CROSSBORDER HARMONIZATION

EAST AFRICA REGION EXPERIENCE

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Presentation Outline

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Introduction

- Cross border coordination is an ongoing activity, with a purpose to assuring provision of **good services** and **smooth operation of radio communications networks** between two or more neighboring countries.

- The ever-growing introduction of new technologies and services comes as a challenge for cross-border coordination because **new sharing or co-existence criteria need** to be implemented in the existing international agreements .

IMPORTANCE OF CROSS BORDER COORDINATION

Importance of Cross border frequency coordination...

- To ensure interference-free operation in border areas.

- To promote efficient spectrum utilization.

- To help resolving interference between neighboring countries.

- To assist in long-term planning of frequencies.

PRE-REQUISIT OF SUCCESSFUL CROSS BORDER COORDINATION

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✓ To have comprehensive Bi-lateral or Multilateral agreements (administrative and technical) on how to deal with cross border Radio frequency interference;

✓ To develop good relation ship between the Regulator and operators;

✓ Constant engagement of operators by having a forum for discussing and dealing with cross border issues,

EACO EXPERIENCE ON CROSS BORDER FREQUENCY COORDINATION

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- ✓ Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda are Members of East African Communications Organization (EACO);

- ✓ In order to execute its mandate, EACO has established different working groups which have been assigned different duties to discharge various obligations in Postal, Broadcasting and Telecommunications Sectors.

- ✓ Among others is a Working Group five (WG-05) assigned to oversee issues related to cross border frequency coordination.

Cross border frequency coordination within EAC member states...

- The cross border frequency coordination exercise within EAC countries is conducted in guidance with the following documents:-

  ✓ The EACO regional framework for frequency coordination.

  ✓ Mechanism for cross border frequency coordination for mobile services.

  ✓ Frequency Coordination Agreement for Broadcasting Services

  ❖ *The two radio-communication services (Mobile and Broadcasting) have triggered cross border coordination across border areas*

Cross border frequency coordination within EAC member states

- The cross border frequency coordination exercise within East African Countries is triggered by the following: -

  - ✓ Incidence of cross border harmful interference;

  - ✓ Planning and assignment of broadcasting station in the border area; and

  - ✓ Forced roaming problem of mobile service users in the border area.

- The cross border frequency coordination exercise is conducted for both **broadcasting** and **mobile** services

BROADCASTING SERVICES CROSS BORDER COORDINATION

Broadcasting Service Cross Border Coordination

- Based on Frequency Coordination Agreement for Broadcasting Services one coordination meeting for FM broadcasting (bilateral and multilateral) has been convened in 2019.

- All six (6) EAC Member states participated in this exercise.

- Therefore, **each year coordination for broadcasting service** is conducted for all new assignment expected in the border Regions for both DTT and FM.

MOBILE SERVICES CROSS BORDER COORDINATION

Mobile Service Cross Border Coordination...

- The mobile service cross border coordination which have been conducted recently among the EAC member states the emphasis were on the following: -
  - i. Verification of Mobile Operators compliance to the set NCC values in different areas along the borders;
  - ii. Verification of signal spillover - Field strengths exceeding thresholds limits specified in the mechanism;
  - iii. Assessment of the forced roaming problem border in areas after changes were affected by mobile operators; and
  - iv. Take necessary corrective action to reduce forcing roaming by optimization of the networks.

Mobile Service Cross Border Coordination...

- Cross border frequency coordination for mobile services is essential in minimizing the **problem of forced roaming** in the border areas.

- Forced roaming occurs when a person's mobile phone along the border area selects the foreign network instead of his/her normal home network while she/he has not crosssed the border. This result to the following two different scenarios: -

  - ✓ Full registration to foreign network where by the customer becomes a roaming customer and starts to incur higher roaming charges.

  - ✓ Partial registration (just network selection), where by the customer will neither be regarded as roaming customer nor be recognized in home network. This scenario causes the customer not being able to make calls, receive calls or any other communication activity.

Challenges

- Network Coverage of the Mobile operators along the border points of EAC member states is still a problem which need to be addressed.

- People who lives along the border points of EAC member states continues to experience the forced roaming problem due to non- uniformity of the coverage from the networks of mobile operators.

- Mobile operators of EAC members states sometimes they fail to attain the coverage obligation along the border points due to the nature of the terrain in some of the places.

Conclusion...

- Based on the recent conducted cross border frequency coordination exercises the **forced roaming problem** along the border points of EAC member states which have no coverage remains to be a challenge which need to be addressed.

- The following are the recommended approach towards addressing the forced roaming problem:-

  - ✓ Review of the received signal level parameters stipulated under the EACO mechanism for cross border frequency coordination for mobile services.

  - ✓ Implementation of the roaming management tool along the borders.

Conclusion

- The following are the recommended approach towards addressing the forced roaming problem:-

    ✓ Joint Re-planning of sites along the borders with the specialized planning tools.
    ✓ Joint site optimization exercises along the borders.

    ✓ Implement the electrical tilting

    ✓ Implementation of the regional (EAC) harmonized roaming initiatives that will reduce roaming charges for subscribers within the region. The harmonized roaming framework will not address forced roaming problem but will ensure forced roamers pay a reasonable tariff as per the framework.

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