COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

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Submissions from entities in the United Nations system, international organizations and other stakeholders on the progress made in the implementation of the outcomes of the WSIS during the past 20 years

Submission by

Department of Economic and Social Affairs, United Nations

This submission was prepared as an input to the report of the CSTD secretariat that will inform the substantive discussion at the CSTD on the progress made in the implementation of the outcomes of the WSIS during the past 20 years during its 28th annual session in April 2025, in response to the request by the Economic and Social Council, in its resolution E/RES/2023/3, to the CSTD to conduct such substantive discussions and to report thereon, through the Economic and Social Council, to the General Assembly.

WSIS+20 Reporting Template

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Role of respondent: WSIS focal point
Date of response: 15 November 2024

I. What is your organisation's formal role and responsibilities concerning WSIS implementation?

a. Mandates of your organization relevant to the WSIS implementation

The United Nations Department of Economic and Social Affairs (UNDESA) through the Division for Public Institutions and Digital Government (DPIDG) serves as facilitator for the implementation of and follow-up to the action lines:

C1 - The role of public governance authorities and all stakeholders in the promotion of ICTs for development
C7 - ICT Applications: E-government
C11 - International and regional cooperation

UN DESA provides the institutional home for the Internet Governance Forum. The concept of the IGF emerged between the two phases of WSIS. The intention was to fill "a vacuum within the context of existing structures" and to address "issues that are cross-cutting and multidimensional and that either affect more than one institution, are not dealt with by any institution or are not addressed in a coordinated manner". The second phase of WSIS in Tunis requested the Secretary-General of the United Nations to convene the IGF with the mandate to deal with the broad range of issues related to Internet governance as defined by the Tunis Agenda in the section relating to Internet governance, from paragraph 22 to 82. Through dialogue, the IGF seeks to develop a common understanding of these issues and raise awareness of the development dimension of Internet governance. By setting development and capacity building as its cross-cutting and overarching priorities, the IGF made it clear that Internet governance is not an end in itself, but should be responsive to the economic and social dimensions of development.

b. Brief History of your organization's contribution to the World Summit on the information Society (WSIS)

The United Nations Department of Economic and Social Affairs (UN DESA) has played a pivotal role in supporting and advancing the objectives of the World Summit on the Information Society (WSIS) since its inception. UN DESA, through its Division for Public Institutions and Digital Government (formerly DPADM), has been at the forefront of facilitating the implementation and follow-up of key WSIS Action Lines, particularly C1 (the role of public governance authorities and stakeholders in ICT promotion), C7 (ICT applications in e-government), and C11 (international and regional cooperation). These contributions align with UN DESA's broader mandate to enhance public administration and promote sustainable development through digital transformation.

During the two phases of the WSIS (Geneva 2003 and Tunis 2005), UN DESA contributed significantly by fostering dialogue and collaboration among governments, international organizations, and other stakeholders to establish a global framework for leveraging information and communication technologies (ICTs) for development. The department has consistently focused on integrating WSIS objectives with the **Sustainable Development Goals (SDGs)**, emphasizing the importance of digital government as a driver of inclusivity, transparency, and efficiency in governance.

In subsequent years, UN DESA has strengthened its leadership role in promoting e-government innovation and digital inclusion. Through its biennial United Nations E-Government Survey, initiated in 2003, the department provides a comprehensive assessment of global e-government progress, offering insights into how ICTs contribute to public service delivery and citizen engagement. UN DESA has also facilitated regular sessions at the WSIS Forums, focusing on emerging challenges like artificial intelligence, data privacy, and the digital divide, ensuring that WSIS outcomes remain relevant in an evolving digital landscape. Through these efforts, UN DESA continues to support countries in achieving sustainable digital transformation while ensuring that no one is left behind.

c. Implementation processes and initiatives within your organization and/or in partnership with other organizations

UN DESA (the United Nations Department of Economic and Social Affairs) implements a range of processes and initiatives, often in collaboration with other UN entities, governments, and international partners, to advance sustainable development, public governance, and digital transformation. Some key initiatives and processes that involve UN DESA include:

E-Government Initiatives: UN DESA with the UN E-Government Survey, which assesses how governments around the world are using digital technologies to deliver public services. This survey aims to provide insights into the e-government landscape, encouraging the adoption of innovative solutions for better service delivery.

In partnership with organizations like UN regional commissions, UN DESA supports capacity-building efforts focused on digital transformation, particularly in developing countries . This includes workshops and initiatives to enhance local and national capacities for advancing digital services and governance structures.

Partnership on Measuring ICT for Development: UN DESA plays a leading role in the Steering Committee, which aims to improve the availability and quality of ICT data to support digital governance and e-government initiatives globally.
Sustainable Development Goals (SDGs): UN DESA works closely with other UN bodies to integrate ICT and digital governance solutions into the implementation of the SDGs, particularly through tools like the Local Online Service Index (LOSI) and the Local E-Government Toolkit. These tools help cities and local governments measure and improve their digital service delivery in line with SDG targets, especially SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), and SDG 16 (Peace, Justice, and Strong Institutions).
Regional Cooperation and Capacity Building:

Smart Cities and Urban Governance: UN DESA's efforts around smart cities focus on enabling sustainable urban development through technology and digital innovation. Initiatives such as the Local Online Service Index (LOSI) are used to measure and improve the delivery of public services at the local level, promoting the use of digital tools to achieve more effective governance.

II. What have been your organization's main contributions to the direct implementation of the WSIS outcomes and related areas of digital development since the Summit, particularly since 2015?

a. WSIS Action Lines (as lead, co-facilitator or supporting participant)

UN DESA has played a key role in facilitating the implementation of WSIS action lines, particularly C1 (the role of public governance authorities and stakeholders in promoting ICTs for development), C7 (e-government), and C11 (international and regional cooperation).

Through annual facilitation meetings, it has fostered discussions on various critical themes such as aligning ICT and e-government strategies with national development

goals, advancing e-government in response to emerging technologies like AI, and addressing global challenges, including digital transformation during crises. The meetings have also emphasized creating synergies between national and local levels, promoting partnerships, and ensuring no one is left behind in the information society.

Key outcomes from these efforts include enhanced international cooperation, the promotion of innovative ICT applications for sustainable development, and capacity-building initiatives aimed at leveraging digital government to eradicate poverty and achieve prosperity. These contributions continue to strengthen global and regional frameworks for ICT and digital governance.

b. WSIS-related projects

All projects have an ICT for Development component.

c. Indicators used to measure the impact of ICT in the achievement of the SDGs in your organization's area of work

1. E-Government Development Index (EGDI):
- This composite index measures the readiness and capacity of countries to use ICT for delivering public services. It consists of three components:
  - **Online Services Index (OSI)**: Assesses the availability of e-government services on government websites.
  - **Telecommunication Infrastructure Index (TII)**: Measures the level of telecommunication infrastructure, which supports digital services.
  - **Human Capital Index (HCI)**: Evaluates the level of skills and knowledge necessary to utilize ICT for governance effectively.
- **Impact on SDGs**: The EGDI helps track SDG 9 (Industry, Innovation, and Infrastructure) and SDG 16 (Peace, Justice, and Strong Institutions), particularly focusing on enhancing the capacity of governments to deliver efficient, inclusive, and transparent services.

2. Local Online Service Index (LOSI):
- A key indicator for measuring the effectiveness of e-government services at the local level. LOSI is focused on evaluating the digital services provided by cities, aligning them with sustainable urban development goals.
- **Impact on SDGs**: LOSI directly contributes to SDG 11 (Sustainable Cities and Communities), as it tracks how cities are leveraging ICT to improve governance and service delivery, enhancing sustainability and inclusiveness in urban environments.

d. What assessment has your organization made of its engagement in WSIS-related work and digital development in its areas of responsibility?

Advocacy and Participation: UN DESA has played a crucial role in the WSIS process, which promotes the development of information and communication technologies (ICT) as a key enabler of economic and social development. UN DESA's involvement in WSIS includes its participation in the WSIS Forum and contribution to the WSIS Action Lines. These action lines cover a wide range of topics, including e-government, digital inclusion, and ICT for development (ICT4D), all of which align with UN DESA's mandate in digital governance.

Policy Dialogue: Through its participation in WSIS-related discussions, UN DESA has facilitated policy dialogue on digital governance, ICT infrastructure, and digital public services, aligning these discussions with the global sustainable development agenda, particularly the SDGs. The organization has contributed to WSIS Forum outcomes and shaped international consensus on ICT as an enabler for achieving the SDGs.

Integration of ICT in Governance: UN DESA's work on e-government and digital governance is closely aligned with several WSIS action lines, particularly in the areas of e-government services, ICT and education, and ICT for sustainable development. UN DESA has used its engagement in the WSIS process to support countries, especially those in developing regions, in leveraging ICT to enhance governance and public service delivery.

III. What does your organization see as the main achievements, problems and emerging issues arising from WSIS and from digital development in its areas of responsibility since the Summit, particularly since 2015?

a. What have been the main achievements of WSIS and digital development?

Since the WSIS Summit and particularly since 2015, UN DESA has recognized several key achievements in digital development, primarily through the advancement of **e-government** and **ICT for development** initiatives. These achievements include significant progress in **digital governance**, with many countries adopting **ICT policies** that improve public service delivery and promote **inclusivity**. The **E-Government Development Index (EGDI) and Local Online Service Index (LOSI)** have provided valuable tools for assessing and enhancing national and local digital governance, fostering greater access to **digital services**. Additionally, the **Global Digital Compact** and **WSIS Action Lines** have contributed to **global cooperation**, encouraging nations to integrate ICT into achieving the **SDGs**, especially in **smart cities**, **ICT infrastructure**, and **digital inclusion**. However, challenges remain, including the **digital divide** between developed

and developing nations, limited **digital literacy**, and the need for more **robust cybersecurity frameworks**. Emerging issues such as the regulation of **artificial intelligence** and ensuring **data privacy** are becoming increasingly critical to ensuring safe and equitable digital transformation.

UN DESA's E-Government Surveys have provided a comprehensive framework for assessing digital government progress, driving policy change, and fostering international cooperation. The widespread adoption of e-participation platforms has enhanced citizen engagement and public service accessibility. Notably, the 2024 survey reported increased investment in digital infrastructure and a growing commitment to inclusive digital policies.

b. What problems, obstacles and constraints have been encountered?

Challenges include persistent digital divides, particularly in low-income and developing countries, which limit equitable access to digital services. Funding constraints and varying levels of national digital capacity hinder the full implementation of WSIS outcomes. Moreover, the rapid evolution of technologies like AI presents new governance and regulatory challenges.

c. What new opportunities and challenges have emerged over the years since WSIS which need to be addressed?

Since the World Summit on the Information Society (WSIS), several opportunities and challenges have emerged, reflecting the rapid evolution of the digital landscape. On the opportunities front, advancements in technologies like artificial intelligence (AI), big data, and blockchain offer unprecedented potential to transform governance, enhance public service delivery, and accelerate progress on the Sustainable Development Goals (SDGs). The proliferation of mobile broadband and IoT has democratized access to digital platforms, while emerging tools in e-participation and immersive technologies empower citizens to engage more actively in policy-making and governance. These technologies also enable more efficient, transparent, and accountable systems for governments, fostering trust and inclusion. Furthermore, the rise of digital public goods and international cooperation frameworks presents opportunities to standardize and scale digital solutions across regions.

However, these developments also bring significant challenges. The digital divide remains a persistent issue, exacerbating inequalities between developed and developing countries, as well as marginalized populations within countries. Issues of data privacy, cybersecurity, and misinformation have grown in complexity with the adoption of AI and big data. The environmental impact of digital technologies, such as e-waste and high energy consumption by data centers, poses a sustainability challenge. Additionally, there is a growing need for ethical governance of AI and emerging technologies to prevent biases and ensure equity. The rapid pace of technological change also outpaces the capacity of many countries, particularly low-income ones, to adapt their policies, infrastructure, and human resources. Finally, while digital transformation offers significant potential, ensuring inclusivity, particularly for vulnerable groups, requires targeted efforts in capacity-building and digital literacy. Addressing these emerging opportunities and challenges will be critical to shaping a sustainable and equitable digital future.

IV. Lessons learned in the implementation of the Summit outcomes in your organisation's specific areas of responsibility

First, e-government has proven to be a powerful catalyst for achieving broader development goals, enhancing governance, public service delivery, and citizen engagement. During crises such as the COVID-19 pandemic, countries with advanced e-government systems demonstrated resilience by maintaining uninterrupted services. However, the persistent digital divide, particularly in least developed countries (LDCs) and small island developing states (SIDS), underscores the need for affordable connectivity and capacity-building to promote inclusivity. Furthermore, the evolving ICT landscape necessitates regular updates to methodologies like the E-Government Development Index (EGDI) to incorporate emerging technologies such as AI, mobile-first strategies, and immersive tools. Reliable and disaggregated ICT data remains critical for informed policymaking, yet significant gaps persist in developing regions, highlighting the need for targeted data collection and capacity-building efforts.

Another vital lesson is the importance of multistakeholder collaboration in addressing global digital challenges. Platforms like the **Internet Governance Forum (IGF)** have facilitated crucial dialogue on AI ethics, cybersecurity, and internet governance, fostering collective solutions. Localized e-government solutions also play a crucial role, as municipal-level services directly impact citizen engagement. Countries have expressed a preference for actionable recommendations over comparative rankings, emphasizing the need for practical guidance and capacity-building tailored to local contexts. Additionally, ICT has the potential to support environmental sustainability but

must address challenges like e-waste and energy consumption. UN DESA has learned that flexibility and adaptive approaches are essential to keeping pace with rapid technological changes, ensuring that e-government frameworks remain relevant and effective. These lessons will guide future efforts to implement WSIS outcomes and align them with the broader goals of the 2030 Agenda.

V. Observations or recommendations concerning the future of WSIS and digital development, taking into account the outcomes of the Summit of the Future in September 2024

Strengthening multistakeholder collaboration remains paramount, with platforms like **the Internet Governance Forum (IGF) and WSIS Forum** providing essential spaces for governments, the private sector, civil society, and technical experts to work together. Enhancing the role of WSIS Action Lines, particularly **C1, C7eGov, and C11**, is critical for promoting ICTs, advancing e-government innovation, and fostering international cooperation. Bridging the digital divide is a priority, requiring significant investment in digital infrastructure for developing countries, least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing states (SIDS). Equitable digital literacy initiatives are essential to empower marginalized groups and ensure inclusivity.

A human-centered approach to digitalization is crucial for promoting responsible digital development, particularly regarding emerging technologies like AI and big data. Strengthening governance frameworks to address cybersecurity, data privacy, digital rights, and environmental sustainability will mitigate risks and ensure equitable progress. E-government should remain a key catalyst for achieving the Sustainable Development Goals (SDGs), with updated tools like **the E-Government Development Index (EGDI) and Local Online Service Index (LOSI)** guiding improvements. Innovations in measurement and monitoring are essential to track progress effectively, emphasizing new indicators, real-time data, and capacity-building. The Global Digital Compact, to be adopted at the Summit of the Future, must serve as a guiding framework, emphasizing a digital future that is inclusive, trustworthy, sustainable, and respectful of rights. Aligning WSIS+20 outcomes with the Compact will ensure cohesive progress in global digital governance and ICT policy.

VI. Please identify publications, reports and other documents by your organisation which you consider can contribute to the work of the review.

- Outcomes of all the annual meetings of the Internet Governance Forum
- All editions of the United Nations E-Government Survey

Useful reference links:

[World Summit on the Information Society (WSIS) | Public Institutions (un.org)](un.org)

[Facilitation Meetings by UNDESA for the action lines C1, C11 and C7eGov | Public Institutions (un.org)](un.org)

[EGOVKB | United Nations > Home](un.org)

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