

GSR10 - Draft best practices

With the growing complexity of the ICT market environment, there is a need to rethink the different degrees of regulations to anchor national broadband strategies and regulatory frameworks around the multi-faceted concept of open access to and over networks, which provides for achieving effective competition while ensuring accessible, affordable and reliable services for consumers.

A new ladder of regulation may now be required to set the right balance between service competition and infrastructure competition to address the challenges of access to broadband networks and services including ensuring equal and non discriminatory access to the networks lifting potential bottlenecks that would prevent the end users from enjoying the full benefits of living in a digital world. The characteristics of which are based on speed and ubiquity of access irrespective of the networks providers and users' location.

We, the regulators participating in the 2010 Global Symposium for Regulators, have identified, and proposed the following best practice guidelines on a new ladder of regulation: best practices for enabling open networks.

I. Defining open access: making sense of the various concepts

1. We note that access can have two forms: whether this is regulated open access (such as unbundling) or commercial open access, the key point is that this means the possibility for third parties to use an existing infrastructure.
2. Every user (customer) should have access to all services and applications carried over these networks, regardless of who is supplying or using them, and in a transparent and non-discriminatory fashion. User's range of choice should not be unduly constrained by the inability of competitors to obtain access services especially over the last mile infrastructure.

II. Open access to networks: what policy and regulatory tools to enable opening up access to network facilities (i.e., international fibre networks, "essential" or "bottleneck" facilities, other networks) without harming investment and innovation?

1. We stress the importance of legislation to set out the general principles of open access, non-discrimination, effectiveness and transparency, stressing the importance of both active and passive infrastructure sharing in the deployment of electronic communications networks – in a technologically neutral and symmetric approach – in property owned by any operator, private entities and public bodies, even if they are operating in other sectors.
2. Regulators may consider mandating the providers of national broadband networks and cable landing stations to provide open access on a fair and non-discriminatory basis of its network and essential facilities for competitors at different levels within the network.
3. We recognize the importance of wholesale regulation and obligation to publish reference offers to bottleneck essential facilities as means to ensure open access.
4. We recognize that, in countries where deployment of fibre optic networks in new buildings is planned, the regulators need to define rules that ensure equal and shared access, prevents discriminatory behaviors and monopolization by the first infrastructure operator in buildings.
5. We recognize that a centralized information system, containing the data records of infrastructures held by public bodies and by electronic communications operators and that can be shared, is of fundamental importance. We encourage operators to set up and make available in a database accessible through an extranet page, information regarding

passive infrastructure (civil elements such as ducts and towers) that can be shared(including paths and space available), with the respective price oriented to costs.

6. We recognize the importance of coordination among all stakeholders to prevent (or address) any barriers to the deployment of broadband networks and define flexible rules adapted to this fast paced environment.

III. Open networks: how to ensure that every citizen has access to the benefits of ubiquitous broadband networks (i.e., through policies for universal access to broadband, transition to NGN, leveraging on the digital dividend)?

1. We recognized that efficient allocation and assignment of the digital dividend spectrum, will result in social and economic benefits that could stimulate innovation for lower-cost communications especially in rural and remote areas of a country.
2. We suggest that governments may update the characteristics of universal service as needs evolve to ensure technology neutrality and the inclusion of broadband access. We note the need to put in place concrete national plans and strategies to stimulate deployment of broadband networks, particularly in developing countries. This strategy should consider setting up of Public Private Partnerships as well as promoting the involvement of municipalities or cities.
3. We believe that, given the importance of broadband and its infrastructure for the entire economy as well as the challenges in attracting investments for large scale deployment, governments should consider the role of the state in funding the national broadband infrastructure partially through PPP or totally (through the US funds?).

IV. Open Internet: how to handle traffic management over increasingly congested networks while applying fair rules?

1. With regard to traffic management, we recommend that, as a general rule and to the extent possible, no differentiation be made between the way in which each individual data stream is treated, whether according to the type of content, the service, application, device or the address of the stream's origin or destination.
2. We recognize that to improve traffic management, regulators should take measures such as:
 - impose information (release?) obligations for network operators,
 - allow for clients to quickly end their contract without high switching costs,
 - allow for clients to prescribe minimum quality of service for internet access,
 - create a policy directive stating the rights of consumers to access any legal content, applications, and services over their internet access, and
 - to connect to the network any devices that do not harm it.
3. We recommend that when ISPs do employ traffic management mechanisms for ensuring access to the Internet, that they comply with the general principles of relevance, proportionality, efficiency, non discrimination between parties and transparency.
4. Regulators may consider the creation of local content and the development of local Internet exchange points (IXP), to limit the outbound data flow.

V. Open access to content: what role for regulators in bringing public services online (i.e. e-government, e-education, e-health) and creating demand for such services?

1. We stress the importance, on one hand, of the creation of preconditions for the organizational, legal and technical, standardization and interoperability aspects, so that public authorities can offer their services electronically and, on the other hand, that

public web-sites be created and maintained to be user friendly and accessible to all, according to relevant guidelines and standards.

2. Regulators may also like to ensure connectivity of broadband of all schools, health centres and hospitals so that citizens may benefit when connecting through high bandwidth to these services.
3. We note that there is a definite need to create awareness about the risks of technological progress among consumers and take necessary measures for data protection, consumer rights, and protection of minors and vulnerable segments of the society.

VI. Challenges to open networks (i.e., cyberthreats, unforeseen aspects of the Information Society, disputes, regulatory efficiency and consistency across services and networks): what strategies?

1. We note that open networks pose challenges in terms of network stability, business continuity, resilience, critical infrastructure protection, data privacy and crime prevention. IP networks, being based on open architecture and well known protocols, are vulnerable to cyber attacks. The complexity of the challenges require cross-cutting approaches in the form of multi-stakeholder processes on the one hand and enhanced inter-service co-operation between the various authorities concerned on the other.
2. We note that it is essential that service providers control outbound as well as inbound traffic. Outbound-traffic control stamps out attacks at the source and thus stops them from spreading, without subjecting the network to congestion.
3. We recognize that security has to transition from the traditional reactive stance to an incrementally proactive stance by reducing windows of vulnerability, improving reaction times, and effectively mitigating attacks. Also, we stress that preventing attacks by patching vulnerable systems, implementing firewalls or other access control technologies, monitoring through intrusion detection systems, and responding to the threats in real time, have become crucial to effective network operation.
4. We stress the importance of a harmonized regulatory framework within regions and the establishment of a broader dialogue between all the actors so that this central issue of open access networks can be further discussed and the appropriate measure taken.