Contribution to GSR-25 – Best Practice Guidelines

Title: "What does it take for regulators to become digital ecosystem builders? "

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Digital transformation is not just about adopting advanced technologies; it must be part of a broader societal vision, where innovation supports inclusion, justice, and sustainability. In this context, regulation plays a central role: it must not only guarantee equitable access to digital services by reducing geographic, social, and economic inequalities, but also build trust through data protection, algorithmic transparency, technological neutrality, and cybersecurity. Finally, it must encourage international and intersectoral cooperation, which is essential to address major cross-cutting challenges such as the environment, education, health, and energy.

It is with this in mind that The Regulatory Authority of Post and Electronic Communications (ARPCE) is fully in line with the GSR-25 guidelines.

Through its response to the consultation, the Regulatory Authority highlights the importance of fostering innovation in regulatory approaches, strengthening institutional capacities, harnessing transformative technologies for more effective and proactive regulation, and developing strong cross-border cooperation to build open, inclusive and resilient digital ecosystems.

1. Promote innovation in regulatory approaches

In a context of rapid digital transformation and the emergence of new technologies, it has become essential for any regulator to incorporate a strategic monitoring center into its organizational chart, which aims to mainly establish Data Science and Artificial Intelligence, in order to beneficially and efficiently exploit all the data circulating in the market, and instill a culture of innovation and forecasting in their activities and decision-making.

Regulatory excellence is increasingly defined by the extent to which a regulator integrates advanced technologies into its practices. With this in mind, and in order to achieve intelligent paperless regulatory processes, it is necessary to achieve a high level of expertise in Information Technology and Artificial Intelligence.

With a view to:

- Leveraging AI and predictive analytics to identify signals well beyond a certain threshold and preemptively mitigate systemic risks (in cybersecurity, spectral congestion, disinformation, etc.).
- Enable dynamic monitoring through Big Data and the Internet of Things (IoT) regarding access, quality
 of service, coverage and digital inclusion.

With these considerations, the regulator becomes an exemplary participant in the regulated relationship with technology by being ethical, secure and responsible.

2. Adapt and improve regulatory capacity

In a context where technological innovation cycles evolve much faster than traditional regulatory development processes, it is essential that regulatory authorities strengthen their institutional agility. Regulators must therefore adopt the following avenues:

- Invest in strengthening internal capacities, with an emphasis on ongoing team training and the integration of multidisciplinary profiles (lawyers, engineers, economists, experts in data science, cybersecurity or AI) capable of anticipating changes in the digital sector.
- Adopt regulatory experimentation mechanisms, such as sandboxes, to enable supervised experimentation of new economic or technological models (non-terrestrial networks, digital currencies, generative AI, etc.) before their widespread adoption.

- Promote adaptive governance, based on impact assessment, feedback and multi-stakeholder consultation processes, in order to ensure responsive regulation, based on field observation.
- Carry out a periodic evaluation of institutional mandates to ensure that they effectively cover the new challenges linked to the digital economy (platforms, data sovereignty, cybersecurity, smart infrastructures, etc.).
- Organize symposiums and technical meetings bringing together the various stakeholders in the field, with the aim of allowing each participant to express their ideas and proposals.

This adaptability should not be seen as a dilution of the rules, but as a strategic requirement to maintain the relevance, legitimacy and effectiveness of regulatory frameworks in a constantly changing technological environment.

3. Harnessing transformative technologies for regulatory excellence

With the rapid digital transformation, regulators now have a range of powerful tools at their disposal to adapt their approach. Leveraging advanced technologies such as artificial intelligence, big data, the Internet of Things (IoT), and blockchain paves the way for more responsive, more refined, and data-driven regulation.

Big Data offers the ability to process massive volumes of information from digital platforms and operators in real time, not only optimizing resource allocation but also accurately identifying underserved areas, competitive imbalances, or structural dysfunctions. Cross-analysis of this data makes it possible to produce key performance indicators (KPIs), disseminated dynamically and contextually, to fuel proactive, targeted, and factual decision-making.

Artificial intelligence complements this logic by transforming collected data into real drivers of regulatory action. Using predictive models, AI can anticipate market developments, detect risky or non-compliant behaviors, and assess the potential impact of proposed regulatory policies. Combined with intelligent agents (bots) and automated detection systems, it offers the possibility of implementing intelligent monitoring systems capable of continuously identifying deviations from established standards.

This combination of Big Data and Artificial Intelligence thus strengthens regulatory agility, giving regulatory authorities the means to react quickly, adapt frameworks in real time, and manage regulation based on verifiable data. This represents a shift from static regulation to dynamic, evolving regulation, focused on anticipation rather than reaction alone.

4. Cross-border cooperation for the construction of digital ecosystems

Cross-border cooperation is an essential factor in building coherent digital ecosystems at national, regional and global levels.

It helps develop common standards, harmonizing regulatory frameworks and reducing barriers to digital trade. Through regional and international digital platforms, regulators can benefit from continuing education opportunities (e-learning, webinars) tailored to local needs, while improving their expertise on emerging technical topics. The development of structured partnerships, via institutional twinning, promotes the sharing of best practices, the pooling of technological tools, and the optimization of internal capacities. This collaborative dynamic strengthens mutual trust between regulatory authorities, facilitates the joint adoption of digital solutions, and positions regulators as key players in agile, coordinated, and sustainable digital governance.

Conclusion

In an environment that is both innovative and constantly changing, regulation must evolve to become a true lever for responsible innovation. It must combine technological mastery, constant adaptation, cross-border cooperation, and respect for ethical values. By adopting this approach, regulators can not only ensure equitable digital development but also strengthen trust and efficiency in the governance of the global digital ecosystem.

The contribution to GSR-25 – Best Practice Guidelines of The Regulatory Authority of Post and Electronic Communications (ARPCE) – ALGERIA