

Working Group 3

Agenda Item 9.1 Topic D

Part A: Description

“to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention”;

Activities of the Radiocommunication Sector since WRC-19: Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations.

[WRC-19 Document 535](#), 2nd section of the Annex: Protection of EESS (passive) in the frequency band 36-37 GHz

Part B: Key Elements - the notables

The studies under WRC-23 agenda item 9.1, topic d), are a continuation of studies to address the following remaining issues from the discussion for WRC-19 agenda item 1.6 related to the protection of EESS (passive) sensors in the 36-37 GHz frequency band:

1. Interference into the sensing channel of EESS (passive) from fixed-satellite service non-GSO constellations operating in the 37.5-38 GHz frequency band at a lower altitude than EESS (passive) sensors.
2. Interference into the cold calibration channel of EESS (passive) from fixed-satellite service non-GSO constellations operating in the 37.5-38 GHz frequency band at a higher altitude than EESS (passive) sensors.

Part C: Current Status of Band(s) or Issue(s)

Part A RR article 5 :

The table below provides the international frequency allocation of the frequency band 36-37GHz band.

REGION 1	REGION 2	REGION 3
36- 37GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED	

MOBILE
SPACE RESEARCH (passive)
5.149 5.550A

PART B - Draft AfriSAP:

The table below provides the African common frequency allocation of the frequency band 36-37GHz band.

ITU Region 1	AfriSAP	Typical applications	Additional information
36-37 GHz EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A	36-37 GHz EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A		In making assignments to stations in the frequency band 36.43-36.5 GHz, Administrations are urged to give consideration to Radio Astronomy applications as per RR n° 5.149

Part D: Conclusion of the results of studies, or Summary of the ongoing study work

ITU- R WP 7C is the responsible group for WRC-23 agenda item 9.1 topic (d) for protection of EESS (passive) in the frequency band 36-37 GHz.

ITU-R WP 7C reviewed the preliminary draft new Report ITU-R S.[50/40 GHZ ADJACENT BAND STUDIES] that was developed by ITU-R WP 4A.

Feedback from WP 4A has been received ([7C/221](#)) concerning the previous WP 7C liaison statements to 4A ([4A/74](#) and [4A/258](#)), offering WP7C characteristics to be considered under this agenda item.

It is also noted that it should be taken into consideration that multiple non-GSO systems will not be able to transmit at the same location and at the same time, as coordination between the systems will be required. This operational limitation should be taken into account in any studies undertaken under this issue. Additionally, non-GSO systems in these frequency bands are subject to epfd restrictions from RR Article 22, which would further restrict their transmit power. Finally, WP 4A informs WP 7C that WP 4A would like to be kept informed of any development on this agenda item.

Contribution [7C/264](#) offered elements for the draft CPM text of this agenda item, which are carried forward to the next meeting as a working document towards a preliminary draft new report on studies related to agenda item 9.1, topic d), attached to the WP 7C Chairman's report as [Annex 23](#)

Part E: Options and Associated Implications

These are yet to be established.

Part F: Proposed African Common View and/or Position

WG3 invites EACO to:

Support studies in ITU-R for the protection of EESS (passive) sensors operating in the band 36-37 GHz from non-GSO FSS systems in the band 37.5-38 GHz, with due consideration of operational aspects of non-GSO FSS system, leading to Recommendations and/or Reports as appropriate.

Part G: Recommendations and Way Forward

WG3 invites EACO administrations to:

Participate the studies in ITU-R, and to submit their views to the next meetings where applicable.

Part H: Other Regional Groups and international organizations preliminary positions or positions

RCC, CEPT, CITEL, ASMG, APT, ATU: as of the IR Workshop on WRC-23 Preparation, 15-December 2021

Support the protection of EESS (passive) sensors operating in the frequency band 36-37 GHz from NGSO FSS systems operating in the band 37.5-38 GHz and the determination of relevant conditions that would ensure such protection.