

Potential for Wi-Fi 6E Harmonisation in Africa

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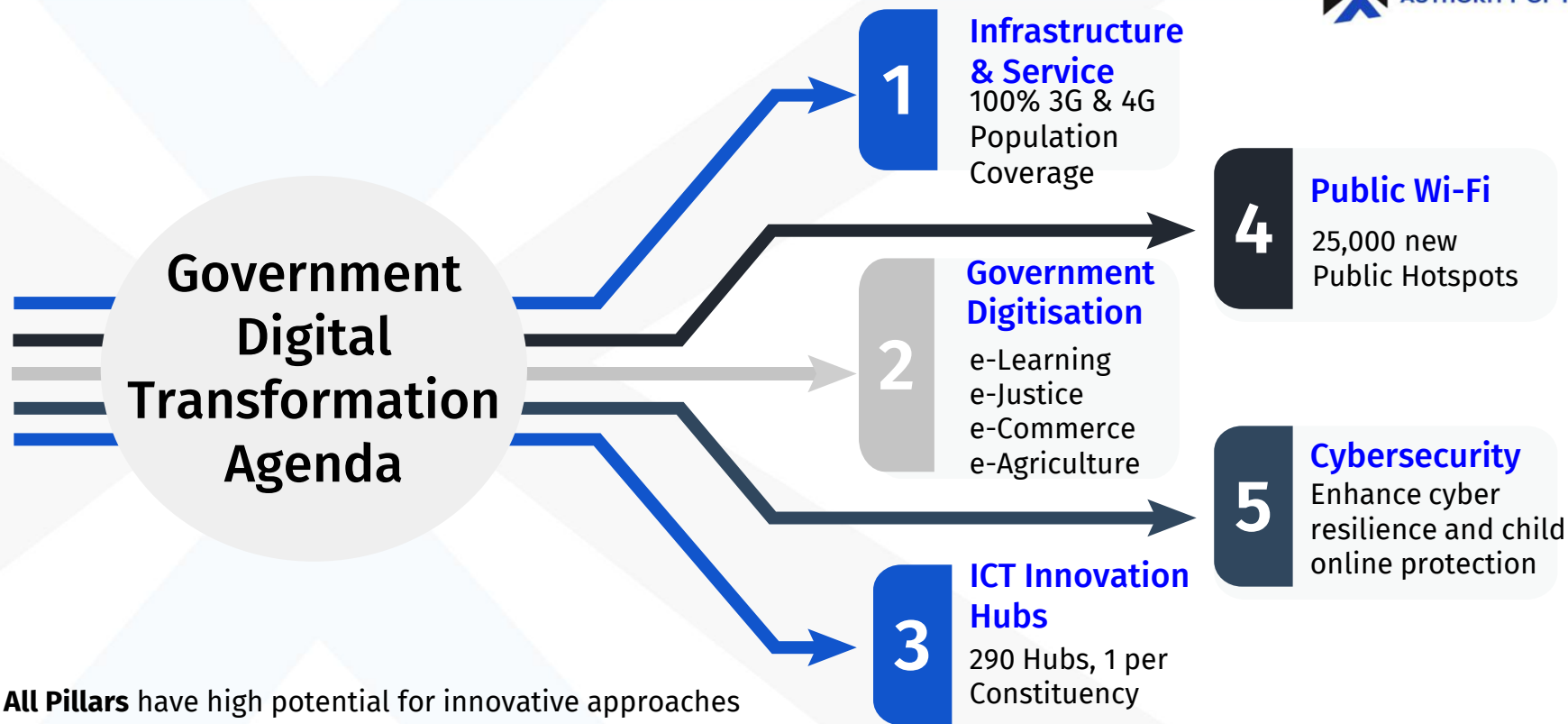
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**COMMUNICATIONS
AUTHORITY OF KENYA**

Country Specific Plan : Kenya Government Priorities



All Pillars have high potential for innovative approaches

Case for more shared spectrum?

Enhanced Connectivity Use Cases & Applications



Manufacturing

- Industrial Automation
- Robotics & Remote Object Manipulation for Mining & Construction
- Virtual & Mixed Reality
- Low-Cost Networks



Communications

- Regional ICT Centres
- High-Speed Home & Office Broadband
- Public Safety and Disaster Response
- Fixed Wireless Access



Education

- High-Speed Home & Office Broadband
- Improved E-Learning Via Videoconference.
- Improved Access To Rich Media Resources



Healthcare

- Remote surgery & examination.
- Virtual meetings
- Remote object manipulation.
- Smart wearables.



Agriculture

- Smart Agriculture.
- Connected sensors for smart agriculture systems.
- Wildlife Tracking & management



Smart Cities


- Internet of Things (IoT).
- Big Data Analytics & AI.
- Remote Smart Meters for Utilities
- Transportation.

License-Exempt Spectrum

Short Term Objectives


- ★ Review the Guidelines on the use of Radiofrequency Spectrum by Short Range Devices to amend EIRP limits for 2.4 GHz & 5 GHz Wi-Fi for Point-to-Point and Point-to-Multipoint use. ✓
- ★ Review options for lowering the barrier to use of other license-exempt bands for PtP and PtMP use, including 24 GHz and 60 GHz. ✓
- ★ Expand the range of frequencies available for license-exempt use, especially in the lower 6 GHz band ✓

Medium Term Objectives





- ★ To strengthen collaborations with service providers to foster standards and regulatory inclusion.  - Regular Engagement

Shared Spectrum

Short Term Objectives




- ★ To expedite the commercial availability of geolocation database service and implement required mechanisms to make the TVWS spectrum available immediately to operators. 

Medium Term Objectives


- ★ To evaluate with regional regulators the feasibility of a common approach implementation of geolocation databases.  
- ★ Establish a regulatory sandbox for localised spectrum access for small operators in unassigned LTE bands. 
- ★ Evaluate feasibility of local/dynamic/shared access to IMT spectrum. 

Additional Complementary Actions



Spectrum Fees

- ★ Review spectrum fee framework recognising the need for significantly reduced fees for underserved/rural areas.  
- ★ Implement a spectrum fee waiver scheme for non-profit community networks. 

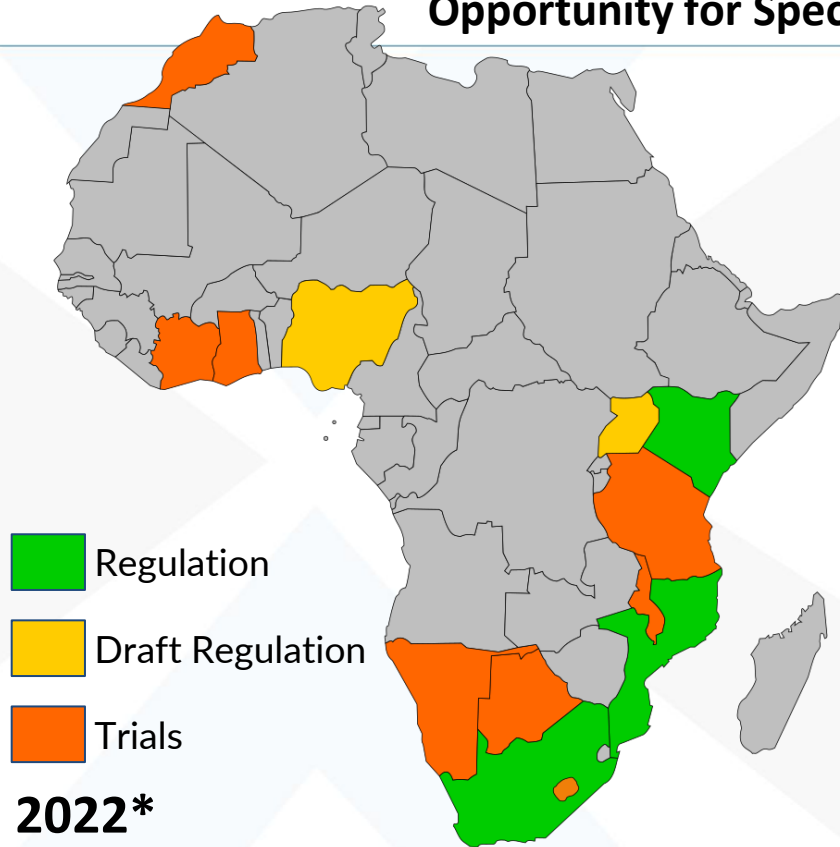
Access to Backhaul

- ★ Require network operators to publish a standard Reference Access Offer in order to ensure access, transparency and non-discrimination in wholesale backhaul markets. 

Universal Service Funds

- ★ Establish a startup subsidy fund for community networks initiatives. 
- ★ Support bottom-up digital skills capacity building initiatives by groups and organisations working within communities. 

Opportunity for Spectrum Harmonisation - Africa



- Example: Adoption of TVWS Regulations have been slow to develop but is gaining momentum.
- Similarly slow approach to WiFi 6E adoption feared despite ATU Spectrum Recommendations, 2021.
- Opportunity for standard power adoption.
- Additional concerted efforts required to drive adoption at accelerated time frame.

Possible Approach to Drive Wi-Fi 6E Adoption in Africa

01

Advocacy and policy recommendations

Prepare & present policy recommendations to regulatory authorities, emphasizing the benefits of opening the 6 GHz band for WiFi 6E.

Help regulators to develop the expertise on frameworks for spectrum allocation, licensing, & mgmt of the 6 GHz band.

03

International cooperation

Partner with int'l orgs to share information, and best practices. at global forums, conferences, and workshops on spectrum management.

Conduct more research and analysis on the benefits of WiFi 6E, as well as potential interference issues and mitigation strategies.

02

Capacity building & tech' assistance

04

Research & Analysis

05

Public Awareness

Conduct awareness campaigns and public outreach activities to inform decision-makers, industry players, and the general public about the benefits of WiFi 6E.

*Thank
you*