

## **Nigeria's Input to GSR-25 Best Practice Guidelines on the topic “What does it take for Regulators to become digital ecosystem builders?”**

### **Fostering Innovation in Regulatory Approaches**

To cultivate an innovation-driven culture in regulation and decision-making, adaptive, forward-thinking strategies that align with the current demands of digital ecosystems must be embraced by regulators. This requires embedding innovation into regulatory frameworks through policy foresight and scenario planning, utilizing tools like Innovation Dialogues and Co-Creation Forums to engage startups, telecom operators, researchers, and civil society. These platforms enable regulators to collaboratively anticipate technological trends and risks.

Another crucial requirement is the implementation of regulatory sandboxes and testbeds, offering controlled environments for testing innovations. Partnerships with academia and the private sector can establish real-time trial spaces under relaxed regulations, fostering experimentation. Additionally, modular and tiered licensing frameworks, with technology-neutral regulations, can ease market entry for new players, encouraging diverse innovations. Regulators should prioritize collaborative strategies, forging partnerships with academia, consumers, and stakeholders while grounding decisions in data-driven evidence. Cross-national studies incorporating territorial nuances can further inform tailored approaches to global and regional innovation efforts.

Regulators should also be encouraged to embrace new skillsets and mindsets so as to develop expertise in emerging technologies (e.g., AI, blockchain), data analytics, and foresight methodologies. A mindset shift toward agility, collaboration, and risk tolerance is essential to embracing iterative, inclusive decision-making that supports digital ecosystem growth.

### **Adapting and Enhancing Regulatory Capacity**

Given the rapid pace of digital transformation, regulators must migrate from traditional and rigid one-size-fits-all technology-specific mandates toward flexible, outcome-focused frameworks that can adapt to emerging business models while protecting consumer interests and promoting fair competition. This evolution requires three critical pillars: enhanced regulatory capacity, adaptive decision-making processes, and robust institutional mechanisms. Effective oversight of digital markets requires specialized expertise and continuous learning, with regulators establishing dedicated units focused on emerging technologies, similar to the NCC's Digital Economy department, while investing heavily in ongoing training programs that keep pace with technological advancement. The goal is to build anticipatory rather than reactive regulatory capabilities, fostering an ecosystem where technological advancement and regulatory oversight work in harmony rather than opposition.

This requires agile decision-making informed by continuous feedback, as well as regular review and upgrade of legacy frameworks, with emphasis on cybersecurity measures that protect both users and critical infrastructure. In addition, the complexity of digital markets requires that regulators foster collaborative approaches that reduce fragmentation and extend beyond individual regulatory agencies, with public-private partnerships and multi-stakeholder forums creating vital platforms for knowledge sharing, consensus building, and early identification of emerging risks. Inter-regulatory cooperation

through peering programs and shared development of regulatory tools amplifies these benefits globally and builds collective capacity while promoting consistency across jurisdictions.

### **Harnessing Transformative Technologies for Regulatory Excellence**

Regulators can achieve regulatory excellence by strategically harnessing transformative technologies like Artificial Intelligence (AI), big data, Internet of Things (IoT), and blockchain to enhance decision-making, compliance monitoring, and regulatory agility. AI and big data analytics improve decision-making in areas such as licensing, compliance, and enforcement by offering real-time data analysis, enabling regulators to detect market trends, anomalies, and non-compliance more effectively. This allows for proactive responses, as demonstrated by the Nigerian Communications Commission (NCC) utilizing data analytics to monitor Quality of Service (QoS) across telecom networks. IoT further enhances this by providing real-time monitoring of network performance and compliance, offering continuous insights into operational status. Deployment of regulatory sandboxes also allows for the testing and evaluation of new and potentially transformative technologies in a controlled environment before widespread adoption.

Blockchain technology is a key tool that can be utilized by regulators to strengthen transparency, stakeholder engagement, and public trust in regulatory processes. It can support transparency of licensing, spectrum management and compliance activities through immutable records, fostering trust and accountability. Establishment of a centralized digital platform for policy formulation and implementation tracking alongside a specialized committee on AI governance and digital ethics, will ensure adaptability and oversight, further reinforcing trust and accountability in the regulatory processes.

### **Cross-Border Cooperation for Building National, Regional and Global Digital Ecosystem**

To foster cross-border cooperation in the global digital ecosystem, regulators should be encouraged to establish bilateral and multilateral agreements as powerful tools for joint research, training, and policy alignment. An example of this is the NCC's collaboration with other African regulators to develop frameworks for cross-border data flows, directly supporting the African Continental Free Trade Area (AfCFTA) digital economy goals. Furthermore, knowledge exchange programs such as study visits and joint workshops, are invaluable for harmonizing regulations and building capacity in data governance and cybersecurity, which are crucial elements of digital connectivity and robust cross-border economies.

The NCC recognizes that becoming a digital ecosystem builder necessitates that regulators embrace innovation, adapt mandates, leverage transformative technologies, and foster cross-border collaboration. To concretely achieve this, countries should promote the **interoperability** of different national networks through mutual standards as well as develop and align data governance and protection principles so as to build confidence and facilitate secure data flows essential for digital economies.