



**REPUBLIC OF THE PHILIPPINES**  
**NATIONAL TELECOMMUNICATIONS COMMISSION**  
BIR Rd., East Triangle, Diliman, Quezon City

MEMORANDUM CIRCULAR

No. \_\_\_\_\_

**SUBJECT: FREQUENCY SHARING AND COORDINATION BETWEEN FIXED SATELLITE AND FIXED SERVICE SYSTEMS**

Whereas, Section 4 (c) of Republic Act 7925 provides that “the radio frequency spectrum is a scarce public resource that shall be administered in the public interest and in accordance with international agreements and conventions to which the Philippines is a party and granted to the best qualified. The government shall allocate the spectrum to service providers who will use it efficiently and effectively to meet public demand for telecommunications service and may avail of new cost effective technologies in the use of methods for its utilization”;

Whereas, the ITU Radio Regulations provide that the bands 3400-3600 MHz and 3600-4200 MHz are co-primarily allocated to the Fixed Service (FS) and Fixed Satellite Service (FSS) and to the Fixed, Mobile and Fixed Satellite Service, respectively;

Whereas, pursuant to Memorandum Circular No. 06-08-2005, the band 3400-3600 MHz is allocated for Broadband Wireless Access (BWA).

Whereas, the Philippines has joined other countries in identifying the band 3400-3600 MHz for International Mobile Telecommunications (IMT) in the recent World Radiocommunication Conference 2015 (WRC 15);

Whereas, the National Radio Frequency Allocation Table (NRFAT) shows that the band 3600-4200 MHz is further sub-allocated for Fixed Wireless Terrestrial (FX) Systems for Point-to-Point Radio Systems;

Whereas, very small aperture terminal (VSAT), Receive Only Satellite Earth Station and Satellite Television Receive Only (TVRO) generally operate in the regular C-band frequency (3700-4200 MHz) and some operate in the extended C-band (3400-3700 MHz);

Wherefore, pursuant to Republic Act 7925 (Public Telecommunications Policy Act), Act 3846, as amended (Radio Control Law), and Executive Order 546 series of 1979, the following rules and regulations are hereby promulgated to facilitate the sharing between fixed wireless access (FWA) and fixed wireless terrestrial (FX) systems and very small aperture terminal (VSAT), Receive Only Satellite Earth Station and Satellite Television Receive Only (TVRO) in the bands allocated to the fixed service (FS) and fixed satellite service (FSS) on a co-primary basis:

Sec. 1. The band 3400-3600 MHz has been identified for the deployment of IMT in the most recent WRC-15, hence, VSAT, Receive Only Satellite Earth Station and Satellite TVRO shall not be allowed to operate in the extended C-band, 3400-3700 MHz;

Sec. 2. The band 3700-4200 MHz which is primarily allocated to the FS and FSS is further sub-allocated to FX (Point-to-Point Radio) Systems. Likewise, VSAT, Receive Only Satellite Earth Station and Satellite TVRO co-exist in the same band. The following interference mitigation methods for the

shared deployment of FX Systems and VSAT, Receive Only Satellite Earth Station and Satellite TVRO shall be considered:

- 2.1. FX systems shall use high performance antennas or higher.
- 2.2. Wherever possible, VSAT, Receive Only Satellite Earth Station and Satellite TVRO should be sited so as to maximize shielding from Fixed Wireless Systems interferers
- 2.3. Wherever practicable, VSAT, Receive Only Satellite Earth Station and Satellite TVRO shall not be sited higher than is necessary for the applications
- 2.4. VSAT, Receive Only Satellite Earth Station and Satellite TVRO antenna feeds shall provide greater interference rejection
- 2.5. FX and VSAT, Receive Only Satellite Earth Station and Satellite TVRO systems shall be deployed using natural screening to increase obstructive/diffraction losses to mitigate interference

Sec. 3. In the occurrence of Radio Frequency Interference (RFI), the authorized affected user(s) shall submit to the Commission a written complaint indicating the details of the alleged observed/monitored RFI. The Commission shall then extend all the necessary assistance to the affected authorized user(s) until the RFI is resolved. Since FX and VSAT, Receive Only Satellite Earth Station and Satellite TVRO systems are co-primary allocations in the 3700-4200 MHz band, the interference shall be jointly resolved by both interfering party and the interfered party and shall exert all possible technical solutions to eliminate and mitigate the interference.

Sec. 4. Failure to resolve the RFI by technical solution or settlement, the First Occupant Rule shall apply.

Sec. 5. Any circular, memorandum, order, guidelines, rules or any parts thereof inconsistent herewith are considered superseded or amended.

Sec. 6. This Circular shall take effect fifteen (15) days after publication in a newspaper of general circulation and three (3) certified true copies are furnished the UP Law Center.

Quezon City, Philippines \_\_\_\_\_

**GAMALIEL A. CORDOBA**  
Commissioner

**DELILAH F. DELES**  
Deputy Commissioner

**EDGARDO V. CABARIOS**  
Deputy Commissioner