**

EuroSea Vision:

'Advance research and innovation towards a user-focused, truly interdisciplinary, and responsive European ocean observing and forecasting system, that delivers the essential information needed for human wellbeing and safety, sustainable development and blue economy in a changing world.'

EuroSea is a European Union project working to improve coordination in ocean observing and forecasting to answer the evolving demands for ocean knowledge and information, underpinning sustainable blue economy and maritime services. New research and innovation will be generated in three EuroSea demonstrators improving oceanographic services and forecasts for port operations and environmental monitoring, food from the ocean activities, and the understanding of the ocean and climate continuum.

These new EuroSea oceanographic services and products will be delivered to and for society so they cannot be designed without engaging with a broad variety of ocean stakeholders (e.g. industries, NGOs, policymakers, national agencies, etc). Using the Responsible Research and Innovation (RRI) approach in EuroSea will help boost the stakeholder co-design and exploitation of the EuroSea project results. Furthermore, this will contribute to draw and share best practices in RRI in the context of ocean science, technology and innovation.

The RRI concept helps to engage societal actors to work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of the European society. RRI has been actively promoted by the European Commission since 2012.

What is Responsible Research and Innovation (RRI)?

The RRI framework consists of **six dimensions**:

1. **PUBLIC ENGAGEMENT**
   Bring together the widest possible diversity of relevant actors including industries, policymakers, non-governmental organisations, civil society, and citizens - to foster their dialogue and interaction.

2. **GENDER EQUALITY**
   Integrate the gender dimension in the development of research and innovation activities to unlock their full potential through an open and inclusive cooperation.

3. **SCIENCE EDUCATION**
   Explain aims, activities and results of science and technology bringing science closer to society and promoting the scientific and societal progress.

4. **OPEN ACCESS**
   Share scientific processes and outcomes and advance all together in research and innovation tackling societal challenges.

5. **ETHICS**
   Respect and promote fundamental human rights and the highest ethical standards shared by the European society.

6. **GOVERNANCE**
   Design models of the RRI implementation to integrate all these six articulations into your own projects and activities.

RRI implies engaging multiple stakeholders in the planned scientific activities and jointly determining their goals, purposes and trajectories. **RRI** suggests that research and innovation are underpinned by shared values and co-created by all stakeholders committing themselves to the scientific and technological process for the common interest and benefit. This approach helps to build trust, create networks, enhance synergies and communities of practice, and jointly enable scientific and societal progress and responsibility.

Why is RRI important in Ocean Observation and Forecasting?

The United Nations resolution **'Our Ocean Our Future Call for Action'** adopted by UN General Assembly on 8 June 2017 stresses the need for an integrated, interdisciplinary and cross-sectoral approach, enhanced cooperation, partnerships, coordination and policy coherence at all levels and for all actors, to achieve the Agenda 2030 goals.

All components of modern society should be mobilized to address the present and future challenges and seize the opportunities that the ocean offers for the human welfare and wellbeing in a sustainable world. An advanced and inclusive ocean knowledge system built on the

RRI approach will help to actively engage all stakeholders who produce, translate, use and elaborate different types of ocean-related data and information for the common benefit.

Co-designing the ocean knowledge requirements and co-creating science and innovation for a better ocean governance includes a sound understanding of the evolving and dynamic societal needs through regular consultations and participation of citizens, consumers, policymakers, scientists across various disciplines, business, and representatives of broad social and economic sectors.

How to implement RRI in the EuroSea Project?

To apply the **RRI** approach in EuroSea the following steps should be followed:

- **WHY?**
  Define the benefits for your activity or desired result in engaging with stakeholders.

- **WHO?**
  Identify the stakeholders to be involved.

- **WHAT?**
  Explain the aims of the planned activities and results to be jointly achieved or benefits to be shared.

- **WHEN?**
  Choose the right time to engage with the identified stakeholders.

- **HOW?**
  Select the best methods for engagement and interaction.

  and also:

- Plan the details of the involvement process.

- Deal with possible conflicts among the different actors.

- Review and evaluate the engagement process to derive achievements and lesson learned.

REFERENCES

The Responsible Research and Innovation Roadmap, 2019
https://www.marinaproject.eu/index.php/2019/03/17/the-rri-roadmap-is-released-a-marina-tool-to-make-responsible-research-and-innovation-real/

Guidelines to Innovate Responsibly, 2019
https://www.rri-prisma.eu/wp-content/uploads/2019/09/PrismaRRI_Roadmap_brief_web.pdf

RRI-Practice Policy Recommendations and Roadmaps, 2019
https://www.rri-practice.eu/knowledge-repository/publications/

Monitoring the evolution and benefit of RRI, 2018
https://op.europa.eu/en/publication-detail/-/publication/d7d917da-c13b-11e8-9893-01aa75ed71a1/language-en

Engaging society for Responsible Research and Innovation, 2018
https://www.ecsite.eu/sites/default/files/proso-support-tool-2018.pdf

eurosea.eu

follow @Euro_Sea