

4th Generation Regulation: Driving Digital Communications Ahead

The telecommunications sector has evolved overtime into highly dynamic, innovative and technology driven markets transforming the environment from a traditional regulated level playing field into an ecosystem where regulated and unregulated players compete. In this rapidly evolving environment, the regulators, being firstly responsible for the industry's health, need to reassess the classic regulatory approach based on the theory of natural monopoly.

It is well known that the impact of ICT development is far beyond the scope of the industry, therefore regulatory measures that could inhibit its growth would hinder the global economy in terms of social inclusion, employment creation and productivity. This calls for a rethink of the conventional telecommunication regulation and a move towards ICT regulation that would take into consideration competition, investment and innovation, external dynamics, end-user welfare, convergence and lastly macroeconomic and long term commitments.

Need for innovative regulatory approaches

Further to the convergence of the Internet and the telecommunications markets, boundaries of the relevant markets are becoming more and more distorted. New types of providers (over the top providers - OTT) are penetrating the core business of telecom operators and cannibalizing their markets with unregulated substitute products. The increasing competition of OTTs, the traditional regulatory framework adopted in most of the countries, as well as the current difficult macroeconomic environment have been very discouraging for telecom operators when considering large infrastructure investments such as NGN investments or fiber optic deployments.

Therefore, regulations should adopt a more holistic framework to move at the same pace with the market to cater for these changes and ensure the healthy and rapid development of the sector. State of the art regulation should envisage shifting from isolated relevant markets to an integrated framework of the entire digital chain, ensuring a level playing field among regulated and unregulated competitors.

Net Neutrality

With the deployment of high bandwidth broadband networks and the successful intake of smartphones, coupled with popular bandwidth hungry applications and content, telecom operators are faced with new challenges where they have to constantly increase their network capacity in order

to serve the needs of their subscribers without being able to recover their costs. Further to this drastic shift in customer interests to online applications and content, the telecom infrastructure has become more of a commodity through which massive amounts of data are delivered to customers. This pushed telecom operators to look at restrictions on traffic transiting through their network by applying traffic management practices, such as blocking services, throttling certain applications, prioritizing certain type of content etc...

In light of the above, regulators are currently debating Net Neutrality to assess whether to allow the practices of Telecom operators or, on the contrary, to adhere strictly to the principle of equal treatment as imagined by the Internet's original designers. In this case, they have to consider whether this principle is compatible with the sustained traffic growth in networks and the need to finance the resulting investments.

In this rapidly evolving digital ecosystem, Telecom regulators are also faced with the challenge to keep pushing for innovation and investment while maintaining fair treatment of market players. Some practical changes have already occurred with an increasing trend towards open licensing regimes and light-handed regulation (co/self-regulation) of operators and service providers. Nevertheless, Regulators still have to push for the right incentives to achieve/keep healthy markets. This could entice to put in place all the regulatory tools that could drive operators in this direction like consumer protection regulation; data security, integrity and privacy guidelines, codes of practices (deontology)...

Another way would be to foster agreements between operators and OTT providers, especially local/regional OTTs. Operators could use these agreements as well as IPTV and video services (self-provided or sub-contracted) as anchor services for sustainable business.

Evolving role of the regulator

In this new digital convergent ecosystem where the impact of regulatory measures could result in major changes in the economy of the country, the role of the regulator should be reassessed with scrutiny to be adapted with the move towards the knowledge-economy concept. It is essential for the regulator to be a partner with the policymaker to ensure that policies of all sectors are aligned and fully integrated with the ICT development and the knowledge economy roadmap.

The regulator should ensure that the right policy and financial mechanisms are put in place to make available broadband services on a nationwide coverage. Fair and healthy competition will guarantee affordable services to the broadest spectrum of people. However, new challenges arising from the changes in the value chain should be considered. Regulators will have to put more emphasis on issues related to consumer protection, e-security, data confidentiality...

On the other hand, the government has also a major role in the successful development of a digital ecosystem by setting policies that would incentivize both sides, supply and demand. From the supply side, Private Public Partnerships (PPP's) are fundamental approaches to effectively use financial incentives and competition to drive innovation, expand access and keep affordable prices. From the demand side, measures such as reduction of taxes on ICT-related services, promotion of universal service at broadband level, encouraging research and development, endorsing special programs to stimulate e-literacy, will result in higher penetration, increased demand and better social inclusion.

Restructuring of the traditional regulator

With the current policies encouraging convergence and the rapidly evolving market digitalization, regulations must adapt to and accommodate the new convergent environment. The synergies between the different regulatory areas, be it the IT related matters such as security and privacy, the infrastructure and networks as well as broadcasting issues from an access and content point of view must be developed more proactively. Thus, this increased need for a coordination of policy directions and regulatory activities both across the industries and sectors would justify the move from a Telecom Regulator to a unified regulatory institution.

The restructuring of traditional telecom regulator might be needed to accommodate new demand, however regulators should be aware of the challenges that come with this enlarged institutional design. The scope of the regulator will diversify and the skills related should be made available to support these prerogatives. Also, policymakers related to each sector or industry covered by the unified regulator will influence regulatory decisions and procedures.