

RIPE NCC Contribution to the GSR-26 Best Practice Guidelines Consultation

On behalf of the Réseaux IP Européens Network Coordination Centre (RIPE NCC), we are pleased to contribute to the Global Symposium for Regulators 2026 (GSR-26) consultation on best practice guidelines under the theme: “Regulatory Governance Essentials: What’s the new core kit regulators need to make digital markets deliver?”

As a Regional Internet Registry (RIR) serving over 20,000 members across Europe, the Middle East, and Central Asia, the RIPE NCC plays a key role in coordinating the allocation of Internet number resources, supporting IPv6 deployment, and promoting routing security and network resilience. We welcome the opportunity to share how regulatory governance essentials can strengthen measurable outcomes for connectivity, security, and resilience, while preserving global interoperability and avoiding unintended fragmentation of the Internet.

Executive summary

Digital markets rely on an Internet that is scalable, secure, and resilient. Regulators can strengthen outcomes with a toolkit that prioritises measurable results over compliance formalities and relies on capacity building and incentives before resorting to intrusive interventions. Cooperation, whether regional or global, helps to reduce fragmentation by aligning metrics, harmonising governance, and preventing the emergence of conflicting rules and policy frameworks.

Question 1 – What is the baseline toolkit for digital governance, beyond rules? A modern baseline toolkit combines outcome-based obligations with incentives, assurance, experimentation, and structured coordination.

A baseline toolkit for digital governance requires open participation and concrete incentives that promote an inclusive digital transformation.

An effective digital governance toolkit should align efforts towards achieving the Sustainable Development Goals (SDGs) by setting clear targets and facilitating structured coordination among stakeholder groups. Targets should focus on addressing skills gaps, supporting the deployment of digital and Internet infrastructure, and supporting the digitalisation of business and public services.

In this context, the RIPE NCC stresses the need to understand the different layers of the Internet and to make a distinction between digital governance and Internet governance. The former covers the policy and regulatory choices that shape digital development and markets, while Internet governance concerns the stewardship of the Internet’s core technical layer (particularly addressing and routing, DNS, and operational coordination). Effective digital governance must respect the boundaries between the Internet’s technical functions and the regulation of the application and content layers it supports. While these layers are interdependent, they serve different purposes and require distinct approaches. Aligning policy interventions with the appropriate layer helps to avoid unintended consequences and supports the global interoperability and resilience that make the Internet a shared resource.

Accordingly, the governance essentials should be framed as technology-neutral, outcome-based obligations for service quality, resilience and security, complemented by measures that strengthen national Internet infrastructure without introducing fragmentation risks.

Question 2 – How can governance essentials be made measurable and enforceable across sectors? What outcome metrics and evidence standards should anchor these essentials (e.g., meaningful connectivity, affordability, accessibility, reliability, consumer harm reduction, market contestability), and how can reporting and observability models provide effective oversight proportionately and without excessive burden, across sectors?

From a RIPE NCC perspective, it is important that the metrics set includes indicators which capture the robustness of the underlying Internet infrastructure. Meaningful connectivity should be tracked via availability, latency and stability, and explained using infrastructure signals that RIPE NCC works with, namely local interconnection maturity (IXP and ASNs) and IPv6 capability.

Among the “outcome metrics” and “evidence standards” mentioned, we would recommend considering the following elements:

- Affordability should be measured by price-to-income and entry-level affordability, and linked to structural cost drivers, including reliance on international transit, which can be reduced through better local interconnection.
- Accessibility should reflect adoption and inclusion gaps and the readiness of essential services to be reachable over modern protocols, with IPv6 readiness as a practical indicator of future-proof access.
- Reliability and resilience should combine outage frequency/duration with systemic risk indicators and include routing security posture (RPKI deployment and route origin validation), as it directly reduces the risk of disruption.

Regulators should avoid relying on a single metric or data source and instead combine the information provided with independent measurements and openly documented methodologies.

Question 3: What should a predictable, graduated supervisory and enforcement pathway look like when risks rise or harms occur? How should regulators move from guidance and targeted remedies to more directive interventions, and how should the pathway be designed to ensure due process, cross-agency consistency, and clear criteria for scaling back measures when conditions improve?

In general, regulators should apply an evidence- and risk-based approach to ensure proportional enforcement and remedies. Key aspects also include an escalation model that starts with observability and guidance (baseline indicators and benchmarking), then moves to targeted supervision and time-bound improvement plans. From our perspective, remedies should remain focused on preserving or encouraging interoperability.

A predictable pathway should also distinguish digital governance harms (market and consumer outcomes) from operational Internet governance issues, primarily affecting connectivity and interoperability.

Tools such as RIPE Atlas and RIPEstat can support an observability-first approach by providing independent measurements and reproducible analytics of connectivity, reachability, and network characteristics, while the RIPE NCC Routing Information Service (RIS) strengthens routing observability to detect and analyse BGP incidents.

The RIPE NCC's RPKI service and related resources provide a practical basis to assess and improve routing security posture (for example, ROA coverage and adoption of route origin validation). Combined with training and certification programmes to disseminate operational best practices, these tools help regulators and stakeholders evaluate how policy proposals affect the Internet's core properties and translate policy objectives into measurable infrastructure improvements, while preserving global interoperability and permissionless innovation.