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Dear Mr Makgotlho

DRAFT UPDATE OF THE NATIONAL RADIO FREQUENCY PLAN

Please find attached the draft update of the National Radio Frequency Plan.

Yours sincerely

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GM: Technical Regulatory

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DRAFT UPDATE OF THE NATIONAL RADIO FREQUENCY PLAN

- 1 M-Net and Orbicom thank the Independent Communications Authority of South Africa ("the Authority") for the opportunity to comment on the draft update of the National Radio Frequency Plan 2017 ("the draft Plan") which was gazetted on 9 December 2016.¹
- 2 We have confined our comments to the specific issues set out below.

SADC timelines and GE-89 reference

- 3 The draft Plan's references to the SADC timelines² have become irrelevant within the South African context, as South Africa has lagged behind this timeline. References to the SADC timelines should therefore be removed. In addition, references to GE-89 should be removed, as they have been superseded by GE-06.

470-694 MHz band

- 4 The draft Plan includes a comment in this band, indicating that "The use of 'White Spaces' in this band is under consideration".³
- 5 We reiterate our objection to the use of white spaces in this band, amongst other reasons because the licensing of white spaces in this band does not accord with the WRC-15 Final Acts⁴. The position ahead of the WRC-15 Conference was one of "No Change" in the allocation of the band. This position was upheld at WRC-15 as reflected in the WRC-15 Final Acts.
- 6 No white spaces permanent licences should be issued until the digital-to-digital migration (frequency restacking) has been completed.

694-790 MHz, 790-862 MHz bands

- 7 In the Table of Frequency Allocations in the draft Plan, the 694-790 MHz band is limited to Mobile services only, with no reference made to Broadcasting services in either of the columns. Furthermore, the 790-862 MHz band is limited to Fixed and Mobile services, with reference made to Television Broadcasting services (in the 470-854 MHz frequency bands) in column 3 ("Typical Applications") and column 4 ("Notes and Comments"). Column 4 makes reference to the IMT Roadmap 2014, the Radio Frequency Assignment Plan 2015 and Recommendation ITU R.M.1036. It also clarifies the need to migrate fixed links and television broadcasting in line with the Radio Frequency Migration Plan.⁵

¹ Notice number 861, Government Gazette number 40480, 9 December 2016

² See pgs 3-76 and 3-88 of the draft Plan

³ Pgs 3-86 to 3-87 of the draft Plan

⁴ Final Acts WRC-15, World Radiocommunication Conference (2015)

⁵ Pgs 3-87 to 3-88 of the draft Plan

- 8 The reference to "Television Broadcasting (470-854 MHz)" in the "Typical Applications" column is understood to mean, in the South African context, that before migration of television broadcasting from the 694-790 MHz and the 790-862 MHz bands, Broadcasting services will continue to be recognized as primary services in the 470-854 MHz frequency bands.
- 9 It has been indicated to the Authority previously, under the work of the Joint Spectrum Advisory Group ("JSAG") that migrating broadcasting out of the 694-790 MHz and the 790-862 MHz bands is a costly, disruptive and time consuming exercise, which requires careful planning and implementation. This process of frequency restacking is not only limited to the technical aspect of retuning transmitters and combiners at affected transmitter sites, but also needs to take into consideration the impact on television viewers who will be required to retune their receivers (TV-Sets/STBs) and the communication campaign required to ensure that television viewers understand the process. The Radio Frequency Migration Regulations and Radio Frequency Migration Plan 2013⁶ provide for a 5-year timeline for migration. There is currently no clarity, whether from the Authority, the Minister or National Treasury, as to who will bear these costs.
- 10 The Authority should also note the National and Regional positions on co-existence of broadcasting and IMT in these bands.
- 11 We therefore propose that the Authority include a footnote, under the National Footnotes⁷, that clearly states the need for consultation on a transition plan, which will implement the Radio Frequency Migration Regulations and Radio Frequency Migration Plan 2013 within the specified timeline and give effect to the decision to migrate broadcasting out of the 694-790 MHz and the 790-862 MHz bands.

3 600-4 200 MHz band

- 12 We have some objections as regards the Typical Applications and Notes and Comments with regard to Broadband Fixed Wireless Access ("BFWA") services in respect of paired services.⁸
- 13 This comment does not reflect the South African Country position nor the SADC position on the band as approved by the respective preparatory working groups and Cabinet of South Africa. The position ahead of WRC-15 was one of "No Change" in the allocation of the 3 600-4 200 MHz band. This position was upheld at WRC-15 as reflected in the WRC-15 Final Acts.
- 14 The National Radio Frequency Plan 2013⁹ as gazetted in June 2013 confirms that the band is allocated for Fixed and Fixed-Satellite (space-to-earth) services and under "Typical Applications" Fixed links (and C-Band downlink (VSAT/SNG/PTP links)). There is no mention of BFWA services.

⁶ Notice Number 352, Government Gazette Number 36334, 3 April 2013

⁷ Pages 5-164 onwards

⁸ Pg 3-109 to 3-110

⁹ Notice number 354, Government Gazette Number 36336, 28 June 2013

- 15 Satellite users, including broadcasters, have made numerous submissions, at national and regional preparatory meetings at which the Authority was in attendance, on the importance of this band and the reliance on it by satellite services in South Africa, SADC and beyond.
- 16 This band is critically relied upon for telecommunications and broadcasting services requiring high availability not impacted by weather and atmospheric conditions. Submissions included, amongst others, the use cases of the band for banking, government services and broadcasting. In addition, the submissions included interference case studies highlighting the incompatibility of BFWA services and satellite services in the same geographical area. These submissions, including previous studies done by the CSIR/Meraka Institute, highlighted the reliance by satellite services on this band as well as the prohibitive costs of any alternatives across South Africa and beyond.
- 17 The “No Change” decision both for South Africa and SADC recognized the importance of the band, and this decision was carried at WRC-15.
- 18 The inclusion of a “typical use” for BFWA services as well as the comment that satellite services (VSAT) be migrated from the band contradict the national and regional position of “No Change” to the band and the outcome of WRC-15. What the Authority has published is therefore inconsistent with the agreed national and regional positions and the outcome of WRC-15.
- 19 This comment and the BFWA use case must be removed to ensure that the “No Change” position is reflected in the National Table of Frequency allocations.

10.7-10.95 GHz, 10.95-11.2 GHz, 11.2-11.45 GHz, 11.45-11.7 GHz bands

- 20 The National Radio Frequency Plan 2013 clarifies that this band is used for Broadcast Satellite services (“BSS”) and DTH on a secondary basis.¹⁰ This critical footnote does not appear in the draft Plan.
- 21 The 10.9-11.7 MHz band is part of the APP30B plan and is used in South Africa and the region for Fixed Satellite services (“FSS”) and BSS. The Authority should list “Fixed-satellite downlinks (PTP/VSAT/SNG)” and “Ku-band downlink (VSAT/SNG/BSS feeder links)” in the “Typical Applications” column, or retain the text as published in 2013.
- 22 The Authority is reminded that operation of Fixed services (“FS”) and FSS or BSS in the same band and geographical area requires careful co-ordination in order to avoid interference to the FSS or BSS. Accordingly, we propose that the Authority include a comment or note in relation to this band as follows: “Operation of FS and FSS or BSS in this band needs to be co-ordinated to avoid interference to FSS or BSS”.

11.7-12.5 GHz, 12.5-12.75 GHz bands

- 23 As explained in paragraph 22 above, operation of FS and FSS or BSS in the same band and geographical area requires careful co-ordination in order to avoid interference to the FSS or BSS. We repeat our proposal that the Authority include a comment or note

¹⁰ Pgs 3-105, 5-148

in relation to this band as follows: "Operation of FS and FSS or BSS in this band needs to be coordinated to avoid interference to FSS or BSS".

Oral Representations

- 24 We reiterate our thanks to the Authority for inviting representations, and trust that our comments will assist the Authority in updating the Plan appropriately in line with the outcomes of WRC-15.
- 25 We request an opportunity to make oral representations regarding the draft Plan at the Authority's public hearings to be held in February 2017.