



TRAINING WORKSHOP OUTLINE

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| Title: | Digital Dividend Review |
| Duration: | 10 Days |
| Dates: | 20th – 31st August 2018 |
| Venue: | AFRALTI, Nairobi, Kenya |
| Tuition Fee: | AFRALTI Members US\$1,800, Non-Members US\$2,160 |

COURSE OVERVIEW

In 1961 and 1989 the International Telecommunications Union (ITU) held the Regional Radiocommunication Conferences for broadcasting for Region 1 in Stockholm and Geneva respectively. These conferences adopted the Stockholm 61 (STK61) and Geneva 89 (GE89) Agreements. The agreements contained Radio Frequency (RF) Plans for analogue terrestrial television broadcasting services in the most attractive and valuable Very High Frequency (VHF) band I (TV.CH 2-4): 47-68MHz, band III (TV. CH 5-12):174-230MHz and in the Ultra High Frequency (UHF) bands IV and V (TV.CH 21-69): 470-862MHz.

For many decades, the STK61 and GE89 RF plans were used throughout the world to deliver analogue terrestrial television broadcasting signals to homes. The analogue terrestrial television broadcasting is a spectrum inefficient technology and utilised inefficiently the most attractive and valuable VHF and UHF bands

In 2006 the ITU also held another Regional Radiocommunication Conference (RRC06) for broadcasting for Region 1 in Geneva and revised the STK61 and GE89 Agreements. Then the RRC06 adopted the Geneva 06 (GE06) Agreement, which contained the RF Plan for digital terrestrial television broadcasting, in the most attractive and valuable VHF band III: 174-230MHz and UHF bands IV and V: 470-862MHz The digital terrestrial television broadcasting is the spectrum efficient technology and utilised efficiently the most attractive and valuable VHF and UHF bands. Hence, the digital terrestrial television broadcasting uses less RF spectrum than the analogue terrestrial television broadcasting and gains the RF spectrum efficiency referred to as the Digital Dividend.

The Digital Dividend; therefore, can be defined as the amount of the RF spectrum made available by the transition of the terrestrial television broadcasting from the analogue to the digital. Finally, the GE06 Agreement specified the deadline for use of the analogue terrestrial television broadcasting signals and subsequent switch over to the digital terrestrial television broadcasting signals in the VHF and UHF bands on 17th June 2015, except some developing countries, which were given an extension to continue using the analogue terrestrial television broadcasting signals in the VHF band only to 17th June 2020.

In 2007 the ITU held the World Radiocommunication Conference 2007 (WRC-07) in Geneva. The WRC07 identified 790-862MHz as the Digital Dividend 1 (DD1) and approved it during the WRC-

12. The same WRC-12, the ITU identified 694-790 MHz as the Digital Dividend 2 (DD2) and approved it during the WRC-15, which was held in Geneva in November 2015.

Both DD1 and DD2 are in the UHF band, and they are extremely valuable RF spectrum under the present technological and economic conditions due to its sweet spot combination of propagation of radio waves as follows:

- Travels at long distance and covers large areas at relative low costs;
- Travels inside buildings and gets good in door coverage; and
- Gets enough bandwidth for carrying broadband data services.

The ITU allocated the DD1 and DD2 to the International Mobile Technologies (IMT) family to offer mobile broadband communications services within the IMT standardization framework and did not specify licensing methods that could be used for the sale of the DD1 and DD2. This training specifies for the Market Led Approach (MLA) licensing method that can be used to assign efficiently and transparently the DD1 and DD2 RF spectrum to the bidders who can use them most valuably. Auction is recommended as one of the Market Based Approaches for the sale of the DD1 and DD2.

Target Audience

Telecommunications and Broadcasting Regulators, Operators, Economists and Government Policy Makers.

Pre-requisite/s

Basic knowledge of analogue terrestrial television broadcasting theory and practice.

Pain Points

The transition of the terrestrial television broadcasting from analogue to digital that gained the Digital Dividend RF spectrum ended three years ago on 15th June 2015. However, a number of countries in Africa until to date have not licensed the Digital Dividend RF spectrum to bidders at market value. Therefore, this training provides methods of licensing the Digital Dividend RF spectrum at market value.

Value Proposition

At the end of the course, participants will get knowledge and skills for licensing the Digital Dividend RF spectrum at market value through auctions and get the bidders who can use it valuably to provide the broadband communications services for social-economic development in their countries

Workshop Objectives

- Understand well economic concepts of the RF spectrum as Resource;
- Get knowledge and skills for licensing the Digital Dividend RF spectrum at market value by using the Market Led Approach;
- Calculate the Reserve Price (RP) for the Digital Dividend RF spectrum as the minimum value for auctioning; and
- Calculate the Enter Price Value (ENV) for the Digital Dividend RF spectrum as the maximum value for auctioning;

Workshop methodology

The workshop includes presentations by a facilitator, country presentations and interactive sessions.

Workshop Contents

Economics of the Digital Dividend Radio Frequency (RF) Spectrum as Resource

- The “ POT of GOLD” RF Spectrum;
- The Sweet Spot Combination of Propagation of Radio Waves

RF Spectrum Pricing and Valuation

- RF Spectrum Pricing in the Telecommunications Monopoly Market;
- RF Spectrum Valuation in the liberalised Telecommunications Markets;
 - Transaction Multiple Valuation Models for Determination of the Reserve Price (RP) for the Minimum Value of the Digital Dividend RF Spectrum;
 - Discounted Cash Flow (DCF) Analysis Model for the Determination of the Enter Price Value (ENV) for the Maximum Value of the Digital Dividend RF Spectrum;

The RF Spectrum Assignment and the Design of the RF Spectrum Auctions

- Different Methods of Assigning the RF Spectrum;
- The Range of the RF Spectrum Auction Designs; and
- Advantages and Disadvantages of the Auctions

For more information, please contact us on

Tel: +254 710 207 061, +254 733 444 421

training@afralti.org or info@afralti.org

www.afralti.org