

## GSR-18 CONSULTATION

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This contribution proposes to provide inputs concerning Emerging Technologies for Digital Transformation as contribution by CRASA towards the Global Symposium of Regulators (GSR) 2018 Best Practice Guidelines. This is in response to the GSR-18 Best Practice consultation launched by the ITU Director BDT, Mr. Brahim Sanou on new regulatory frontiers.

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## Introduction

The traditional way of work has been abandoned, and new ways of work are re-designed requiring global participation, including that of regulators and policy makers of various countries. *Table 1* below gives a comparison of the most topical discussion topics in 2017 and those anticipated for 2018 in the technological space.

**Table 1: Hot Topics for Discussion (in Technology) in 2017 and 2018**

RANKING	5 TOP TECHNOLOGY DISCUSSION TOPICS IN 2017	EXPECTED 5 TOP TECHNOLOGY DISCUSSION TOPICS IN 2018
1	Devices	5G
2	AI	Devices
3	IoT	Content
4	5G	AI
5	Regulation	IoT

Source: Huawei Report on Industry Trends # MWC 18

It can be gleaned from Table 1 that the expected trend in the discussion topics is:

Digitization is increasingly and fundamentally changing societies and economies and disrupting most sectors in what has been termed the 4<sup>th</sup> Industrial Revolution. Government and Public Policy must keep up by ensuring that the disruptions taking place see a revision of the norms in order for the digital transformation to achieve its full potential. This paper seeks to outline some of the policy and regulatory measures needed in response to the changing landscape to protect consumers and ensure trust. However, the first two questions that beg for answers are: (1) which are the key emerging technologies? (2) What regulatory measures are needed to respond to the changing landscape? and (3) What are the appropriate regulatory frameworks for digital transformation?

## **1. REGULATORY MEASURES NEEDED TO RESPOND TO CHANGING LANDSCAPE**

- ❖ Regulatory measures to be adopted should aim to eliminate barriers to infrastructure deployment (particularly small cells which are expected to be widely utilised in 5G networks). In addition, policies should encourage viable infrastructure sharing arrangements that develop organically and commercially over time and avoid than introducing rules that could slow down the pace of deployment.
  
- ❖ Spectrum allocations should be made in blocks large enough so as to avoid spectrum fragmentation and support new services requirements e.g. IoT. Spectrum fragmentation results in inefficient use of spectrum, higher network costs and lower throughput for end-users;
  
- ❖ Spectrum prices should not be too costly for operators;
  
- ❖ The life of spectrum should be longer and public subsidies should be neutral.
  
- ❖ Regulators should ensure a level playing field that promotes both investment and competition;
  
- ❖ The Regulators should not permit a regulatory holiday for dominant players however, they should also avoid over regulation; and
  
- ❖ Antitrust legislation should be dynamic, to avert dominance by a few Internet giants.

## **2. SUGGESTIONS FOR REGULATORY FRAMEWORKS FOR DIGITAL TRANSFORMATION**

### **5.1. Economic**

Ideally, an investment friendly policy framework is necessary before consideration can be made for a regulatory framework that supports digital transformation. The most appropriate regulatory framework should go beyond mere regulatory directives when seeking to level the playing field. This entails a framework that goes beyond regulating net neutrality, but also tries to set the

foundation of a digital bill of rights. Another requirement is for a long-term policy view because this ensures the predictability and regulatory certainty that is needed in order to encourage investment in the emerging technology networks and deliver connectivity for all use cases. In addition, policies must not only promote effective competition among sector players in the ecosystem but also encourage innovation.

Policy makers should also consider pro-investment economic reforms. This is because in several jurisdictions there is a need to change some archaic tax laws and introduce new laws and policies that help to promote investments in infrastructure and increase business activity in other industries and ensure greater demand for services provided by ICT solution providers.

## **5.2. Spectrum**

Spectrum plays a critical role in the growth of emerging technologies. US mobile operators believe there is a need for a regulatory framework that prioritises and supports the timely and sufficient availability of spectrum for 5G, particularly in the frequency ranges (sub-1 GHz, 1–6 GHz and above 6 GHz) the should include the mmWave frequencies, as well as licensed and license-exempt bands. It is recommended that new spectrum auctions should allocate blocks of at least 5MHz (or even 10MHz) in order to avoid spectrum fragmentation. In cases of licence renewals, the recommendation is for re-organization of spectrum allocations to ensure as much as possible, a contiguous block of spectrum for each operator. It is also recommended for existing licences, that spectrum swaps be permitted among operators in order to ensure a contiguous block for each operator. Telecom regulators should continue to pursue a “Technology Neutral” strategy in the allocation of spectrum resources because this allows operators to apply spectrum re-farming whenever it is necessary.

For the spectrum bands prioritised for 5G, it is recommended that some “light touch” regulations be applied to ensure some coverage obligations are met and guarantee certain minimum speeds as stipulated for both low and high spectrum bands. In the final analysis, it is recommended that governments and regulatory authorities should treat 5G infrastructures in a similar manner as transportation infrastructure and energy grids, and always implement positive and progressive spectrum policies.

## **5.3. Enabling Policy and Self- Regulation Balance**

The most ideal regulatory approach should be “light touch” and not have excessive control and does

not stifle innovation in order to enable the emerging technologies. In addition, government policy is needed in order to facilitate physical network deployment. Regulatory and policy frameworks also need to favour “smart pipe” and discourage operators from offering the “dumb pipe” given that “light touch” regulation is intended to spur investment without harming internet freedom. Development of Standards should be timeous and progressive.