

**ITU-R SG 1/WP 1B WORKSHOP:
SPECTRUM MANAGEMENT ISSUES ON
THE USE OF WHITE SPACES BY
COGNITIVE RADIO SYSTEMS
(Geneva, 20 January 2014)**

**Licensing of TV White
Space Networks in
Kenya**

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THE USE OF WHITE SPACES BY
COGNITIVE RADIO SYSTEMS

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Scope



- 1. TV White Space Technology**
- 2. Licensing of TV White Space Networks in Kenya**
- 3. Way forward**



TV White Space Technology



TV White Spaces refer to frequencies allocated to TV broadcasting services but not locally used in order to avoid interference between two adjacent TV channels

TV White Space technology operates in the unused portions of the broadcasting band IV and V (470-862 MHz) to provide internet connectivity in rural (underserved) areas



Licensing of TVWS Networks in Kenya



- **The Commission received an application for the deployment of a trial TV White Space network in December 2012**
- **Deployment of a trial network by the applicant at two designated rural sites was authorized in August 2013 for a period of 12 months**
- **Due to the on-going studies the following conditions were prescribed alongside this authorisation:-**



- That the applicant acquires a Network Facilities Providers' (at least NFP Tier 3) operating license in accordance with the existing licensing regime or works in partnership with a licensed operator.
- That the TVWS devices will only operate within the frequency band 470 MHz to 694 MHz on non-protected, non-interference and non-exclusive basis



Licensing of TVWS Networks in Kenya



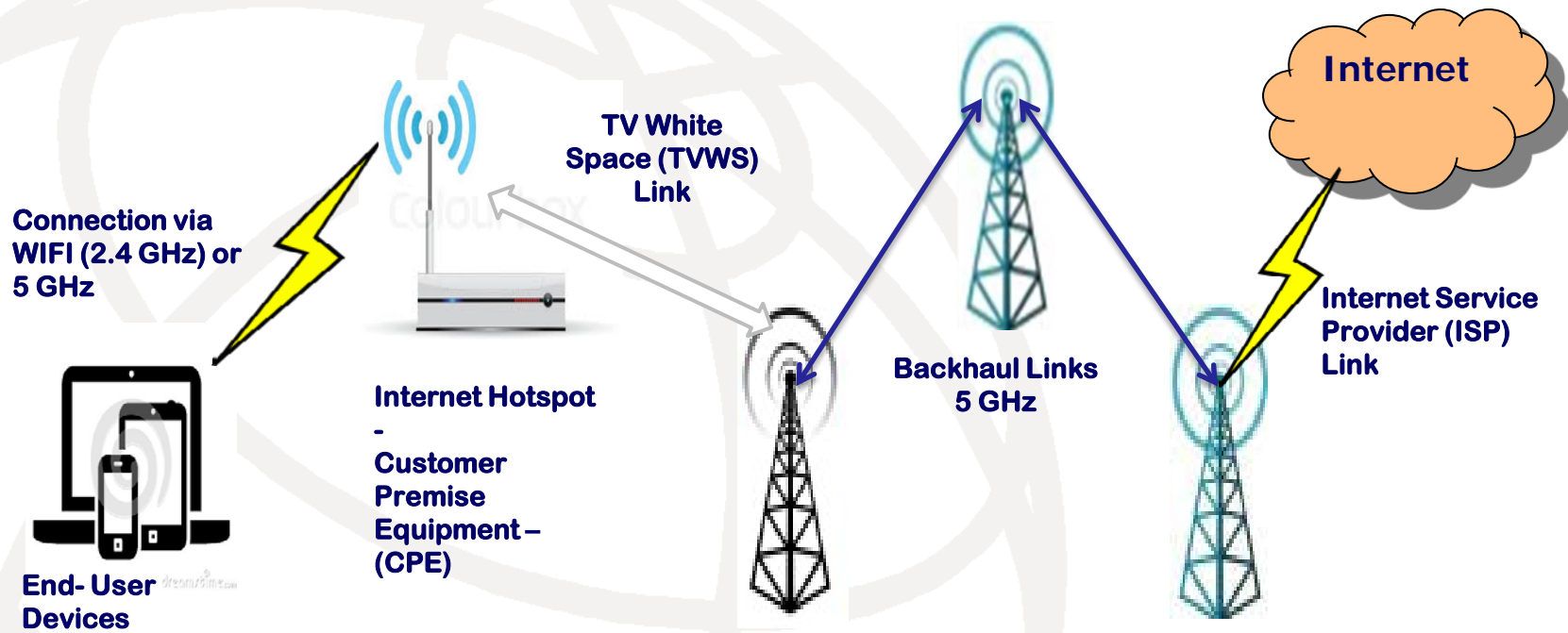
- That the devices and equipment to be used in the network should be duly type approved by the Commission prior to installation and use.
- That should the deployed trial network cause any interference to a protected radio service, the applicant shall promptly take steps to eliminate the interference and upon notification by the Commission, cease all transmissions until the interference is eliminated.



- That the TVWS devices and databases will be installed and operated in consistency with technical rules and/or international standards what will ensure that no harmful interference is caused to any licensed service.
- That at the expiry of the trial period the applicant will present to the Commission a report on the project for review. The satisfactory performance of this, together with the results of the ongoing ITU studies on the matter will determine if the trial will be converted into an operational license.



Typical TVWS Network Set up





Way Forward



- Due to the on-going ITU studies, the Commission has decided to employ a wait- and- see strategy with respect to deployments of White Space devices in Kenya.
- This Strategy allows deployments of a geographically and time confined limited number of trial networks within portions of the UHF band designated for Digital TV broadcasting (470-694 MHz).
- Depending on the outcome of ITU studies and trial tests, these trial networks may be commercialised.



Way Forward



- **The Commission is also following closely the on-going debate on whether to favour the fixed or variable (dynamic) power level approach when it comes to TV White Space regulation.**
- **As a result, the Commission would like to urge other administrations / regulators proceed with caution with respect to authorisations/deployment of TVWS systems and devices, in order to avoid any unforeseeable situation which can render the valuable UHF spectrum band worthless.**

Thank You

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