Best regulatory practices for next-generation networks

Contribution of Tunisia

The transition to next-generation networks (NGN) is generally acknowledged to be an important step in facilitating the provision of advanced new services for all citizens and end-users, including those living in rural areas, with a good quality of service and at an affordable price; at the same time, there is a concomitant need for regulators and decision-makers to develop a flexible and clear regulatory framework to facilitate that transition.

In the current situation of diverse networks, with separate terminals for a fragmented range of disparate services (telephony, television, the Internet, etc.), NGN projects have the goal of moving towards network convergence, with packet mode, multimedia and multimode terminals, and secure interconnected services that can be reached from any access network and any fixed or mobile terminal, thanks to a unified transport network.

However, because of the great number of services offered, and the variety of divergent means for providing and controlling them, operators face problems, particularly in connection with the introduction of new services and the extension of networks characterized by convergence and the emergence of all-IP networks.

While the NGN-enabled convergence of service provision makes it possible to meet the needs of increasingly advanced new services, it also creates, for the regulators, significant issues and challenges of a technical, economic and especially economic nature; these need to be addressed.

To this end, the national telecommunication authority of Tunisia (*Instance nationale des télécommunications*), an independent administrative body that has the responsibility of regulating telecommunications, has made the following practical proposals and recommendations:

Facilitate NGN access by

– evaluating at a strategic level the economic advantages of migration from an STN network infrastructure to NGN-type solutions;

– convincing the incumbent operators to provide for gradual migration to NGN by elaborating a migration plan that will optimize capital investments and encourage the provision of new, convergent services;

– initiating this migration through experimental projects in order to build proficiency with this new concept and obtain a better assessment of the benefits.

Create an environment of healthy and fair competition by

– encouraging the entry of new operators with NGN network architectures, by creating a flexible and appropriate legal framework;

– improving the acceptance of convergence strategy among mobile network operators by offering fixed/mobile services and new mobile services based on new types of access (WiFi, WiMax, etc.).

Facilitate interconnection with NGNs by

– providing the best possible technical and tariff conditions for interconnection, particularly for co-location services (tariffs, invoicing process for sharing, etc.);

– regulating interconnection tariffs so that they give new operators a chance for economic viability;

– adapting the models for interconnection costs to NGN service.

Encourage and attract investment in NGNs by

– establishing NGN solutions for different scenarios;

– economic modelling, together with operators, to determine the "how and when" of new investment, in order to better address the challenges and issues associated with migration to NGN (new services, targeted clients, potential revenue size, etc.);

– putting into practice the principle of a standardized licensing regime.

Set up permanent programmes for monitoring NGN quality of service by

– developing standardized procedures for QoS monitoring;

– providing for continuous monitoring of NGN services (QoS, speed, etc.)

Establish effective cost-based NGN service tariffs by

– ensuring that the costs of migration or infrastructure creation are not recovered via retail prices;

– ensuring that tariffs allow new entrants a chance at economic viability.

Exploit new NGN infrastructure to extend and strengthen universal service by

– ensuring that universal service continues to be provided via the new NGN infrastructure with the same coverage, quality and services at affordable prices;

– progressively bringing the new NGN services into the definition of universal service.