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GSR-21 Best Practice Guidelines

REGULATORY UPLIFT FOR FINANCING DIGITAL INFRASTRUCTURE, ACCESS AND USE

Digital technologies are now powering our economies and the way we live – our very future.

Digitalization is fast revolutionizing productivity, employment, skills, services and markets. It changes the means of production, methods of delivery, lifestyles, patterns of consumption and the fabric of social intercourse. ICTs are now the foundation for every economic sector, for business performance and for national growth. This change is profound. Collaborative digital regulation addresses the complexity and the opportunity of this change through flexible and enabling policy frameworks.

The COVID-19 pandemic has underlined how important reliable broadband is to people and businesses. Investment in rolling out and upgrading ICT infrastructure to deploy superfast broadband networks to meet future needs is vital to ensuring affordable access and expanding digitalization for social and economic good.

We, the regulators participating in the 21st Global Symposium for Regulators, recognize that there is no single, comprehensive blueprint for best practice and that regulatory patterns for the digital transformation will be rooted in local circumstances while addressing regional and global challenges. Recalling the series of GSR Best Practice Guidelines since 2003 that capture established regulatory principles, expertise and tried-and-tested practices, our focus is on novel, bold and ground-breaking approaches and tools for digital regulation.

We have collectively identified and endorsed these regulatory best practice guidelines to continue setting the gold standard for digital regulation. We are more engaged than ever to put these to work to build the digital momentum in the Decade of Action.

I. Inducing new, effective and agile financing mechanisms to digital infrastructure, access and use

Government and private industry are making significant investments to upgrade digital infrastructures and promote access for all, to deliver more reliable, resilient, high-capacity Internet to homes, government offices and businesses. However, achieving universal connectivity will require new enablers and a holistic perspective.

The role of government is to clear the way to such investment and support a vibrant, competitive markets for future-proof broadband and digital services. On the other hand, regulators and policy makers might need to adopt alternative approaches to spur investment in non-commercial or challenging areas.

Policies and strategies can trigger the multiplier effect of digital by providing predictability and direction

- *Design an overarching strategy setting out the long-term plan for digital development and economic recovery*, including for developing the infrastructure for superfast broadband with the

right mix of models and approaches to support affordable fibre availability over as wide an area as possible.

- *Rescope rural connectivity policies* to give priority to technologies and projects that show sustainability, efficiency, and rapid implementation.
- *Consider adopting an overarching digital transformation strategy and augment it with new generation policies for the digital economy* with a focus on stimulating financing mechanisms for innovation, skills development, job creation and the development of the startup and small and medium enterprise (SME) ecosystem with concrete implementation mechanisms and targets.
- *Engage in whole-of-government collaboration and coordination and the national and local level* to leverage synergies and the pooling of funds, and address social and economic priorities, notably between Ministries of ICT, Economy/Finance, and Planning but also other Ministries (e.g. Education, Health, Agriculture, Transportation, Energy, etc.) and with local authorities, and convene a multistakeholder policy dialogue involving the public and private sectors, international donors and organizations, and civil society.

Investment is the cornerstone of the digital transformation

- *Design incentives and opportunities for blended public and private financing and partnerships* in high-capacity broadband infrastructures, and consider *providing smart government subsidies* to support deployment in the near-term
- *Promote public spending on basic infrastructure, such as energy and transport*, which represent a substantial cost in the provision of broadband.
- *Promote sustainable and green investments* to accelerate progress on achieving the 2030 Agenda.

Regulatory tools are at hand to bridge the funding and financing gap in digital markets

- *Ensure the efficient and responsible disbursement of existing Universal Service and Access Funds (USAF)* to extend digital connectivity to unserved and underserved communities. New breeds of national Funds could support the development of digital infrastructure, such as Infrastructure Funds and Innovation Funds, across economic sectors.
- *Support innovative financial instruments and create targeted incentives for traditional and new economic agents* in infrastructure deployment with a focus on underserved areas, such as blended grants and guarantee schemes to provide tailor-made solutions.
- *Promote local innovation ecosystems* and provide incentives for the participation of small and community operators in deploying low-cost rural networks, including specific licensing measures, access to key infrastructure and funding, and social coverage promotion programs.
- *Implement sound tax policy strategy to foster digital economy*, including tax incentives or tax deductibility for new investments in infrastructure, tangible and intangible assets such as ICT equipment and software, and remove sector specific taxes on digital services, devices and equipment.

A sharp focus on policy implementation is needed to ensure impact

- *Adopt policy and regulatory measures to make digital devices and services available and affordable*, including through connecting schools, local government offices and health centers; subsidized Internet access and digital devices ownership schemes, creating e-government applications and promoting local digital content.

- *Design and implement demand creation for broadband services and digital literacy programs, including with focus on women and girls, people with disability and marginalized groups*.

Regulatory basics still apply

- *Adopt streamlined regulatory and licensing policies and procedures and reduce costly regulatory fees and licensing burdens*, making it easier for businesses to invest, create jobs and grow the economy.
- *Consider adopting cost-based charge controls* applicable to operators with market power to ensure they are able to cover the costs of their investment in rural and underserved areas.
- *Leverage infrastructure sharing strategies* to reduce the cost of infrastructure deployment and service provision, as defined in the GSR-08 Best Practice Guidelines.

II Prototyping regulatory patterns for the post-COVID digital world

The post-COVID digital world needs a new take on regulation. New approaches may be needed to enhance regulatory foresight, harness data to target interventions and create space for regulators and industry to experiment together. This is key in finding market solutions to new challenges as new technologies, business models and players continue to test existing regulatory paradigms. Such new approaches will build sound solutions that protects consumers while encouraging market growth and innovation.

Novel regulatory tools can unlock the power of new and emerging technologies

- *Commit to the adoption of multi-modal regulatory frameworks* that enable the development of emerging technologies and business models. A range of co-regulatory and self-regulatory patterns can allow technology developers and providers to respond rapidly during a crisis without the need for emergency legislative changes and, in normal times, enables faster and more efficient network rollout at a lower cost for consumers and businesses.
- *Extend the ex-post approach to regulation and competition to digital markets* and where the market can sustain it, *promote broadband network infrastructure competition*, in addition to access-based *service* competition and infrastructure sharing.
- *Enhance innovation in emerging areas by creating safe space for regulatory experimentation* such as innovation testbeds and regulatory sandboxes to allow fine-tuning new business models and foster resilience of future networks and services.
- *Allow broadening legal frameworks for experimental regimes for digital innovation* using regulatory sandboxing to multiple sectors, such as medicine, transport, agriculture, finance, commerce, and government services and oversight. Such regimes would allow for safe and sound testing of emerging technologies and their applications ahead of hitting markets (e.g., artificial intelligence, blockchain, big data, neurotechnology, quantum technologies, virtual reality). Such measures will facilitate the digital transformation and help address new challenges and emergencies.

Spectrum innovation is key for the digital future

- *Set policies that guarantee an effective use of spectrum* through moderate pricing and prioritize the expansion of networks over maximizing revenues for the government can have a significantly favorable impact on the digital economy, infrastructure investment and bringing benefits to

remote or more disadvantaged areas, in particular in the context of emerging technologies (such as 5G and Internet of Things, IoT),

- *Adopt a multifaceted approach to freeing up additional spectrum* in the low, mid, and high bands for a variety of business plans to successfully meet the need for additional network capacity while facing finite spectrum resources, including *releasing spectrum for the establishment of community networks* on a technology-neutral basis.
- *Enable more efficient spectrum usage* by balancing both licensed and unlicensed uses and c*onsider new rules for expanding unlicensed broadband* into the 6 GHz band to create an opportunity for innovators to provide new and advanced services, such as the next generation of Wi-Fi (*i.e.*, Wi-Fi 6), while also ensuring that licensed incumbent operations in the band continue to flourish.
- *Allow setting up trial platforms for new technologies* where licensed and unlicensed operators and industry players can access available infrastructure for trialing their own use cases (including for 5G, the IoT).

Data is the silver bullet of digital regulation

- *Build research and data analytics capabilities* to inform regulatory decision making and foresight, monitor policy implementation and identify emerging regulatory issues with regards to industry, consumer and market developments.
- *Adopt data-driven tools* in decision-making (including big data and open data schemes), machine learning tools and online platforms, including national GIS systems to identify white and grey areas and coordinate the deployment and sharing of digital infrastructures, such as national infrastructure mapping systems.
- *Ensure that regulators are empowered* to collect relevant data from market players and have capacity to develop regulatory tools to address identified failures in ICT and digital markets.

III Transformational leadership to unleash the power of emerging technologies and business models

Technology developments and economic disruptions in the aftermath of the global COVID-19 crisis are affecting policy settings. Investment gaps and scarce available funding for digital infrastructure and services are exacerbating the need to review policy and regulatory frameworks beyond national boundaries or sectors. The COVID-19 pandemic highlighted the need for agile, responsive regulatory action and leadership.

Digital policies and regulation hold a three-fold promise - as a tool for driving the digital transformation of the economy; as a framework for the digital transformation of regulators and regulatory governance; and as an interface for cross-border collaboration and coordination on thorny issues related to digital markets.

Transformational leadership will be rooted in new and revisited approaches to digital and collaborative regulation.

Regulators and policy makers are the master builders of the digital transformation

- *Be equipped with clear, ambitious but executable regulatory roadmaps*, integrating a medium-term strategic perspective on the broad digital market development. The roadmaps need to define priorities, responsibilities and set measurable targets and metrics for markets and the

regulator. Their implementation needs to be coordinated across government agencies and with private sector stakeholders.

- *Adapt regulatory governance structures to the new digital mandates, capacitate regulators* to ensure they are adequately equipped to deal with the old and new issues and define mechanisms for coordination and collaboration amongst government agencies to allow for pooling of resources and expertise.
- *Ensure the engagement of regulators in the legislative initiatives* that have impact on the sector under their mandate and within their competences.
- *Develop the advisory role of regulators across sectors towards industry and citizens*, specifically through engaging in new initiatives such as innovation labs that help startups grow and work together, digital mentorship schemes, and research programs.

A regulatory paradigm shift is needed to deliver on the digital dividend for all

- *Build accountability, focus on outcome in the design and implementation of collaborative regulation practices* by integrating regular and transparent stakeholder engagement and building new regulatory partnerships, including for overseeing the development of voluntary codes of practice by digital platforms.
- *Reinforce regulatory agility and transparency* by providing a clear rationale to the public for how and why regulatory decisions are made; monitoring and implementation of rules and guidelines with stakeholders.
- *Enhance the design, administration and effectiveness of regulation*, de-regulate areas that no longer require extensive regulatory oversight and *reconfigure regulatory capacity* to address gaps and new areas.

Given the borderless nature of the digital economy, introducing international and regional cooperation mechanisms with a focus on addressing the thorny issues related to digital trade, data protection, Internet of things and taxation will allow 5th generation collaborative regulation (G5) span geographies and markets to facilitate cross-border collaboration.

National regulators and policy makers have a role to play at the international arena

- *Step up national and international engagement strategies* and work closely with the international multi-stakeholder community as well as with other national and foreign regulators on transboundary issues in the digital ecosystem.
- *Cooperate and build a common understanding at the international level on issues surrounding anti-competitive behaviors in the digital economy* and converge towards a certain level of regional harmonization in view of spearheading innovation and investment in digital.
- *Encourage regional and international cooperation on data privacy and cybersecurity* initiatives to streamline the patchwork of data privacy and cybersecurity rules and practices into common regional or global standards and laws and allow free flow of data and digital trade.
- *Intensify international cooperation on cross-border data flows* to ensure that data localization requirements and other restrictions on cross-border data flow do not unduly interfere with cross-border communications and the economic and societal benefits that global data networks make possible and are minimally trade-restrictive, while promoting trust.