CONTRIBUTION TO GSR-18
FROM COMISION DE REGULACION DE COMUNICACIONES COLOMBIA

We would like to contribute the following observations on the subject of “regulatory frontiers”.

Emerging technologies

• As regulators we need to keep pace with advances in technology. It is time to move on from the traditional telephony-based setup and grasp how the world is moving towards convergence in all aspects: infrastructure, services and users.

• As regulators we need to anticipate the challenges of digital transformation. For this reason our standards relating to quality and broadband must provide incentives for operators to invest in infrastructure that will support AI, IoT and M2M services.

• As regulators we need to work on a set of standards that will facilitate infrastructure sharing, interconnectivity and cross-border roaming.

Economic and business approaches

• Circumstances have changed and disruptive forces such as the power of information and technology, human talent and digital confidence, have led to major advances; physical products are offered as a service; we are moving away from a disconnected society to one in which modularity is the norm; individuality is giving way to multifaceted markets; and vertical integration within a single sector is giving way to convergence between sectors. As regulators we thus need to examine the different forms of vertical integration in order to prevent concentrations and failures in these new emerging markets.

• The telecommunication sector is a booster and enabler of digital transformation in other economies. In recent years we have witnessed a change in the nature of operators’ business, a change which is both a challenge and a major opportunity: according to the World Economic Forum the digital transformation of telecommunications is a $2 trillion opportunity for industry and society.¹ This is reflected in the development of new networks, new businesses, and in the redefinition of relations with customers. Regulators need to evolve with the sector.

Digital transformation requires multi-sector regulation: the challenge concerns all regulators, not just those in the ICT sector. This requires coordination at the highest level in order to harmonize public policies and regulations and direct them towards a single objective – that of successful transition to the digital economy.

The regulator has evolved from liberalizing markets to facilitating development of the digital economy.

- **Regulatory frameworks for digital transformation**

  - First, it is important to chart and understand these challenges:
    - Collaborative economy
    - Taxation for the digital economy
    - Measurement of the digital economy
    - Protection of personal data
    - Cross-border digital market
    - Protection for digital users in cross-border services
    - Working arrangements
    - Education focusing on the challenges of the digital economy
    - Emerging technologies, including: blockchain, artificial intelligence - machine learning, Internet of Things
    - Data administration and use
    - Connectivity for half the world
    - Network neutrality

  - Regulators can support development of public policy by:
    - Defining the digital skills that are needed to prevent social exclusion and foster employment
    - Indicating the needs of all digital ecosystem players
    - Characterizing the digital consumer
    - Developing recommendations on use, privacy and data protection
    - Quantifying the value of information
    - Developing recommendations on the use and generation of algorithms.