***Draft final – GSR-25 Best Practice Guidelines***

**EMPOWERING REGULATORS AS DIGITAL ECOSYSTEM BUILDERS**

As digital technologies transform how societies connect, trade, learn and are governed, telecommunication/ICT regulators are being called to do more than oversee markets. They must adapt, embed innovation at the heart of their institutional mission and help shape resilient and future-ready digital ecosystems. This transformation demands a continued evolution in regulatory approaches and mindsets, the adoption of new tools, and deeper collaboration across sectors and borders.

Building on two decades of GSR Best Practice Guidelines, which have helped define sound regulatory principles and foster enabling environments, we – the regulators participating in the 2025 Global Symposium for Regulators – acknowledge the pace of this change and our urgency to respond. Responding to today’s challenges and preparing for those ahead call upon regulators to reconsider our role as digital ecosystem builders: convening partners, aligning rules and incentives, opening shared data and infrastructure, and using evidence and testing to build inclusive, trusted digital markets.

These guidelines reflect our shared commitment: informed by national experience, guided by a global perspective and focused on delivering practical, forward-looking regulatory leadership for a digital future that leaves no one behind.

## I FOSTER INNOVATION IN REGULATORY APPROACHES

### Make innovation a core regulatory practice

Regulators should treat innovation not as a side project, but as a core part of how regulation is designed and delivered. Institutionalize experimentation by embedding pilot projects into annual workplans, using regulatory sandboxes and testing light-touch rules before full rollout.Make room for learning from failure, recognizing that not every innovation will succeed but every attempt generates valuable insights that strengthen future regulatory approaches.

### Develop future-ready skills and mindsets

In addition to technical knowledge in telecommunication/ICTs, digital, new and emerging technologies such as AI, IoT, space- and satellite-enabled services and quantum technologies, blockchain and advanced cybersecurity frameworks, regulators need skills in policy prototyping, behavioural insights and systems thinking – applied through practical, evidence-led methods. Foster an agile, future-responsive regulatory culture by supporting continuous peer learning opportunities for staff and building cross-disciplinary collaboration into institutional routines.

### Regulate with agility and foresight

Implement agile frameworks such as outcome-based or principles-based regulation, and consider arrangements such as tiered licensing and sunset clauses, where appropriate, to enable adaptive regulatory responses as technologies and markets evolve. Guide innovation rather than simply react to it by using data, strategic foresight, horizon scanning and anticipatory frameworks – including scenarios, early-warning indicators and pre-agreed triggers that enable timely action – to better identify emerging risks and opportunities. Leverage spectrum and space-based technologies as platforms for innovation.

### Collaborate to innovate

Expand stakeholder engagement beyond one-off consultations to continuous, problem-solving partnerships with ministries, market actors, academia and civil society across sectors. Co-creating solutions allows for the diversity of different actors’ experiences to collectively inform optimal and adaptive solutions, builds legitimacy and shared ownership, and improves compliance and implementation. Align policies and prevent conflicting rules by embedding intersectoral coherence mechanisms.

## II ADAPT AND ENHANCE REGULATORY CAPACITY

### Empower regulators for digital realities

We encourage policymakers to ensure regulatory mandates reflect convergence across infrastructure, content and services. This may require oversight of digital platforms, data governance or AI, as well as cross-sector coordination to reduce fragmentation and reinforce public interest outcomes. This also calls for political, operational and financial independence to enable long-term planning, impartial decisions and consistent enforcement beyond political or market cycles.

### Invest in strategic capacity

Go beyond technical upgrades. Secure sustained investment in the human and financial resources needed to maintain and expand new technological tools and methodologies as part of the core regulatory operations. Build multidisciplinary teams, establish internal foresight and data analytics units, allocate resources and streamline coordination across departments. Partner with stakeholders, including industry, academia and thinktanks to support continuous learning and regulatory intelligence. Use peer upskilling and joint consultations with regulators from more mature digital markets (staff exchanges, joint hearings) to absorb learnings from regulatory and industry practices.

### Make decisions inclusive and evidence-based

Strengthen regulatory capacity for evidence-based and risk-informed decision-making. Use new data sources and platforms, AI analytics and stakeholder inputs to inform decision-making. Align rules with real-world conditions through regulatory impact assessments that account for potential distinct consequences for different stakeholders (including distinct providers and consumers and especially from underserved groups and local innovators), staged implementation, and recurring evaluation for iterative evolution of regulatory measures.

### Institutionalize collaboration

Enable regulators to coordinate across sectors and jurisdictions using joint task forces, shared regulatory labs and inter-agency working groups, among others. Consider ITU’s collaborative governance approach – structured, transparent decision-making with defined roles, shared evidence, time-bound workplans and joint accountability across public, private and civil society partners – to design coordinated and adaptive responses to complex ecosystem challenges. A ‘whole-of-government’ approach is increasingly essential to ensure coherence in national digital policy and effective governance of complex digital ecosystems, recognising the complementary and distinct role of regulators vis-à-vis governments.

### Leverage co- and self-regulation

Where appropriate, share or delegate responsibilities to trusted partners with clear accountability mechanisms. Support co-regulation with expert institutions, civil society or industry actors – especially in fast-moving areas such as cybersecurity, AI and data governance where less agile models could impede investment and innovation. Explore means by which regulators can reduce their own and others’ regulatory burdens by pooling and simplifying regulatory models. Consider voluntary mechanisms co-designed with stakeholders to spur action as a new model of regulation, while ensuring competent authorities safeguard privacy, ethical responsibilities, and related obligations.

### Shape innovation for public value

Enable and steer innovation toward inclusive and sustainable connectivity and digital markets that supports socio-economic development. Embed safety-by-design and inclusion in decisions on fast-moving areas. Resource regulators with the ability to collect and analyse consumer data and outcome metrics to inform decisions, track real-world benefits, and address disparate impacts of new technologies.

## III LEVERAGE EMERGING TECHNOLOGIES FOR REGULATORY EXCELLENCE

### Use new tools across the regulatory cycle

Where appropriate, integrate technologies such as AI, big data, blockchain and IoT into regulatory supervision, compliance and decision-making – working towards them as embedded capabilities. Examples include regulation through data, real-time spectrum monitoring, automated compliance alerts and smart licensing systems, among other RegTech and SupReg applications.

Co-design such applications to encourage potential interoperability with industry applications and iterating on experimental, test-case applications. Streamline and simplify regulatory processes for industry to lower compliance costs and improve the ease of doing business while maintaining oversight.

### Harness data for responsive oversight

Build integrated data systems to assist with effective regulatory compliance. Such systems can combine, among others, industry submissions, sensor data and crowd-sourced information. Detect service gaps, identify risks early and guide interventions where they matter most, publish interactive dashboards that guide compliance and consumer choice. Use these strategies to build holistic pictures of market realities with greater granularity.

### Modernize engagement through technology

Launch digital portals, interactive open data platforms and mobile tools to make decisions transparent and participation of non-industry users easier. Develop these projects with the needs of users in underserved or remote communities in mind. Improve data use by stakeholders and stakeholder feedback with tools like chatbots or map-based dashboards.

### Institutionalize experimentation

Test regulatory responses before codifying rules in high-risk or high-uncertainty areas by using sandboxes, living labs, simulations and scenario tools. Leverage recognised technical standards (e.g. for AI, cybersecurity, digital identity, quantum) and standards-based certification to structure sandboxes and speed safe scaling. Accelerate consultation analysis and improve responsiveness with AI-assisted tools. Ensure effectiveness and responsible innovation by co-designing these experimental frameworks with industry and other stakeholders.

### Design for trust and ethics

Lead by example in how technologies are used internally. Adopt privacy-preserving tools and standards for consumer and industry data, establish clear accountability and appeals for automated decision-making as relevant to the administrative law of each jurisdiction and aligned with established global principles on trustworthy AI and data protection. Clearly communicate with the public on how technologies are being used and what safeguards are in place.

### Leverage emerging technologies for space sustainability

Where ICT regulators hold a space mandate, use AI and other tools for space-traffic monitoring, collision avoidance and orbital resource optimisation. Where they do not, enable coordination with the competent space authority, promote data sharing and standards-based safety measures so space services remain safe, reliable parts of digital infrastructure.

### Build the capacity to deliver

Recognize that digital transformation requires strategy, not just software. Invest in multidisciplinary talent, promote open standards and develop shared infrastructure across government to avoid duplication and overdependence on proprietary systems.

## IV STRENGTHEN CROSS-BORDER COOPERATION FOR A CONNECTED FUTURE

### Make collaboration results-driven

Use regional and international partnerships to address common challenges and shared priorities, from spectrum coordination to cybersecurity to AI governance, taking into account established global regulations and principles. Prioritize joint activities, regulatory sandboxes or enforcement efforts that deliver tangible impact for consumers over formal agreements alone and resource accordingly.

### Promote regulatory interoperability where it adds value

Encourage alignment through common baselines and principles in areas such as digital trade, AI ethics and data protection, noting existing or established global and regional principles and recommendations and with explicit safeguards for domestic policy space. Shared policy principles and coordinated timing help balance interoperability with sovereignty.

### Build shared learning infrastructure

Establish mechanisms to share best practices such as communities of practice, joint training platforms and peer mentoring schemes. Leverage country experiences with experimentation and innovation to support regulatory advancements that are adaptable to diverse markets and contexts. Support open-access knowledge tools that can be adapted locally and reused by other regulators.

### Coordinate data, tools and standards

Promote interoperability-by-design. Each country should decide the appropriate partners – domestic agencies, neighbouring regulators, regional bodies and standards organisations - and align regulatory action where it adds value using, among others, common APIs, shared indicators and data-sharing protocols. Consider setting collaboration frameworks for privacy-preserving data sharing (e.g. aggregated incidents/performance) to support aligned oversight and cross-border incident response.

### Assert regional voice and digital sovereignty

Coordinate at regional levels to influence emerging international frameworks, ensuring adaptability to diverse national contexts. Engage in multilateral fora and regional platforms, support regional initiatives, and build regional capacity and shared mechanisms to turn common positions into action while preserving national policy space.

### **Leverage** regional and international cooperation to accelerate national agendas

Cooperate – as appropriate to national context – with regional bodies, peer regulators and standards organisations to share practices, pursue targeted alignment where it reduces duplication or speeds deployment (e.g. in spectrum planning, safety, interoperability), and mobilize joint capacity to advance national regulatory and innovation goals. Embed coordination in existing structures, assign dedicated units, facilitate cross-border planning and track the real-world impact of cooperation. Integrate systemic coordination and consultation into institutional and policy design to support ongoing alignment, as necessary, across policies, sectors and stakeholders.

For international organisations, use convening power to matchmake among regulators and help cultivate peer-to-peer learning opportunities that are based on precise need and challenges. Facilitate the optimal use of global resources by blending shared experiences with localised applications. With technology, support developing open-access knowledge tools that can be adapted locally and reused by different regulators and promote interoperability-by-design through regulatory systems and commonly defined indicators.

**Enable partnerships and investment**

Recognize the need for innovative investment models to support the sustainable deployment of telecommunications/ICTs and digital infrastructure while ensuring a level-playing field for all market players and applying competition safeguards. In light of persistent financial challenges in rural and remote areas, we encourage the development of inclusive policy and regulatory approaches that enable public-public and public-private partnerships, government-wide collaboration and long-term digital growth.

## V WAY FORWARD

In a landscape shaped by constant flux and technological upheaval, regulation can be a lever for responsible innovation that supports economic growth, market competition and public good. We do not act in silos – through internal innovations, sufficient capacity and deep partnerships within and across our markets, we can move from rule-setters to ecosystem builders. The principles and approaches in these guidelines offer a clear path: one that strengthens public trust, credits the specific role of regulators, protect public interests, fosters digital development that leaves no one behind, and reinforces the collective ability to govern a connected, dynamic and interdependent digital world.