



**Telecommunications Users Association of New Zealand Inc.**

(TUANZ)

Submission on the Discussion Document in regards to Fixed Services

20th March 2015

## **TUANZ**

1. The Telecommunications Users Association of New Zealand (TUANZ) has been in existence for over 25 years, advocating for the continued improvement of the use and supply of telecommunications technology and services to all end users of such services. We have always advocated that connectivity, and fast connectivity will enable businesses to improve productivity, and to deal far more efficiently with well-connected customers. Families, wherever they live, will become far better connected. Smart young Kiwis will be much more attracted to living here rather than overseas. The world's capitals will be on our electronic doorstep, while we will become earlier adopters of leading-edge services like fibre-powered television on demand.
2. TUANZ is a not-for-profit membership association with nearly 200 members, predominantly large organisations with a strong dependency on telecommunications technology as well as small enterprises and individual members. These small businesses and residential users are the customers of our large corporate members, who are just as focused on the quality of their customers' connectivity as their own.

## **Our Submission**

3. This submission is TUANZ response to the Ministry's *"Fixed Service Discussion Document"*
4. TUANZ represents the users and owners of large UHF radio networks specifically Council "water and waste", River flow management, flood management, large scale irrigation control, Power network utilities as well as Telecommunication service providers. These critical infrastructure operators need interference-free radio services to monitor their essential networks and to provide a safe working environment for their staff.
5. TUANZ is aware of the submission Orion New Zealand Ltd has submitted and we endorse it.

6. We have addressed our comments in this submission to specific sections within the discussion paper.

## **Comments**

7. Section 2.1 – Digitisation [Q1-2]

Our members strongly support the migration to digitisation but consideration of the cost should be taken into account before a requirement to transition is enforced.

8. Section 2.2 – Spectral Efficiency [Q3-4]

Reliability is a key factor for our members, so we would not favour changing the spectral efficiency requirements should this result in a less reliable network. Any proposed policies for change of spectral efficiency will need to take into account existing users who may want to expand their existing networks

9. Section 2.3 – Metropolitan Site Congestion [Q5-7]

Careful consideration needs to take place to make sure that the benefits of proposed performance requirements do not come at significant cost or limit incumbents network owners future deployments. Each location should be evaluated individually and not grouped as one solutions suits all locations.

10. Section 2.4 – Interference Evaluation Method [Q8-9]

TUANZ supports continued use of the current '1 dB interference threshold degradation' method prescribed in Section 4.3 'Co-channel interference threshold' of PIB 38.

11. Section 2.5 – Adjacent channel interference criteria [Q10]

First Adjacent Channel FDR varies as a function of modulation rate and the value of 30dB if used in co-ordination assessment relative to lower order modulation existing services those services would be put at risk as for example a 4QAM operation service would realistically only be expected to have 23dB FDR for 1st Adjacent Channel.

12. Section 2.6 – Equipment standards [Q11]

ETSI standards (ETSI EN 302 217-2) would be appropriate.

13. Section 2.7 – Necessary bandwidth and channel widths for digital services [Q12]

TUANZ supports option 2: “Emphasise the relevant parts of the International Radio Regulations by adding references to specific recommendations in the general licence conditions”.

14. Section 2.8 – Information on Licence Records [Q13]

It is important that the Ministry undertakes a careful evaluation otherwise the cost of the solution may outweigh what could be, in fact, a minor issue.

15. Section 2.9 – Transition to the management rights regime [Q14-15]

The group of TUANZ members outlined in our introduction do not support moving any of the frequency bands they currently occupy to management rights.

Currently, the fixed service band demands can be met and there is significant investment in infrastructure. TUANZ does not consider there would be any clear economic advantage in creating management rights for the existing fixed service bands.

16. Section 2.10 – Channel widths [Q16]

TUANZ members have differing views on this issue and so we have not taken a position on this.

17. Section 2.11 – Band Renaming [Q17]

TUANZ prefers the use of frequencies and frequency bands for naming purposes as these are both clear and unambiguous.

18. Section 3.1 – STL Bands [Q18-23]

If implementing digital STLs leads to better efficiency and freeing up spectrum for other fixed services uses and users, then TUANZ would support the digitisation of this band.

19. Section 3.2 – EE Band [Q24]

TUANZ agrees with the Ministry's proposal for no change to this band.

20. Section 3.3 – I Band [Q25]

TUANZ believes that 100kHz channel may be beneficial in the long run, any introduction should not impact existing service and incur costs for existing operator.

21. Section 3.4 – J Band [Q26]

TUANZ believes that 100kHz channel may be beneficial in the long run, any introduction should not impact existing service and incur costs for existing operator

22. Section 3.5 – JL Band [Q27]

TUANZ does not believe there is issue in this band.

23. Section 3.6 – KK Band [Q28]

TUANZ does not believe there is issue in this band.

24. Section 3.7 – L Band [Q29]

For the benefit of the country, we should adopt the agreement from the conference (WRC 2015) – assuming the majority of the world also support it. However, the timing should take into account of:

- Natural evolution/migration of existing services (such as CMAR which is critical for rural end users)
- If there is no natural evolution / migration, then appropriate subsidies should be allowed for migration

25. Section 3.8 – 5GHz [Q30]

TUANZ does not believe there is issue in this band.

26. Section 3.9 – P Band [Q31]

TUANZ is not aware of any of its member has plan to utilise P Band.

27. Section 3.10 – R Band [Q32-33]

Rechanneling to 28MHz and alignment to higher data rate equipment will be beneficial in theory. However, this will need to be done in coordination with existing users over a period that the existing licensee can migrate / change without incurring unnecessary costs.

28. Section 3.11 – T Band [34-36]

1. Support removing the N+1 requirements.

2. Support removal of TA channels

3. Do not support rechanneling of the band to 14 MHz channel plan. This band is historically a 40MHz channel plan band. A change to a 14MHz channel plan would create co-ordination problems with all the existing use

29. Section 3.12 – V Band [37-38]

TUANZ supports the introduction of the new 56 MHz channels be on a non-interference basis

30. Section 3.13 – U, W, Y Bands [Q39-43]

- TUANZ do not have specific comments on the current coordination process but would like to note that this band is important for rural linking
- We support 28MHz channel that allows overlay of 56MHz channel.
- We support the disestablishment of the Yx channels.
- We support having an additional 56 MHz allocation added to the current YxA 28 MHz channel plan
- We support boundaries alignment

31. Section 3.14 – H Band [Q44 - 45]

No comment

32. Section 3.15 – Z Band [Q46-48]

TUANZ recommends retention of existing 40MHz channelling with adoption of 80MHz channel overlay.

33. Section 3.16 – G Band [Q49]

TUANZ does not believe there is any issue

34. Section 3.17 – X Band [Q50]

TUANZ supports additional 56MHz channels only if it definitely won't impact satellite.

35. Section 3.18 – 18GHz, 23GHz [Q51-52]

In the long term, satellite will play a more important role in deep rural communications. Having provision for change should be considered. However, any change should not incur unnecessary

change over costs for existing users. So perhaps the ministry need to consider a long term migration program.

With increase in bandwidth demand, small channels will lead to more fragmentation

36. Section 3.19 – 38GHz [Q53]

TUANZ does not believe there is any issue

37. Section 3.20 – 70-80GHz [Q54]

TUANZ recommends no change for now.

### **Concluding comments**

38. TUANZ welcomes the opportunity to provide a submission on the Fixed Services Discussion Document.

### **Contact**

Craig Young

**Chief Executive Officer**

**Telecommunications Users Association of New Zealand Inc.**

[craig.young@tuanz.org.nz](mailto:craig.young@tuanz.org.nz)

021 488 188