

Directing the digital dividend towards bridging the digital divide in Nigeria

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ABSTRACT

In this work we investigate the use of digital dividend from the transition of analogue to digital terrestrial television broadcasting to bridge the digital divide between urban and rural areas of Nigeria. First, we predict that 77% of the VHF and UHF spectrum can be freed up and released for other communication services after transition to digital television. We also presented a few of the services competing for the use of the freed spectrum and considered necessary approaches in estimating the values and benefit of allocating this digital dividend to each of these services. These approaches were based on technical considerations, economic and social benefits. Results show that wireless broadband for fixed reception had the highest recommendation for the use of the digital dividend because of its potential capacity of bridging the digital divide in rural areas of the country and its relatively high revenue potentials. Finally, challenges that could hinder the successful transition to digital terrestrial television and the release of the digital dividend in Nigeria were identified and necessary recommendations were made to government and policy makers on ways to address these problems.