



Submission on

ICASA's Draft Radio Frequency Spectrum Licence Fees Regulation ("the Draft Regulations")
published as General Notice 305 of 2009 in GG 32029 on 16 March 2009
& the accompanying Draft Radio Frequency Spectrum Licence Fees Discussion Document ("the
Discussion Document") published therewith as General Notice 304 of 2009.

INTRODUCTORY REMARKS

1. The Wireless Access Providers' Association (WAPA) welcomes the publication of the Draft Regulations and the accompanying Discussion Document and thanks the Authority for providing it with the opportunity to make written submissions in respect of the Draft Regulations and Discussion Document.
2. WAPA requests that a slot be reserved for it to make oral representations should the Authority decide to hold public hearings.

ABOUT THE WIRELESS ACCESS PROVIDERS' ASSOCIATION (WAPA)

3. WAPA is an association not for gain, registered under the Non-Profit Organisations Act, which seeks to play a constructive role in ensuring the efficient, sustainable use of wireless spectrum, both as a self-regulatory body and as a lobby for the introduction of innovative spectrum management techniques such as shared usage and "lite" licensing models.
4. WAPA represents a rapidly-growing number of Fixed Wireless Access (FWA) providers, ISPs and equipment vendors currently using or with an interest in licence exempt bands. While use of these bands for the provision of access services in South Africa is not well-documented, it is clear that there is significant demand present, mainly due to the fact that licensed spectrum is currently not available from the Authority notwithstanding WAPA members' entitlement thereto as holders of ECNS licensing. The vast majority if not all of WAPA's members have indicated that they will seek assignments of suitable radio frequency spectrum once these become available.
5. WAPA members' focus on using open standard wireless technologies such as the 802.11 Wi-Fi standard. The average WAPA member is an SMME providing extensive coverage of rural areas in South Africa where there is no cost-effective alternative access means. Free or E-rated Internet services, including the underlying ECNS service, are provided to some 329 schools and other social responsibility programmes.
6. WAPA has identified a need for a body other than ICASA to take steps to address interference and other issues in the licence-exempt bands which ICASA has no mandate under the ECA to

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- manage. Such a body should also seek to minimise the potential of users of licence-exempt bands causing interference to services provided by licensed users and other unlicensed users.
7. WAPA enforces a Code of Conduct which is focused on wireless activities, an enforcement process, certification and training and a forum for sharing knowledge and resolving technical problems. The Code emphasises consumer protection issues and a copy can be downloaded from the [WAPA website](#).
 8. WAPA also works with registered equipment suppliers to promote the enforcement of type approval regulations by such suppliers as well as WAPA members.

GENERAL REMARKS

9. WAPA has had sight of the submission prepared on behalf of the Internet Service Providers' Association (ISPA) and wishes to align itself with such submission, being supportive of the entire content thereof.
10. WAPA, as an industry body specifically seeking to advance the interests of FWA providers, wishes to make certain further submissions in the hope that these will be of assistance to the Authority in its further deliberations.

SHARED FREQUENCY

11. WAPA wishes to promote the development of a sustainable frequency sharing model in South Africa and believes that this is a key intervention in raising spectrum efficiency and providing opportunities for new entrants.
12. WAPA accordingly strongly supports the use of a sharing factor (SHR) in the formula for the calculation of annual frequency spectrum licence fees and agrees that the Authority should seek to incentivise the sustainable sharing of frequency where this is possible. WAPA notes that frequency sharing has an important role to play in increasing the participation of SMMEs in the industry by making access to licensed frequency more affordable for such entities.
13. As noted above the majority of WAPA's members currently make use of licence exempt frequencies in accordance with the ICASA Frequency Licence Exemption Regulations 2008. It is recognised, however, that this is not a sustainable solution given the pressure under which these bands are coming.
14. WAPA's members have resolved to investigate the co-ordinated sharing of a national frequency assignment on a geographical basis. It is proposed that WAPA itself act as an interface between ICASA, as the legislatively-empowered regulator, and those using such an assignment of spectrum on a shared basis under a form of "lite" licensing model.
 - 14.1. "Lite Licensing" is a progressive frequency allocation model under which ECNS licensees pay a relatively small fee for a nationwide, non-exclusive license. These licensees then pay an additional nominal fee for each base station they deploy. All base stations must be clearly identifiable (and the GPS co-ordinates registered with WAPA/ICASA) and, in the event that these stations cause interference which cannot be mediated by technical means,

licensees are required to resolve the dispute between themselves (or with the assistance of WAPA).

15. WAPA would welcome the opportunity to engage with the Authority regarding the desirability and feasibility of its plans in this regard.
16. With reference to the application of the proposed SHR factor WAPA requests that the Authority give due consideration to including at least one further SHR factor value in the table so as to increase the effect of the intended incentive for sharing amongst multiple licensees, such as has been proposed above. Allowing a further discount where frequency is shared will, it is submitted, also serve to create far greater opportunities for SMME providers to enter the wireless access market.

Sharing	Value of sharing factor
Exclusive	1
Shared (2-4 licensees)	0.5
Shared (5+ licensees)	0.25
Shared (10+ licensees)	0.1

UNIT PRICING

17. WAPA's understanding is that paired spectrum is generally referred to in association with FDD (Frequency Division Duplex) systems. These use separate frequency bands for sending and receiving respectively.
18. The majority of WAPA's members, however, use Wi-Fi technology which employs a system more like TDD (Time Division Duplex), i.e. where only one channel is required for both the up and down link.
19. WAPA has noted the proposed Unit Price of R2 000 per MHz paired and wishes to confirm whether its understanding that the Unit Price accorded to unpaired frequency would be R1 000 per MHz, alternatively that 2MHz of unpaired frequency would equate to 1MHz of paired frequency.

GEOGRAPHIC FACTOR (GEO)

20. WAPA strongly supports the proposed approach to incentivise the deployment of communications infrastructure in under serviced areas. A large percentage of WAPA's membership are engaged with deploying networks and providing services in rural areas.
21. WAPA submits, however, that the GEO factor would be far more effective if it could be closely linked to the work currently being completed by the Universal Service and Access Agency of South Africa ("the Agency") in defining terms such as "under service", "universal access" and needy person.
 - 21.1. WAPA notes the interpretational difficulties which arose with the deployment of CSTs by Cell C and calls on the Authority to work closely with the Agency in developing a more detailed and nuanced application of the GEO factor. .

22. WAPA is also concerned that the application of the factor in the manner proposed constitutes a relatively blunt regulatory intervention in that the application of the highest GEO factor in the area of coverage as the governing factor may result in the intention that this factor act as an incentive for rural network deployments being lost. There are, for example, a number of licensees that have proposed network deployments requiring national assignments of licensed frequency and which will specifically target rural communities.
23. It is also apparent that the provision of much-needed wireless networks in poor urban areas such as Soweto, Orange Farm and Khayelitsha will not be captured within the incentives intended to be offered.

CONCLUSION

24. We thank you for your time in considering the above submissions and are available to provide any further information which you may require.
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