**Report of the Agenda Item Coordinator during WRC-19**

Dave Kershaw ([dave.kershaw@dkconsulting.co.nz](mailto:dave.kershaw@dkconsulting.co.nz))

31 October 2019

1. Agenda Item 1.6 *- to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution* ***159 (WRC-15)***
2. APT Common Proposals and APT Views for WRC-19 (which has been submitted to WRC-19)

APT Members support the establishment of regulatory and procedural conditions for non-GSO FSS satellite systems in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5 42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) while ensuring protection to GSO satellite networks in FSS, MSS and BSS, and other existing primary services in the same bands as well as protection of the EESS (passive) in the frequency bands 36 37 GHz and 50.2-50.4 GHz and the radio astronomy in the frequency bands 42.5-43.5 GHz, 48.94-49.04 GHz and 51.4-54.25 GHz.

APT Members support Method A of Issue 1 in the CPM Report.

In the absence of suitable ITU-R Recommendations to be incorporated by reference, APT Members support consideration of WRC Resolutions, addressing:

* generic GSO Reference Links and calculation procedures, that may be used to verify the compliance of non-GSO systems; and
* regulatory provisions to protect GSO satellite networks based on appropriate sharing methodology and reference characteristics of GSO satellite networks.

APT Members support ensuring the protection of EESS (passive) from unwanted emissions in adjacent bands. In relation to Issue 2 relating to possible modifications to Resolution **750 (Rev.WRC-15)**, preference towards Option A has been expressed, and Option B is still under consideration.

1. Topics proposed by other regional Groups or ITU Members which are not included in no. 2 above

The contributions on this agenda item are complex. Attached below for APT Member’s reference, is a matrix outlining the positions of the different regional groups and administrations.



1. Progress of discussion during WRC-19 on the Agenda Item

Presentation of the documents has been completed.

There has also been general discussion about grouping of subject matters and development of compilation material for consideration by the meeting.

An informal meeting on 1 November discussed a number of issues where there is general agreement. The issues discussed were:

* Whether to have one footnote or two for Article 5 – coordination between non-GSO FSS and MSS (5.A16 and 5.B16). In the end some felt more comfortable with two footnotes, as MSS is not operating in all portions of the bands under study (only in 39.5-40.5)
* Coordination under 9.11A vs 9.12 - agreed that coordination under 9.12 is more appropriate as we are only dealing with non-GSO FSS and MSS and are not dealing with coordination between non-GSO and GSO. Article 22.2 limits are to protect GSO FSS and BSS networks
* MODS to 5.338A: added in square brackets the bands 37.5-38 GHz as per the RCC and European proposals, pending further discussion under Issue 2
* Article 22.5L: all agreed with the values and text presented for 3% degradation in the time allowance for C/N for systems not using ACM.
* Discussed the CITEL footnote 22.5L.1 which explains where to find the generic links and specifies that the 3% applies to the generic GSO links for clarity
* We agreed on language that references the calculation methodology in Resolution [A16-A, Single Entry]. Both RCC and Europe have similar language, as well as the proposals from ATU, Singapore, China.
* Discussed 22.5M and agreed on the aggregate values of 10% degradation in the time allowance for C/N for systems not using ACM.

More discussion is required on addition of non-GSO MSS to 22.5L/M as per the CITEL IAP. Some participants consider it to be outside the scope of the agenda item.

The meeting on Friday, 1 November 2019 commenced discussion on Issue 1 relating to possible new regulatory and procedural conditions for non-GSO FSS satellite systems in the frequency bands of interest. Four informal groups were established to address the following issues:

* Reference Links
* Single entry limits for NGSO FSS systems
* Aggregate interference from multiple NGSO FSS systems
* Footnotes and Appendix 22

The work of the first three informal groups commenced on Saturday, 2 November and is progressing. The fourth group is yet to meet.

1. Issues which require discussion at APT Coordination Meetings and seek guidance thereafter

Nil required at this time.

*Note: Coordinators are encouraged to conduct informal consultation with interested APT Members on the issues/topics under no. 3 and inform the outcomes of consultation to the Coordination Meeting*. *Coordinators can also organize coordination meetings on the respective agenda items whenever necessary.*