

1. INTRODUCTION

The National Association of Broadcasters (NAB) welcomes this opportunity to respond to government gazette no: 2242 calling for views from interested parties on reserving the 2.6GHz band for IMT 2000

The NAB is widely representative of the South African broadcasting industry. Its membership includes:

- All television broadcasters;
- 19 SABC radio stations and 15 commercial radio stations;
- Over 40 community broadcasters;
- Both the common carrier and the selective and preferential carrier licensed signal distributors.

In particular the NAB represents various interested parties and stakeholders operating in the band 2.5 – 2.7GHz, which is extensively used for “services ancillary to broadcasting”.

2. SERVICES IN THE 2.5 – 2.7 GHZ BAND

The NAB notes that services in this band include broadcast contribution, manpack cameras, remote outside broadcast links and multi point multi channel (point to multipoint) distribution systems (MMDS).

In particular, MMDS lends itself well to economical local area programme distribution for educational use by tertiary educational bodies, wishing to widen their coverage in the immediate vicinity of their campus.

The frequencies in 2.5 – 2.7GHz band are currently shared with TDMA and proposed TDMA services for rural telephony. The band is used by broadcasters on a non-interfering basis.

The NAB submits that broadcasters are aware of the necessity to provide telephones

and telephony infrastructure particularly in rural areas for emerging communities. In this regard the WRC2000 Conference adopted a resolution for developing countries that a spectrum requirement calculation should be undertaken prior to using any of the extended bands. Use should therefore first be made of the core bands of the IMT2000 and related mobile telephones services. From the formulas indicated in the Number 6 report from the UMTS Forum, it is unlikely that the additional spectrum for third generation cellular radio telephony will be required in emerging Africa until well after 2010.

The attached graph is extracted from a publication by the ITU and shows the third generation IMT2000 cellular phones subscriber forecast, on a continent by continent basis between 2005 – 2010. The very thin red line at the top indicates the subscribers in Africa which although, the growth is comparable to North America, the demand is less than 0.1% of the other continents. It is unlikely therefore that the extended bands will be necessary for even the most densely populated areas in Africa.

It is further envisaged by broadcasters that the development of terrestrial digital television broadcasting although initially requiring additional spectrum for dual illumination, will eventually require less spectrum than is currently used for analogue services. It is predicted that a full changeover to digital terrestrial television broadcast is likely to take place in approximately 10 to 15 years time.

Similarly current developments in COFDM technology for broadcast contribution using narrow bandwidths for manpack links will provide less pressure on the 2.6GHz band in approximately 5 years time.

The general availability now of MMDS transmitters for digital terrestrial transmission and the availability of SFN (single frequency network) operation will allow some economy in the existing 2.5 - 2.7GHz band for MMDS in the immediate future.

CONCLUSION

Taking the above points into account, the NAB supports Option 2, where the assignment of point to point and point to multipoint systems in the 2.6GHz band is

continued until the 2012 (with new allocations on a digital service basis). This is the year predicted for the full implementation of IMT2000. We submit that migration should not commence before 2013 - 2015 and only then provided the UMTS IMT2000 spectrum report yields a conclusion that such extended bands are required to fulfil the mobile communication requirements of South Africa.