

PCC.II/REC. 36 (XX-12)¹

**FACILITATING THE INTRODUCTION OF BROADBAND FSS
KA-BAND SYSTEMS IN THE AMERICAS**

The XX Meeting of the Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

CONSIDERING:

- a) That the 17.7-20.2 GHz (space-to-Earth) and 27.5-30.0 GHz bands (Earth-to-space) (the “Ka-band”) are allocated to the FSS in Region 2 in the International Telecommunication Union (ITU) Radio Regulations;
- b) That portions of Ka-band are planned to provide broadband services, through Fixed Satellite Services (FSS) networks;
- c) That the number of satellites operating in portions of Ka-band has increased since Recommendation PCC.III/REC. 62 (XVIII-01) was first adopted, and they can provide broadband services;
- d) That, due to spot beam technology greater frequency reuse is possible, thereby providing increased capacity needed for provision of broadband services through FSS networks;
- e) That a number of FSS systems with other types of earth stations and characteristics have already been brought into use or are planned to be brought into use in portions of the Ka-band;
- f) That frequency sharing between fixed-satellite and terrestrial services must be considered, and it is difficult for both types of services to operate in the same frequency band in the same geographic area when at least one of the services utilizes densely-deployed user terminals (See, e.g., Recommendation ITU-R SF.1719);
- g) That, as a result of considering f), national Administrations must make decisions on in which frequency bands they will deploy terrestrial services and in which frequency bands they will deploy HDFSS;
- h) That in certain portions of Ka-band, to facilitate provision of broadband services it is useful to facilitate the deployment of FSS earth stations, through class licensing;
- i) That a “class” earth station license is a single authorization covering a large number of earth stations associated with a given satellite system;
- j) That for Region 2, the ITU Radio Regulations, in No. 5.516B, identifies the following bands: 18.3-19.3 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), and 28.35-28.6 GHz (Earth-to-space), 28.6-29.1 GHz (Earth-to-space), 29.25-29.5 GHz (Earth-to-space), and 29.5-30 GHz (Earth-to-space), for deployment of high density FSS earth stations; and

¹ CCP.II-RADIO/doc.3158/12

k) That “gateway” or “hub” stations in Ka broadband system designs require very large amounts of dedicated bandwidth that cannot be shared with the system’s HDFSS user terminals in the same geographic service area,

RECOGNIZING:

a) That the Declaration of Mexico, adopted by the Fifth Ordinary Meeting of the CITEL Assembly, held March 8 to 11, 2010, recognized the provision of broadband access as a priority, thus the need to establish public policies to facilitate its introduction and the opening to new technologies;

b) That countries have the autonomy and sovereignty to regulate the commercial operation and use of telecommunications services and technologies in their territories; and

c) That, concerning the use of Ka-band, implementation of class licensing procedures does not eliminate the need for satellite network coordination in accordance with the ITU Radio Regulations, or compliance with other provisions of the Radio Regulations (e.g., epfd limits in Article 22) and the procedures for ITU coordination, and for those Administrations that require coordination at the national level, are conducted directly by Administrations, nor the need to ensure compatibility with and protection of other terrestrial services and space service networks allocated in Ka-band frequencies;

d) That coordination between GSO and non-GSO FSS systems is required in the 18.8-19.3 and 28.6-29.1 GHz bands pursuant to No. 9.11A of the ITU Radio Regulations, and that in 29.1-29.5 GHz and 19.3-19.7 GHz, No. 9.11A applies only to coordination of GSO FSS and Non-GSO MSS feeder links while other NGSO FSS systems must comply with Article 9 and No. 22.2,

RECOMMENDS:

1. That, in portions (*see* No. 5.516B) of frequency bands 17.7-20.2 GHz (space-to-Earth) and 27.5-30.0 GHz (Earth-to-space), OAS/CITEL Administrations consider implementing national provisions and procedures to facilitate the implementation of Ka-Band FSS systems intended to provide broadband services to ubiquitously deployed terminals;

2. That, in the portions of the bands referred to in considering a) where there is a co-primary allocation to the FSS, terrestrial and other space services, Administrations examine the impact of implementing HDFSS to provide satellite broadband services to the public;

3. That in the development of the national provisions described in recommends 2, Administrations consider provisions to facilitate deployment of fixed-satellite service broadband services and the associated ubiquitously deployed earth stations in the frequency bands identified for high density FSS Region 2 in ITU Radio Regulations 5.516B, specifically 18.3-19.3, 19.7-20.2, 28.35-29.1, 29.25-30 GHz, including class licensing;

4. That, taking into account *Recommends* 3 above, Administrations identify the bands 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space) bands, which are not shared with the terrestrial services, for ubiquitous deployment of FSS earth stations, and develop national provisions and procedures for class licensing of earth stations;

5. That in the development of the national provisions described in recommends 3 and 4, earth station technical parameters be considered to avoid unacceptable interference between different satellite systems and the ubiquitously deployed FSS earth stations;

6. That Administrations also take into account the need for access to spectrum by hub or gateway FSS earth stations, including in bands shared with terrestrial services on a coordinated basis;

7. That Administrations take into account the need to share Ka-band spectrum between GSO and non-GSO FSS systems in order to bring the benefit of both types of satellite services to the countries of Region 2;

8. That in developing these national provisions and procedures, Administrations take into account existing and planned FSS systems with different types of earth stations and characteristics, where national class licensing provisions and procedures would not be applicable.

RESOLVES:

To derogate Recommendation PCC.III/REC. 62 (XVIII-01).