Dear Sirs,

In accordance to your kind invitation to support the development of the GSR-25 Best Practice Guidelines and to contribute to the ongoing consultation on the theme ***"What does it take for regulators to become digital ecosystem builders?"***, please, find below some ideas, views and experiences related to the questions you have emphasized at the ongoing consultation link Contributions – GSR-25.

First question

Fostering innovation in regulatory approaches: *How can regulators cultivate an innovation-driven culture in regulatory work and decision-making? What new skillsets and mindsets do they need today?*

Ideas, views and experiences related to the first question:

Regulation is one of the five key drivers of every sector of the economy, the other four being Consumer Behavior, Industry Value chain changes, Macroeconomy and Technology Changes (Nwana, 2024). Over the last two decades, the rate of change of the other factors have been accelerating, e.g. consumers demand to be able to do their banking 24/7; the telecoms industry value chain has evolved into the Internet Value Chain and OTTs (GSMA, 2022); technology changes such as Internet Protocol (IP), Industry 4.0, blockchains and AI are being very disruptive. This means some of the following in terms of new skillsets and mindsets for regulators:

- Regulators have traditionally been very cautious 'watchdogs' - they now need to become *curious and fast learning collaborators*. M-Pesa mobile monies craze emerged because of Kenyan regulators took a curious and collaborative stance, rather than 'regulating away' such a major innovation benefiting hundreds of millions today across emerging markets.
- Mindsets: the new regulator's mindset therefore requires:
    - Agility over rigidity: agile and iterative policy and rule making
    - Adaptivity and being iterative instead of "set the rules and forget"
    - Being curious
    - Being collaborative
    - Adopting more of a Risk-based approach to regulation
- Skillsets: the new regulator's skillsets include:
    - Understand when and where to use different forms of regulation: No regulation, Self-regulation, Co-regulation, Statutory regulation, Meta-regulation and Regulatory Networks.
    - Tech fluency: they should start learning to use tools such as AI Large Language Models (LLMs) and understand the implications of such new technologies in the hands of industry.
    - Data Analytics and Foresight: data is truly the new Oil of the 2020s and beyond.
    - Smart collaborators: smart collaborations with industry, academia, Governments and with other regulators.
    - Continuous learning: a good example is how Saudi Arabia's Communications, Space & Technology Commission (CST) has launched its Digital Regulatory Academy to upskill staff on all things about regulating in a digital economy world.
- Regulators need to encourage their employees to establish and maintain an innovation-oriented mindset and skillset at their daily work in order to bring the way of thinking out of box and to embrace more proactive way of work beyond traditional regulatory work.

- The learning process should be based on both failures and successes feeling comfortable to share the ideas with the colleagues through brainstorming meetings in order to achieve better outcomes.
- Continual education and training of employees in order to be involved as much as possible in future trends in regulated industry development to provide faster response to innovation focusing on achieving desired outcomes and estimation of pros and cons.
- Strengthening the communication and collaboration with industry, academic institutions, and other stakeholders during the development of regulations will bring more effective and tailored solutions, better evaluation of the impact of regulations as well as better understanding of new technologies (e.g., AI, blockchain, data analytics) and their use in daily work.

Second question

Adapting and enhancing regulatory capacity: *How should regulatory mandates, capacity and decision-making evolve to balance market innovation with digital inclusion and support the achievement of broader social and economic policy goals? What institutional mechanisms can enhance regulatory responsiveness to emerging digital business models and evolving risks?*

Ideas, views and experiences related to the first question:

Balancing market innovation and digital inclusion is getting trickier because the evidence is more that those who are digitally connected are getting disproportionately more benefits, whilst 2.6 billion are not connected at all (ITU, 2024). So, is it really okay that regulators turn more of their attention to newer and desirable innovations, whilst 1/3 of the world is not connected at all and another third are not meaningfully connected? Therefore:

- Regulatory Mandates need evolving: for example, mandates for regulators need to be evolved to emphasise digital inclusion more (EC). *Inclusion* should arguably become as important as *interconnection*.
- Evidence-based and Inclusion-driven decision making for regulators: following from latter vis-à-vis digital inclusion, addressing usage gaps root causes as well as coverage gaps are now critical. The BharatNet connectivity programme in India is rightly driven by these needs – in their quest to digitally connect all Indians.
- Building Capacity of Regulators: this is becoming more and more acute:
    - Tech-fluent staff
    - Understanding AI, Cybersecurity, Data Science, Mobile Financial Services
    - No more 'ivory tower' regulators – cross-sector regulation: they need to collaborate with other stakeholders and fellow regulators more.
- Institutional mechanisms: these are becoming more acute too:
    - Understand when and where to use different forms of regulation: no regulation, Self-regulation, Co-regulation, Statutory regulation, Meta-regulation and Regulatory Networks.
    - Use more of Incentive Regulation: Incentive regulation is a framework applied in telecommunications and utilities to encourage efficiency, innovation, and consumer value, functioning as an alternative to cost-plus models. Under this approach, regulators establish performance targets, and firms may benefit if they surpass these objectives. The model places emphasis on performance outcomes rather than solely on cost recovery. Firms can receive rewards for reducing costs, improving service quality, or meeting policy objectives, such as increasing rural connectivity or working toward net-zero emissions.
    - Use of Regulatory sandboxes for piloting new technologies like AI, blockchains, etc.

  - Digital Regulatory Academies (like CST in Saudi Arabia, Cenerva Regulatory trainings, Cullen Regulatory training, etc.)
  - Collaborative Governance Model: no more 'ivory tower' regulators – cross-sector regulation: they need to collaborate with other stakeholders and fellow regulators more as well as with Governments' entities and policy makers in order to support and to educate the employees in state administration and to raise the awareness of policy makers. This would lead to a legal and market environment in which the benefits of technological and regulatory improvements would be valorised, especially so in cases where the state administration has limited administrative capacity and cannot have the dynamics and vision of the development of the legal framework that is needed for the development of regulation and the EC/IT market.
- Regulators need to provide the continual development of their administrative capacity and the growth of competences of their employees through the investment into their education and trainings in order to anticipate and adapt to rapidly changes of technology and to improve regulatory processes.
- Regulators should ensure that whole society, especially vulnerable populations such as the citizens with the insufficient financial support, the citizens with the special needs and disabilities, children and elderly people, marginalized population etc., have access to new technologies and services in order to exploit the benefits of digital inclusion.
- Regulators should focus also on end-user needs: their continual information and education especially regarding user rights and protection, ensuring that they have control over their personal information.
- By engaging AI and Data analytics to improve the development and implementation of regulation mechanisms and rules, regulators can ensure more effective and relevant outcomes.

Third question

Harnessing transformative technologies for regulatory excellence: *How can regulators better leverage Artificial Intelligence, big data, Internet of Things, blockchain and other digital technologies to enhance decision-making, compliance monitoring and regulatory agility? What technology tools and applications can regulators use to strengthen transparency, stakeholder engagement and public trust in regulatory processes*?

Ideas, views and experiences related to the first question:

In general, many regulators in emerging markets should do their jobs much better to promote competition and drive for maximum inclusion in the sectors they manage, whilst being agile towards innovations around them. This should continue to be the priority. However, and in addition, they could consider the following too:

- Regulators can use AI for predictive analytics, forecasting potential compliance risks to enhance decision-making by analysing historical data and real-time inputs in order to proactively address possible risks before they become challenging ones. Also, AI can be used in document analysis, e.g., by quick scanning and interpreting a number of legal and regulatory documents regulators can ensure compliance.
- However, the main question is how to regulate AI in order to use it safely and without posing any risk by using it. This is because AI technologies are evolving and improving quickly, and it becomes very difficult for regulators to keep up with AI tools and applications development because of lack of regulators expertise in AI field.

Fourth question

Cross-border cooperation for building national, regional and global digital ecosystems: How can regulators leverage regional and international cooperation to foster harmonized regulatory approaches, knowledge exchange and capacity-building?

Ideas, views and experiences related to the first question:

Regulators must become those who help connect trust and innovation in order to build thriving digital ecosystems nationally and across borders. Just consider e-commerce as an example: regional and international cooperation is not just a nice-to-have - it is a MUST HAVE for harmonizing rules, sharing knowledge, and scaling digital inclusion. So,

- Harmonize regulatory approaches
  - Like in the EU-27 with their EEC Code
  - Adopt international and regional common rules and standards more like the ITU does for spectrum, standards and more.
  - Support more regional laws regulations, like the EU AI Act
  - Mutual recognition agreements (MRAs)
- Knowledge Exchange & Capacity Building: this is sorely needed
  - Regional for a for Capacity Building, e.g., Smart Balkans, Smart Europe, Smart Africa, Smart Asia, Smart America etc.
  - Global regulatory academies, Regional Regulator Forums under umbrella of ITU (RRF) etc.
  - With the advance of technology development and the lack of experts within Regulators in many new challenging fields for regulations (e.g., DSA, DNA etc.), it becomes necessary to provide strong connections with the different regulatory bodies within country as well as with the similar regulatory bodies internationally in order to make regulation more effective. These connections should be strengthened by signing the Memorandum of Understanding or Memorandum of Cooperation between regulatory bodies.
  - Sharing experts and knowledge among regulatory bodies (within the same or different field of regulation) by organizing working groups in order to track technology trends, and to identify possible regulation challenges brought with new technologies, is crucial to achieve efficient and effective regulations within global digital challenges. Those working groups can educate and train the regulatory staff to deal with new ways of regulation and at the same time to be initial support points in further collaboration. Also, this way, they will stimulate the exchange of best practices (e.g., methods of regulation, organizational schemes of regulators etc.) among regulatory bodies in order to contribute to the efficiency of regulators. For example, in order to prevent operators of electronic communication networks from gaining a market advantage by leveraging their exclusive contracts with the owners of digital platforms that monopolize popular media content, regulators of electronic communication networks should seek assistance, education, training, and collaboration from media regulators.
  - Working together to identify and analyse the relevant international markets (especially at the regional level) that affect the effectiveness of individual national regulations.

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M-Pesa [Safaricom's] - M-Pesa is a mobile phone-based digital wallet and money transfer service widely used in Kenya and elsewhere in Africa like Democratic Republic of Congo (DRC), Egypt, Ghana, Kenya, Lesotho, Mozambique, Ethiopia and Tanzania. M-PESA Africa - https://www.m-pesa.africa/what-is-mpesa

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BharatNet: Bridging the Digital Divide. [Online]. Available: https://pib.gov.in/PressReleseDetailm.aspx?PRID=2086701&reg=3&lang=1 - India's BharatNet connectivity programme is arguably the world's largest rural connectivity initiative. The programme was first set up in 2010 to bridge the digital divide across India. In the early 2010s, digital adoption in India was low, with total Internet users around 92 million[1]. Launched in the early 2010s when Internet penetration was merely 92 million users, the programme has contributed to a remarkable increase to 900 million users by 2025.

EEC Code - The European Electronic Communications Code is a set of rules on electronic communications in the EU. The Code entered into force on December 21, 2018. The EECC is a comprehensive set of rules for the telecommunications sector in the EU and the European Economic Area. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:european_electronic_communications_code.

EC (European Commission) - https://digital-strategy.ec.europa.eu/en/policies/digital-inclusion

RRF (Regional Regulator Forum) - ITU-EKIP Regional Regulatory Forum for Europe 2025

[1] "Internet users by region and country, 2010-2016." Accessed: Feb. 10, 2025. [Online]. Available: https://www.itu.int/en/ITU-D/Statistics/Pages/stat/Treemap.aspx