

VODAFONE SUBMISSION TO THE PRODUCTIVITY COMMISSION



**Response to the Radiocommunications
Draft Report**

22 April 2002

Executive Summary

- Vodafone considers that the objective of the Radiocommunications Act (RCA) should be to maximise the overall public benefit by the efficient allocation and use of spectrum. One clear objective is preferable to primary and secondary objectives, which can lead to a heightened risk of subjective decision-making. The greater the number of objectives, the greater the chance of conflicting outcomes or confusion as regulators “cherry-pick” objects.
- Vodafone supports the ability to impose competition rules when allocating spectrum. In limited circumstances, for a transitory period, it may be more effective to impose ex-ante competition rules for spectrum auctions in circumstances where competition law cannot sufficiently deal with potential problems, ie in markets that do not yet exist.
- Spectrum licences should have a fixed initial period of sufficient length to justify capital intensive investment, with the ACA to conduct a review of the spectrum use at a fixed period prior to expiry. During this review, some form of presumption of renewal subject to a public benefit test could apply, to determine whether the continued use of the spectrum would be the most beneficial use for society, or whether some other use is more appropriate.
- Vodafone supports the current three licence structure but would support changes to improve processes to ensure that the proper incentives exist for the most appropriate licence type to be allocated.
- Vodafone supports the issuing of spectrum licences in bands even if only one party is interested in using that bandwidth.
- Vodafone advocates the conversion or sale of unencumbered spectrum where the licence holder may subsequently allocate parts of the licensed spectrum to third parties. Where this is not possible, Vodafone believes that as part of the conversion process, if agreements are negotiated with incumbent licencees such that their current utilisation of spectrum will not alter, then this should minimise any new interference issues.
- Vodafone is concerned by the Commission’s draft finding that no compensation be provided to apparatus licensees whose licences are cancelled or not renewed as a result of spectrum re-allocation. While we support the argument in principle, in practice this would mean that we would be prevented from receiving compensation if the government decided not to renew our GSM 900 apparatus licence.
- Vodafone agrees that where shadow pricing of apparatus licences is implemented, it should be undertaken in a transparent and predictable manner that incorporates necessary adjustments to make comparisons meaningful.

- Vodafone supports the Commission's draft finding that in some cases the ACA has set the reserve price too high in some auctions. Vodafone considers that the reserve price should not determine the final price of the spectrum.
- Vodafone supports the Commission's draft recommendation that responsibility for the broadcasting services spectrum bands should be transferred to the ACA and be managed under the RCA.

1. Objectives of Legislation

1.1 Vodafone welcomes the Productivity Commission's desire to reform the objectives of the Radiocommunications Act. We consider that the objective of the RCA should be to maximise the efficient allocation and use of spectrum as currently specified in object (a) of the RCA.

1.2 In our initial submission, Vodafone advocated the following principles of

- efficiency of allocation and use of spectrum,
- certainty especially investment certainty,
- consistency,
- transparency of process and decision-making, and
- technology neutrality.

Such principles should be encapsulated within object (a). Vodafone welcomes proposals that can demonstrably improve spectrum allocation and management in accordance with the object and such principles.

1.3 However, Vodafone does not agree that secondary objectives are required. Where there are secondary objectives that may potentially conflict with the efficiency object, or are ambiguous, the regulator has discretion to select an object to abide by. This may be the case even where primary and secondary object are specified, as the objects themselves and their level of standing may be open to interpretation. It may result in outcomes that would not have occurred if object (a) had been adopted as the sole object of the RCA.

1.4 Our view on the need for a clear objects statement is shaped by our practical experience of the use by the ACCC of the objects clause of the telecommunications-specific access regulation in the Trade Practices Act (TPA). The ACCC is required to consider whether declaration of a service will promote the long-term interests of end users, with regard to three secondary objectives. However, not all three sub-tests must be met, only regard had to them. We believe that this gives the ACCC significant discretion to select which objective it chooses to fulfil. We would argue that the recent decision by the ACCC to regulate CDMA services was a prime example of a selective use of the various 'tests' in the LTIE objective.

2. Competition Limits

- 2.1 The PC recommends that competition limits imposed under s60 and s106 of the RCA should be repealed as s50 of the TPA provides adequate protection against anti-competitive behaviour. This contrasts with Vodafone's submission that in limited circumstances, it may be necessary to impose ex-ante competition rules for spectrum auctions to protect against anti-competitive outcomes. This may occur in markets that are yet to develop as competition law is best suited to deal with competition in existing markets.
- 2.2 Vodafone emphasised that such rules should be transitory in nature to provide for the time period needed for the market to emerge. Licence holders should be able to maximise return on investment either through use of spectrum or through trading with a secondary person who has a better use for the spectrum. We also suggested that the ACCC is best placed to judge when such spectrum caps should be applied, in consultation with the ACA and other stakeholders.
- 2.3 Vodafone seeks to achieve the desired outcome of protecting against anti-competitive behaviour in yet-to-be defined markets and will consider the most efficient and effective option. However, Vodafone is not convinced that general competition law would provide a timely and effective solution to protect against anti-competitive outcomes. If a bidder purchases spectrum and is subsequently found to breach s50 of the TPA, the ensuing regulatory remedy may be costly and time-consuming. Specific, narrowly focussed, and time-limited competition rules would more effectively deal with competition issues at the time of sale.
- 2.4 One example where ex ante competition rules, (ie spectrum caps), have been appropriately applied was in the 3G spectrum auctions. Given the uncertainty that currently exists about how the 3G market will develop in the future, it was prudent for the Government to apply a competition rule 'up front' to protect against one player foreclosing the 3G market by purchasing all available spectrum.
- 2.5 It is important to ensure that the criteria for imposing competition limits are restricted to these circumstances. Where the market is well defined, we agree with the PC that specific competition rules are unnecessary and could lead to poor outcomes.

3. Licence Tenure

Indefinite v Fixed Licence Tenure

- 3.1 The PC has suggested that indefinite licence tenure for spectrum licences should be an objective but other steps need be put in place first. The PC has asked for comment on the merits of holding auctions at a specified period (eg three years) before spectrum licences expire.
- 3.2 Vodafone considers that allocation of spectrum licences on an indefinite basis may create disincentives to use spectrum efficiently and lead to spectrum hoarding and delay in the roll out of new infrastructure or services, in the event of artificially created scarcity. The licence holder may be able to artificially increase the price of the spectrum in secondary trading by controlling the supply and timing of release.
- 3.3 Rather, Vodafone recommends that spectrum licences should have a fixed initial period of sufficient length to justify capital intensive investment. As previously stated, for mobile networks this would be a minimum of 15 years and probably longer (ie 20 years).
- 3.4 Vodafone also advocates that the ACA conduct a review of the spectrum use and that this should be at a significant fixed period prior to expiry. For mobile spectrum, Vodafone suggests a period of five years prior to expiry of the licence. This would give the business greater certainty to make the necessary initial investment and sufficient timeframe for planning purposes, including an incumbent potentially vacating the spectrum, while also allowing spectrum to be released for new use where appropriate.
- 3.5 This review of spectrum should encompass a presumption of renewal subject to some form of “public benefit” test. Vodafone acknowledges that specifying public benefit criteria may be problematic, but we consider there is scope to provide clear guidance. A public benefit test is useful to determine whether the continued use of the spectrum would be the most beneficial use for society, or whether some other use is more appropriate. If the test resulted in the existing use being the most appropriate use, then the incumbent would continue to use the spectrum.
- 3.6 The ACA may decide that it is in the public interest to allocate the licence for another fixed period (say 10 years). The ACA and incumbent user would negotiate a commercial agreement for the spectrum licence for this new period. If the incumbent decides that the price is too high, it can decline to acquire the spectrum under the agreement. Again, the incumbent would be free to participate in the subsequent allocation process if it so chooses. This allocation could occur after the review, at say three years prior to expiry as suggested by the PC.

- 3.7 If the test concluded that there is a better use for the spectrum, then the ACA may allocate that spectrum for this use, through a market-based process where appropriate. The incumbent would then have five years to plan its future after expiry, including a possible exit from the spectrum. However, the incumbent user would still be able to bid for the new licence via the allocation process. Hence, the incumbent may not necessarily lose access to the spectrum, though the licence conditions may have altered.
- 3.8 This proposal provides certainty to the incumbent and other potential users regarding access to the spectrum, as does the PC suggestion for holding auctions a specified period before expiry of the licence. However, the public benefit test also allows for consideration of what is in the best interests of society, including the continued operation of the incumbent.
- 3.9 The duration of the renewal period would be influenced by this public benefit test. For example, should a licensee, after an initial 15 year period, decide to deploy a next generation system or an entirely different technology then it would do so within an environment of great uncertainty if it could only be sure of, say five years future tenure.
- 3.10 Apparatus licences and spectrum licences should not necessarily have the same duration. Licence tenure should be linked to the use of spectrum. Shorter duration apparatus licences are appropriate where the government needs to closely regulate a particular use or technology or where there is some uncertainty about the future use of the band. For example, point-to-point fixed links may be best regulated by a shorter tenure period subject to rolling review, as greater co-ordination of frequency is required to minimise interference and maximise the number of licensees operating efficiently.

Compensation

- 3.11 Vodafone is concerned by the PC draft finding that it is not appropriate to provide compensation to apparatus licensees whose licences are cancelled or not renewed as a result of spectrum re-allocation. The PC's rationale is that apparatus licences are akin to short-term permits to access a public resource. While this characterisation may be true for the majority of apparatus licences, the five year apparatus licences for GSM 900 spectrum are the cornerstone of our significant investment in our GSM mobile network in Australia. If the licences were not renewed, the business would not continue to operate. Vodafone would expect some form of compensation in the event of non-renewal.

4. Licensing

Licence Structure

- 4.1 Vodafone supports the PC's view that the current three licence structure should be retained. Each licence type has unique characteristics and allocation of the type of licence should be based upon how the spectrum is to be used. Vodafone supports the PC draft finding that the introduction of a single flexible licence type would bring few advantages compared to the current system. However, Vodafone would support changes to improve processes to ensure that the proper incentives exist for the most appropriate licence type to be allocated.
- 4.2 Vodafone supports the PC draft recommendation that the ACA should issue spectrum licences in bands even if only one party is interested in using that bandwidth. That is, the allocation of a licence should not be determined by whether there is excess demand for spectrum. The ACA can efficiently allocate the spectrum to one buyer after calling for expressions of interest, and secondary trading should accommodate any subsequent increased demand for that spectrum. Where there is well-defined markets, this allocation would not require any specific competition rule as the general provisions of the TPA would guard against anti-competitive outcomes. General competition law should operate in well-defined markets where one buyer purchases the spectrum in a band.

Spectrum Conversion

- 4.3 Vodafone supports the concept of conversion where appropriate, based on use of spectrum. Apparatus licences are more efficient for accommodating a large number of users in a certain geographic area. Conversion to spectrum licences may not increase this efficiency. Our existing GSM 900 spectrum should be converted to a spectrum licence as soon as practicable, assuming commercial agreement can be reached.
- 4.4 Where conversion is appropriate, Vodafone prefers the conversion of apparatus licences to spectrum licences free of other incumbent licensees. Where such conversion is not possible, interference and other management issues can be minimised if the incumbent apparatus licensees enter agreements to not alter their existing use of spectrum, as part of the conversion process. Vodafone considers it would be able to manage existing users in the 900 band if conversion was contemplated.
- 4.5 Vodafone supports the draft recommendation that where it is cost-effective, the ACA should convert wide area apparatus licences into spectrum licences. However, this must be considered with regard to the intended use of the spectrum in the future, and the price and conditions being acceptable to the apparatus licence holder. It is

important that the licence period should reflect the type of use and the investment involved.

Allocation of Unencumbered Spectrum

- 4.6 Similarly, Vodafone prefers the sale of unencumbered spectrum, where the licence holder or “band manager” can subsequently enter into agreements with third parties, rather than the purchase of spectrum with incumbent licensees in operation. As long as the spectrum is used for existing services, then management of incumbents should not be an issue. Where such agreements cannot be negotiated, then management issues may be of concern.
- 4.7 Difficulties arise where fixed links are auctioned at the same time as spectrum licences, creating the potential for gaming. For example, New Zealand’s auction of 2GHz spectrum involved a mixture of management rights and overlapping spectrum licences offered at the same time but as separate items¹. There were incumbent fixed point-to-point systems using frequencies covered by the management rights offered. Hence a significant issue was to reconcile the demands of incumbent fixed point-to-point operators and potential mobile telephony operators. Under such an auction the potential for gaming exists as a bidder can at relatively low cost, “hold-up” a prospective mobile entrant from acquiring the management right by bidding for a point-to-point licence that overlaps in geographical, bandwidth or time dimensions with the management right.

The Role of Private Band Managers

- 4.8 Where spectrum licensees are to manage tenants, such “band managers” should be committed to the business of managing spectrum users, with the requisite skill and interest levels. Spectrum licence holders may not have the requisite skill set or desire to take on this function, which may lead to the inefficient management of spectrum. Hence the ACA should explore options to ensure that band managers have the appropriate skill set to handle this responsibility.

¹ See Review of 2 GHz Radio Spectrum Auction, Charles River Associates (Asia Pacific), August 2001.

5. Charging for Spectrum

Auction Structure

- 5.1 Vodafone has found the electronic simultaneous ascending bid multiple round auction process used to be transparent, not open to manipulation and reliable. Vodafone has been satisfied with the use of this auction method but is open to other auction forms such as combinatorial auctions if clear advantages can be demonstrated, in light of international experience.

Shadow Pricing

- 5.2 Vodafone supports the PC's view that if shadow pricing of apparatus licences is implemented, it should be undertaken in a transparent and predictable manner that incorporates necessary adjustments to make comparisons meaningful. Raising annual fees based on results of a single auction at the height of a speculative 'bubble' would result in over-pricing, inefficiency and increased costs that will pass through to consumers. Vodafone also supports the PC view that an unexpected fee increase during the term of the licence is likely to render previous investment decisions inefficient. The terms of the licence must include the conditions under which fees can be increased. Last year, the government increased Vodafone's GSM 900 apparatus licence fee from \$7m to \$17.5m per year. We remain unclear of the reasoning for this increase. Vodafone would support changes to our existing GSM 900 apparatus licence that would restrict the ability for the government to impose ad-hoc non-transparent licence fee increases in the future.

6. Managing Spectrum for Broadcasting Services

- 6.1 Vodafone supports the PC draft recommendation that responsibility for the broadcasting services spectrum bands should be transferred to the ACA and be managed under the RCA. As we have stated previously, differing regulatory treatment of broadcasters and telecommunications companies create the potential for inconsistent policy outcomes and market distortions at a time of increasing convergence of technologies. Spectrum users should not be able to gain a competitive advantage due to differing regulatory environments.

7. Operations of the ACA

- 7.1 Vodafone supports the PC draft finding that in some cases the ACA has set the reserve price too high in some auctions. Vodafone is of the view that the reserve price should not determine the final price of the spectrum. For example, in the 3G spectrum auction, the final price paid was only marginally higher than the initial

reserve price. The excessively high reserve price may have prevented the true market value emerging.

8. Spectrum Allocation

- 8.1 While Australia's geographic location gives it some flexibility to depart from ITU Plan for Region 3, Australia should still undertake spectrum planning so as not to preclude high value services such as mobile from being introduced in future because Australia has departed from ITU allocations. The mobile market is global in nature and Australian mobile consumers are likely to be adversely impacted if global standards on spectrum use are not followed in Australia. As global use of technologies increases, the need for consistent regional and global standards gains importance.

9. Secondary Markets

- 9.1 Vodafone supports the PC draft finding that 'use it or lose it' provisions are generally not warranted as supplementary conditions in radiocommunications licences because of the protection afforded by the TPA. Vodafone also supports the PC view that a "use it or lose it" condition tends to create definitional issues regarding "use" of spectrum.

10. Roles and Responsibilities

- 10.1 Vodafone supports the PC's view about the importance of transparency and consistency of decision-making. Clarification of roles and responsibilities should ensure that the most appropriate body handles the key areas of spectrum management to achieve such transparency and consistency. Vodafone considers that there is merit in better defining and positioning the key regulatory stakeholders to manage spectrum. We consider that the Minister's role should be narrowed to focus on establishing and directing the broad regulatory framework with regard to social and economic policy. The role of the ACA should be expanded to deal with the key technical and operational tasks of spectrum management. The ACCC should have sole responsibility for decisions about whether competition rules are required when spectrum is allocated.

11. Conclusion

- 11.1 Spectrum is one of the most critical inputs for Vodafone. Without spectrum, Vodafone would be unable to offer the range of mobile products and services to Australians. Given the critical nature of spectrum, it is important that it is allocated efficiently, with transparent and consistent allocation processes in place. Vodafone broadly supports the PC's draft report and the emphasis on market-based reform to the regulatory framework. While Vodafone proposes alternative solutions in relation to such matters as competition limits and licence renewal, we are aligned with the

PC in seeking to develop a regulatory framework that delivers efficient allocation and management of spectrum, transparent processes and decision-making, investment certainty and consistency for all spectrum users.