



## ITUGSR KAMPALA2024

### GSR-24 BEST PRACTICE GUIDELINES

*“Helping to chart the course of transformative technologies for positive impact”*



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*We stand at the threshold of a digital revolution with profound implications for the future of our societies. Recognizing the nature of advances in transformative technologies, we need to commit to fostering an enabling regulatory environment where innovation thrives while minimizing risks and maximizing benefits. It is our collective responsibility to chart the course of transformative technologies for a greater positive impact, where technology serves as a lighthouse of development, economic growth, inclusivity and sustainability.*



**Mr George William Nyombi Thembo**  
Executive Director and GSR-24 Chair  
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(UCC)

*As we navigate the transformative landscape of digital technologies, the importance of impactful regulation cannot be overstated. Our shared learnings and collaborative efforts are crucial in shaping a regulatory environment that not only fosters innovation but also ensures that the benefits of technological advancements are widely shared. By recognizing the interdependencies with other sectors, we can create a cohesive framework that supports sustainable development, economic growth, and inclusivity. Together, we have the power to turn technology into a force for positive change, illuminating pathways to a brighter, more connected future.*



## GSR-24 BEST PRACTICE GUIDELINES

### *“Helping to chart the course of transformative technologies for positive impact”*

As telecommunication/ICT regulators, we play a key role in shaping a regulatory environment that enables the deployment and maintenance of cutting-edge infrastructure that support digital society of the future, including transformative technologies.

Recalling the series of GSR Best Practice Guidelines since 2003 that capture established regulatory principles for a competitive, secure and inclusive enabling digital environment, we, the regulators participating in the 23<sup>rd</sup> Global Symposium for Regulators, recognize the importance of defining effective policy and regulatory measures and guiding principles to help chart the course of telecommunications/ICTs as enablers of transformative technologies for positive impact. We have therefore identified and endorsed these regulatory best practice guidelines for helping to chart the course of transformative technologies.

### Challenges

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Policy makers and regulators face several challenges in embracing transformative technologies for greater impact. These include:

1. Regulatory silos, administrative burdens, policy fragmentation and sector overlaps.
2. The uncertainty of sectoral regulators' roles and responsibilities in addressing the challenges posed by telecommunications/ICT as enabler of transformative technologies.
3. Ethical concerns, including data privacy, big data challenges, artificial intelligence (AI) bias, job displacement, reliability of information.
4. Data governance and cross-border issues, including supranational competition issues.
5. New business models that make it difficult to enforce accountability as well as assign liability.
6. Technology complexities and risk management knowledge.
7. Security risks.
8. Environmental footprint and energy consumption.
9. Access inequality.
10. Investment deficiencies for infrastructure development, access, adoption and use.
11. Lack of skilled human resources in the telecommunication/ICT sector.
12. High deployment costs and potential revenue loss that could inhibit implementation for network operators.

### Opportunities

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Telecommunications/ICTs can unlock the potential of equal, global access to existing digital services and of transformative technologies, offering to:

1. Improve the efficiency of services by supporting the streamlining processes and applying automation and technology innovation.
2. Benefit from the use of transformative technologies, e.g., when network operators use AI in network planning or the prevention of fraud via their networks.
3. Promote innovation, economic growth and competitiveness, new industries and job opportunities, and enhance transparency and accountability in the public sector.
4. Empower citizens and all stakeholders by providing new means of participation, access to public information and services, and by sharing information.
5. Build partnerships between regulators and industry stakeholders to facilitate shared goals, risk mitigation, and maximization of technological benefits.
6. Enhance user experiences across various sectors.
7. Offer greater opportunity for flexibility, cost reductions, feasibility enhancements and resilience of networks.



## Key policy and regulatory measures and guiding principles for positive and inclusive impact

These regulatory measures and guiding principles aim to maximize the benefits of telecommunications/ICTs for transformative technologies while mitigating risks and ensure inclusivity in their application. They emphasize the importance of balancing innovation with responsible regulation to create a positive impact on societies and economies. By implementing these measures and principles collectively, we, regulators, aim to create an environment conducive to positive outcomes for all stakeholders, fostering innovation, trust, and social welfare.

1. **Proactive approach:** adopt a proactive approach that balances innovation promotion with risk minimization and provide a controlled environment that enables businesses to test and scale up their products or services. This includes adopting agile, adaptive and anticipatory regulatory frameworks, applying innovative regulatory approaches such as regulatory sandboxes, regulatory impact assessments (RIA), collaborative regulation, horizon-scanning exercises, and evidence-based decision-making.
2. **Enforcement:** adopt regulations that incentivize ethical conduct and address misconduct, by establishing monitoring and supervision mechanisms to prevent abuses and address risks.
3. **Streamlining regulations and processes:** reduce bureaucratic hurdles to streamline administrative processes (e.g., in licensing).
4. **Stakeholder engagement:** prioritize inclusive stakeholder engagement and public consultation throughout the regulatory process by engaging industry and civil society collaboratively in the pursuit of shaping competitive and inclusive markets.
5. **Transparency and accountability in decision-making, based on data analysis:** ensure transparency, accountability and inclusive design in regulatory processes.
6. **Data collection and sharing:** adopt effective mechanisms for collection and use of data in order to increase the regulator's capacity for action.
7. **Collaboration:** foster collaboration among all stakeholders across different economic sectors, involving policy makers, regulators, regulatory and industry associations, private sector, academia and civil society at the national, regional and international level on developing harmonized governance and regulatory approaches to ensure that telecommunications/ICTs contribute to peace, security, and sustainable development.
8. **Regulatory harmonization:** align regulatory frameworks with international best practices.
9. **Risk-based approach:** consider employing risk-based principles to enhance product safety and effectiveness. Implement risk management and mitigation measures to address potential risks associated with transformative technologies, including research and foresight capacity among policy makers and regulators.
10. **Cybersecurity standards:** enforce robust cybersecurity standards and regulations to safeguard against threats.
11. **Equitable access:** ensure fair, affordable, consistent, resilient and non-discriminatory access and use of all digital technologies, resources and services to address the digital divide and ensure meaningful connectivity.
12. **Market competition and openness:** foster equitable market access and healthy competition among all players and technologies, including start-ups, ensuring sufficient availability of and ease of access to limited resources (e.g.: spectrum) to drive innovation and efficiency and encourage partnerships with local players.
13. **Regulatory incentives:** foster regulatory and economic incentives as well as innovative financing mechanisms that encourage investment and competitive pricing.
14. **Consumer and data protection:** ensure there are personal data protection and privacy regulations in place, as well as protect consumer interests and ensure accountability of service providers.
15. **Data governance:** develop appropriate data governance and transparency policies to strike a balance between safeguarding individual and organizational data privacy, security and integrity and enable cross border data flows to operate effectively.
16. **Ethics and security:** foster the creation of ethical frameworks and secure standards for the development and deployment of transformative technologies in telecommunications/ICTs, including AI, by incorporating considerations such as human-centered design and non-discrimination.
17. **Promotion of ethical practices:** foster a culture of responsibility through industry-wide codes of



conduct and corporate social responsibility initiatives in the telecommunication/ICT sector.

18. **Sustainability:** consider the environmental and socio-economic impact of all telecommunication/ICT technologies in developing policies and regulations. Provide incentives to companies adopting responsible and sustainable practices and encourage research and development for responsible and sustainable telecommunication/ICT technologies.
19. **Education and awareness:** invest in capacity-building and awareness initiatives to improve knowledge, literacy and skills of policymakers and regulators and promote digital skills among the population to ensure optimal use of telecommunications/ICTs and transformative technologies. This can include providing training programmes, technical assistance, and access to relevant resources and expertise.

## Policy makers and regulators can encourage market players to:

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1. **Employ risk analysis and assessment:** identify potential threats and opportunities associated with business activities and develop preventive measures to minimize threats, such as emergency plans, appropriate insurance and coverage mechanisms to mitigate potential losses.
  2. **Diversify activities:** invest in different sectors or markets to reduce exposure to industry-specific risks.
  3. **Adopt a sustainability-based approach:** incorporate sustainable practices in business operations to reduce environmental impact and consider social factors in decision-making.
  4. **Invest in research and development:** allocate resources to stay at the forefront of the industry, stimulating innovation and reducing risks.
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