



# Radio Frequency Users Association, New Zealand

Response

To

Review of the Radio Communications Act 1989:  
Discussion Document

September 2014

The Radio Frequency Users Association wish to thank the Ministry for the opportunity to respond to the Discussion Paper regarding the Review of The Radiocommunications Act.

Our Association represents well over 100 members who are involved in the landmobile and wireless broadband industries, and they represent a wide variety of market segments including Network Operators, utilities, local bodies, transport, emergency services to name just a few.

While not a direct interest of our group, we note that there is no mention of the ARX role and responsibilities.

It would be our view, that in reviewing the Act, the focus should be on promoting business efficiency and economic growth, rather than just on managing the radio spectrum and regulating activity.

If you have any queries on our submission, please contact our secretary at;

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## Answers to Questions

1) *Should the current dual spectrum management regimes (management rights and administrative radio licencing) be retained?*

Response:

Yes but with tweaking of both regimes.

2) *Should more spectrum frequencies be placed under the management rights regime? If so, which bands should be transferred to management rights and why?*

Response:

Management Rights is not necessarily the most preferred or efficient allocative management regimes but there may be some scope for industry to manage bands on behalf of the Ministry.

The cost structures of the various industries using radio spectrum are significantly different as are the customers it serves. A move to management rights regime may be hugely disruptive and expensive.

RFUANZ can manage the frequencies, but it could be counterproductive to take on the management rights on behalf of the Ministry.

3) *Should additional matters relating to radio spectrum management be covered by the Act? If so, what other matters should be included*

Response:

A more prescriptive way of dealing with issues where two legitimate licenced operators interfere with each other. There are other areas that could be included which will be covered later in this document.

4) *Should the Act provide a comprehensive regulatory regime for all aspects of radio spectrum management and how can this be achieved without imposing any unnecessary regulatory burden on licence allocations?*

Response:

We believe that there is a reasonable balance between flexibility and certainty within the current act

5) *Should the Act be more prescriptive around particular matters or processes? If so, what areas should be more prescribed and how?*

Response:

A more prescriptive way of dealing with issues where two legitimate licenced operators interfere with each other.

Also, although covered in the Radio Regulations (15B), it may give more authority to also include the principle of "Use it or lose it" within the Act and ensure that both the Management Rights regime and the Radio Licence Regime are included. The Radio Regulations concerning Revocation and Suspend only seem to apply the Radio Licensing regime at present.

6) *Should the application of the government policy statement issued under section 112 be extended to cover the government's intentions for the management rights regime?*

Response:

Yes it would be helpful to know future intentions.

7) *Should a requirement for a national table of frequency allocations, based on the IRRs, and national band plans be included in the Act? If so, how?*

Response:

Present arrangement is satisfactory.

8) *Should the requirements placed on radio engineers during the certification process be made directly and be more specific and/or compulsory? If so, how?*

Response:

We recommend that certification application be made more rigorous. Radio engineers and certifiers should be able to demonstrate a working knowledge of PIBS. Matters to be considered should be prescriptive and compulsory. There are no current quality standards for licencing certifiers or engineers or ongoing training requirements. A quality and training regime needs to be put in place

9) *Are the matters that radio engineers must have regard to when certifying a licence sufficiently defined under the Act or should there be further guidance provided to radio engineers as they carry out their certification? If so, what form should this guidance take and what issues should the guidance cover?*

Response:

ARC's & ARE's should only be required to take into account technical matters, policy matters should be prescribed by RSM within those documents.

Mandatory consultation should be adopted if changes to PIBS are required; the industry should be consulted, given opportunity to respond. The PIBS need to be referenced in the ACT.

The IRR's are not universally available and therefore it would probably be helpful to include the generic articles (3.2, 3.3, 3.11, 3.12) in the Act.

10) *Should the Act require all relevant information to be included on a licence application to enable a complete assessment of technical compatibility when creating future licences? If so, what information should be required?*

Response:

Yes - The Act should refer to the information on the license being required as specified in the relevant PIBs. The requirements are largely covered by the relevant forms and templates, but there are practical limits as to how much information can be included on a particular licence.

11) *When assessing whether a proposed licence is 'technically compatible', should radio engineers take account of the potential cumulative effects of transmission sources? If so, how can this be enabled under the legislation?*

Response:

Where possible yes. But this is a very complex subject and may be very difficult, if not impossible to both calculate or define in legislation. We would recommend a statement that requires the ARE to consider it when certifying technical compatibility.

*12) Should the beneficial position of being first in time be retained in the Act? If not, how should this be addressed?*

Response:

Yes, first in time is an industry accepted practice – but must be subject to, a minimal standard of equipment. The rights of others users should be considered as long as they meet the minimum guidelines, excepting if there is a particular old or poorly equipped operator involved

Even if first in time, a licence should be crafted in the expectation that the adjacent Management Right or channel will be used in due course. While a situation could possibly arise in the future when both services were operating within their licensed specifications but interference still occurs. In that case they should have a joint responsibility to resolve the issue and the costs should probably lie where they occur. In some instances this may mean that the first in time operator has to make changes to their plant because that is the only course for correction.

*13) Should radio engineers be required to consider whether a proposed licence is technically compatible with potential future uses of adjacent management rights? How should these potential future uses be defined?*

Response:

No. The management right should already be defined to a degree.

*14) Should any additional information be recorded on licences? If so, what types of information should be recorded?*

Response:

There is an issue with multiple site references for the same site. Antenna details should be generic not make/model.

*15) Should the information requirements in the Register for spectrum licences and radio licences be aligned? If so, what should be the minimum information requirement for licences?*

Response:

Data on both licenses should be aligned if possible.

*16) Should it be made an offence to inaccurately record or over-record parameters on a licence? If so, should any tolerances be applied and how should this be done?*

Response:

Yes, if purposefully recorded incorrectly

*17) Should the Maximum Permitted Interfering Signal parameter be retained? If so, should this be specified in the Act, should MPIS relate solely to co-channel emissions, and should there be a*

*specified minimum MPIS for different services? Are there preferred alternatives to the MPIS parameter?*

Response:

Yes

*18) Should receiver data be publicly recorded as part of the certification and licencing process to assist technical analysis of future emissions? If so, how?*

Response:

Yes, a receiving standard is an important part of system design.

*19) Should new provisions be introduced to set tolerance limits for receivers from emissions in adjacent frequencies?*

Response:

Not in the Act – should be dealt within the PIBs

*20) Should the Act include provisions establishing the process for authorising Approved Radio Certifiers? If so, how?*

Response:

Yes, in a similar manner to the process for approving Radio Engineers.

*21) Is an arbitration process appropriate for managing disputes between parties? If not, what other process should be included in the Act?*

Response:

Arbitration is not quick or effective enough

*22) Should the dispute resolution processes under the Act be updated? If so, how should the process be updated?*

Response:

Yes

*23) Are the matters an arbitrator must have regard to, in reaching a decision, appropriate? If not, what other matters should the arbitrator consider?*

Response:

Yes

*24) Should any resolution reached through a dispute resolution process be binding on the participants?*

Response:

Always need recourse for inappropriate arbitration.

25) *Should injunction or other cease and desist mechanisms be provided for in the Act itself, as a prelude to arbitration? If so, what limits and criteria should apply prior to such as mechanism being used?*

Response:

Yes

26) *Should timeframes in the Act be amended and should the actions of the Chief Executive be bound by timeframes prescribed in the Act?*

Response:

Yes, however The Chief Executive also needs a timeframe – suggesting 20 working days

27) *Should the Act include a right of appeal against the Chief Executive's decisions? If so, to whom should the appeal be directed?*

Response:

Yes

28) *Should disputes involving both lawful and unlawful emissions be able to be subject to arbitration or other dispute resolution process? What limits of applicability would be appropriate?*

Response:

Yes, for lawful emissions. Unlawful transmissions should be closed down immediately. MBIE/RSM needs to determine lawful or unlawful.

29) *Should the Crown, through the Ministry, be involved in interference management in frequency bands subject to private management rights?*

Response:

Yes

30) *Should any additional enforcement provisions be included in the Act?*

Response:

Yes, with reference to ARC's/ARE's. The Ministry seems to be under resourced in regards to matters that require enforcement in matters of interference.

31) *Should the maximum penalties for contravention of the Act be amended?*

Response:

No – they are already a deterrent.

32) *Should the scope of section 2 of Schedule 1 be limited to purely capture the impact on emergency and safety signals, and reduce unintended consequences? If not, why not?*

Response:

Yes it is limited – self-regulating to some degree.

33) *Should liability in regard to certification be introduced and should this rest with the certifier, the licence holder, or the manager (as the actual licensing authority)?*

Response:

No, at this point in time liability sits with the Ministry.

34) *Should radio engineers be required to be independent of the entity on behalf of which they are certifying spectrum?*

Response:

No - Radio Engineers and certifiers should be required to undergo formal training which includes a module covering, "Act independently and professionally without bias to their employer". Sufficient rules should exist.

35) *Should ARE's and ARC's be treated consistently in terms of liability, independence and authorisation?*

Response:

The respective roles need to be clearly enunciated within the Act.

36) *Should the certification process be articulated independent of the responsibilities of the Registrar under the Act?*

Response:

The process for ARC's and ARE's be lifted out of the Act and placed in a PIB document. The Ministry should provide an annual forum for ARE's and ARC's to attend.

37) *Should the requirement under section 38 that AFELs are below the protection limit of adjacent frequencies also apply when management rights are being modified, amalgamated, or divided?*

Response:

No comment

38) *When two management rights are being amalgamated, should modification of the protection limit to remove the 'spike' at the common boundary be included in the amalgamation process? If so, what should the protection limit default to either side of the common boundary?*

Response:

No comment

39) *Should greater flexibility be allowed to modify management rights once they have been created? If so, what modifications should be allowed with the agreement of whom (i.e. managers, rightholders or others)? Should this include aggregation of rights with different expiry dates?*



Response:

Yes – some flexibility should exist to modify

40) *Should the Crown, with the consent of the manager and/or rightholder(s), have the ability to cancel or terminate management rights? If so, what limitations, if any, should be applied to this power?*

Response:

Yes – however any spectrum license holder pursuant to the management rights should have their rights protected.

41) *Should any changes to the ability to modify or cancel management rights be applicable to existing management right or only as new management rights are created?*

Response:

Yes, should have the ability to modify or cancel. In the interest of allowing re-farming or introduction of new technology, then it should be available for existing or new management rights.

42) *Should power floors be retained? If so, are they appropriately defined?*

Response:

Yes, but we do want a better or clearer definition.

43) *Should reference bandwidths for power floors and other limits be specified? If so, should these be specified in the Act, the Regulations or through conditions on management rights?*

Response:

Yes, and through regulations.

44) *Should the nature and type of conditions the Crown (as the initial manager and before sale or transfer) is able to place on a management right be extended? If so, what types of conditions should be allowed on management rights (for example ownership caps, limitations on the use of, or transfer of, management rights)?*

Response:

Yes if it has been reallocated for retender to stop it from being re-modified

45) *Should the Act include provisions to ensure that spectrum is put to use to provide services for consumers? If so, what form should these provisions take?*

Response:

Yes – Use it or lose it. Access for external parties to Management rights should not be unreasonably withheld, where the spectrum will not otherwise be used.

46) *How should conditions on management rights not applicable to individual licences be enforced? What entity should be responsible for their enforcement? (see Questions 59 to 67)*

Response:

An audit should be undertaken by MBIE at least once, when established.

47) *Should the Act include additional provisions to support leasing and the operation of power of attorney in relation to the operation of management rights?*

Response:

No comment – too complex not required in Act.

48) *Should the Act be explicit about the geographic extent of protection limits for management rights and spectrum licences?*

Response:

Yes - Anything that occurs under this Act must be within the 12 mile limit.

49) *Is there a need to assert management of spectrum outside the 12 mile limit?*

Response:

Yes - We believe there have been issues; therefore the Act should not include a limit.

50) *Is there demand for regional management rights? For what services?*

Response:

Yes – Local broadband distribution and broadband linking on campus cellular networks.

51) *What is the relationship between regional management rights (and demand for this) and any future deployment of technologies such as white space networks?*

Response:

White space networks are more likely be implemented in rural and low population areas, where as regional networks may well cover areas of sizable population

White space deployments are probably more suited to GURL rights sitting under subservient use of the Management rights. Which could either be government or privately owned.

52) *If regional management rights are introduced, should the decision to create regional rights lie solely with the Crown at the time of primary allocation, or should existing nationwide management right holders be empowered to subdivide their rights? If so, how could this be achieved? What are the benefits and costs for regional management techniques?*

Response:

Yes – Management right holder should be divisible into more subservient rights as they think fit

53) *If regional management rights are introduced, how should the areas covered by the rights, signal strengths, and boundary conditions be defined?*

Response:

By the licenses within the management right.

54) *Are unwanted emissions from transmitters operating under a spectrum licence appropriately managed under the Act?*

Response:

Yes. Generally yes, as non-evidence of significant interference.

55) *Should unwanted emissions in the spurious emission domain and outside specified UELs be explicitly managed under the Act? If so, how should this be achieved?*

Response:

Yes, we believe they should. This could probably be achieved by specifying a specific level they need to be below at greater than a specified frequency separation from the licensed frequency. Spurious frequencies are generally well separated from the licensed frequency and therefore appropriate filtering should be possible at the transmitter.

56) *Should rightholders have protection from harmful interference from unwanted emissions above and/or below the power floor?*

Response:

Yes particularly form interference above the noise floor.

57) *Should there be a distinction between the application of the IRRs to international and domestic interference management under the Act?*

Response:

Yes, the application of the IRRs to both international and domestic interference management should continue and be consistent. Where possible and appropriate, the particular IRR reference should be stated in the local regulations and guidelines.

58) *Should the requirement for rightholders and radio licence holders to comply with the IRRs be amended? If so, how?*

Response:

No view at this time – it continues to be a requirement. New Zealand being geographically separated from rest of world, IRR's are more restricted than the rest of the world. Compliance is more restrictive than necessary.

59) *Should the subordinate legislation or regulation making powers under the Act be extended to cover additional matters? If so, what additional matters should be covered?*

Response:

Yes, they probably should be extended to include at least the four issues listed in the Discussion Document.

60) *Should the role and status of some or all of the PIBs be recognised in the Act and/or Regulations? If so, how should this be achieved and what types of PIBs should this cover?*

Response:

Yes, making reference to the prescriptive PIB's, specifically PIB 34 and 38 (ARC/ARE's)  
From time to time, with Industry consultation, the Ministry may review.

As a suggestion, there could be another PIB above all PIB's that is the one that is referenced by the Act, which declares which portions of which PIB's are enforceable by the Act.

61) *Should the current overlap between government policy setting and the role of the Commerce Commission in spectrum allocations be clarified? If so, how?*

Response:

The commerce commission should really be the ones who manage the spectrum allocations.

The role of competition should be set by Commerce Commission, not MBIE. However, we have reservations how the Commerce Commission see the definitions of the market e.g, FM broadcasting is seen as a media market including newspaper TV and accumulation of FM broadcasting licenses is not necessarily seen as anti-competitive.

62) *Are spectrum caps still necessary, either initially or for the longer term, and if so, should they have a legislative basis?*

Response:

Yes, we believe they are still necessary, both initially and for the longer term for effective competition. For the future, one company can acquire another thus becoming a dominant player and lessening competition

63) *In setting spectrum caps, should total spectrum holdings be considered or should spectrum caps solely relate to particular bands? How should broader caps be determined?*

Response:

We suggest that total spectrum holdings should be considered when considering spectrum caps. There is some evidence to suggest that certain firms will bid for spectrum in any band that becomes available to ensure future opportunities can always be realised. While the "use it or lose it" policies may diminish this tactic, it has not proved effective in the past. Presently there are around 5 frequency bands generally available for cellular use, there are still only 3 operators. Should anyone else wish to enter the market, suitable spectrum would be hard to find. Imposing a total spectrum cap may remedy this.

64) *Should any legislative mechanisms to apply spectrum caps be generic and flexible enough to apply to all high-value spectrum uses, or should they be specific to particular uses? How could flexibility for technology changes be incorporated?*

Response:

Yes, they should be generic, but should only be used for high value spectrum where there is expected to be insufficient spectrum for it to be freely available, i.e. a competitive situation.

65) *What are the most appropriate mechanisms to implement competition safeguards in radio spectrum using markets? Are the current deeds and agreements sufficient or should competition safeguards have a legislative basis?*

Response:

Sufficient. Providing access to spectrum to regional and secondary market operators would ensure future competitive opportunities.

66) *If spectrum caps are given a legislative basis, how should they be affected?*

Response:

No comment.

67) *Should spectrum caps be applied at the initial allocation for a limited number of years with a periodic review of whether they remain necessary, or for the entire length of the management right?*

Response:

MBIE should carefully monitor supply and demand and behaviour of spectrum in consultation with the industry to ensure there is no anti-competitive nature

68) *Should any process, criteria, or framework for the review of spectrum caps be included in the Act?*

Response:

Status Quo - The current process works satisfactorily giving the Ministry flexibility

69) *Should the Commerce Commission be involved in any review of spectrum caps? If so, how?*

Response:

Yes, by a formal request to audit the review.

70) *Should competition regulation in the administrative radio licencing regime be introduced? If so, how?*

Response:

That section 116 para 1 section (e) provides for competitive pricing. We do not see that any further provisions are necessary at this time. In discussion RFUANZ considers the question of what parameters can be changed on a license before a new license can be considered and specified under the act. It would be useful to be able to administer licenses directly from one party to another without having to relinquish and reapply.

71) *What competition issues may arise from the deployment of new technologies?*

Response:

The competitive issues will no doubt be dependent on the actual technology and market size. In the case of White Space technologies, it is expected that the market will be quite small and specialised as it can only be used in some areas and only when the Right Holder is not using it. Initially we suggest that any White Space user should be licensed so that it is known where transmitters are and who is using it. If any instances of hoarding or jamming are detected, then a licence can be revoked.

For other new technologies, it is suggested that initial requests for spectrum could be approved with a limited term licence. At the end of the term, the service can be reviewed to see if any competitive issue have arisen. The industry is presently migrating to 12.5kHz channel spacing in landmobile frequency bands that do not presently conform to that specification. However numerous digital systems are also being implemented and they generally employ 6.25kHz equivalency channel spacing

*72) Are there any legislative barriers to an active secondary market for radio spectrum in New Zealand? If so, how should they be addressed? Are there other barriers to be addressed?*

Response:

There does not appear to be any legislative barriers to management right of holders creating a secondary market to spectrum they are not using.

However this market does not appear to be developing and it was seen that the Management right holders have no interest in doing so, while there may be some interest in other parties obtaining the use of those license.

RFUANZ consider it may be useful to have some legislative encouragement of a secondary market, The spectrum seeker needs a mechanism to encourage a management right holder to make available unused spectrum.

For example there seems to be some demand for in house, facility wide private cellular deployments but there is no spectrum available.

*73) Are there changes to the general user radio licence regime that would facilitate greater use of this mechanism without unduly affecting the rights of incumbent users?*

Response:

The frequencies within the GURL are fine, the bands above and below need to be tightened up although none can be identified at this time.

*74) Are power floors in management rights effective in achieving spectrum sharing?*

Response:

No comment

*75) Should management rights created in the future place more obligations on the owner to allow spectrum sharing? Are there ways to increase sharing in management rights without decreasing the value of the right to the owner?*

Response:

Yes to part one.

As a management right holder shouldn't they be asked to substantiate why they can't make it available to a secondary market. Management rights should have conditions to make use in a secondary market. However, this will only apply to new licenses. Any provision would have to put in at the outset.

76) *Should the Act be amended to provide for greater flexibility to accommodate dynamic spectrum sharing technologies? If so, how?*

Response:

Yes, but as technologies emerge industries need to be consulted.

77) *Should some or all of the transitional provisions be repealed? If so, which ones?*

Response:

The transitional provisions provider 162-169 should be preserved and strengthened and reworded to include all administrative Licenses up to a date when a management right were created

Schedule 6 should be extended to include all land mobile band and fixed services, including 174-230MHz and 162 – 173MHz EE Band of frequencies.

With reference to your discussion paper we strongly challenge your statement of the second paragraph of section 10.1.3;

*“Demand for licenses in these bands has been decreasing and administrative policies to require new licenses utilising a narrow bandwidth (i.e.12.5kHz) from 2015 will mean there will likely be adequate spectrum for future purposes.”*

There appears to be a significant miscarriage of process in that wide band licenses being converted to narrow band are not carrying forward the incumbency provisions of the ACT. This was done for the ‘B’ band conversion to other bands under contract in the late 1990’s and these still exist.

78) *Should the legislation be amended to restrict all classes of licence to be for transmission from a single transmitter location? If so, should this be done in the Act by prescribing a licence format consistent with spectrum licences or through changes to the Regulations?*

Response:

RFUANZ strongly supports that a license should be for one single transmitter channel on a single location. All multiple location licenses should be abolished. The current situation is creating opportunities for spectrum denial, licenses being issued but not used, and cost.

79) *If an amendment to restrict all classes of licence to a single transmitter location is implemented, how can licensees under the administrative radio licencing regime be provided certainty around being able to operate a national service on a single frequency?*

Response:

It is not necessary to operate on a single frequency. Technology enables use of various systems to operate nationwide services. The creation of a new band of 174 – 230MHz will give opportunity for nationwide services on a single frequency if required.

80) *Should there be any amendments to the provisions enabling introduction of administrative incentive pricing for radio licences under the Regulations? If so, what should these be?*

Response:

The current arrangement seems to be adequate and no further change is required.

81) *Should records of instruments lodged with the Registrar and included in the Register be retained in any particular form or location? If so, where and in what form?*

Response:

No comment

82) *Should a minimum retention period for expired instruments be defined in the Act? If so, what should the minimum retention period be?*

Response:

No comment

83) *Should the Regulation making powers of the Act be clarified to include partial waiver of fees?*

Response:

Yes, this is already being done.

84) *Should the Regulation making powers of the Act be amended to require a fee structure be set on a per location basis?*

Response:

We don't support any differential fee by a per location basis.