EARSC
European Association of Remote Sensing Companies

EARSC Statement for the CoR Consultation: Towards resilient water management to fight the climate crisis within an EU Blue Deal

Focused on innovation, the European Association of Remote Sensing Companies, (EARSC) is a trade association with more than 140 company members from all over Europe. EARSC represents the **Earth Observation (EO) industry.**[1] EARSC welcomes the efforts of **the Committee of the Regions (CoR)** to develop a stakeholder consultation towards **resilient water management to fight the climate crisis within an EU Blue Deal.**

In formulating the scope of the Water Strategy Action Plan, it is crucial to consider a comprehensive approach that encompasses not only water scarcity measures but also water security and sustainability measures. **Satellite-derived data and services** can significantly contribute to this scope by providing comprehensive insights into **water availability, extent, and quality**. These data can inform strategies to address challenges related to water scarcity, such as identifying areas at risk, **monitoring water sources, and assessing the impact of climate change on water resources**. Additionally, satellite data can aid in enhancing water security by monitoring infrastructure, detecting leaks, and supporting early warning systems for natural disasters affecting water availability.

Regarding water governance, especially at the local and EU levels, efforts should focus on reducing fragmentation and **promoting integrated approaches to water management**. Satellite-derived data can play a crucial role in facilitating this by providing a common,

1 **Earth Observation** (EO) refers to the use of remote sensing technologies to monitor land, marine (seas, rivers, lakes) and atmosphere. Satellite-based EO relies on the use of satellite-mounted payloads to gather imaging data about the Earth's characteristics. The images are then processed and analysed in order to extract different types of information that can serve a very wide range of applications and industries. Ref. EUSPA

accessible platform for **monitoring and managing water resources across different administrative levels**. By integrating satellite data into water governance structures, policymakers can improve coordination, decision-making, and resource allocation to address water-related challenges effectively.

To raise awareness among local communities about the **value of water**, innovative approaches leveraging satellite-derived data can be employed. For example, interactive platforms and applications can be developed to provide information on **water availability, usage patterns, and environmental impacts, fostering community engagement and participation in water management efforts.**

In terms of **'blue diplomacy'**, the EU and local authorities should focus on **promoting cooperation, dialogue, and partnerships among stakeholders at the regional and international levels**. Satellite-derived data can support these efforts by providing objective, transparent information on **water-related issues**, facilitating informed decision-making, and fostering collaboration among countries sharing water resources. Additionally, satellite technologies can **support the monitoring of water-related agreements** and compliance with international water treaties, enhancing transparency and accountability in 'blue diplomacy' initiatives.

Cooperation tools with stakeholders should be tailored to specific contexts and needs, leveraging satellite-derived data to develop more applicable solutions and sustainable investment in water infrastructure, research, and innovation. For example, satellite-based monitoring systems can support participatory approaches to water management, enabling stakeholders to contribute data, insights, and feedback to decision-making processes. Additionally, satellite technologies can **facilitate the identification of innovative solutions**, such as precision agriculture techniques for efficient water use or decentralized water treatment systems for improving access to clean water in remote areas.

In terms of legislative, regulatory, policy, and financial measures, the action plan should incorporate incentives and mechanisms to **promote circular and digital solutions for water management**. Satellite-derived data can inform the development of policies and regulations

that encourage the adoption of innovative technologies and practices, such as **assisting in the monitoring of wastewater and water quality management for water recycling practices**.

Financial incentives, such as subsidies or tax incentives, can be targeted toward investments in sustainable water infrastructure and technologies, **with satellite data and services used to assess the effectiveness and impact of these measures** over time. Additionally, capacity-building initiatives and knowledge-sharing platforms can be established to support the uptake of digital tools and technologies for optimizing water management and consumption by all users.

Satellite-derived data is a **reliable, continuous, and systematic** source for monitoring water quality across extensive **spatial and temporal** scales which is essential to characterize waters and identify changes or trends in water quality over time. Information on water quality and quantity can be used to inform irrigation management, drinking water treatment, and industrial water use. The use of satellite data in this way can help ensure that water resources are managed sustainably and efficiently. EARSC supports the **integration of new monitoring practices such as the use of satellite-derived data and added-value services as operational solutions to support water management to fight the climate crisis within an EU Blue Deal and contributing to taking appropriate measures to achieve progress evaluation related to water and freshwater ecosystems (SDG6)**. EARSC remains at your disposal to work together on this objective.