

**Representations by Orbicom (Pty) Ltd on the
Authority's draft Frequency Migration
Regulations and Frequency Migration Plan**

12 October 2012

Introduction

- 1 Orbicom (Pty) Ltd welcomes the Authority's invitation for written representations on the Draft Frequency Migration Regulations and Frequency Migration Plan¹ ("the draft Frequency Regulations and Plan").
- 2 The draft Frequency Regulations and Plan raise important issues for current and future broadcasting services, electronic communications services and electronic communications network services.
- 3 We note that the Authority intends to conduct public hearings from 31 October to 2 November 2012. Orbicom requests an opportunity to participate in those hearings. Since Electronic Media Network Ltd ("M-Net") supports Orbicom's representations, and has submitted a letter to that effect to the Authority, we would like Orbicom and M-Net to share a slot at the hearings.

Failure by Authority to adhere to ITU procedures, and misinterpretation of WRC-12 resolutions

- 4 The International Telecommunications Union ("ITU") primarily manages spectrum by convening a conference called the World Radio Communications Conference (WRC) every three to four years. At this Conference, member states decide on the allocation of spectrum for different purposes through a consensus building exercise. In many instances, spectrum in a particular band is allocated on a shared basis. There are also instances where services are allocated on a secondary or co-primary basis.
- 5 The Authority's gazetting of the draft Frequency Regulations and Plan raises two fundamental concerns:
 - 5.1 The Authority has not adhered to ITU procedures; and
 - 5.2 The Authority has misinterpreted what is required by the WRC-12 resolutions.

¹ Notice No 606, Government Gazette No. 35598 of 17 August 2012

- 6 On the issue of procedure, the Authority has deviated from accepted spectrum management principles. Once the WRC has finalized its decision and regulations have been adopted, the next step is for member states to embark on a process of reviewing their current table of allocations to ensure consistency with the outcomes of the latest WRC conference.
- 7 Accordingly, the Authority's first step after WRC-12 should have been to update the current table of allocations to ensure consistency. In doing so, it should have invited interested parties to make representations. Only once the Authority had carefully considered all representations would it be appropriate to embark on a migration process, and then only to the extent that there is a need for such a migration, taking into account the decisions of the WRC and South Africa's specific needs.
- 8 Not only has the Authority failed to take this critical step, the current process goes further and proposes the migration of users in particular bands, when the relevant WRC resolutions do not propose a migration of existing users.
- 9 These procedural and substantive irregularities expose the entire process to challenges. It would accordingly be ill-advised for the Authority to proceed with the draft Regulations and Plan.
- 10 On the issue of interpretation, the Authority's proposals for migrating existing users are contrary to the decisions of WRC-12. Importantly, WRC-12 has made allocations on a shared basis with current users of particular bands. Yet, instead of exploring co-allocation, the Authority appears to have interpreted co-allocation to mean that existing users must be migrated. This is not only incorrect, but a violation of radio regulations which should form the basics of spectrum management.
- 11 It is not clear why the Authority has totally ignored the content of the WRC-12 resolutions with regard to co-allocation. If it is the Authority's intention to invoke Article 4.4 of the radio regulations which allows member states to deviate from the ITU Table of Allocations on a non-interference basis, then the Authority should make this clear. However, even if this were the case, it is our view that

such a process should be done separately for each band because the migration processes in each band would be different.

Authority's proposals re band 694–790 MHz

- 12 The draft Regulations and Plan propose the migration of existing broadcasters in the band 694-790 MHz (pg 38) and further state that the migration will end in 2015. The Authority is well aware that WRC-12 made an allocation on a co-primary basis in this band to IMT pending the outcome of WRC-15. It is our view that the migration of existing users in this band is not only premature, but also contrary to the decision of WRC-12.
- 13 The allocation on a co-primary basis means that both services enjoy equal rights to the particular band, and in this case it will mean that both broadcasting and IMT have equal rights to this spectrum. The resolution that accompanied the decision to allocate this band on a co-primary basis pending the decision of WRC-15 is Resolution 232.
- 14 The resolution is clear on the considerations each member state needs to take into account prior to deciding on the allocation or implementing IMT in this band. For some reason, the Authority has not considered the needs of the current broadcasters occupying the band and whether migrating them will leave enough spectrum for their immediate and future needs. The resolution makes it clear what steps each member state should follow prior to making a decision. The Authority has not undertaken any of the steps identified in this resolution. The resolution also makes it clear that this spectrum is for broadcasting and the deployment of IMT should take into account the existing services in the band.
- 15 Furthermore, the resolution invites the ITU to conduct studies on the compatibility between broadcasting and IMT services. However, the results of such studies are only going to be made available at WRC-15.

Authority's proposals re band 3600-3800 MHz

- 16 Another instance of misinterpretation relates to the band 3600-3800 MHz. Once again, WRC-12 allocated this band on a co-primary basis, but the Authority is proposing the migration of all current satellite users out of this band.
- 17 The band 3600-3800 is heavily used by satellite broadcasters. Multichoice uses this band for receiving broadcast channels for its DStv service and for distributing channels across the African continent. This C-Band is the only reliable band due to its robustness against rain fading, especially in the African continent, where it is not feasible to rollout cable.
- 18 The WRC-12 Allocation of 3600-4200 in MOD 5.340A reads as follows:
- “...the band 3400-3600 is allocated to the mobile, except aeronautical mobile, service on a primary basis subject to agreement obtained under No. 9.21 with other administrations and is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations.” (WRC-07) (our emphasis)
- 19 As in the case of the band 694-790 MHz, the Authority has not adhered to the current allocations by the ITU and has failed to take into account that this band (3400-3600 and not 3600-3800) has been allocated on a co-primary shared basis to both satellite and IMT.
- 20 The alternative proposal by the Authority, namely that services will be migrated to Ku-Band is technically not feasible. The Ku-Band is very susceptible to rain, and therefore not a reliable band to use for services which must consistently be provided at a high level.
- 21 The Authority’s proposal to migrate services out of the band 3600 – 3800 MHz is contrary to the ITU allocations, given that the ITU radio regulations have allocated this band on a shared basis to satellite and mobile (except aeronautical mobile services). Furthermore, the proposed migration to Ku-Band is completely unsuitable and will make it impossible for us and our sister

company, Multichoice, to offer a reliable and quality service to our subscribers because of the technical challenges that are concerning the Ku-Band. .

Grounds upon which the Authority may initiate the process of radio frequency migration

- 22 By virtue of draft regulation 4(b) the Authority proposes that it be empowered to initiate a process of radio frequency migration in a number of circumstances, including "Where a change in the use of a radio frequency band is required to bring the South African National Frequency Plan into line with ITU Radio-regulations or the final acts of the latest WRC".
- 23 Similarly, in paragraph 3.1 at pg 23 of the Government Gazette the following is stated:

"Bands are identified for radio frequency migration according to the following hierarchy

- First Level – where the ITU radio regulations/decision of a World Radio Conference (WRC) require a change in national allocation that will require existing users to be migrated.
- Second Level – where a Regional Radio Conference require a change in national allocation that will require existing users to be migrated."

- 24 These statements seem to suggest that services allocated in a particular band must migrate if the ITU has made a new allocation. However, this interpretation is incorrect. If, despite a new allocation, services could co-exist, then migration may not be necessary.

Concerns in relation to existing radio frequency spectrum licences

- 25 There are a number of provisions in the Authority's gazetted document which suggest a somewhat cavalier approach on the part of the Authority towards the rights of radio frequency spectrum licensees. For example, the Authority states that "The spectrum licence is currently valid for one year only and a spectrum

assignment can be revoked at any time."² Elsewhere the Authority states that "The process of migrating users will not have an impact on the duration of the radio frequency spectrum licences." And draft regulation 3(5) provides: "The users to be migrated shall not be entitled to be compensated by the Authority for the costs of the migration."

- 26 The reality is somewhat different. Regulation 15(2) of the Radio Frequency Spectrum Regulations provides that "... a Radio Frequency Spectrum Licence will remain valid from 01 April until 31 March of the following year and is thereafter renewable by payment of the prescribed annual licence fee in terms of these regulations." Regulation 9(1) provides: "Renewal of a Radio Frequency Spectrum Licence is performed on an annual basis by payment of the prescribed annual licence fees, except ...". Thus, provided a spectrum licensee timeously pays its annual licence fees, its spectrum licence will run from year to year for as long as the service licence to which the spectrum licence relates continues to be in place.
- 27 Nor may a spectrum licence/assignment be revoked at any time. It would only be justified in exceptional cases where there has been a material and repeated failure by the spectrum licensee to comply with the relevant legislation, regulations and its licence conditions, alternatively where there are overwhelmingly strong public interest considerations.
- 28 The Authority also seems to fail to appreciate that it is the existing terrestrial television broadcasting service licensees which are having to relinquish valuable spectrum and it is those licensees which are creating the digital dividend. Those licensees ought to be properly compensated through the assignment of other spectrum so that post analogue switch-off they are each assigned sufficient spectrum to have their own multiplex. There also has to be greater consideration given as to who has to bear the costs of migration.

² Para 2.3.1, pg 21 of the Gazette

Concerns about consultative process

- 29 As we've indicated, a separate process should be undertaken where the Authority sees the need to migrate existing users of a band. Any regulations governing that process ought to include procedural protections for those spectrum licensees which may have to migrate.
- 30 Furthermore, issues which require proper consideration in any such process must include whether there are less intrusive measures available than requiring a spectrum licensee to migrate, the details of how the migration will work, the time frames of such a migration if necessary, how any possible interference is to be dealt with, the costs of the migration and who is to bear those costs.

Concluding comments

- 31 Our analysis of the draft regulations and the draft plan has revealed two critical errors. First, the Authority has failed to follow the correct ITU procedures and second, the proposals made by the Authority do not reflect the resolutions adopted at WRC-12. We urge the Authority to withdraw these draft Regulations and Plan and to publish a new set of draft Regulations focused solely on updating the current table of allocations.
- 32 Only after the table of allocations has been updated to correctly reflect the changes that came out of WRC-12 that the Authority ought to consider whether the migration of any service is necessary. The migration of services should also not be automatic, but rather be based on the need for such a migration to keep the table of allocations in line with the ITU table of allocations.
- 33 Once again, Orbicom would like to thank the Authority for this opportunity to make written representations. The draft Frequency Regulations and Plan raise complex issues which require input from the sector and careful consideration by the Authority.