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|  | **Document IEG-WTPF-26-2/2** |
| **10 January 2025** |
| **English only** |
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| Contribution by India |
| INDIA’S COMMENTS AND SUGGESTIONS ON THE SECOND DRAFT OUTLINE OF THE REPORT BY THE ITU SECRETARY-GENERAL FOR THE 7TH WTPF 2026 |
| **Purpose**This contribution provides comments on the second draft outline of the report prepared by the ITU Secretary-General for the 7th WTPF in 2026 and proposes complementary suggestions on sub-themes.**Action required**The Informal Expert Group on WTPF-26 is invited to consider this document and take appropriate action.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**References**[*Second draft Report by the ITU Secretary-General*](https://www.itu.int/md/S24-WTPF26PREP-R-0002/en) |

India welcomes the opportunity to participate in the Informal Group of Experts for the seventh World Telecommunication/ICT Policy Forum 2026 (IEG-WTPF-26).

We support the [*Second draft Report by the ITU Secretary-General*](https://www.itu.int/md/S24-WTPF26PREP-R-0002/en)and we propose that the IEG agree to develop five possible draft Opinions, one for each of the sub-themes of WTPF-26.

In line with the above, India puts forward for consideration the attached suggestions for the Report.

We look forward to productively engaging in the WTPF-26 preparatory process in the spirit of collaboration and consensus.

ATTACHMENT

Suggested modifications to the Second Draft Outline of the Report
by the ITU Secretary-General for the 7th WTPF 2026

Second draft Report by the ITU Secretary-General
for the World Telecommunication/Information and Communication
Technology Policy Forum 2026

# 1 The Seventh World Telecommunication/Information and Communication Technology Policy Forum 2026 (WTPF-26)

1.1 Originally established by the Plenipotentiary Conference (Kyoto, 1994) of the International Telecommunication Union (ITU), the World Telecommunication/Information and Communication Technology Policy Forum (WTPF) has been successfully convened in 1996, 1998, 2001, 2009, 2013 and 2021. By its [Resolution 2 (Rev. Bucharest, 2022)](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-002-E.pdf), the Plenipotentiary Conference of the ITU resolved to hold the next WTPF in 2026.

1.2 The purpose of WTPF is to provide a venue for exchanging views and information and thereby creating a shared vision among policy-makers worldwide on challenges and opportunities arising from the new and emerging telecommunication/ICT services and technologies, and to consider any other policy issue in telecommunications/ ICTs which would benefit from a global exchange of views, in addition to the adoption of opinions reflecting common viewpoints as per [Resolution 2 (Rev. Bucharest, 2022)](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-002-E.pdf).

1.3 By its [Decision 641 (Rev. Council 2024)](https://www.itu.int/md/S24-CL-C-0136/en), the ITU Council decided that the theme for WTPF-26 is as follows:

 “***Accelerating an inclusive, sustainable, resilient, and innovative digital future***: In this regard, the WTPF-26 will discuss opportunities, challenges and policies to address the following:

– bridging digital divides, particularly on gender and age as well as skills and connectivity

– green digital transformation: climate change and environmental sustainability

– resilience of telecommunication/ICTs

– space connectivity

– strengthening ICT-centric innovation ecosystems and entrepreneurship”.

1.4 WTPF-26 shall not produce prescriptive regulatory outcomes; however, it shall prepare reports and adopt non-binding opinions by consensus for consideration by Member States, Sector Members, and relevant ITU meetings as per [Resolution 2 (Rev. Bucharest, 2022)](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-002-E.pdf).

1.5 More information relating to the preparatory process of WTPF-26 is posted on <https://www.itu.int/en/council/Pages/ieg-wtpf-26.aspx>.

# 2 Preparatory process for the ITU Secretary-General’s Report

2.1 Discussions at WTPF-26 shall be based solely on a single report by the ITU Secretary-General, and contributions from participants based on that report, prepared in accordance with a procedure adopted by the Council and based on the proposals of Member States and Sector Members, and on the views of Associates, Academia and stakeholders, and WTPF shall not consider drafts of any new opinions that were not presented during the preparatory period foreseen for drawing up the Secretary-General’s report prior to the forum as set out in [Resolution 2 (Rev. Bucharest, 2022)](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-002-E.pdf).

2.2 In accordance with [Decision 641 (Council 2024)](https://www.itu.int/md/S24-CL-C-0136/en), the ITU Secretary-General shall convene a balanced, informal group of experts (IEG), each of whom is active in preparing for WTPF-26 in his/her own country, to assist in this process. In this regard, a circular letter ([CL-24/44](https://www.itu.int/md/S24-SG-CIR-0044/en)) has been sent on 14 June 2024 to Member States, the State of Palestine, Sector Members, Associates, Academia, and Organizations which have the right to attend ITU conferences and meetings as observers, calling for nomination of experts to constitute the IEG.

2.3 The preparatory process will be guided by the timetable set out as in Annex 2 of Decision 641 and in Table 1 below (revised based on agreement of the first IEG meeting).

Table 1: Timetable for the elaboration of the ITU Secretary-General’s Report

|  |  |
| --- | --- |
| **5 August 2024** | A First Draft outline of the Report by the Secretary-General shall be posted online for comments |
| **26 August 2024** | Deadline for receipt of comments on the First Draft, and for contribution on outlines for possible draft opinionsDeadline for nominations for a balanced group of experts to advise the Secretary-General on further elaboration of the report and of draft opinions associated with it |
| **1st IEG Meeting (7-8 October 2024 during the CWG cluster)** | First meeting of the group of experts to discuss the First Draft of the report by the Secretary-General and the comments received |
| **18 November 2024** | The Second Draft of the report by the Secretary-General will be posted online, incorporating discussions from the 1st IEG meeting and including outlines of draft OpinionsThis draft will also be made available online for open public consultations |
| **13 January 2024** | Deadline for receipt of comments on the Second Draft and for contribution on possible draft OpinionsDeadline for inputs from the open public consultations |
| **2nd IEG Meeting (13 – 14 February 2025 during the CWG cluster)** | Second meeting of the group of experts to discuss the Second Draft of the report by the Secretary-General as well as the possible draft Opinions and the comments received, including from the open public consultation |
| **31 March 2025** | The Third Draft of the report by the Secretary-General will be posted online, incorporating discussions from the 2nd IEG meeting, and including the text of the possible draft Opinions as an AnnexThis draft will also be made available online for open public consultations. |
| **16 June 2025** | Deadline for receipt of comments on the Third Draft, including the possible draft OpinionsDeadline for receipt of comments from the open public consultation |
| **3rd IEG Meeting (September 2025 during the CWG cluster)** | Third meeting of the group of experts to discuss the Third Draft of the report by the Secretary-General as well as the draft Opinions and the comments received, including from the open public consultation |
| **3 November 2025** | The Fourth Draft of the report by the Secretary-General will be posted online, incorporating discussions from the 3rd IEG meeting and including the draft Opinions as an Annex |
| **19 December 2025** | Deadline for receipt of comments on the Fourth Draft, including the text of the draft Opinions |
| **4th IEG Meeting (February 2026 during the CWG cluster)** | Fourth meeting of the group of experts to finalize the Draft Report by the Secretary-General, including the final text of the draft Opinions to be submitted to the seventh WTPF |
| **13 April 2026** | The final report of the Secretary-General to WTPF will be posted online, including the draft Opinions |
| **First half of 2026** | Seventh World Telecommunication/Information and Communication Technology Policy Forum |

# 3 Theme for WTPF-26

3.1 By Decision 641 (Council 2024), the 2024 session of Council decided that the theme for WTPF-26 is as set out in paragraph 1.3.

3.2 With the aim to accelerate an inclusive, sustainable, resilient and innovative digital future, the theme presents five key topics for consideration and discussion at WTPF-26. As technological breakthroughs reshape the global digital economy, it is essential to address a wide range of interconnected issues while designing public policy interventions that can maximize opportunities and address the challenges related to the adoption and use of digital technologies. Looking towards 2026 and beyond, and recognizing the limited time left for the global community to make progress on the 17 UN Sustainable Development Goals (SDGs), it is imperative for policymakers and stakeholders to adopt a holistic and complementary approach for developing the integrated policy frameworks necessary to address the topics presented in the theme.

3.3 As a platform that brings together policymakers and stakeholders for a global exchange of views and information on technology policy issues and adoption of opinions reflecting common viewpoints, the WTPF is uniquely placed to facilitate an exchange of best practices and enhance international collaboration for developing interconnected solutions, harmonized approaches and forward-looking policy frameworks.

3.4 A robust enabling environment through effective policymaking is key for facilitating efforts, particularly in developing countries, to ensure universally accessible, affordable, high-quality, interoperable, and secure infrastructure and services, for enhanced international coordination and the international standardization of telecommunications, and to leverage existing and emerging technologies, connectivity solutions, and business models to close the digital divide, ensuring access in all countries and regions.

3.5 This report was developed through an open and inclusive preparatory process in accordance with the schedule set out in Decision 641 (Council, 2024) and will serve as the basis for discussions at the WTPF-26, considering the inputs and contributions from experts and stakeholders.

3.6 The report presents the policy issues and key questions for consideration for each of the topics of the theme, with an aim to help policymakers explore ways to leverage digital technologies for sustainable development, build an inclusive society and economy, work to close the digital divide for everyone, including women and girls, youth, indigenous peoples, older persons, persons with disabilities, and persons with specific needs, and promote and enable digital transformation across all spheres of life and activity – particularly to address the dual climate and environmental crisis, foster the continued advancement of science, promote the sustainable exploration of Earth and space, and encourage resource use for the benefit of all.

3.7 Each of the topics is explored in the following sections and the Draft Opinions as agreed by the Informal Expert Group during the preparatory process are presented in the Annex:

– Section 4: Bridging digital divides, particularly on gender and age as well as skills and connectivity

– Section 5: Green digital transformation: climate change and environmental sustainability

– Section 6: Resilience of telecommunication/ICTs

– Section 7: Space connectivity

– Section 8: Strengthening ICT-centric innovation ecosystems and entrepreneurship

– Annex: Draft Opinions

# 4 Bridging digital divides, particularly on gender and age as well as skills and connectivity

4.1 Previous iterations of the WTPF recognized that bridging digital divides requires sustained commitment and multistakeholder collaboration. Today's digital divides are more complex and multifaceted than ever, encompassing not just connectivity gaps, but fundamental disparities in digital skills, age-related barriers, and gender-based exclusion. The concept of universal and meaningful connectivity (UMC), as developed through ITU's work with the G20 Digital Economy Working Group, provides a comprehensive framework for addressing these interrelated challenges.

State of the Digital Divide at a Glance:

* Approximately 67% of the world's population (5.4 billion people) is now online, while 2.6 billion people (33% of the global population) remain offline.
* In high-income countries, 93% of the population uses the Internet, while in low-income countries, only 27% of people are online.
* Women are 16% less likely to use the internet than men in developing countries, highlighting persistent gender-based disparities in digital access and use.

*Source: International Telecommunications Union, “Facts and Figures 2023 - Report Index”*

4.2 It is important to prioritize a holistic approach to digital inclusion, ensuring that older generations can confidently navigate digital spaces, that youth as digital natives can actively shape the digital future, that women and girls have equal opportunities for digital engagement, that all populations possess the necessary digital skills for effective participation, and that connectivity is truly meaningful - incorporating quality of service, affordability, and relevant content.

4.3 This multidimensional understanding of digital divides, anchored in the UMC framework, emphasizes that true digital inclusion requires addressing all these elements holistically - from basic connectivity and affordability to fostering digital literacy and basic digital skills development among targeted populations, gender-responsive approaches, and meaningful engagement opportunities.

Beyond Infrastructure:

Some 2.6 billion people remain offline, around 33% or one-third of the global population. By the end of 2022, an estimated “usage gap” of 38% of the global population lived within mobile broadband coverage but were not using it, while 5% of people are still not covered by mobile broadband (coverage gap).

*Source: International Telecommunications Union, “Facts and Figures 2023 - Report Index”*

4.4 The digital skills gap represents a particularly pressing challenge, as technological advancement continues to outpace skills development in many communities. The lack of digital literacy and basic digital skills is one of the main reasons for why people are still not using the Internet. This is especially acute among citizens living in rural and remote communities, and marginalized groups as well as older populations, who may face multiple barriers to digital adoption. Similarly, persistent gender divides in both access and skills development continue to limit women and girls' participation in the digital economy, particularly in developing countries.

Digital Skills

By 2030, 90% of all jobs will require some level of digital skills. These include both basic digital skills as well as advanced skills related to AI, data analysis, cloud computing and cybersecurity; at the same time, 75% of organizations struggle to find the necessary skills to adopt AI technologies and there is an estimated lack of 7 million cybersecurity professionals in the global labour market. The skills demand goes beyond technical skills and includes interpersonal and soft skills.

*Source: International Telecommunication Union, “Skills development for the digital economy”, November 2024*

Case Study: Digital Skills Toolkit

The ITU [Digital Skills Toolkit 2024](https://academy.itu.int/itu-d/projects-activities/research-publications/digital-skills-toolkit) offers a comprehensive, step-by-step guide to support the ITU membership to create effective national digital skills strategies and policies. This practical resource offers actionable insights and examples, making it a valuable tool for countries at all stages of digital development. At its core, it provides a concrete roadmap for creating a digital skills strategy, including all elements from the planning to the design and implementation stage.

4.5 Urgent action is required by all relevant stakeholders – governments, private sector, educational and training institutes, international organizations and civil society – to address the global digital skills gap.

4.6 Against the backdrop of these considerations, some policy questions that could be studied include:

4.6.1 How can strategies and policies create a favourable policy environment to overcome challenges to expanding internet connectivity and access to digital technologies and platforms and prioritize public and private investments in development of accessible and affordable telecommunications, Infrastructure and platforms in local language, to bridge the digital divide based on age, gender, socio-economic levels and urban - rural disparity?

4.6.2 How can national and international strategies and policies be developed to effectively monitor and adopt innovative solutions, technologies, and platforms focusing on their deployment, scaling, and replication both nationally and globally to bridge the digital divide across age, gender, socio-economic levels, and urban-rural disparities?

4.6.3 How can policymakers develop and implement effective strategies and policies to promote digital literacy, training, and skills development addressing digital divides such as those based on gender, age, persons with disabilities, socio-economic levels and urban vs. rural disparities?

4.6.4 How can policymakers identify in-demand digital skills that offer employment opportunities, and ensure that individuals across different genders, age groups, socio-economic levels, and regions have access to these skills? Additionally, how can policymakers encourage the private sector and civil society to play a significant role in providing digital skills training and education, and promote investment in these areas?

4.6.5 How International level organizations and community continue their efforts and take new initiatives on infrastructure development to connect the unconnected, make digital access more affordable, take global initiatives on digital literacy and skills and other initiatives with aim to bridge the digital divide based on gender, age, socio economic levels, as well as urban -- rural disparities?

4.6.6 How can schools and other educational institutions, through their curricula and initiatives, promote innovation and entrepreneurship while effectively addressing the digital divide and ensure\ing that students from diverse socio-economic backgrounds, genders, age groups, and regions have equitable access to digital tools and resources?

4.6.7 How can policymakers identify and address the barriers to entrepreneurship caused by the digital divide, and what strategies can be implemented to ensure equitable access to digital tools and resources for aspiring entrepreneurs across different socio-economic levels, genders, age groups, and regions?

4.6.8 How should policymakers evaluate the frameworks currently used to monitor and assess the effectiveness of initiatives and programs aimed at bridging the digital divide, and how can these frameworks be improved in terms of indicators or metrics to measure success?

# 5 Green Digital Transformation: Climate Change and Environmental Sustainability

5.1 While technology can play a critical role in monitoring, mitigating and adapting to environmental sustainability and climate change, it brings with it significant implications. New and emerging technologies, particularly artificial intelligence (AI), are proving transformative in advancing environmental protection and climate action. AI applications are being deployed to optimize energy consumption in networks, predict extreme weather events, monitor biodiversity, and enhance climate modelling. These technologies are also enabling smart grid management, reducing e-waste through predictive maintenance, and supporting precision agriculture to decrease resource consumption.

5.2 The rapid growth of digital technologies, including AI, whose computational power doubles every 100 days, also underscores the urgent need for sustainable practices in the digital sector. Digital companies already account for nearly 2% of global electricity use and up to 4% of greenhouse gas emissions, which must be reduced by 45% by 2030 to align with the Paris Agreement.[[1]](#footnote-1) Meanwhile, the world's transition to a circular economy remains slow, with only 7% of economic activities estimated as circular and 82 billion kilos of e-waste projected by 2030. Furthermore, almost half of all countries lack multi-hazard early warning systems, and data gaps in Least Developed Countries and Small Island Developing States exacerbate their vulnerability to climate risks. Green digital transformation offers an opportunity to address these challenges and build a more sustainable, equitable future.

International Standards at ITU:

ITU has been developing international standards to advance environmental efficiency, climate action, energy efficiency, and the circular economy within the ICT sector and beyond. By establishing methodologies to assess the environmental impact of ICT products, ITU provides frameworks that guide organizations in measuring and reducing their carbon footprints. ITU standards promote sustainable design principles that support resource efficiency and facilitate the shift toward a circular economy. For instance, standards for energy efficiency in telecommunications equipment and green data centres enable significant reductions in energy consumption, supporting organizations in lowering their operational costs while reducing emissions. In terms of climate action, these standards help governments and companies alike adopt practices that minimize emissions and foster resilience to climate impacts. Through standardized reporting mechanisms, ITU enables consistent and transparent tracking of environmental performance, thereby enhancing accountability and driving global efforts toward sustainability.

5.3 A true green digital transformation requires three key approaches: prioritizing material efficiency, promoting the reuse of equipment, and implementing circular economy principles. These strategies minimize the environmental impact of digital infrastructure by reducing the demand for new resources. The circular economy approach emphasizes designing ICT products for durability, repairability, and recyclability, thereby extending product lifecycles and reducing waste. Furthermore, international collaboration is essential for developing sustainable e-waste management systems that ensure proper collection, refurbishment, recycling, and environmentally sound disposal of electronic devices. These combined strategies support a more sustainable and resilient global ICT sector while reducing both resource consumption and emissions.

Global Commitments:

Regulatory approaches globally have begun to address environmental impacts through various measures including mandatory emission reporting requirements, energy consumption monitoring, voluntary climate data disclosure programs, and market reforms to encourage renewable energy investments in the telecommunications sector.

5.4 Some key aspects to consider in this respect are international partnerships that focus on promoting sustainable development and climate action through technological innovation, support mechanisms for developing countries through targeted assistance and knowledge sharing, development of industry best practices to examine how telecommunications/ICTs can reduce negative environmental impacts across sectors.

Bridging the gap:

The lack of comprehensive, country-based data on emissions remains a significant gap in the ICT sector. Effective management requires standardized data on emissions and energy usage, transparent data disclosure and analysis, inclusive technology transitions, and revised regulations with intensified cooperation between ICT and energy sectors.

5.5 Given these global developments in regulatory approaches, industry commitments, and collaborative initiatives, several critical questions emerge regarding how to accelerate and expand the technology sector's contribution to environmental sustainability:

5.5.1 What actions can ITU take to build international partnerships that promote use of green digital transformation for sustainable development and climate action?

5.5.2 How can telecommunications/ICTs help developing countries achieve green digital transformation?

5.5.3 What are the good practices of telecommunications/ICTs in reducing the negative impact of industries on the environment including the development of common standards?

5.5.4 How can international standards assist governments and the ICT sector in reducing the environmental impact of telecommunications/ICTs, while also enabling them to leverage ICT solutions to drive positive environmental impacts within the ICT sector and beyond?

5.5.5 How can policymakers help to reduce the environmental impact of telecommunications/ICTs, including energy consumption, and support sustainability?

5.5.6 Leveraging existing efforts like Green Digital Action, how can governments, industry, UN agencies, academia and civil society fast-track industry-wide commitments to addressing climate challenges and put digital solutions at the forefront of climate action, ensuring that the benefits of green digital transformation are shared equitably among all stakeholders, including vulnerable and marginalized communities?

5.5.7 How can policymakers identify the most promising innovations and technologies that support green digital transformation, including clean tech, sustainable materials, and circular economy solutions? Additionally, how can these innovations be effectively promoted for their development and deployment?

5.5.8 How can policy makers monitor and evaluate the effectiveness of green digital transformation strategies and policies, including the development of metrics and indicators for measuring progress, including how to address the challenges in doing so?

5.5.9 How can policy makers identify most significant data gaps and research needs in the area of green digital transformation, and how can it be addressed through international cooperation and knowledge sharing?

# 6 Building Resilient Telecommunication/ICT Infrastructure and Services

6.1 The resilience of global telecommunications networks depends on multiple factors. Resilient telecommunication/ICT Infrastructure and Services must be understood through various technologies: terrestrial networks, submarine cables through which over 99% of global internet traffic passes, satellite systems providing critical redundancy and reach, and the cybersecurity frameworks that protect this infrastructure.[[2]](#footnote-2)

6.2 New and emerging technologies are transforming the approach towards digital resilience. Advanced capabilities such as AI and machine learning are being utilized for real-time risk detection and predictive maintenance of critical infrastructure. Low Earth Orbit (LEO) satellite networks are expanding connectivity to remote regions. Edge computing and digital twins are enabling faster decision-making and improved system modeling to predict and mitigate vulnerabilities. However, these technologies, while offering new capabilities, also introduce new considerations for security management and technical expertise requirements.

Case Study: Submarine Cable Resilience

Recognizing the critical importance of submarine cables to global connectivity and the digital economy, ITU has established an [International Advisory Body for Submarine Cable Resilience](https://www.itu.int/en/digital-resilience/submarine-cables/Pages/default.aspx). This initiative responds to the increasing vulnerability of submarine infrastructure to service outages and aims to enhance the safety, redundancy, and protection of submarine cables through international multistakeholder collaboration. The Advisory Body brings together governments, regulatory authorities, and industry leaders to develop best practices, improve technical frameworks, and strengthen policy approaches for submarine cable protection.

6.3 Recognizing this, the following key considerations are offered for a holistic approach to this issue:

6.3.1 Infrastructure resilience across terrestrial, submarine and space-based networks requires coordinated technical frameworks. Emerging technologies and advancements in these areas could enhance capabilities of comprehensive protection and rapid recovery.

Case Study: Network Resilience Through Standards

To strengthen these global cooperation mechanisms, ITU has been developing international standards (recommendations) for enhancing network resiliency. They include protection switching, performance monitoring, fault management, network element management functions for various transport technologies such as optical transport network (OTN), Ethernet, MPLS-TP. Protection switching function pre-assigns some capacity between nodes so that the original traffic can be carried using this capacity in case of a failure on the original route.

6.3.2 Policy and regulatory approaches must address resilience holistically across all infrastructure layers, from physical protection to cybersecurity.

6.3.3 Capacity building and skills development are essential for operating, maintaining and protecting complex, multi-layered communication systems.

6.3.4 International cooperation mechanisms strengthen global telecommunications infrastructure resilience through information sharing and coordinated response.

6.4 Given the urgency of these issues in the face of an ever-evolving landscape of complex and multifaceted challenges, the following questions are intended to guide policymakers and stakeholders toward meaningful and productive tools to help build resilient telecommunication and ICT infrastructure and services:

6.4.1 How can emerging technologies and innovations improve the resilience of telecommunications and ICT infrastructure and the interdependence with other critical sectors like energy, health, and transportation to mitigate cascading failures during disasters?

6.4.2 What policy and regulatory frameworks are needed to foster resilient telecommunications/ICT systems?

6.4.3 How can public awareness and preparedness contribute to telecommunications/ICT resilience?

6.4.4 What capacity building and skills development initiatives are needed to support telecommunications resilience?

6.4.5 How can international cooperation and collaboration strengthen telecommunications/ICT resilience?

6.4.6 How can networks, including NRENs (National Research and Education Networks), leverage existing infrastructure, technologies, and community assets to enhance the resilience of telecommunications and ICT services?

6.4.7 How can ICT infrastructure and services be strengthened to ensure reliable performance in times of crisis, including natural disasters, supporting timely response and recovery efforts?

6.4.8 How can policy-makers create framework for monitoring and evaluating the resilience of telecommunication/ICTs, including the development of metrics and indicators for measuring resilience?

# 7 Space Connectivity

7.1 Space connectivity has become fundamental to achieving global digital inclusion. Satellite technologies have a transformative role in providing universal connectivity, particularly for unserved and underserved areas.

7.2 The space connectivity landscape is evolving rapidly through the deployment of Very-High-Throughput Satellites in Geostationary Orbit (GSO), advances in Low-Earth Orbit (NGSO) satellite constellations, and innovative business partnerships between satellite and terrestrial telecommunications providers.

Understanding the space arena:

The space economy demonstrates significant growth potential, with forecasts indicating it will reach USD 1.8 trillion by 2035, growing at an average of 9% per year. Notably, at least 40% of the SDGs rely on Earth observation, remote sensing, and global navigation satellite systems, underscoring the critical role of space technologies in sustainable development.

*Source: “Space: The $1.8 Trillion Opportunity for Global Economic Growth.” World Economic Forum, April 2024*

7.3 The integration of satellite and terrestrial networks is creating new possibilities for connectivity. These technological advances are particularly significant as they enable cost-effective and reliable communications in areas where terrestrial infrastructure has been technically challenging or economically unfeasible to deploy.

7.4 Countries are increasingly adopting forward-looking regulatory frameworks that address several aspects including:

– streamlined authorization processes for both GSO and NGSO systems, mechanisms to encourage investment in space infrastructure,

– requirements for security and data protection provisions for industry partnerships and collaborations

– measures to protect existing networks while enabling new technologies.

7.5 Advancements must be balanced with considerations of space sustainability to ensure long-term accessibility of orbital resources.

Case Study: Space Sustainability Forum

The Forum convened top leaders and subject matter experts from the satellite and space industries, space and telecom agencies, governments and other space stakeholders that are committed to the responsible use of the space. The Forum provided a platform to discuss and dive deeply into the policies, best practices, guidelines and strategies to ensure space remains accessible and sustainable for the future space activities envisioned today and in the future.

7.6 As the space connectivity sector continues its rapid evolution, several important aspects emerge for consideration at the intersection of technological advancement, universal access, and sustainable space operations:

7.6.1 Emerging trends and developments in space connectivity focus on creating innovative solutions for inclusive and sustainable digital futures.

7.6.2 Bridging the digital divide through space-based connectivity can help to address the needs of unserved and underserved communities.

7.6.3 Enabling policy and regulatory frameworks support the responsible deployment and use of space-based connectivity systems.

7.6.4 Complementarity between different space-based systems and terrestrial networks creates opportunities for enhanced connectivity solutions.

7.6.5 The spectrum and orbits being limited; it is necessary to use it optimally with equitable access to all country specially underdeveloped countries.

7.6.6 Public private partnership and economic incentive by governments can accelerate the deployment of space technologies which can accelerate access to connectivity in underserved and unserved regions.

7.7 Given these critical considerations in space connectivity and sustainability, policymakers and stakeholders must address the following questions to ensure responsible development of space-based telecommunications/ICT technology and services:

7.7.1 What challenges, trends and developments in space-based connectivity contribute to an inclusive, sustainable, resilient, affordable and innovative digital future? How can governments, industry, and civil society each build upon these developments?

7.7.2 How can space connectivity bridge digital divides and contribute to sustainable development, particularly in communities historically unserved and under-served by legacy connectivity services?

7.7.3 How can administrations at the national, regional, and international levels create an enabling policy and regulatory environment for the deployment and use of space-based connectivity?

7.7.4 How can complementarities among different space-based connectivity systems and between space-based connectivity systems and terrestrial networks contribute to an inclusive and innovative digital future?  How can policymakers help enable viable business models that evolve from these complementarities?

7.7.5 How can international coordination be improved to manage the allocation and use of radio frequency spectrum for space-based services, ensuring minimal interference and optimal usage?

7.7.6 How can governments foster effective public-private partnerships to accelerate the deployment of space-based connectivity solutions, particularly in unserved and underserved regions?

7.7.7 What economic incentives can be provided to encourage investment in space-based connectivity technologies, and how can these incentives be balanced with the need for fair competition?

7.7.8 How can every country and region have equitable access to space resources such as satellite orbits and spectrum? How can the ITU’s regulatory framework be strengthened to ensure fair distribution of satellite orbits and spectrum? What planning procedures can be implemented to guarantee future access to orbit/spectrum resources for all countries?

7.7.9 How can the environmental impact of satellite launches and operations be minimized, and what regulations are needed to ensure environmentally sustainable practices in the space industry? What policies can be implemented to address the growing issue of space debris, and how can international cooperation be enhanced to ensure sustainable space operations?

7.7.10 How can policies ensure that space-based connectivity services are accessible and affordable to all, particularly in low-income and remote communities?

7.7.11 What policies can support ongoing innovation and research in space connectivity technologies, and how can these policies ensure that advancements benefit all sectors of society?

7.7.12 What frameworks can be established to enhance international collaboration on space connectivity projects, and how can these frameworks address geopolitical challenges? How can regulatory frameworks be harmonized across different countries to facilitate the seamless deployment and operation of space-based connectivity systems?

7.7.13 What policy and regulatory measures should be taken to ensure the security and privacy of data transmitted via space-based networks, and how can these measures be standardized internationally?

# 8 Strengthening ICT-centric Innovation Ecosystems and Entrepreneurship

8.1 Technology-centric entrepreneurial ecosystems are essential to drive sustainable development while increasing inclusion, providing economies of scale, and bridging digital divides.

Case Study: Digital Innovation Profiles and ITU Acceleration Centres

ITU collaborates with countries to provide accurate assessments of the health of their digital innovation ecosystems. This helps them develop strategies to inform national policies and initiatives. The ITU has delivered assessments to numerous countries, offering a comprehensive roadmap for ecosystem-driven innovation strategies.

ITU has supported countries in establishing new ecosystem acceleration centers that provide a coordinated implementation and governance framework for their digital ecosystems, helping them achieve national goals.

8.2 However, there is a growing digital innovation divide among countries that inhibits access to equitable benefits for all.

8.3 Supportive policies and regulations are key to enable innovation and support Micro, Small and Medium-sized Enterprises (MSMEs), as well as enhanced collaboration efforts among key stakeholders, including policymakers, industry and academia.

8.4 Given the importance of the role of innovation as a driver of sustainable development and the growing innovation divide between developing and developed countries, several important considerations require attention:

8.4.1 Trends research readiness: Adapting to the fast-changing digital environment requires countries to be ahead of the curve and make sense of the evolution of technology, policy and innovation dynamics. This requires new thinking and approaches, such as equipping countries with foresight capabilities and strategic research.

8.4.2 Open technology innovation: Harnessing technological know-how for competitive digital economy value chain, embracing open innovation and multistakeholder mechanisms, accelerating access to emerging technology for all. Promoting collaboration and synergies that scale digital innovations and achieve cross-cutting sectoral value for a competitive digital economy.

8.4.3 Entrepreneurship and MSMEs growth: Accelerating the uptake of digital innovation-driven entrepreneurship and opportunities for talent to achieve socio economic inclusion in their communities need renewed focus.

Case Study: ITU Academy Innovation Ecosystem Curriculum

ITU has been developing a curriculum for building the innovation capacity of countries, which includes many relevant courses, including Ecosystem 101, Strategic Foresight, and Ecosystem Initiative Development, among others. These courses are part of competency framework developed for ensuring countries have the skills and knowhow to engage in bridging the digital innovation divide and are available on [the ITU Academy](https://academy.itu.int/) platform.

8.4.4 Policy Acceleration: Developing agile policies that provide stakeholders with safe space for experimentation, encouraging innovation and attracting investment in the digital ecosystem. International cooperation is key to facilitate knowledge sharing, capacity building, and standardization efforts.

8.5 To address these challenges in innovation ecosystems, from barriers to leverage entrepreneurship, to innovation policy, special initiatives and programs for a favorable environment, and international cooperation, several critical questions require consideration, particularly regarding the role of MSMEs in driving digital transformation:

8.5.1 What are the barriers for MSMEs to innovation and to contribute to ICT innovation ecosystem and to make use of the digital transformation?

8.5.2 How can policy makers help MSMEs to adapt to digital transformation, making their digital transformation of the entire value chain "affordable, useful, scalable and profitable" and to integrate digital tools and technologies into ICT innovation ecosystems and support them in collaboration with large enterprises?

8.5.3 How can policy makers help MSMEs innovate, grow and integrate into the ICT innovation ecosystem more efficiently?

8.5.4 How can ITU assist policy makers to work with relevant stakeholders to invest in ICT research and development for new innovative products and services for MSMEs?

8.5.5 How can ITU assist policy makers to bring intellectual property developed by MSMEs to market and to the ICT innovation ecosystem?

8.5.6 How can policy makers, universities, research institutes, innovation hubs and enterprises in the ICT innovation sector promote, invest, support and develop entrepreneurship and enhance the supply of digital talents for enterprises?

8.5.7 How can policy makers promote competition and improve access to open markets to foster entrepreneurship?

8.5.8 How can the ITU and international cooperation support MSMEs and assist policy makers by providing platforms for building cooperation networks for knowledge and capability sharing, for evaluation and training, for bringing ICT innovations into standardization, for regulatory toolkits and sandboxes?

Annex: [PLACEHOLDER] DRAFT OPINIONS FOR THE SEVENTH WORLD TELECOMMUNICATION/INFORMATION AND
COMMUNICATION TECHNOLOGY POLICY FORUM 2026

CURRENT STATUS OF POTENTIAL DRAFT OPINIONS

Contributions on possible Draft Opinions received from members of the IEG-WTPF-26 for the second meeting on 7-8 October 2024 are listed below in the order in which they were received. Members were requested by the Chair to consolidate similar contributions so that the Group can focus on a manageable number of draft Opinions and work towards a consensus.

## DRAFT OPINIONS

I. Draft Opinion on bridging digital divides, particularly on gender and age as well as skills and connectivity (contribution submitted by India)

II. Draft Opinion on Inclusive and Sustainable Space Connectivity ( (contribution submitted by Amazon Services LLC)

III. Draft Opinion on Building digital transformation, climate, and environmental sustainability (contribution submitted by Rwanda)

IV. Draft opinion on Resilience of telecommunication/ICTs (contribution submitted by Rwanda)

V. Draft Opinion on bridging digital divides, particularly on gender and age as well as skills and connectivity (contribution submitted by Rwanda)

VI. Draft Opinion on Inclusive and Sustainable Space Connectivity (contribution by [Saudi Arabia](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Saudi%20Arabia), [Bahrain](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Bahrain), [Egypt](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Egypt), [South Africa](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=South%20Africa))

VII. Draft opinion on Resilience of telecommunication/ICTs Connectivity (contribution by [Saudi Arabia](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Saudi%20Arabia), [Bahrain](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Bahrain), [Egypt](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=Egypt), [South Africa](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=S24-WTPF26IEG1-C&source=South%20Africa))

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1. “Press Release,” ITU, accessed November 18, 2024, https://www.itu.int:443/en/mediacentre/Pages/PR04-2020-ICT-industry-to-reduce-greenhouse-gas-emissions-by-45-percent-by-2030.aspx. [↑](#footnote-ref-1)
2. *Did You Know ITU Develops Submarine Cable Standards?*, 2024, https://www.youtube.com/watch?v=EVkpxsPceuk. [↑](#footnote-ref-2)