

Statement by the Delegation of the Islamic Republic of Iran

under

Agenda Item 10: Space and Water

68th Session of the Committee on the Peaceful Uses of Outer Space (COPUOS)

25 June 2 July 2025

Mr. Chair,

The Islamic Republic of Iran, due to its largely arid and semi-arid geography, has long encountered significant challenges in water resource management, drought, flooding, and the effects of climate change. We firmly believe that space technologies, particularly remote sensing, are essential for monitoring, forecasting, and managing these phenomena.

In recent years, the operation of the Khayyam satellite and the development of indigenous algorithms to extract key environmental indices, such as the Normalized Water Turbidity Index and the Aquatic Vegetation Cover Index, have enabled us to monitor aquatic ecosystems, including Lake Orumia, the Hoor al-Azim wetland, and groundwater resources in central Iran with high precision. These data not only contribute to analyzing water level fluctuations and water quality but also support decision-making efforts aimed at restoring wetlands and reducing evaporation in water bodies.

In this regard, cooperation between the Iranian scientific and executive institutions has led to the development of systems that translate satellite data into actionable information for policymakers in the water, agriculture, and environmental sectors.

Mr. Chair,

Recognizing the importance of monitoring water resources under cloudy conditions and during nighttime, the Islamic Republic of Iran has incorporated the development of domestic capacities for radar imaging systems into its medium-term space program. Achieving this capability will enable continuous observation of water bodies regardless of atmospheric conditions.

To this end, Iran expresses its readiness to engage in technological, scientific, and operational cooperation with countries experienced in the fields of radar satellite systems, flood early warning systems, and regional-scale water surface monitoring. Such cooperation could take the form of joint projects, training programs, technology transfer, and data sharing.

Furthermore, Iran supports international initiatives aimed at facilitating developing countries' access to satellite data and services, as well as the establishment of systems to

align satellite-derived information with end-user needs, particularly in areas such as water management, climate change, and resilience to natural disasters.

In conclusion, the Islamic Republic of Iran proposes that UNOOSA, in collaboration with relevant specialized entities, establish an effective platform for targeted dialogue among Member States and stakeholders, including data providers and end-users. This platform should promote knowledge transfer, capacity building, and synergistic use of space technologies for the protection of water resources, enhancement of climate resilience, and advancement of equitable and sustainable use of shared water resources. Such cooperation can help prevent regional and international tensions over water and mitigate the risks of water-related conflicts.

I thank you.