

**Independent Communications Authority of South Africa**

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**BRIEFING NOTE ON THE AUTHORITY’S RESPONSE TO STAKEHOLDERS’ QUESTIONS OF CLARITY ON THE INQUIRY FOR THE IMPLEMENTATION OF THE RADIO FREQUENCY MIGRATION PLAN AND OF THE INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT) ROADMAP (“THE INQUIRY”) FOR CONSULTATION IN TERMS OF SECTION 4B OF THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA ACT, 2000 (ACT NO. 13 OF 2000).**

**Date of issue: 30 September 2021**

**Government Gazette Number 45247 (Notice 580 of 2021)**

1. **Background**
   1. On 30 September 2021, the Independent Communications Authority of South Africa (“Authority/ ICASA”) published the **Notice on** **the Inquiry for the implementation of the Radio Frequency Migration Plan and of the International Mobile Telecommunications (IMT) Roadmap (“the Inquiry”)** for consultation in terms of section 4B of the Independent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000).
   2. On 15 October 2021, the Authority received questions for clarity from Sentech and Telkom SA SOC LTD ("Telkom”)
   3. The questions of clarity raised by various stakeholders have been summarised and are set out below, followed by the Authority’s response to each question. The focus is on the key issues raised in the submissions received, and not necessarily to respond to each and every point made by stakeholders.
   4. To this end, Stakeholders are encouraged to submit written representations in a **signed PDF document**, including an electronic version of the representation in **Microsoft Word**, of their views on the Inquiry. Submissions must be made no later than 16h00 on Friday 03 December 2021.
2. **Purpose**
   1. The purpose of this briefing note is to provide the Authority’s response to stakeholders’ questions of clarity in relation to the Inquiry.
3. **Enquiries**
   1. **Question 1**

**Inquiry Section: Introduction**

The Authority states the need to “ensure that sufficient radio frequency spectrum is available for broadband and other services in the short term”. To ensure the proper context of the Inquiry, SENTECH seeks clarity from the Authority regarding what is specifically, quantitatively, meant by “sufficient spectrum “? Additionally, is the Inquiry on IMT covering both satellite and terrestrial or limited to terrestrial?

**Authority’s response:**

The Inquiry covers all radiocommunications services, as well as both the terrestrial and satellite component of International Mobile Telecommunications.

Sufficient Spectrum means the amount of Spectrum available to meet the demand that fully facilitates investment and access to broadband for sustainable economic development, assisting in bridging the digital divide.

* 1. **Question 2**

SENTECH is struggling to comprehend the intention and purpose of the Inquiry. The sentence below, from the Inquiry, is too long and difficult to understand.

*The purpose of this Inquiry is to determine the current use and usage of the frequency bands as mandated by the Radio Frequency Migration Regulations 2013 in order to develop an implementation plan regarding the Radio Frequency Migration Plans, IMT Roadmap and the frequencies identified for migration during the development of the National Radio Frequency Plan of 2018, as well as the implementation plan thereof, through the development and amendment of new and existing the Radio Frequency Assignment Plans to achieve global harmonisation of Standards and Systems*.

**Authority’s response:**

Within the 2013 migration regulations, which in turn draw from the ECA, there is a mandate to change the uses of radio frequency bands in line with the National Radio Frequency Plan, in order to ensure harmonisation in the region. Section 4 of the 2013 regulations outlines the principles to be followed for the migration process. The Inquiry is, therefore, part of the necessary series of steps in determining the use and usage of radio frequency spectrum bands before implementing the migration plans. The implementation of the Radio Frequency Migration Plan will be through the development of the Radio Frequency Spectrum Assignment Plan in accordance with Regulation 5[[1]](#footnote-2) .

* 1. **Question 3**

On the cover page, the Authority refers to the 2013 Radio Frequency Migration Plan. The latest migration plan was published in 2019 (Government Gazette 42337, Notice 66 of 2019 dated 29 March 2019). Telkom requests clarification as to the relevance of the 2013 Migration Plan versus the 2019 Migration Plan in the Implementation Plan.

**Authority’s response:**

The Inquiry refers to both the 2013 and 2019 Migration Plans regulations because they are both still in force. The purpose of the Inquiry is to assist the Authority in implementing the migration plans as mandated by the Radio Frequency Migration Plans of both 2013 and 2019 as well as mandated by the IMT Roadmaps of 2014 and 2019.

* 1. **Question 4**

**Current use and usage**

SENTECH seeks clarity from the Authority regarding the intended meaning of the phrase, in particular, lucidity on the combined application of the terms use and usage:

*The purpose of this Inquiry is to determine the current use and usage of the frequency bands as mandated by the Radio Frequency Migration Regulations 2013…*

**Authority’s response:**

The Inquiry aims to gain feedback on the current use of the radio frequency spectrum and to determine to what extent the current users of the frequency band as well as the current systems used.

* 1. **Question 5**

**Radio Frequency Migration Regulations 2013**

SENTECH is concerned that the purpose of the Inquiry is incorrectly referenced and justified. Section 34(3) of the ECA clearly indicates that the “Authority must assign radio frequencies consistent with the national radio frequency plan for the use of radio frequency spectrum by licence holders and other services that may be provided pursuant to a licence exemption”. Section 2 of the Radio Frequency Migration Regulations 2013, Government Gazette No. 36334 of 3 April 2013, state that the purpose of the Regulations is to “establish the framework by which the Authority may migrate users of the radio frequency spectrum under the National Radio Frequency Plan of South Africa”. It is therefore incorrect for the Authority to imply that the Radio Frequency Migration Regulations 2013 mandate use of frequency bands.

**Authority’s response:**

Regulations 4, 5 and 6 of the Radio Frequency Migration Regulations, read with section 34(16) of the Electronic communications Acts (ECA), provide for the procedure and mandate to change the uses of radio frequency bands, for a range of reasons. The Inquiry is therefore supporting this mandate to assess through consultation (of which this Inquiry is an information gathering component), the need to change the uses of radio frequency bands by gaining feedback from stakeholders on the current use and usage of frequency bands.

* 1. **Question 6**

According to section 4, “The main objective of the category 1 bands is to identify priority IMT and other Radiocommunications frequency bands”. Some of the bands listed are not fully aligned with the IMT frequency bands as licensed or as per the relevant Radio Frequency Assignment Plans. Is the intention to get inputs on services working within the IMT bands as defined for South Africa, or also on services adjacent to these IMT bands as per the start/stop frequencies listed in the tables?

**Authority’s response:**

The purpose is to gain feedback on both services working within the IMT bands as defined for South Africa, and on services adjacent to these IMT bands, as per the start/stop frequencies listed in the tables, in order to support the understanding of current use and usage.

* 1. **Question** **7**

**Implementation Plan**

SENTECH seeks further clarification on the extended phrase below:

*The purpose of this Inquiry is to determine the current use and usage of the frequency bands as mandated by the Radio Frequency Migration Regulations 2013 in order to develop an implementation plan regarding the Radio Frequency Migration Plans, IMT Roadmap and the frequencies identified for migration during the development of the National Radio Frequency Plan of 2018…*

SENTECH requests the Authority to provide clarity regarding which implementation plan is envisioned. The company’s understanding is that the Radio Frequency Migration Regulations 2013outline the following: Principles for Radio Frequency Spectrum Migration; Processes for Radio Frequency Migration; Preparation of a Radio Frequency Spectrum Assignment Plan; and Amendment of a Radio Frequency Spectrum Licence. The Radio Frequency Migration Regulations 2013 state that frequencies identified for possible migration will be done through the Radio Frequency Migration Plan.

**Authority’s response:**

The purpose of the Inquiry is to assist the Authority in implementing the migration plans as mandated by the Radio Frequency Migration Plans of 2013 and 2019 as well as mandated by the IMT Roadmaps of 2014 and 2019. The implementation of the Radio Frequency Migration Plan is through the development of the Radio Frequency Spectrum Assignment Plan in accordance with Regulation 5[[2]](#footnote-3).

The process of frequency migration is carried out in a manner consistent with the Radio Frequency Spectrum Regulations 2015, and the generic process is described in the Frequency Migration Regulation (FMR) 2013.

The key processes are described in the Radio Frequency Spectrum Regulations (RFSR) 2015, and are as follows:

* Preparation of a RFSAP for the particular band or bands; and
* Amendment of a Radio Frequency Spectrum Licence where necessary.

When it has been established that migration is required, then the critical issue is to determine the time frame in a manner consistent with sound radio frequency spectrum management.

In some cases, it is necessary to carry out a feasibility study on the band in question. This is illustrated in the process flow indicated below.



* 1. **Question 8**

# Inquiry Section: Category 1 Bands

SENTECH requires clarity from the Authority regarding the framework for the prioritisation of “IMT and other Radiocommunications frequency bands”. To ensure objectivity and fairness of the Inquiry process, SENTECH argues that it is important for the Authority to publish the framework to be adopted when determining, weighing and prioritising issues submitted to ICASA. When the Authority refers to priority identification for IMT and “other Radiocommunications frequency bands”, does ICASA refer to mobile allocation and then IMT identification? Or has the Authority already determined mobile allocation and then IMT identification, and the Inquiry only seeks to address issues of priority? The question is limited to issues not discussed as part of the Draft National Radio Frequency Plan 2021 that currently requires Ministerial approval.

On the issue of “alternative frequency bands”, SENTECH requires the Authority to clarify whether this relates to IMT (terrestrial and satellite) or to services currently assigned spectrum in the table (pages 7 to 14 of the Inquiry document).

SENTECH has noted that the Authority has included several bands that are still in discussion as part of the ITU Study Group processes leading to WRC-23. The company has also noted that no country position/s have been considered and approved by Cabinet for discussion at WRC-23. Additionally, the Draft National Radio Frequency Plan 2021 is yet to be approved by the Minister in compliance with section 34(2) of the ECA, and the Minister is yet to publish a draft policy on 5G as indicated in the Policy Direction on High Demand Spectrum and Policy Direction on the Licensing of the WOAN (2019).

SENTECH seeks clarity from the Authority on the legal basis justifying the consideration of the following bands for IMT: 174 – 223 MHz, 214 – 230 MHz, 223 – 230 / 230 – 238 MHz, 238 – 267 MHz, 617 – 652 / 663 – 698 MHz, 2025 – 2210 / 2200 – 2285 MHz, 3600 – 3800 MHz, 3800 – 4200 MHz, 4800 – 4990 MHz, 5925 – 6425 MHz and 10 700 – 11 700 MHz.

**Authority’s response:**

The Inquiry aims to gain feedback on all radiocommunications services in order to facilitate the first phase for the implementation of migration plans. The frequency bands which are the subject of the Study at the ITU-R for WRC 23 have been included in order to determine the level of priority attached to them by stakeholders in South Africa for future long-term planning.

* 1. **Question 9**

Some bands listed in the table in section 7 (“IMT frequency category 1 bands for comments are”) are not currently identified for IMT in South Africa (e.g. 617-652 MHz paired with 663-698 MHz, 3600-3800 MHz, and 3800-4200 MHz). Are these bands considered for IMT in South Africa? Should respondents motivate for or against these bands to be considered for IMT in future?

**Authority’s response:**

The frequency bands are not identified for IMT in the ITU Radio Regulations and therefore are not identified for IMT in South Africa. These have been included in order to determine the level of priority placed on them by stakeholders in South Africa for future long-term planning.

The Authority would request stakeholders to include in their response which specific bands they feel should be combined and why.

* 1. **Question 10**

Bands 9 to 12, as contained in section 7 of the Implementation Plan, relate to the frequency range 1350 – 1518 MHz. The ultimate IMT band is however limited to the band 1427-1518 MHz.

Although the IMT band overlaps with the current PTP bands, Telkom recommends that bands 11 and 12 be combined into one band namely the band 1427-1518 MHz, to deal specifically with the internationally accepted IMT band.

Telkom also recommends that some bands be split in the response: for example, band 14 could be split into the bands the MSS bands (1980-2010 MHz paired with 2170-2200 MHz as Band 14a and the band 2010-2025 MHz as band 14b.

Will it be acceptable to the Authority if the table in the written submission is amended to reflect these band- specific issues?

**Authority’s response:**

Respondents to the Inquiry who feel there are band specific issues should provide feedback within the table as it is set out, and they may amend the table to reflect these band specific issues.

* 1. **Question 11**

Band 43 (i.e., 825-830 MHz and 870-875 MHz) listed in section 8 of the Implementation Plan has been identified for IMT in the relevant Radio Frequency Spectrum Assignment Plan. Should this band therefore not be listed in section 7 (i.e., IMT bands)?

**Authority’s response:**

Question 9 in the Inquiry asks respondents to detail frequency bands that are not detailed in Question 7 or Question 8 and why they need to be considered. Stakeholders may make proposals in the table where the band is to be situated.

* 1. **Question 12**

In section 9, the Authority requests identification of “other IMT bands”. It is noted that some existing IMT frequency bands are not listed (e.g., IMT1800). Is the intention that these bands be listed as “other IMT bands” or has this band be excluded because the band is not considered for migration?

**Authority’s response:**

Question 9 should be used to detail frequency bands that are not detailed in Question 7 or Question 8, and to motivate why they need to be considered. Stakeholders may make proposals in the table where the band is to be situated.

* 1. **Question 13**

Section 10.1 lists frequency bands that “may be considered for IMT services”. These are all bands that could be considered for IMT: for example, the mmWave bands identified at WRC-19. However, the 2300-2400 MHz band is included, although this band is already an IMT band as per the National Table of Frequency Allocations. A Radio Frequency Spectrum Assignment Plan for the IMT2300 band has also been prescribed (although it may have to be updated). Can the Authority please clarify why this band is included in the list of 14 bands?

**Authority’s response:**

The Inquiry Questionnaire allows respondents to provide feedback on the bands listed as ‘may be considered’ in section 10.1. Stakeholders may make proposals in the table where the band is to be situated.

* 1. **Question 14**

# Inquiry Section: Category 2 Bands

SENTECH has noted with concern that the Authority has listed bands to be “considered for IMT services”, without listing “alternative bands” for current users. To empower current users to provide substantive, relevant and pertinent information on section 11, the Authority must provide information on “alternative bands” for current users. The Inquiry is currently unevenly balanced for the benefit of terrestrial IMT at the unfair expense of current services.

SENTECH seeks clarity from the Authority on what is meant by “services that facilitate access to broadband services”? Some of the bands in section 10.2 of the Inquiry have been identified for mobile allocation and IMT identification at WRC-19. The Minister is yet to approve the Draft National Radio Frequency Plan 2021 and also publish Policy on 5G for public comment. What principles were considered by the Authority is determining table in section 10.2 as likely possible bands to migrate some of the users of frequencies in the table illustrated in section 10.1? How is the Authority considering dealing with paired frequencies that appear in 10.1 and 10.2, such as 3600 – 4200 / 5925 – 6425 MHz?

**Authority’s response:**

The Inquiry questionnaire aims to gain feedback from stakeholders. Stakeholders should therefore propose alternative bands that they suggest might be used for the implementation of the Migration Plan of 2013 and 2019, as well as the IMT Roadmaps of 2014 and 2019, in addition to those detailed, as stakeholders within the industry are likely to have additional information on the current use and usage of the frequency bands

With regard to services that facilitate access to broadband, the Authority is referring to systems and applications, such as Wi-Fi or satellite or fixed wireless services, that can facilitate Internet access.

Where stakeholders feel additional consideration is required with regard to dealing with paired frequencies, then the Inquiry Questionnaire is seeking feedback from stakeholders on this, if they have any.

* 1. **Question 15**

The Authority recently published at draft update of the National Radio Frequency Plan 2021. In this draft plan, the Authority included the decisions for IMT as adopted at WRC-19 (i.e., the mmWave frequency bands).

In terms of process, Telkom believes that the updating of the Frequency Migration Plan should be concluded, before the final updated band plan is prescribed. In this way, the IMT bands adopted, and the related migration of incumbent services, will be reflected in the updated band plan. Can the Authority confirm this understanding in terms of process?

If the Authority intends to publish the updated band plan before concluding on updating the migration plan, how does the Authority intend to ensure alignment between these two documents?

**Authority’s response:**

Section 34(16) of the ECA provides that:

“*the Authority may, where the national radio frequency plan identifies radio frequency spectrum that is occupied and requires the migration of the users of the of such radio frequency spectrum to other radio frequency bands, migrate the users to such other radio frequency bands in accordance with the national radio frequency plan”.*

In terms of process, the Authority develops the National Radio Frequency Plan, and, upon publication thereof, this forms the basis for the development and updating of the Radio Frequency Migration Plan, in accordance with section 34(16) read with the Radio Frequency Migration Regulations.

1. Government Gazette 36334 (Notice 352 of 2013) [↑](#footnote-ref-2)
2. Government Gazette 36334 (Notice 352 of 2013) [↑](#footnote-ref-3)