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Emerging technologies - including 5G, artificial intelligence, IoT, cloud services, big data analytics, etc. – are reshaping our life and ushering new and competitive opportunities, challenges, and risks. These technologies accelerated the pace at which today's businesses are evolving and the degree to which businesses innovate, operate, and serve customers. Accordingly, with such powerful technologies on the way, all stakeholders need to rethink how they value it.

Significantly, 5G represents an overhaul in the way that networks are run and managed. 5G wants to be the disruptive generation, the generation that no longer only caters to the needs of mobile operators and consumer communications, but which opens up new prospects and enables an extremely wide diversity of applications and use, unified within a single technology. However, in contrast to the hardware-based networks of the past, the technology takes advantage of virtualization and cloud systems, leaving it more vulnerable to breaches if not properly secured.

The Internet of Things (IoT) will fundamentally change all industries, from agriculture to transportation to healthcare. In the next few decades, everything in our world will become connected. Recent studies expects municipalities around the world to increase their spending on IoT systems, generate tremendous returns, and create around \$241 billion in economic value for these cities by 2019. However, IoT will also generate immense amounts of data, which

will put pressure on the Internet and force us to come up with more efficient ways to transmit, store, and secure this data.

Policymakers all over the world are now recognizing these challenges and working to implement reforms that will protect competition and consumers without impeding social and economic progress. In the digital world, regulators need to be flexible to keep up with rapid changes in the market, open to new ideas, aware of financial aspects of the business, and understand of consumer issues.

In doing so, it is important for policymakers to provide transparent, innovative and pro-investment policy frameworks. Regulations should be functionality-based rather than based on technology, industry structure or legacy regulatory regime. In addition, regulations need to be flexible to accommodate rapidly changing markets and technologies and create enough regulatory confidence for companies to take risks.

New regulatory regimes should differ from previous ones in the emphasis they place on consumer protection and access to broadband networks. Regulators must oversee an increased range of services, delivered over multiple broadband and converged networks that form the digital ecosystem. More than ever before, regulators are now being asked to protect consumers from misusing of information and personal data, inappropriate content, and fraudulent online activities.

Standards and specifications will certainly help on the way to securing emerging network and services. Robust cybersecurity must include the network, the device, and the data, taking into account the unique issues that emerging technologies and networks bring.

Regulatory frameworks should encourage efficient management of scarce resource and innovative spectrum and infrastructure sharing models given the heavy investment required to deliver emerging technologies.

Policymakers should also avail incentives in order to encourage corporates at all stages of growth and expansion. A special emphasis should be placed on small businesses and SMEs, which cannot afford long and costly efforts but nonetheless are the backbone of the economy.

Finally, through effective cooperation and collaborative regulations among all stakeholders nationally, regionally, and internationally, we can overcome the negative activities occurring in the digital ecosystem and maximize the immense benefits it can bring to people around the world.