



ISPA Submission

in response to the publication by ICASA of the

**Draft Radio Frequency Spectrum Regulations
published in terms of sections 4(1)(d), 4(2)(b), 31(6) and 31(3) read
with section 4(4) of the Electronic Communications Act 36 of 2005**

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INTRODUCTORY REMARKS

1. ISPA wholeheartedly welcomes the release by the Authority of Draft Radio Frequency Spectrum Regulations published in terms of sections 4(1)(d), 4(2)(b), 31(6) and 31(3) read with section 4(4) of the Electronic Communications Act 36 of 2005 (“the Draft Regulations”) and accompanying Reasons Document as well as the underlying intention to review the existing Radio Regulations and to set out high-level regulation relating to the management of radio frequency spectrum (hereafter “spectrum”) in South Africa.
2. It is fair to say that the Draft Regulations represent an overdue overhaul of the piecemeal and outdated Radio Regulations promulgated under the Telecommunications Act of 1996 and preceding legislation. ISPA in particular wishes at the outset to emphasise its particular support for the introduction of spectrum sub-assignment and spectrum leasing as spectrum management tools which have the potential to facilitate a substantial increase in the efficiency with which spectrum is utilised.
3. ISPA confirms that it accepts the Authority’s invitation to make oral submissions at public hearings relating to the Draft Regulations.

GENERAL COMMENT

The urgent need for a comprehensive spectrum audit

4. It has been apparent for some time that it is absolutely critical for South Africa to undertake a comprehensive audit of the spectrum resources of South Africa. This audit needs to establish:
 - 4.1. The proper context for informed spectrum management and particularly the need for the withdrawal of existing licences and assignment of new licences;
 - 4.2. A base set of data against which to measure the effectiveness of introduced regulation in increasing the efficiency with which spectrum is being managed and utilised; and
 - 4.3. A base set of data which can be made available to licensees: network planning is currently extremely difficult given the outdated and incomplete information held by the Authority and which can be accessed by licensees.
5. ISPA submits that it also necessary to have an accurate assessment of the spectrum available in a band before it can be definitely determined that demand in that band exceeds supply.
6. ISPA has noted the announcement of various plans to undertake either a comprehensive or a selective spectrum usage audit but the majority of these have not been implemented. The results of audits of the 450 – 470MHz and 790 – 852MHz bands required for the implementation of ITU Regulations and recently published by the Authority are highly instructive as to the low levels of use of spectrum.

PART II – RADIO FREQUENCY SPECTRUM PLANNING

7. ISPA supports the proposed introduction of a more structured approach to spectrum management in South Africa which simultaneously affords the Authority a significant flexibility in assigning this critical resource so as to meet the demands of society and the competing interests of licensees.

8. It is possible – with hindsight – to appreciate how the following of the methodology set out in the Regulations with regard to spectrum planning would have cured many of the defects which led to the withdrawal earlier this year of the ITAs in respect of the 2.6GHz and 3.5GHz bands. The finalisation of a Radio Frequency Spectrum Assignment Plan in respect of the 2.6GHz band would, for example, have indicated the necessity for in-band migration so as to allow for an efficient assignment of the available spectrum. It appears further that the experience garnered in connection with the withdrawn ITAs is reflected in the Regulations insofar as there is a clear requirement for an ITA in respect of high demand spectrum to set out the auction rules to be applied.

9. Notwithstanding the above ISPA is extremely concerned that the application of this approach as set out in finalised Regulations in respect of the high demand spectrum in the 2.6GHz and 3.5GHz bands will lead to further substantial delays in the assignment of this spectrum. ISPA requests that the Authority clarify its position in this regard and reaffirms its commitment to re-releasing the ITAs in the first quarter of 2011. In considering its position the Authority should take the following into account:
 - 9.1. The process was initiated in 2006 and its finalisation is long overdue.

 - 9.2. The process relates to a demonstrably scarce resource, the efficient assignment and use of which is critical for increased penetration of broadband in South Africa. Regional assignments in the 3.5GHz band in particular have the potential to reinvigorate efforts to ensure service provision in under-serviced areas and to increase the quality of access in others.

 - 9.3. The assignment of this spectrum is a critical element of facilitating competition in the provision of wireless local loop access services and addressing the pricing bottleneck associated with the local loop.

- 9.4. The information-gathering phase of the process has been completed. All the information the Authority needs to make the right decisions is already available in the numerous public submissions made to date, the recommendations of the International Telecommunications Union (ITU) and the National Radio Frequency Spectrum Policy for South Africa.
- 9.5. All that is required to re-initiate the ITAs is the appointment of a suitably qualified and experienced consultant to design an auction process with detailed rules.
10. ISPA therefore submits that this spectrum assignment process should be the Authority's immediate priority, given its importance to meeting the twin objectives of lowering prices to consumers through greater competition and facilitating greater access to broadband services for all South Africans.
11. Finally in this regard ISPA calls on the Authority to make public:
- 11.1. Which bands it intends to draw up Radio Frequency Spectrum Band Plans for;
- 11.2. Which bands it intends to draw up Radio Frequency Assignment Plans for; and
- 11.3. The priority which it attaches to undertaking spectrum planning processes in respect of the different bands, i.e. the order in which it will draw up plans specific to various bands.

Definitions

12. The definition of the term "land mobile service" is problematic:
- 12.1. The term is not consistently used in the Regulations. The use of variations such as "land mobile radio-communication service", "land radio mobile service" or "land mobile radio service" creates confusion. ISPA assumes that these terms refer to the same thing and submits that "land mobile service" should be used exclusively.
- 12.2. The application of this logic will require an amendment to the definition itself:

"land mobile service" means a mobile radio-communication service between fixed stations and ~~mobile land stations~~ land mobile stations, or between land mobile stations;

Regulation 3 – National Radio Frequency Plan

13. ISPA supports the positioning of the National Radio Frequency Plan at the apex of domestic spectrum regulation as the document which governs all subsidiary plans and processes. ISPA would suggest that the Authority take steps to ensure that the maximum permissible degree of flexibility – subject to the governing ITU Radio Regulations and decisions of the World Radiocommunication Conferences – is incorporated into the National Radio Frequency Plan.

14. This flexibility could prove to be valuable taking into account the realities of South Africa and the policy drive for a massive increase in broadband penetration to 50% of the population by 2015. The majority of this growth will take place through the roll-out and upgrade of wireless networks and the introduction of new and more efficient broadband technologies. ISPA believes that it will be necessary for the Authority to retain the maximum possible flexibility in its management of spectrum so as to facilitate as efficiently as possible (and without the delays associated with amendment of the National Radio Frequency Plan) the use of wireless technology to meet socio-economic development imperatives.

15. The term “National Radio Frequency Plan” needs to be capitalised where it occurs in this regulation.

Regulation 4 – Radio Frequency Spectrum Band Plans

16. While ISPA is not convinced that section 4(2)(b) of the ECA requires the development of Radio Frequency Spectrum Band Plans (“Spectrum Band Plans”) as the language used in that section is discretionary (“Different regulations may be made in respect of different uses of radio frequency spectrum”) we support the notion of having a detailed allocation plan in respect of spectrum bands where this is justified or required. The language used – “The Authority may, as required by section 4(2)(b)...” - is confused and ISPA suggests the following amendment:

“(1) The Authority may, ~~as required under~~ in terms of section 4(2)(b), ”

17. Insofar as Spectrum Band Plans will be promulgated under section 4(2)(b) of the ECA such Plans will be regulations under the ECA and will therefore be subject to the public consultation procedures set out in sub-sections 4(4) to 4(7) of the ECA. Regulation 4(5) of the Regulations is accordingly redundant.

18. ISPA repeats its submissions set out above regarding the need to import the maximum degree of flexibility built into the National Radio Frequency Plan and submits that the same considerations should apply to Spectrum Band Plans.

Regulation 5 – Radio Frequency Spectrum Assignment Plans

19. ISPA supports the development of Radio Frequency Spectrum Assignment Plans ("Spectrum Assignment Plans").

20. ISPA repeats its submission above with regard to the nature of Spectrum Band Plans as regulations and notes that the Authority has not specified any legislative basis for the development of Spectrum Assignment Plans. It appears from the specific provisions of regulation 5 that the Authority views Spectrum Assignment Plans as being regulations. If this is correct then sub-sections 4(4) to 4(7) of the ECA will apply to Spectrum Assignment Plans.

21. ISPA submits that – assuming Spectrum Assignment Plans are to be regulations under the ECA – regulation 5(6) which allows the Authority to “modify or vary the Radio Frequency Spectrum Assignment Plan as it deems fit and appropriate” may need to be reviewed as any such modifications or variations would be subject to the relevant provisions of the ECA relating to the amendment of regulations.

Regulation 6 – Invitation to Apply

22. ISPA welcomes the notion of a standing ITA in respect of spectrum bands where demand does not exceed supply. Such an ITA, coupled with a detailed database indicating geographical availability, would greatly facilitate applications for spectrum and enhance the efficiency of the application process.

PART III – RADIO FREQUENCY SPECTRUM LICENCE EXEMPTIONS

Regulation 7 & Annexure A – Apparatus exempt from Radio Frequency Spectrum Licences

23. Annexure A to the Draft Regulations is incorrect in that it does not take into account an amendment to the Radio Frequency Spectrum Licence Exemptions Regulations effected on 8 August 2008¹.
24. The amendment involved the replacement of page 16 of the Radio Frequency Spectrum Licence Exemptions Regulations to remedy the omission of the category of equipment used for WLAN services as being licence exempt in the 2.4GHz ISM band.
25. ISPA submits that Annexure A to the Regulations needs to be amended to reflect the abovementioned amendment.
26. Sub-regulation erroneously refers to section 30(6) of the ECA where the reference should be to section 31(6). ISPA notes that the Authority is effecting the distinction reflected in sub-sections 31(6)(a) and 31(6)(b) of the ECA:

“(6) The Authority may prescribe—

- (a) types of radio apparatus the use or possession of which; or
- (b) the circumstances in which the use or possession of radio apparatus, does not require a radio frequency spectrum licence, including, but not limited to radio frequency spectrum allocated for use in respect of radio astronomy and other scientific uses of radio frequency spectrum that have been coordinated and agreed to by the Authority.”

26.1. ISPA’s understanding is that regulation 7 read with Annexure A refers to the exemptions in respect of radio apparatus as contemplated by sub-section 31(6)(a).

26.2. The exemption contemplated by subsection 31(6)(b) is dealt with in regulation 43.

¹ General Notice 944 of 2008, GG 31321

PART IV – STANDARD TERMS AND CONDITIONS OF RADIO FREQUENCY SPECTRUM LICENCES

27. ISPA supports the introduction of a set of standard terms and conditions for spectrum licences.

Regulation 8 – Standard Terms and Conditions of Radio Frequency Spectrum Licences

28. ISPA suggests the following redraft of sub-regulation 8(5):

“(5) the licensee must ~~ensure that~~ cease operation of all apparatus causing harmful interference ~~to cease operation~~ until such time ~~when~~ as the harmful interference has been eliminated;”

Regulation 9 – Duration of a Radio Frequency Spectrum Licences and Renewal

29. The clear expression of the principle that no licensee should regard an assignment as conferring a monopoly on use or a right to continued tenure in spectrum in sub-regulation 5(1) is welcome and correct.

30. ISPA notes, however, that the balance to be struck between the need to regulate efficient spectrum utilisation and the realities of investing in network deployments is an extremely tricky one which requires in-depth consideration.

30.1. On the one hand it is apparent that a great deal of spectrum currently assigned to some licensees is not being used and that this represents a significant inefficiency which the Authority is required to remedy.

30.2. At the same time extreme caution needs to be taken not to allow uncertainty over the term of a spectrum licence as this will threaten the investment in and deployment of new networks. This will be particularly true of network roll-outs in rural and under-served areas where the period over which the capital network investment can be recovered will be significantly longer than in the metro areas.

31. ISPA notes the following statements in paragraph 5 of the Reasons Document:

31.1. The five year term of validity after which a new application is required is intended to reflect the technological cycle.

31.2. That a different term may be stated in an ITA in respect of a particular band or range of spectrum.

31.3. That while a new application is required every five years “it must be stressed that in most cases, a 'fresh' application for the frequency will be approved and any exceptions to this will be the result of a spectrum planning process as mentioned above.”

32. ISPA submits that the requirement that new application be made for an existing licence every five years is not the optimal manner in which to balance the competing interests set out above. This impression is strengthened by the fact that the Regulations themselves do not expressly set out the reassurance contained in the Reasons Document to the effect that the new application will be granted unless there is spectrum planning process which dictates otherwise. In support of this submission ISPA notes that:

32.1. There is no need for the Authority to attach a limited term to spectrum licences for the purpose of providing it with a mechanism for the withdrawal of a licence through the non-renewal of the licence after its term has expired due to a spectrum planning process. This objective is easily achieved without creating uncertainties for licensees by the Authority reserving the right to withdraw a spectrum licence on notice due to a spectrum planning process. It is ISPA's understanding of the Regulations that the Authority is in fact proposing to reserve just such a right.

32.2. The interest of the Authority in ensuring efficient utilisation of assigned spectrum is likewise not met by imposing a five year term on spectrum licences as the Authority has proposed to reserve the right to withdraw licences where conditions relating to utilisation have not been met. Information relating to utilisation should be submitted by licensees on an annual or other suitable basis and should inform the extent to which the Authority exercises this right.

- 32.3. While there may be a technological cycle of five years (ISPA does not accept the validity of this as a blanket statement), the investment cycle in respect of recovering the cost of a network deployment may be considerably longer.
- 32.4. The potential imposition of a term longer than five years through a specification to this effect in an ITA does not assist as the principle of the withdrawal of a licence based on effluxion of time is still being promoted.
33. ISPA further submits that it is inequitable to discriminate between ECNS licensees who hold BS licences (in respect of which the Regulations expressly state that the term of validity of a spectrum licence runs concurrently with the term of the BS licence) and ECNS licensees who hold ECS licences (and who are required to reapply every five years). ISPA believes this position to be untenable and that convergence will render it ever more tenuous in future.
34. ISPA believes that the reference in sub-regulation 9(4) to a spectrum licence being “issued to the holder of a Broadcast Service Licence” is incorrect. Under the ECA spectrum licences can only be issued to holders of ECNS licences: the holding of a service licence – whether ECS or BS – is incidental and a spectrum licence cannot be issued to a BS licensee in such capacity.
35. ISPA therefore calls for the Authority to reconsider its position as regards limiting the terms of licences as this requirement does not seem to further any objective while introducing a very definite element of uncertainty into network investment and deployment.

Regulation 11 – Withdrawal (Cancellation or Suspension) of Radio Frequency Spectrum Licences

36. ISPA submits that - as a matter of principle – the withdrawal of a licence should be used as a spectrum management tool of last resort.
37. A licensee that has invested in a network deployment cannot under law be arbitrarily deprived of a right to use of spectrum and the grounds relating to and process governing the withdrawal of a spectrum licence should be carefully delineated.

38. In the context of the above ISPA does not support the inclusion of a public interest ground for the withdrawal of a spectrum licence. ISPA submits that this ground is too vague and that the implementation of policy which is in the public interest should be achieved through an appropriate spectrum planning process.

Regulation 12 - Transfer of a Radio Frequency Spectrum Licence

39. ISPA has publicly welcomed the proposed introduction of a secondary market for spectrum licences in South Africa and expressed the view that we believe that this has the potential to of itself engineer far greater efficiency in the management and utilisation of spectrum in South Africa.

40. ISPA further supports the introduction of the ability to transfer spectrum licences on a non-profit basis, at least initially. This aspect of the Regulations will no doubt require close policing.

Regulation 13 - Amendment of a Radio Frequency Spectrum Licence

41. ISPA suggests the following amendment to sub-regulation 13(1):

“(1) The amendment of Radio Frequency Spectrum Licences ~~and Assignment~~ may be initiated by the Authority or the licensee.”

42. The same error occurs in the heading of regulation 21.

PART V - PROCEDURES FOR RADIO FREQUENCY SPECTRUM LICENSING AND ASSIGNMENT

Regulation 15 - Standard Application Procedures for a Radio Frequency Spectrum Licence and Assignment

43. ISPA suggests the following amendment to sub-regulation 15(1):

“(1) Standard Application procedures are applicable to the categories listed in Annexure A B to these regulations.”

Regulation 18 - Procedures for Withdrawal (Suspension or Cancellation) of a Radio Frequency Spectrum Licence

44. As noted above ISPA is of the view that the withdrawal of a spectrum licence should be subject to clear rules and processes.

45. ISPA submits that the notice referred to in sub-regulation 18(1) notifying a licensee of the Authority’s intention to suspend or cancel a licence should also set out the full basis on which the Authority justifies such intention. This will allow the affected licensee to exercise its right to respond in full.

PART VI - SHARING AND CO-ORDINATION OF RADIO FREQUENCY SPECTRUM ASSIGNMENTS

46. ISPA welcomes the focus in the Regulations on the sharing of spectrum and the co-ordination of spectrum assignments.

47. ISPA is not clear, however, as to whether the regulations relating to sharing and co-ordination are intended to be the regulations contemplated in section 33 of the ECA but ISPA assumes from the matters covered that they are.

48. If this assumption is correct then ISPA:

48.1. Suggests that the Regulation 2 relating to the Purpose of the Regulations should be amended through the insertion of a new sub-regulation referring to the purpose of providing for sharing and co-ordination of spectrum and the resolution of disputes arising through the use of shared frequencies and that the long title of the Regulations be amended to make it clear that they are also being issued in terms of section 33(1).

48.2. Is concerned that the regulations are not comprehensive enough insofar as section 33(3) of the ECA requires regulations which govern co-ordination with specific reference to:

48.2.1. the avoidance of harmful interference among radio frequency spectrum licensees;

48.2.2. ensure efficient use of any applicable frequency band; and

48.2.3. allow for the provision of cost-efficient services.

Regulation 24 - Procedures for Co-ordination within Shared Frequencies

49. ISPA requests that the Authority clarify in the Regulations the role it intends to play where it requires that licensees who have an assignment on a shared basis, collectively submit a spectrum sharing co-ordination agreement. Does the Authority contend that it has the right to vet such agreement and impose conditions on the parties where they cannot agree?

PART VII - WITHDRAWAL OF THE RIGHT TO SPECTRUM

50. ISPA is not clear as to the precise meaning of the term “withdrawal of the right to spectrum”. The right to apply for spectrum is a right inhering in ECNS licences and ISPA is not aware of any basis or procedure which would see the withdrawal of such right from an ECNS licence holder.
51. The Authority seeks to distinguish the notion of “withdrawal of the right to spectrum” as set out in Part VII from the notion of the “withdrawal (suspension or cancellation) of a spectrum licence” as set out in regulation 18. Different procedures are stipulated in respect of these two processes.
52. ISPA understands that there can be the withdrawal of the right to apply for frequency in a particular band where such band is re-allocated in accordance with spectrum planning processes but it appears that the Authority’s intended meaning is wider than this. ISPA seeks clarity in this regard.
53. ISPA submits that the two notions and processes should be consolidated and that the current proposed distinction is unnecessary and confusing.

Regulation 26 – Conditions for Withdrawal of the Rights to Spectrum

54. ISPA submits that the public interest should not be a condition on which the Authority can rely in isolation to justify the “withdrawal of rights to spectrum” and that such public interest would need to be expressed as policy and thereafter be implemented through the spectrum planning process.

PART IX - REGULATIONS FOR SPECIFIC SERVICES

Regulation 28 - Electronic Communication Equipment Dealer

55. ISPA is concerned that this section is overly-broad in its scope in that it appears to suggest that all “electronic communications equipment” is regulated in terms of the ECA. ISPA submits that this is not the case and that the Authority should insert an appropriate definition of the term “electronic communications equipment” alternatively consider using the term “radio apparatus” as that term is defined in the ECA and which appears to be far more reflective of the intention of the Authority in this instance.
56. It appears from regulation 43, discussed below, that the intended reference should indeed be to “radio apparatus”.

PART VIII - OTHER

Regulation 45 - Offences and Penalties

57. ISPA is unable to discern the logic underpinning the stipulation of a far higher maximum fine for non-compliance relating with regulations regarding the licence exempt bands / radio apparatus. ISPA requests that the Authority take into consideration that:

57.1. Use of such bands is subject to light-touch regulation and the usage base comprises many smaller operators and providers of miscellaneous services relating to all of the various licence exempt categories.

57.2. Many operators have little option but to use licence exempt bands given the non-availability of licensed spectrum and such operators play an important role in the delivery of rural broadband services.

Regulation 47 – Repealed Regulations and Notices

58. The list of repealed regulations and notices does not make reference to the Regulations in respect of Licence Exemptions in terms of Section 6 of the Electronic Communications Act read with section 31(6) in respect of radio frequency spectrum, ECS and/or ECNS (“the Radio Frequency Spectrum Licence Exemptions Regulations”) promulgated by General Notice 929 of 2008 dated 29 July 2008 as amended.

59. Given that the above regulations are to be incorporated through regulation 7 read with Annexure A to the Regulations ISPA submits that this is an oversight.

ERRATA

60. The numbering of the different Parts of the Regulations needs to be amended. Part VIII (Other) has at some stage been relocated to the end of the Regulations and should now be Part X. The current Part IX becomes Part VII and the current Part X becomes Part IX.

CONCLUSION

61. ISPA trusts that the above submissions will be of assistance and will gladly provide any further assistance which may be asked of it.
