



8th CRO Discussion Points

In view of [7th CRO](#) and the [Chairman's Report](#)

Introduction

The emergence of new opportunities and challenges within the digital ecosystem requires new perspectives in understanding and cooperation-building. Ultimately, collaboration should foster true innovation in digital communications, enable sustainability of the digital ecosystem, aid fulfilment of individual and administration-level ICT visions, and contribute to progress on internationally agreed Sustainable Development Goals.¹

Clearly, as these new developments are new and require new perspectives, legacy rules and approaches cannot continue. A transformational reset is required for all digital ecosystem stakeholders, including policy- and decision makers, regulators, digital communication service providers, digital technology providers, and consumers.

In this context, the industry's future will significantly depend on how the following key topics that were identified by participants of the 7th CRO Meeting to be considered at the 8th CRO Meeting at the GSR-17 in the Bahamas in 2017 will be advanced:

- **Digital Services** (e.g. Net Neutrality, OTT / IoT services versus regulated telcos, Industry regulation versus market competition rules, Ex ante versus ex post approaches, Market definitions);
- **Data Regulation** (e.g. Consumer protection rules, Data protection laws, Cross-border data sharing / management / storage, Commercialisation of data, Cyber security);
- **Spectrum Management** (4G/5G allocations, Spectrum pricing practices, WRC-15 implementation, WRC-19 preparation, Renewals);
- **Taxes, Industry Fees and Charges** (Annual fees/Royalties, Regulatory fees, Effective tax burden, USF / ICT fund, Provide a platform through the IMF and World Bank);
- **Internet Governance** (Capacity Building), Incentives for investment, Cross sector collaboration, Partnership opportunities with Government/ITU.

The 8th CRO's discussion focus needs to build on past progress made by the CRO and consensus built among the participants on these key issues, while also addressing emerging advancements, which may include 5G, AI, AR, VR, ILE, robotics, smart materials and systems, autonomous vehicles, IoT, IIoT, Industry 4.0, 3D printing, cognitive radio, millimetre wave and others.

¹ The SDGs focus on socio-economic development, reducing injustice and inequality (including the digital divide), and mitigating the effects of human development and human activity on the environment.

Context

Conducting business in today's environment is challenging, especially due to the rise of non-traditional digital communications technologies and the always-on communications facilities that have become the enablers of human-to-human, human-to-machine and machine-to-machine interactions. Operators want to and are expected to provide the infrastructure for, catalyse, share in and embrace innovation and emerging technologies to offer and enable digital services and applications.

To carry on their investment plans and sustainably build digital infrastructure that facilitates the provision of digital services as well as the IoT (e.g. 5G investment and roll-out), operators require a holistic and cross-sectoral enabling policy and regulatory framework and environment, that takes into consideration the interrelations of all digital ecosystem stakeholders and other economic sectors. Existing and emerging rules within old frameworks (e.g. access- and market definition-based ex-ante rules, net neutrality regulation and Spectrum Management), should be closely scrutinized as to their impact on each ecosystem stakeholder, the degree of competition across the digital ecosystem, emerging innovation and technologies and incentives to invest in infrastructure. Moreover, financial obligations imposed on operators in the form of taxes, industry fees and regulatory charges and their impact need to be considered within the context of the entire digital ecosystem and government ICT policies for economic transformation.

Considerations for discussion

- How to accommodate unpredictability of emerging technologies within new regulatory approaches? (e.g. creating a flexible path for timely 5G deployment, review of spectrum management and pricing)
- Digital hyper-connectedness at what cost? (fair competition and rules between digital ecosystem stakeholders, including financial obligations)
- Digital divide across communities and genders
- Human-to-machine and machine-to-machine interactions and trust-building in autonomous systems and smart things / IoT
- Consumer data protection and privacy rules
- Security in devices, networks and communication

Discussion Focus 2 – Data Regulation to enable increased data consumption

Context

The emergence and the use of more and more digital services and applications as well as the impact of IoT devices exponentially increase the amount of data generated that passes through operators' networks. On the one hand, this trend calls for greater ICT infrastructure investment. Well-functioning digital infrastructure is critical to driving sustainable long-term economic growth in the age of the digital economy. However, hyper-connectedness brought about by the availability and the use of infrastructure (i.e., telecom networks) has strained network resources. If incentives for investments are not promptly set, the ability to meet connectivity goals (one of the SDGs) could be undermined. On the other hand, this trend of increasing data consumption bears the question on **how** the data that is generated by users and devices is used (i.e. monetization, and can operators share in the value of the data that is created, are conditions in place to enable operators to share in Big Data?) and by **whom the data is used** (e.g. customer protection, privacy rules, cross-border data flows, cybersecurity especially in view of IoT).

Considerations for discussions

- Data consumption and infrastructure / investment challenges and consequential impact on areas defined as part of the SDGs
- Incentives to invest in infrastructure versus regulation
- Cross-border data regulation
- Innovative and fair use of data and data protection
- Cybersecurity

Discussion Focus 3 - Policy & Cooperation

Context

Digitalization provides unparalleled opportunities for value creation and capture, while also representing a major source of risks. There are varying visions and priorities among stakeholders when it comes to the use and implementation of digital communications technologies and systems. Without alignment and understanding of each stakeholders' needs and perspectives, complexities arise and can undermine digital value creation and the effective deployment and use of emerging technologies.

Regarding advanced technologies, such as AI, the measure of success for AI applications is the value they create for human lives. We need to enable people to understand AI systems successfully, participate in their use, and build their trust. Public policies should help ease society's adaptation to AI applications, extend their benefits, and mitigate negative externalities, their inevitable errors and failures. A debate about how AI is deployed (including concerns about how privacy is protected and how AI's benefits are shared fairly) needs to be encouraged and the CRO can serve this purpose.

Operators need to be among the key stakeholders taken into confidence when developing ICT policies and when implementing regulatory regimes. The realities of the current marketplace are different from the "silo'ed" and deterministic telecommunications-only world, and thus new approaches must be found and implemented. These can only be created through the formulation, communication and understanding of common positions and by working closely with government bodies, including all concerned regulatory authorities.

Considerations for discussions

- Digital transformation drivers and criteria for effective technology adoption – all technologies are not for all
- Acceptance and degree of adoption of AI – what types of AI technologies are “for good” and to the benefit of all and can be impactful in fulfilling the SDGs?
- Fostering practicality and sustainability of innovation in smart technologies

Context

The development of next generation technologies, with their promise to address mass-scale needs, requires harmonized efforts and prompt decision-making processes, especially in relation to the allocation of resources - in the case of telecom operators, **spectrum for 5G**. 5G is of particular importance as it enables the emergence and deployment of other technologies, such as IoT based technologies that, in turn, drive the creation and adoption of technologies for sewage treatment, water purification, environmental management. Therefore, we need to think of both existing and emerging digital technologies in a larger societal context, from which the decisions to devise and implement new solutions may arise through the CRO platform.

Telecom operators are viewing themselves as the enablers across platforms, sectors, and industries. In their efforts to foster innovation and better make use of their relationships with their customers, telecom operators are willing to be part of any initiative that will contribute to the fulfilment of SDGs and reduce environmental impact of human activities. IoT can have a positive role in managing environmental conditions, and the operators' investments in digital infrastructure will contribute to that effect.

Considerations

- Technology development and environmental impact
- Benefits and effects of the adoption of 5G systems
- Implications of advanced technologies in impeding fulfillment of SDGs