

**LOCAL MULTIPOINT DISTRIBUTION/COMMUNICATION SYSTEMS  
(LMDS/LMCS) OPERATING AT FREQUENCIES AROUND 27 GHZ**

The XVII Meeting of the Permanent Consultative Committee III: Radiocommunications,

**CONSIDERING:**

- a) That a Working Group was established at the Fifth Meeting of the Permanent Consultative Committee III in August 1996 to study the various aspects of the implementation of LMDS/LMCS in the Americas and that the terms of reference of this Working Group include the preparation of guidelines needed for the implementation of LMDS/LMCS in the Americas (see Resolution PCC.III/RES.35 (V-96));
- b) That at the Eleventh Meeting of the Permanent Consultative Committee III, the above Working Group was renamed to “Broadband Wireless Systems in the Fixed Service Operating in Frequency Bands above 20 GHz” with the same terms of reference (see Resolution PCC.III/RES. 76 (XI-98));
- c) That the implementation of wide band LMDS/LMCS can offer alternate multimedia distribution including video, telephone and data to residential and business subscribers;
- d) That there is a need to ensure that there is possibility for deployment of these new systems in the Americas, taking into account efficient use of the frequency spectrum and sharing of the bands among all allocated services;
- e) That the LMDS/LMCS are point-to-multipoint and point-to-point systems of the fixed service;
- f) That, in the Radio Regulations, there are shared allocations to the fixed service in the frequency bands 25.25-29.50 GHz and 31.0-31.3 GHz that can be considered for implementation of the LMDS/LMCS;
- g) That many CITELE Administrations have identified frequency ranges around 27 GHz for the operation of their LMCS/LMDS systems;
- h) That the ITU-R has concluded that sharing between LMDS/LMCS and the Inter-Satellite Service in the band 25.25-27.5 GHz is feasible given the constraints set forth in Recommendations F.1249 and F.1509 and that compliance with these recommendations, taken together, will ensure a mutually beneficial, stable, long-term, sharing environment.
- i) That a joint study carried out by one Administration and its industry concludes that in the frequency range 27.5-29.5 GHz, co-frequency sharing between point-to-multipoint

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<sup>1</sup> Document PCC.III/doc.1847/01 rev.1

LMDS/LMCS and the fixed satellite service (FSS) is deemed not possible due to issues concerning ubiquitous deployment of both services;

- j) That the above study, refer to considering i), also concluded that sharing is deemed possible between LMDS/LMCS hub-to-subscriber links and NGSO/MSS feeder links in the band 29.10-29.25 GHz under certain technical conditions;
- k) That Article S.21 of the ITU Radio Regulations provides technical limits for the sharing of bands above 1 GHz by the Terrestrial and Space services, and
- l) That the deployment of LMDS/LMCS may be global in extent,

#### **RECOGNIZING:**

- a) That the Broadband Wireless Working Group has studied the various aspects of the implementation of LMDS/LMCS around 27 GHz in the Americas, and
- b) The convenience for the allocation of frequencies to provide economies of scale, minimize cross-border coordination, facilitate deployment and promote competition,

#### **RECOMMENDS:**

- a) That CITEL Administrations contemplating implementation of LMDS/LMCS, should consider the following bands:
  - b) 25.25 – 27.5 GHz
  - c) 27.5 – 28.35 GHz
  - d) 29.1 – 29.25 GHz LMDS Hub-to-Subscriber Transmissions only
  - e) 31.0 – 31.3 GHz;
- f) That LMCS/LMDS deployment in the band 25.25 – 27.5 GHz should be in accordance with Recommendations ITU-R F.1249 and F.1509;
- g) That CITEL Administrations choosing to implement LMCS/LMDS systems in the 27.5 – 28.35 GHz band give priority to these services over fixed satellite service use;
- h) That CITEL Administrations consider the harmonization of spectrum usage for LMDS/LMCS around 27 GHz, taking into account the aforementioned compatibility studies between radio services which share the use of the bands on a co-primary basis.
- i) This Recommendation replace recommendation PCC.III/REC.57 (XV-00).

#### **INSTRUCTS THE EXECUTIVE SECRETARIAT:**

To inform the Administrations and associate members that this recommendation replaces PCC.III/REC.57 (XV-00).