Session Outcome Document

WSIS Action Line C7: e-Science for Inclusive Futures: Access, Collaboration, and Foresight for the Next Decade

UNESCO

11 July 2025 – 9:00 – 9:45 (UTC +02:00)

https://www.itu.int/net4/wsis/forum/2025/Agenda/Session/395

Key Issues discussed: Looking Beyond 2025 (5–8 bullet points highlighting achievements, emerging trends, challenges in 20 years, figures, success stories and opportunities for WSIS beyond 2025)

- This session explored how e-Science can support the goals of the WSIS Action Line C7, particularly in fostering inclusive, equitable, and anticipatory scientific ecosystems. With the global review of WSIS under way, the session highlighted community perspectives on key priorities including: expanding remote access to scientific infrastructure; promoting digital STEM education and skills development; and strengthening open, collaborative, and foresight-driven science, especially in support of youth, women, and the Global South.

- E-science is reshaping how scientific knowledge is created, shared, and applied, through globally connected research infrastructures, open access to data, and digital collaboration platforms. It enables researchers, regardless of location, to remotely access advanced scientific instruments, process large datasets in real-time, and engage in cross-border collaboration. This transformation supports more inclusive, efficient, and responsive scientific systems, particularly empowering scientists in developing countries to contribute to and benefit from global scientific progress.

- Technical standards are emerging technologies common language, a set of agreed-upon rules and benchmarks developed through transparent, bottom-up and collaborative efforts by experts worldwide that help ensure interoperability, promote safety, guarantee quality, and foster trust in new technologies, enabling emerging technologies to scale, to be adopted widely, and to integrate seamlessly into our existing infrastructure. They transform exciting new concepts into reliable, everyday realities.

- Anticipated emerging science and technology will radically transform the most basic features of our reality.

Tangible Outcomes of the session

- These transformations will challenge our fundamental assumptions about what it means to be a human, how we can live together as societies and in a sustainable relationship with the planet.

- Multistakeholder developed, consensus-driven technical standards provide the necessary foundation for digital transformation, sustainable development, and responsible technology governance, contributing to the achievement of the SDGs, the principles outlined in the UN Global Digital Compact (GDC), and in support of WSIS outcomes.

- Call for strong cooperation frameworks, to synergize with ongoing global initiatives, such as the International Decade of Sciences for Sustainable Development and the International Year of Quantum Science and Technology, avoiding duplication.

Key Recommendations and Forward-Looking Action Plan for the WSIS+20 Review and Beyond (2–5 bullet points presenting concrete actions and guidance to inform the WSIS+20 Review by UNGA and build the multistakeholder vision of WSIS beyond 2025)

- To fully realize the potential of e-science, investment in digital infrastructure, capacity-building, and institutional support is essential. It also requires coordinated policy frameworks that foster equitable access, ensure responsible use of data and AI, and bridge the digital divide. In line with the WSIS Action Lines and the SDGs, e-science offers a strategic pathway to promote scientific innovation, accelerate knowledge-based solutions, and strengthen science as a global public good.

- For diplomats and decision-makers, anticipating conceptual disruptions is essential to shape rather than respond to accelerating socio-technological co-evolution, aligning emerging science and technology with human values and societal needs.