

Date: 28 Jan 2019

The Independent Communications Authority of South Africa (the Authority)
350 Witch-Hazel Avenue,
Eco Point Office Park,
Eco Park, Centurion, Gauteng.

Attention:

Mr Manyapelo Richard Makgotlho

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Thuraya comments on the draft International Mobile Telephony (IMT) roadmap

Dear Sir,

Thuraya Telecommunications Company “Thuraya” wishes to thank the Independent Communications Authority of South Africa (ICASA) for allowing the comments on the draft International Mobile Telephony (IMT) roadmap. Thuraya is looking forward to responding to any future ICASA consultations on this or other satellite impacted issues. Annex-1 to this document contains Thuraya comments on the draft IMT roadmap. Thuraya response is limited only to the implementation of IMT within the frequency range 1427-1518 MHz and does not contain any comments about any other sections of the document.

Thuraya is a leading mobile satellite communications company that empowers people with tools to bring the organizations and communities they serve closer together for the purpose of saving and improving lives, by offering innovative, flexible and dependable technology that achieve the highest aspirations - facilitating reliable communications where and when it matters most.

Best regards,

Zahid Zaheer
VP GMPCS Affairs

Annex-1

Thuraya comments on the draft International Mobile Telephony (IMT) roadmap:

Sections 7.4 and 7.5 of the Draft IMT Roadmap include 1427-1518 MHz as potential frequencies for IMT-2020.

Thuraya notes that the Draft IMT Roadmap does not address issues related to compatibility with existing and planned Mobile Satellite Services in the 1.5 GHz band. The 1427-1518 GHz band is adjacent to the MSS allocation at 1518-1559 MHz.

Thuraya in its response would like to highlight the need to consider adjacent band compatibility with respect to mobile satellite systems operating in the band 1518-1559 MHz. The band 1518-1559 MHz is used by MSS systems in all three regions, and is being intensively used by the MSS operators including Thuraya to provide vital services all over the globe.

While recognizing the importance of having mobile broadband it is required to note the important role of MSS services above 1518 MHz in dealing with global threats such as terrorism, regional conflicts, disaster relief and organized crime. MSS systems provide ubiquitous connectivity through widespread international coverage with simultaneous access to the satellite service at the instant of service commencement in the entire footprint of the satellite. Such service, although not indispensable for the wider public, is an integral part of some niche markets in which MSS has traditionally provided service including maritime, aeronautical, exploration (for example services to the mining, oil and gas industries); and public safety.

For the cases of Maritime, South Africa has 3924 kms of coastline and a “sea-land” area that is three times bigger than its land size. Thirty percent of South Africa’s population lives on the coast. The country is also positioned on a major shipping route and has eight commercial ports and 44 noncommercial harbours. In addition, the country generates a significant 3.5% of the world’s seaborne trade volume. MSS services are used to provide vital services including mandatory safety communications for the maritime community. IMT deployed in the upper part of the 1.5 GHz band near to ports could prevent ships from being able to use their satellite terminals. Measures are required for shipping along the coastal areas and internal waters. These measures are becoming even more essential considering:

1. the need to support the introduction of Maritime Autonomous Surface Ships (MASS); and
2. the introduction of mobile satellite terminals designed for use by non-SOLAS vessels, particularly in the leisure sector.

Both applications require reliable communications over all coastal areas and along connecting rivers and waterways to marine facilities, including all types of ports, harbors, marinas, berthing areas, which may be situated some way from the coast.

Similar situation exists for the Aeronautical Mobile Satellite Service. MSS services are used to provide vital safety services including mandatory safety communications for the aviation community. IMT deployed in the upper part of the 1.5 GHz band near to airports could prevent aircraft from being able to perform vital satcom equipment checks before take off.

Without having proper measures to protect MSS in adjacent band, there could be severe operational and economic impact on the maritime and aeronautical industries in South Africa.

For the case of Land MSS, the MSS user equipment is in mobile nature and it will be difficult to define an exclusion Zone, however with reduction of the power of the upper part of IMT band and/or having a guard band, the compatibility with land MSS terminals is achievable.

If ICASA choose to turn its attention to this band, the necessary compatibility requirements need to be part of the mobile operator's license, in order ensure continued viability and growth of MSS services above 1518 MHz, and to allow the South African citizens to benefit from the vital MSS services in the adjacent band. One possible approach ICASA may consider would be to focus first on deploying IMT in the portion of the band below 1492 MHz, deferring consideration of the higher frequency ranges for the time being. In later stage if there is high demand to implement the band above 1492 MHz proper ICASA may consider defining technical measures such as Guard band, power limits and exclusion zones as a part of the mobile operator's license to allow continuous operation of MSS.