
GENERAL NOTICE

NOTICE 800 OF 2011



Independent Communications Authority of South Africa

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RE-CATEGORIZATION OF MEDIUM WAVE (MW) FREQUENCIES, 2011

REASONS FOR DECISION

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1. INTRODUCTION

1. The Independent Communications Authority of South Africa ("the Authority") is the regulatory body tasked with controlling, planning, administering and managing the use and licensing of the radio frequency spectrum in the Republic in terms of section 30(1) read with subsection (2) of the Electronic Communications Act, 2005 (Act No. 36 of 2005), in accordance with the applicable standards and requirements of the International Telecommunications Union ("ITU"), as agreed to and adopted by the Republic.
2. In making provision for the Medium Wave ("MW") spectrum re-categorization process, the Authority has acted in terms of its powers in terms of the Electronic Communications Act 36 of 2005 ("the EC Act"), the Broadcasting Act 4 of 1999 and the Independent Communications Authority of South Africa Act 13 of 2000 ("the ICASA Act") and has sought to promote relevant regulatory objectives, as provided for in these legislations.
3. The Authority has now finalised the determination on the re-categorisation of MW frequencies. The determination sought primarily to provide a regulatory framework for the licensing of all spare MW radio frequency spectrums within the designated categories provided by the Electronic Communications Act 36 of 2005 ("the EC Act") for sound broadcasting services. The determination also provide procedures and criteria for the awarding of MW radio frequency spectrum licences in the provision of sound broadcasting services on the MW radio frequency band.
4. The Authority also took cognizance of interests expressed by various licensees and interested parties who made submissions in response to Government Gazette 34143 of 23 March 2011. While the Authority is mindful of the escalated demands for radio frequency spectrum in the metropolitan areas, it has decided to simultaneously deal with the licensing of commercial sound broadcasting and opening of MW frequency for community broadcasting in order to maintain a balanced licensing approach.



5. In this Reasons Document the Authority has outlined the basis for its determinations in relation to the re-categorization MW radio frequencies in the context of the representations and submissions received from licensees and various interested parties in response to the document of re-categorization intent published in Government Gazette 34143 of 23 March 2011.
6. The Authority seeks to set out its position in relation to all material issues raised in the representations.
7. The Authority has adopted and published this Reasons Document also with the intention of giving clarity to participants in the communications sector, particularly with regard to the steps which the Authority intends to take in relation to matters of spectrum scarcity, demand of community sound broadcasting frequencies and the future of MW sound broadcasting technologies.
8. In taking into account the representations received from interested parties, where the Authority considered those submissions to have merit, the Authority has taken cognisance of and included them on the final determination.

2. NATIONAL POLICY FRAMEWORK

9. In terms of section 3(4) of the ECA, the Authority is required, when exercising its powers and performing its duties, to "consider policies made by the Minister".
10. Consideration was given to section 4.1 "national spectrum management must ensure that spectrum is provided over both short and long term in order that all potential spectrum users both public and private are able to achieve their objectives".
11. Followed by section 4.3 " Spectrum management shall encourage sharing of radio frequency spectrum among different radio users and service, where appropriate, making use of proper sharing criteria and suitable mitigation techniques".



3. LEGISLATIVE FRAMEWORK

12. Section 2(e) of the EC Act provides that the Authority must ensure that there is efficient use of the radio frequency spectrum.
13. Section 30 (1) of the EC Act confers power to the Authority to control, plan, administer and manage the use and licencing of radio frequency spectrum except in instances provided for in section 34.
14. Section 30 (2) of the EC Act confers power to the Authority to give high priority to applications for radio frequency spectrum where the applicant proposes to utilise digital electronic communications facilities for the provision of broadcasting services, electronic communications services, electronic network services and other service licenced in terms of the Act.

4. PROCEDURE FOLLOWED

15. Authority initiated a process of re-categorization in order to licence some of the commercial and public sound frequencies for community sound broadcasting to utilised existing MW transmitters.
16. On 23 March 2011, the Authority published a Notice in Government Gazette no. 34143, containing the notice for re-categorization of medium wave frequencies in accordance with section 30(2) of the EC Act.
17. The Authority received four (4) written representations from the following stakeholders:
 - (a) Sentech Ltd;
 - (b) NAB;
 - (c) T and W Management; and
 - (d) Radio Pulpit.
18. The Authority has decided not to hold public hearings by exercising its discretion in terms of 4 (6) of the EC Act since there were no material issues which warranted the same.

5. REPRESENTATIONS ON MW INFRASTRUCTURE AND RADIO FREQUENCY PLANNING

19. According to Sentech MW existing infrastructure is at Meyerton and Klipheuwel transmitter sites to serve MW sound Broadcasting services. The use of Durban MW frequency will cause co-channel interference. Sentech also submitted that the Maraisburg transmitter site is inappropriate for MW transmission since it's in a heavily urbanised area.
20. While at Garankuwa Transmitter site 540 kHz no longer exists, both masts were destroyed on 25 February 2011, and the 702 kHz mast can no longer be used, it collapsed due to high winds in October 2010. Sentech Pty Ltd also submitted that 1098 kHz must be included for re-categorization and Metro FM MW frequency, 567 kHz at Meyerton should be included in the list of frequencies for re-categorization.
21. Radio Pulpit concurred that Sentech has long-since disbanded the MW transmitting station in Maraisburg and has even sold the land where the transmitter was previously located. Consequently, the only existing MW transmitter capable of actually broadcasting on the 729 kHz frequency is, as has been listed at row "19" in the gazetted Notice.
22. T and W management submitted that if the 567 kHz frequency at Durban were to be reallocated as proposed in the Notice and then used by a community broadcaster, this would result in heterodyning interference (with the 567 kHz frequency at Klipheuwel currently used by Cape Talk) at night as a result of the sky wave.
23. T and W Management (Pty) also asserted that there is a danger that Medium Wave frequencies that are not assigned or in use, may be de-registered by the ITU thus depriving South Africa of a valuable national resource in the future. Existing FM allocations are fully utilised in South African urban areas and commercial broadcasters will seek alternative additional spectrum. The Medium Wave spectrum may be used to satisfy future demand.
24. The Authority concurs with above and that frequencies allocated for Maraisburg site will be re-planned for other transmitter locations. This process was initiated to



ensure that underutilised MW frequencies are assigned to interested sound broadcasters. The decision regarding the extent of MW deployment will be left to market forces and the demand for commercial and community broadcasting sound services.

6. REPRESENTATIONS ON REGULATION AND STANDARDIZATION

25. Radio Pulpit and T and W management cited that the Authority must review the policy or regulation of the specific location of medium wave transmitters. Unlike VHF, where transmitters need to be established on "high sites" to provide line-of-sight or near line-of-sight to the desired coverage area. Medium Wave transmitters rely on ground wave propagation and do not need to be on high sites and there is a need to upholding international and SABS standards on Electromagnetic Compatibility and immunity of electronic and telecommunications equipment. To ensure compliance with the local and international EMC standards, the question of the establishment and location of transmitter sites and regulation thereof becomes much simpler.

26. In order to maximise the value of the radio frequency spectrum, the Authority reiterates that electronic equipment and receivers for household sound broadcasting services are subjected to type approval process to ensure compliance with national standards. Technical parameters of MW frequencies will also be amended to specifically cover the intended or target community or licenced service area.



7. REPRESENTATIONS ON MW DEPLOYMENT CHALLENGES

27. Sentech submitted that the deployment of MW frequencies has the following challenges:

- ✓ MW has high capital costs;
- ✓ EIA approvals take very long and the cost of building is expensive;
- ✓ Electricity consumption is too high;
- ✓ Negative impact on telephone lines when transmitters are in close proximity to the residential areas; and
- ✓ Fewer receivers with receiving capability.

28. The Authority is of the view that all prospective applicants need to take cognisance of the above challenges. However, the Authority has also considered the scarcity of sound broadcasting FM radio frequencies in the metropolitan areas, opening of all spare frequencies will provide an opportunity for prospective licences to apply.

The opening up of MW frequencies will provide new broadcasting opportunities, promote new technological advancement through the introduction of digital broadcasting technologies and will promote diversity. There are also existing community sound broadcasting self-providing MW licensees that have been broadcasting for a number of years without any problems.

8. REPRESENTATIONS ON THE FUTURE OF MEDIUM WAVE

30. According to T and W Management (Pty) Ltd, the latest digital modulation technology as well as encoding such as DRM (Digital Radio Mondiale) and HD Radio from iBiquity offer audio quality and absence from interference competitive with FM. DRM also offers advanced features such as text messaging, automated frequency switching and data over radio. These features are particularly useful in serving the elderly and handicapped in the same way as RDS on FM.



31. Further, the development of digital broadcasting technique in the form of DRM (Digital Radio Mondiale) will provide a number of benefits including frequency re-use text messaging and improved audio quality.
32. The Authority concurs with the above sentiments and its consideration has led to the balanced approach for all categories to ensure that none of the existing sound broadcasting service categories (CML, CTY, PBS) is eroded in the future.

9. REPRESENTATIONS ON LICENCING PROCESS

33. NAB does not believe that the re-categorization of all underutilised frequencies exclusively to community broadcasting sound service will solve the scarcity problem. This is also so because there are no guarantees that there will never be any demand for these frequencies in the future. NAB believes that in order to ensure optimal use of the radio frequency spectrum, the Authority should not restrict the MW frequencies to community sound broadcasting.
34. Further, the Authority must give all MW frequencies an open access status, where all prospective licences are allowed to apply irrespective of their category of intended broadcasting sound services. They added that this will allow competition and lowers barrier to entry. The Authority should allow any application, whether commercial, public or community sound broadcasting services, for carrying out new broadcasting services on MW frequency should be allowed without a public process of re-categorization.
35. NAB submitted that this will provide flexibility and will eliminate administrative hurdles for ICASA of having to re-categorise every time there is demand on a specific sound broadcasting category.
36. While T and W Management (Pty) Ltd believes that ICASA should streamline the process for individual broadcaster to self-provide and encourage the growth and use of privately operated technical companies in order to better serve the broadcasters of South Africa. ICASA should consider offering Medium Wave frequencies as an alternative option to the compliant but unsuccessful applicants who responded to the recent ITA dated 28 March 2009.



36. Radio Pulpit strongly supports the Authority's contention, contained in the Notice, that "the demand from the community broadcasters outweighs that of the commercial and public counterparts". Radio Pulpit believes that it is supported by the Department of Communications which directed ICASA to reallocate unused Medium Wave ("MW") frequencies to community use in its policy directions on National Radio Frequency Policy.

10. REPRESENTATIONS ON COMMERCIAL BROADCASTING CATEGORY

37. T and W Management (Pty) Ltd submitted that the under-utilisation of the Medium Wave frequencies has occurred for a number of reasons. The under-utilisation may be explained by the observations below and provide reasons why no Medium Wave frequencies have been assigned since January 1999. The non-assignment of frequencies does not necessarily reflect the interest or demand for Medium Wave frequencies by commercial broadcasters. The first such ITA since 1999 was issued in General Notice 330 published in the Government Gazette No 32072 dated 27 March 2009, a gap of ten years.
38. Further questions were posed on whether the Authority can share the market research study result and that this perception may be a result of the fact that there has been no ITA issued by ICASA for Primary Market Commercial radio licenses on the Medium Wave band for more than a decade.
39. Whilst they are not against the allocation of commercial frequencies to community broadcasters, they feel strongly that should there be a blanket re-categorization future commercial broadcasters might be prejudiced. They urged for consideration of alternative solutions to the question of community broadcasting. T and W Management (Pty) also added that this will also provide leverage for prospective broadcasters to negotiate with Sentech not to demolish MW Transmitter site due to non-usage.
40. T and W Management (Pty) also contended that, if indeed the number of community broadcasters is fewer than three, there is no need to convert commercial frequencies to community as there are more than enough community frequencies



available to provide community broadcasting. If community broadcasters are concerned with coverage area then a better solution may be to review the permitted transmitter power level and operating conditions of existing frequencies set aside for community use.

41. According to section 9 of the EC Act, "the Authority must give notice of the application in the Gazette and invite interested persons to apply and submit written representation in relation to the application within the period mentioned in the notice". If there is no ITA published to deal with commercial sound interests, community broadcaster will have an unfair advantage since their licencing process does not require an ITA.
42. Publishing an ITA will ensure a balanced approach, by allowing commercial sound broadcasters to apply for existing commercial frequencies before opening this avenue to all community broadcasters. The decision of not re-categorizing, but rather opening the MW frequencies must be considered in line with the publication of an ITA as well and licencing of Community sound broadcasters due to the independencies of the three processes. This will also deal with the comments made by T and Management that lack of demand on the commercial category has not been properly tested in the market citing the 11 year of no commercial ITA publication for MW frequencies.
43. Failure to publish the commercial ITA will be a barrier to entry for all prospective commercial broadcasters. This will lead to depletion of MW frequencies by community sound broadcaster since their licencing process is on first come first serviced basis.
44. The Authority has decided on a balanced approach with a managed sequence of activities to ensure that conditions for both commercial and community broadcasters are conducive to participate in the Broadcasting Sound services.



11. REPRESENTATIONS ON COMMUNITY BROADCASTING CATEGORY**Radio Veritas**

45. Radio Veritas have lodged an application for a MW frequency categorised for public broadcasting. Radio Veritas is interested in a public category frequency 576 kHz at Meyerton transmitter site, which LM radio has withdrawn its interest in citing an alternative frequency as 783 kHz.

Radio Pulpit

46. Radio Pulpit's interest is on 729 kHz commercial frequency in Klipheuwel transmitter site, the only available pre-coordinated commercial frequency in the transmitter site. The South Gauteng High Court held that "In these circumstances this Court, like ICASA, is precluded from granting a community broadcasting service licence to Radio Pulpit in conflict with the provisions of section 31(1) and (2) and 34 of the EC Act and in the absence of necessary technical evidence having been fully canvassed. In all the circumstances the court orders that the decision of ICASA to refuse Radio Pulpit's application to broadcast in Western Cape on the 729 kHz medium wave frequency is reviewed and set aside and referred back to ICASA to consider upon completion of its section 34 procedure presently embarked upon by it.
47. LM radio has reiterated its interest particularly to the 729 kHz frequency since it is a commercially categorised frequency. However, in the correspondence to the Authority, it further expressed its willingness and flexibility to working with the Authority in finding suitable frequencies in the MW band.
48. The Authority has decided to approve Radio Veritas spectrum licence application, subject to fulfilment of service licence registration conditions.
49. The Authority will consider Radio Pulpit's application to broadcast in the Western Cape on the 729 kHz medium wave frequency. In considering this matter, the Authority will liaise with Radio Pulpit on this matter, accordingly.



12. REPRESENTATIONS ON PUBLIC BROADCASTING CATEGORY

50. Currently, there are no pending applications from the public sound broadcaster and there is no indication of demand for utilisation of MW frequencies for this sound broadcasting service category.
52. The Authority believes that issuing of spectrum licenses will not only benefit the prospective licensees, it would also provide a platform for introduction of MW digital technologies like DRM. It would also allow the interested broadcasters to continue using the available infrastructure.

13. DECISION

Pursuant to the finalisation of the re-categorization process, the Authority has decided on the following:

- a) re-categorization and Licencing of 576 kHz at Meyerton to Radio Veritas (subject to fulfilment of service licence condition);
- b) issuing of an ITA Notice for Commercial MW frequencies in 2011/12 financial year;
- c) to licence all future MW application based on demand irrespective of the frequency or service category(subject to Publication of an ITA for commercial MW frequencies);
- d) to consider Radio Pulpit's application to broadcast in the Western Cape on the 729 kHz medium wave frequency.



Dr SS Mncube

CHAIRPERSON

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

