

# 5G: Myths, Realities and Opportunities

## *Regulatory Perspectives*

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COMMUNICATIONS  
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# Structure of Presentation

1. Introduction
2. Role of the Communications Authority of Kenya (CA) in the development of 5G
3. World Radio Communications Conference 2019 (WRC-19) decisions on 5G
4. Current status on 5G
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# Introduction



The Communications Authority of Kenya (CA) is the regulatory authority for the ICT industry in Kenya with responsibilities in:

- Telecommunications
- Cyber security
- E-commerce
- Broadcasting and
- Postal/courier services

CA is also responsible for:

- managing the country's numbering and frequency spectrum resources
- administering the Universal Service Fund (USF)
- safeguarding the interests of users of ICT services.

Our role in the 5G narrative is mainly in the **management of the frequency spectrum resources.**

# Introduction



**-The UN body that co-ordinates global management of frequency spectrum**



**-Adoption of ITU recommendations  
-Regional Harmonization**



**-Coordination with our neighbouring countries within the East African Community**



**-Development of regulations best suited for Kenya**

# Role of CA in the development of 5G

- The International Telecommunications Union (ITU) set the agenda for 5G studies during the World Radio Communication Conference 2015 (WRC – 15)
- These studies indicated that the frequency range between 24.25 GHz and 86 GHz would be considered for 5G services.
- Other aspects of the studies included:
  - Reviewing the technical and operating characteristics
  - The deployment scenarios
  - the time-frame in which spectrum would be needed

more details on the studies:

<https://www.itu.int/en/ITU-R/conferences/wrc/2015/Pages/default.aspx>

# Role of CA in the development of 5G

- CA participated in the 5G studies and developed positions on preferred frequency bands for deployment of 5G services.
- This was done through a National Preparatory Committee that included all relevant stakeholders.
- CA then harmonised its position within the East Africa region and also within the African region.
- This position was then presented to the World Radio Communication Conference 2019 (WRC-19)

# WRC-19 Decisions on 5G

- WRC-19 identified the following globally harmonized frequency bands for 5G:
  - 26GHz
  - 40GHz
  - 66-71 GHz

More details on the decisions:

<https://www.itu.int/en/ITU-R/conferences/wrc/2019/Pages/default.aspx>

- The globally harmonized frequency bands will facilitate system interoperability, global roaming and benefit from economies of scale.

# WRC-19 Decisions on 5G

- These additional frequencies will facilitate:
  - enhanced mobile broadband
  - massive machine-type communications
  - ultra-reliable and low-latency communications.
  - Intelligent Transport Systems
  - smart cities
  - Improved health care
  - Sustainable agricultural practices

# Current Status on 5G

- The Authority is working on mechanisms for release of 5G frequencies. These mechanisms include:
  - Licensing methodologies
  - Amount of bandwidth to be offered to operators
  - Frequency spectrum pricing mechanisms
  - Type approval of devices

# Conclusion

- The Authority will continue participating in future 5G studies
- Follow discussions on other proposed frequency bands that can be released for 5G
- Work with relevant stakeholders to develop strategies for 5G that will be beneficial to Kenya

# Questions?



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