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Review of Radiocommunications Acts
Productivity Commission
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Draft Productivity Commission Report on Radiocommunications

Please find attached the Australian Communications Authority's response to the Productivity Commission's Draft Report on Radiocommunications which was released in February 2002.

Yours sincerely

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April 2002

PRODUCTIVITY COMMISSION DRAFT REPORT ON RADIOCOMMUNICATIONS

AUSTRALIAN COMMUNICATIONS AUTHORITY SUBMISSION

INTRODUCTION

The Australian Communications Authority welcomes this opportunity to provide comments on the Productivity Commission's draft report on Radiocommunications which was released in February 2002.

The ACA strongly agrees with the thrust of the Commission's draft report supporting a market-based approach to spectrum management and the introduction of some additional reforms to accelerate the progress towards this approach. Further, we agree with the great majority of the draft recommendations and findings in the draft report. (A schedule of our specific responses to these draft recommendations is attached.) The ACA believes that the implementation of the Commission's basic approach would build on and consolidate the achievements to date of spectrum management reform in Australia, and we welcome the challenges that would lie ahead of us in furthering this objective.

After considering the Commission's draft report, and some of the views from inquiry participants cited in that report, the ACA would, however, like the opportunity to clarify and comment on some matters.

KEY MESSAGES

The ACA strongly agrees with the Commission that radiofrequency spectrum is a vital input for modern communications, and with the Commission's view of the rationale for some continuing role for the government in managing that spectrum. We also support its view about the importance of the market-based reforms introduced with the *Radiocommunications Act 1992*.

Notwithstanding the technical difficulties that the Commission has noted in its draft report, the ACA has endeavoured to implement these reforms in a positive and constructive manner. In particular, the challenges facing us in implementing spectrum licensing were underestimated, both in the Act itself (and by those who contributed to its development) and by the ACA and its predecessor. Moreover, we note that, based on evidence to the Commission from interested parties, the proper role of technical frameworks for spectrum licensed bands remains the subject of considerable dispute. The ACA has sought to maintain an open mind on this subject, with its objective being to provide the most flexible—and the simplest possible—system for licensees. However, we remain concerned that this issue has the potential to impede the progress of spectrum licensing, and welcome the Commission's call for further views and information about this matter.

In its report, the Commission has noted that the current framework provides a good base on which to build. We agree. We also support the thrust of the Commission's suggestions for further reform relating to conversion mechanisms, sale of encumbered

spectrum and spectrum licensing of fallow spectrum. Some specific comment on these suggestions is set out later in this submission. We also agree with the thrust of the Commission's views on security of tenure.

The ACA supports the Commission's views on an explicit presumption of renewal for apparatus licences. One area, however, where we do not agree with the Commission's view is the question of extending the term of apparatus licences or more particularly the issue of a 'single licence type'. The ACA maintains its previous view that there would be advantage in considering a single licence type in order to help bring a more market-oriented approach to spectrum covered by apparatus licences.

The ACA broadly supports the Commission's views on other reforms to improve the efficiency of spectrum use. Specific comments are set out below.

Objects of the Act

The Commission has made the draft finding that clause (a) of the objects section of the Act appears to be the primary objective of the legislation — that is, to maximise efficient allocation and use of spectrum. The Commission's draft report also notes that identifying a primary objective, supported by any subsidiary objectives deemed necessary by Government, could improve the clarity and usefulness of the objects section of the Act.

As we noted in our earlier submission to the Commission, decisions on spectrum use involve trade-offs between competing objectives and the tension between objectives is reflected in the objects of the Act. We do not believe that the Act's objectives are too broad or insufficiently clear, nor do we consider that the administration of the legislation is compromised by the potential for tension between objectives. That said, we note the rationale underlying the findings and have no objection to the re-casting of the Act's objectives in the manner suggested.

Licensing

The Commission has commented on the relative flexibilities of apparatus licences and spectrum licences, noting that it is important that licensing systems are able to adapt to new technologies and changes in spectrum use. The Commission has made the draft findings that:

- *While the reforms to apparatus licences in the 1990s have led to some improvements, this licence type remains highly prescriptive and inflexible with respect to changes in spectrum use and new technologies. Apparatus licensing still requires intervention by the Australian Communications Authority to enable licensees to adapt to new uses and technologies;*

- *While spectrum licences are not entirely technology or use neutral at the time of issue, they are more flexible than apparatus licences in responding to changing uses and technologies over time; and*

- *There are few advantages and likely disadvantages from introducing a single licence type compared with retaining the current licence types in the Radiocommunications Act.*

While we note the Commission's view that there is not a strong case for introducing a single (apparatus/spectrum) licence type (draft finding 6.3), we believe it is easy to overstate the differences between the spectrum licence and apparatus licence regimes. The ACA thinks that a major difference between the two licence types is the term of the licence.

As noted in the ACA's original submission to the Inquiry, we believe that this sharp distinction between apparatus and spectrum licences probably no longer serves a useful purpose. Arguments over whether a particular service should be apparatus or spectrum licensed are rarely clear-cut. What is important is that licensing arrangements allow policy objectives to be met efficiently. To do this, a range of licensing terms, interference management techniques, and allocation methods might be needed to meet a range of user needs.

While most apparatus licences are prescriptive in nature, technical prescription is not necessarily an inherent feature of such licences. They can be, and in some cases have been, designed to allow considerable flexibility to the licensee. Similarly, while we agree with the Commission as to the flexibility of spectrum licences, there may be occasions when a greater degree of prescription will be desirable or necessary with this form of licence.

Further, the ACA believes that there are occasions when the ideal licensing form for a particular purpose would bring together some characteristics of apparatus licences and some of spectrum licences. We draw attention, for instance, to the recent allocation process for space licences. In that allocation, the size of the investment suggested that a licence term longer than the maximum 5 years allowable under apparatus licensing was probably appropriate. It would appear that the 5 year term of the licences in fact deterred some parties – refer Bramex evidence at page 117 of the Commission's draft report. While spectrum licences could possibly have been used to enable a longer licence period, the spectrum band in question is intended to be shared between two or more satellite systems and this requires tight technical prescription. It also means that tradeability of the licences (particularly the size of the Standard Trading Unit) would necessarily be more restrictive than has been used to the present time. The ideal form of licence in this instance may have blended elements of both apparatus and spectrum licensing.

While individually most apparatus licences could be considered as prescriptive and inflexible, the apparatus licence regime as a whole offers considerable flexibility. New licence types can be implemented relatively easily to meet particular needs. A strength of the apparatus licence system is the relative speed and simplicity of the initial allocation – they are available immediately over the counter for a pre-determined price (unless a price based allocation process is justified due to competing interests in the particular spectrum.) Conversely, the long lead-time required to bring spectrum to the market under the spectrum licence system has tended to reduce its attractiveness.

Further, while it is true that spectrum licences are more flexible than apparatus licences in responding to changing uses and technologies, spectrum licences arguably offer less flexibility in the event that the technical conditions for a band need to be altered. The ACA would generally require agreement from all spectrum licensees in the band before considering a significant change to the technical framework.

The ACA still believes that there is room to improve both the apparatus licence and spectrum licensing schemes and that the need for the sharp distinctions, in the Act and in licensing practice, between the two licence types warrants examination. The Commission has observed that moving to a single licence type may dampen the "cultural change" towards a more market-based focus to spectrum management. On the other hand, it is arguable that moving to a single licence type could strengthen such a cultural change as it would provide the opportunity to bring a greater market orientation and flexibility to apparatus licensing.

The Allocation of Spectrum Licences

The Commission's draft report (p.109) states that "spectrum licences have been issued only in situations of excess demand". This is not correct. The discussion of allocation procedures contained in that section of the draft report would appear to confuse spectrum licensing with auctions.

The ACA's practice is to use auctions in circumstances of excess demand but that has not prevented the allocation of spectrum licences even when there is only one party interested in the relevant lots. In the allocation of the 27 GHz band, for instance, there was excess demand only for two of the 126 lots on offer. The lots were therefore allocated at the reserve price without competitive bidding. Similarly, in the February 2001 allocation of the 800 MHz band, the lots were allocated at the reserve price as there was only one party interested in those lots.

The Commission has made the draft recommendation (6.1) that the ACA should issue spectrum licences in bands, even if only one party is interested in using that bandwidth. The ACA has no difficulty with that draft recommendation as it aligns with the ACA's current practices. As noted above, it is only with regard to a decision to auction (whether spectrum or apparatus licences) that the ACA takes into account whether there is evidence of competition.

The draft report also suggests (at page 109) that where there is only one party interested in licences in a given band, the ACA should allocate licences at a price based on administrative costs. That approach could be appropriate in some circumstances. However, where the relevant licences are closely similar to other licences which have been allocated through price-based processes, the ACA's view is it is appropriate to take into account benchmark market values established through the previous allocation when considering pricing decisions. Lack of interest at a point in time may simply be a reflection of lack of awareness in the market place.

We do not accept the comment made in some submissions that we have allowed spectrum to lie fallow until demand is sufficiently strong. That said, there are occasions when the ACA will not seek to allocate (or more likely re-allocate) a band in advance of the designation of a band internationally or the availability of

equipment to use that band. It may be argued that the ACA should allocate bands regardless of international developments, and the ACA agrees that there may be circumstances where that is appropriate. However, we note that there remains the potential in these circumstances for the 'alienation' of spectrum that could prevent, or at least impede, the adoption of particular technologies. Thus, for example, the ACA could have re-allocated the 2 GHz bands in advance of the designation of this spectrum for 3G mobile telephony. It is possible that this could have impeded the adoption of 3G in Australia to the cost of consumers (and competition in the mobiles market).

Competition Limits

The ACA notes the discussion of competition limits contained in Chapter 6 of the Commission's draft report. We agree with the Commission's observation that competition limits appear to have been effective in encouraging new entrants to markets. We also note that competition limits have provided a degree of certainty to auction bidders and have generated little contention, other than in the allocation of the 28/31 GHz and 3.4 GHz bands. Therefore the ACA supports the retention of competition limits within the *Radiocommunication Act 1992* but would agree that the competition limits should be used sensitively and only to achieve clear policy objectives.

Security of Tenure

The ACA notes the Commission's discussion of issues relating to security of tenure for apparatus licences and agrees with its draft recommendation that the Act should be amended to provide for an explicit *presumption of renewal*. The draft recommendation envisages that apparatus licences would be renewed except where licensees have failed to comply with licence conditions and/or where the licence is affected by a spectrum re-allocation declaration. We suggest that an additional circumstance which would negate a presumption of renewal would arise where the spectrum occupied by an apparatus licence is affected by a prospective change in a band plan or the Australian Spectrum Plan.

Re-issue of Spectrum Licences

The Commission has expressed the view that section 82 of the Radiocommunications Act, which outlines the procedure for re-issue of spectrum licences, opens the potential for arbitrary and inconsistent outcomes. It has made the draft recommendation that the process for the re-issue of spectrum licences could be made more transparent by requiring the ACA to publish both its reasons for re-issuing a spectrum licence and the price paid for the re-issue. The ACA agrees with the Commission's draft recommendation.

We note the discussion contained in Chapter 6 of the Commission's draft report as to the difficulty in defining public interest. While we agree that it would not be practicable to seek to define the meaning of the term in this particular context, we consider that it would be feasible to amend the Act so as to incorporate guidance for decision makers as to matters which should be taken into account in considering the public interest.

An argument likely to be put forward by licence holders is that having a large number of customers for a service operated under a spectrum licence would be grounds for the re-issuing of the licence in the public interest. The ACA would welcome the Commission's view as to the appropriate weight that should be given to consumer issues in considering the public interest.

Under the arrangements set out in the Act, decisions as to whether licences are to be re-issued to the current licensees or offered to the wider market through a new price-based process, are not taken until the final two years of the life of a licence. The ACA considers that the arrangements provided in the Act could serve as a disincentive to investment in the mid-to-later years of the licence period. For that reason, we consider it desirable that decisions as to whether licences are to be re-issued in the public interest should be taken earlier in the licence period.

Where licences are to be offered to the wider market through a new price-based process, rather than be re-issued because of public interest considerations, we believe it would be desirable to conduct an auction earlier than the final two years of the licence life. We agree with the three-year timeframe suggested by the Commission. We note that early decisions on the future allocation of licences could assist in minimising the impacts on consumers of a possible cessation of service by the incumbent licensees.

Conversion of apparatus licences to spectrum licences

We support the Commission's views and draft recommendations in relation to the conversion process and consider that, if accepted, those recommendations could considerably improve current arrangements.

Secondary Markets

We agree with the Commission that secondary markets have the potential to play a much greater role in allocating spectrum among users and we agree with findings made on this matter in Chapter 7 of the Commission's draft report.

The Commission has sought examples of leasing arrangements under spectrum and apparatus licences. In relation to spectrum licences, the ACA is aware of few examples of leasing, although we understand that licences in the 500 MHz band were the subject of leasing arrangements for communication services required for the Sydney Olympic Games. In addition, some apparatus licensees in the 1.8 GHz spectrum licensed band were able to reach agreement with spectrum licensees to remain in the band for a period after the end of the re-allocation period (when apparatus licences ceased).

In relation to apparatus licences, the ACA is aware of reasonably extensive leasing arrangements, particularly for land mobile licences. In land mobile bands, several licensees have apparently acquired licences and developed infrastructure for the purpose of leasing capacity to third parties. In this way, the licensees effectively act as band managers/service providers. The ACA understands that leasing arrangements

also operate, albeit in a more limited manner, in fixed link bands and would typically involve a licensee leasing surplus capacity to third parties.

The Commission has sought views on the desirability of amending the Act to require the ACA to publish information on trading activity and prices paid in the secondary market. We agree that the publication of such information would facilitate the operation of the secondary market. We suggest that the more pertinent amendment to the Act would be an amendment which required licensees to disclose, to the ACA, the prices paid for traded licences. The ACA generally does not have access to information on prices paid in the secondary market. We also note that licences are frequently traded in conjunction with other assets such as infrastructure, sites and program content. We note that it would be necessary for trading parties to establish and disclose a price for spectrum, separately from other assets.

The Commission has noted concerns as to the possible lack of competitive neutrality between apparatus licence fees charged by the ACA and those which could be charged by spectrum licensees. The ACA is not in competition with spectrum licensees and rejects the suggestion that it would "undercut" fees which could reasonably be charged by spectrum licensees (or indeed by apparatus licensees). We also note that, because of their ability to arrange services beyond the simple supply of spectrum (eg. sites, infrastructure and interconnection), licensees would, in any event, have scope to set pricing levels above those levied by the ACA. The largest challenge faced by the ACA in the setting of apparatus licence fees is the paucity of information as to market values in different bands. We would welcome views from spectrum licensees and prospective band managers as to market values. We also note that we have never been requested by spectrum licensees to increase the level of apparatus licence fees.

Device Registration

The Commission has made the draft recommendation (8.1) that the ACA should not be able to refuse the registration of a device where an accredited person certifies that it will not breach spectrum licence core conditions.

The ACA agrees that its power to refuse registration of a device in this area should be exercised with caution although we would not go so far as to say that this power is inappropriate. The ACA's operational practice is that all spectrum licensed devices and nearly all apparatus licensed devices are automatically registered. However, removal of the ACA's power would prevent it from being able to prevent potential problems if, at the time of registration, an obvious risk of unacceptable interference is detected. The inconvenience caused to the accredited person is simply that the process of registration is delayed until the potential problem is rectified. In practice, accredited persons have usually appreciated the ACA's assistance to address potential problems. We therefore consider the ACA's power to refuse registration of a device should be retained but should be used only where there is an obvious risk of unacceptable interference.

We intend to issue a discussion paper and arrange a workshop at an appropriate time, seeking the views of interested parties on a range of issues related to spectrum licences including whether:

- registration of devices under spectrum licences should be required at all;
- a simplified form of device registration would perhaps be more appropriate; and
- the ACA should remove the requirement for interference impact certificates (IICs).

If it were possible to remove the requirement for IICs, we would expect that licensees would take a risk management approach to interference impact analyses. It could be expected, however, that a licensee would be required to produce an IIC in the event of an interference dispute.

Cost Recovery

The Commission has made draft recommendations (8.2 and 8.3) in relation to the recovery of the costs of interference investigation. We agree with those recommendations and, in relation to Recommendation 8.2, we note that we already recover costs of interference investigation according to the cost recovery arrangements for indirect costs.

The Commission has also noted that it is likely that holders of space licences place a greater burden on the international coordination functions than do fixed link users. While that observation is correct, we note that there is a degree of specific and direct cost recovery for some of the international coordination functions in the space area.

In its initial submission to the Commission, the ACA noted that it was considering whether it is worthwhile to continue the arrangement under which a portion of each apparatus licence fee is hypothecated as a Spectrum Maintenance Charge. For the reasons discussed in that initial submission, the concept of a specific Spectrum Maintenance Charge has now been abandoned as a component of licence fees.

Draft recommendation 9.2 proposes that the ACA should examine the cost effectiveness of introducing a new system of recovering indirect costs using a suite of rates designed to indicate the costs imposed by different categories of users. We have no difficulty with that draft recommendation. We note however that there may be practical difficulties with readily distinguishing the costs imposed by different categories of users.

Setting of Apparatus Licence Fees

The Commission has recommended (draft recommendation 9.3) that spectrum charges should be based on opportunity costs. Moving to a strictly opportunity cost-based model may mean abolishing licence fees, or licensing altogether, in most of Australia, where supply exceeds demand. Setting prices at the opportunity cost where this may be zero may not represent the most efficient outcome for the community because there may be adjustment costs in moving from one spectrum use to another. A zero price which ignores such adjustment costs runs the risk that spectrum will be alienated from higher valued uses that may emerge later. Charging a small tax rather than zero – where opportunity costs are low – means the licensee provides a contribution to ACA indirect costs and pays for use of a community resource.

The ACA would agree that opportunity cost is an appropriate basis for valuing spectrum in congested areas. We also agree with the Commission's draft recommendation 9.5 that shadow pricing is a suitable technique for avoiding distortions between different types of licence, but that it should be undertaken in a transparent and predictable manner. We note, however, that, notwithstanding the number of auctions conducted, in fact we have learned really very little about overall spectrum values, and that values indicated by the market can be highly volatile.

In relation to draft recommendation 9.4, the ACA agrees with the Commission that continuous pricing with respect to bandwidth is desirable. That has been, and remains, a long-term objective.

The Commission's suggestion that the fees vary continuously with spectrum location is more difficult to support. The market price of spectrum, if it could be determined with any confidence, would vary markedly from one band to the next. Within a homogeneous band, it would be expected that price would be more constant. However, the value of the spectrum within a band depends on the international and Australian allocations of spectrum. Allocations determine the use to which the spectrum may be put and the equipment available in each band, so adjacent bands set aside for different purposes may have very different values. In this environment, imposing fees that are "lumpy" with respect to spectrum location, does not lead to inefficiencies as the Report suggests. In fact, efficiency may be enhanced if pricing divisions more closely align with bands such that prices can be set closer to market prices in each band.

In relation to fees charged for the conversion of the MDS band to spectrum licensing, to set the record straight, we note that the conversion fees were not based on previous auction prices. Because these licences had previously been auctioned, and the term of the licences and their renewability had been left somewhat open at that time, the ACA took the view that it was arguable that the "resource rent" for these licences had already been captured by the initial auction process. It was thus agreed that the price for the conversion would be based on the ongoing value of the licences (ie. at the value of the revenue stream from the annual fees). While some of the licences were traded following conversion, reportedly at prices significantly above those charged by the ACA, we understand that the transaction included assets other than spectrum. In any event, we note that the licence values have reportedly now been revalued at zero by the purchaser.

Spectrum Auctions

The discussion of spectrum auctions at page 185 of the draft report suggests that prices paid in the PCS auctions represent an artificial scarcity that was created for each of those auctions. We agree that it might be argued that, because the PCS spectrum was sold over several auctions, there was an attempt to limit the supply. In fact, there was an attempt to cushion the impact on incumbents by initially releasing only 2 x 45 MHz of the 1800 MHz band. The Government gave a commitment that the remainder of this band would not be reallocated before 2000 and the next allocation was in 2000. This allocation was not undertaken, however, to maximise revenue and nor is there evidence to suggest that the staged release of the band led to this outcome. Rather it was an attempt to not force incumbents out of the whole band

if the demand for mobile spectrum could be accommodated with a partial band release. At the time of the 1998 PCS auction and for a year or two afterwards this appeared to be the case.

Auction Design

The ACA has closely monitored the development of the theory of combinatorial auctions and acknowledges the theoretical advantages. While we believe that the simultaneous round auction design has served the Australian market well, we will continue to monitor alternative auction methodologies, including combinatorial designs, and to consult with our clients as to the optimum auction format to use in future allocations. We therefore endorse the Commission's draft recommendation 9.1.

Exemptions and Concessions

The Commission has made various draft recommendations relating to the management of spectrum for non-commercial services. Draft recommendation 10.2 proposes that a system of explicit budgetary support should replace the current system of exemptions and concessions. While the ACA accepts that some degree of subsidy for certain non-commercial uses serves a useful purpose, it strongly supports the Commission's recommendation. Assistance to non-commercial bodies is currently in the form of a hidden subsidy and we would support more publicly visible support, such as a system of grants. We also note that, unlike the current system of exemptions and concessions, a system of grants would serve to encourage more efficient use of spectrum over time.

For similar reasons, we also support draft recommendations 10.3 and 10.4.

Setting Of Reserve Prices

In its discussion of the setting of reserve prices for auctions, the Commission has indicated that perhaps reserve prices were set too high in the recent allocation of space licences. While it is true that the allocation attracted only one bidder, we doubt that the setting of reserve prices served as a deterrent to bidders. Firstly, we note that reserve prices are set *after* bidders have registered for an auction. Secondly, the reserve prices represented less than 1 per cent of the expected infrastructure costs associated with the launching of a satellite. The deterrent to prospective bidders (to the extent that there were any), as noted in evidence provided by Bramex (page 117 of the Commission's draft report), was the 5 year tenure of the licence.

In the case of the 27GHz allocation, the Commission has suggested that reserve prices deprived the community of telecommunications services that the unallocated spectrum could have provided. It is likely that the failure to allocate all the available spectrum is largely related to the inability of the Local Multipoint Distribution Technology (which was expected to be deployed in that spectrum) to gain a successful toehold in the market. If the reserve price had been zero the market may have cleared. However, the opportunity cost of this spectrum to the community may not be zero for two reasons. Firstly, the technical framework may represent a barrier to subsequent trading of the spectrum for more productive uses (in advance of

information about such likely uses) unless the truly technology neutral framework can be determined. Secondly, the adjustment costs of changing spectrum use later may act as a brake on the operation of the market.

Delegation of the ACA's powers

Draft recommendation 11.1 proposes that the ACA's power to delegate the assessment of qualifications should be extended to include delegation of the issuing of certificates of proficiency. Section 122A of the Act already enables the ACA to delegate the power to issue certificates of proficiency. However it does not include the power to make a final decision to *refuse* to issue a certificate.

ATTACHMENT

ACA RESPONSE TO PRODUCTIVITY COMMISSION DRAFT FINDINGS AND RECOMMENDATIONS

Chapter 4 Regulatory arrangements

Draft Finding 4.1
Clause (a) of the objects section of the Radiocommunications Act 1992 appears to be the primary objective of the Act – that is, to maximise efficient allocation of use of spectrum.

ACA agrees with this finding.

Draft Finding 4.2
Clauses (c) (d) and (e) of the objects section of the Radiocommunications Act 1992 appear to be superfluous to clause (a).

ACA has no objections to the recasting of the objects of the Act as suggested.

Draft Finding 4.3
Clause (b) of the objects section of the Radiocommunications Act 1992 clearly states the Commonwealth Government objective of ensuring access for non-commercial users.

ACA agrees with this finding.

Draft Finding 4.4
Clauses (f) and (g) of the objects section of the Radiocommunications Act 1992 are unclear and may be superfluous.

ACA has no objections to the recasting of the objects of the Act as suggested.

Draft Finding 4.5
Clause (h) of the objects section of the Radiocommunications Act 1992 clearly states the Commonwealth Government objective of promoting Australia's spectrum management interests in international fora.

ACA agrees with this finding.

Draft Finding 4.6
Identifying a primary objective, supported by any subsidiary objectives deemed necessary by Government, could improve the clarity and usefulness of the objects of the Radiocommunications Act 1992.

ACA has no objections to the recasting of the objects of the Act as suggested (see detailed comments in text of the submission).

Chapter 5 Spectrum Allocation

Draft Finding 5.1
Although there are overall benefits from adhering to the international spectrum plan to minimise the potential for international interference, Australia's geographic location gives it some flexibility to depart from the International Telecommunications Union plan for Region 3.

ACA agrees with this finding but notes that there are other benefits from adhering to international allocations such as economies of scale and roaming opportunities.

Draft Finding 5.2
Aligning spectrum use to ensure inter-operability of some international services is appropriate where safety-of-life or national security issues are involved. However, this need not pre-determine the use of other spectrum bands.

ACA agrees with this finding.

Draft Finding 5.3
Australia would benefit from economies of scale in production and greater choice of equipment even in the absence of the Australian Radiofrequency Spectrum Plan.

ACA agrees with this finding, although it notes that the Spectrum Plan has other advantages, notably in providing guidance to industry to enable it to plan.

Draft Finding 5.4
Even if fully functioning markets existed, there would be a limited role for administratively allocating parts of the spectrum in the following circumstances:
- *to allocate spectrum to meet Australia's international treaties and obligations;*
- *to clear areas of spectrum where re-allocation would have community benefits but licensees refuse to move; and*
- *to ensure the provision of spectrum for defence, and where appropriate, other public and community users.*

ACA agrees with this finding.

Chapter 6 Licensing

Draft Finding 6.1
While the reforms to apparatus licences in the 1990s have led to some improvements, this licence type remains highly prescriptive and inflexible with respect to changes in spectrum use and new technologies. Apparatus licensing still requires intervention by the Australian Communications Authority to enable licensees to adapt to new uses and technologies.

Agree in part, but see detailed comments in text of the submission about some flexibilities provided by the apparatus licensing system.

Draft Finding 6.2
While spectrum licences are not entirely technology or use neutral at the time of issue, they are more flexible than apparatus licences in responding to changing uses and technologies over time.

Agree, although there may be some practical limits to the flexibility available under spectrum licensing (see detailed comments in text of the submission).

Draft Finding 6.3
There are few advantages and likely disadvantages from introducing a single licence type compared with retaining the current licence types in the Radiocommunications Act 1992.

ACA does not agree with this finding (see detailed comments in text of the submission).

Draft Finding 6.4
The practice of using a market-based approach only when there is excess demand for a band may unnecessarily restrict the issue of spectrum licences. From an efficiency perspective, it may be beneficial to sell spectrum licences even when there is only one prospective buyer.

The ACA does not accept that this "practice" exists, but agrees with the principle underlying this finding.

Draft Recommendation 6.1
The ACA should issue spectrum licences in bands even if only one party is interested in using that bandwidth. To establish the level of demand, the Authority should call for expressions of interest and allow a suitable period for responses.

Agree (but note the preceding comment).

Draft Finding 6.5

Competition limits imposed under sections 60 and 106 of the Radiocommunications Act 1992 are not necessary given the application of section 50 of the Trade Practices Act 1974.

The ACA supports the retention of competition limits within the *Radiocommunication Act 1992* but would agree that they should be used sensitively and only to achieve clear policy objectives.

Draft Recommendation 6.2
Those parts of sections 60 and 106 of the Radiocommunications Act 1992 that impose competition limits should be repealed.

The ACA supports the retention of competition limits within the *Radiocommunication Act 1992* but would agree that they should be used sensitively and only to achieve clear policy objectives

Draft Recommendation 6.3
The ACA should continue to indicate to potential bidders that section 50 of the Trade Practices Act 1974 applies to the acquisition of radiocommunications licences.

Agree.

Draft Recommendation 6.4
The ACCC should consider amending its merger guidelines to address specifically how the acquisition of radiocommunications licences would be assessed under section 50 of the Trade Practices Act 1974.

The ACA does not offer a view on this recommendation.

Draft Recommendation 6.5
Section 130 of the Radiocommunications Act 1992 should be amended to specify that apparatus licences generally will be renewed unless:

- *licensees have failed to comply with licence conditions; and/or*
- *spectrum re-allocation declarations affect the licences.*

The ACA agrees with this recommendation but see further text in submission.

Draft Finding 6.6
Given that apparatus licences are akin to short-term permits to access a public resource, it is not appropriate to provide compensation to apparatus licensees whose licenses are cancelled or not renewed s a result of spectrum re-allocation.

The ACA has no objection to this recommendation.

Draft Finding 6.7
Section 82 of the Radiocommunications Act 1992 creates scope for arbitrary and inconsistent outcomes. Although section 82 has not been applied yet, the process for determining the re-issue of spectrum licences on 'public interest' grounds could be made more transparent.

The ACA agrees with this finding.

Draft Recommendation 6.6
Section 82 of the Radiocommunications Act 1992 should be amended so that, if it re-issues spectrum licences to the same persons, the ACA is required to publish its reasons and the fees paid.

The ACA agrees with this recommendation.

Draft Finding 6.8
The conversion process has been hampered by technical and legal complexities as well as legislative impediments.

The ACA agrees with this finding.

Draft Recommendation 6.7
The Radiocommunications Act 1992 should be amended to allow the conversion of designated band to spectrum licences while allowing for certain apparatus licences to remain in that band.

The ACA has no objection to this finding.

Draft Recommendation 6.8
Where is it cost-effective to do so, the ACA should convert wide area apparatus licences into spectrum licences.

The ACA agrees with this recommendation.

Draft Recommendation 6.9
The conversion process in the Radiocommunications Act 1992 should be amended to allow the ACA to offer – where practicable – a spectrum licence for the same frequency range in cases where an apparatus licensee operates on different frequencies in contiguous geographic areas.

The ACA agrees with this recommendation.

Draft Finding 6.9
Given the characteristics of apparatus licences and the risk of hold-out, it is appropriate to retain the spectrum re-allocation process in the Radiocommunications Act 1992 to facilitate the clearing of bands for new uses.

The ACA agrees with this finding.

Chapter 7 Secondary Markets

Draft Finding 7.1
Secondary markets could improve the allocation of rights to use spectrum.

The ACA agrees with this finding.

Draft Finding 7.2
Available data suggest that the turnover rate for spectrum licences is currently around four times that for apparatus licences. In broad orders of magnitude, the turnover rate for spectrum licences is close to that of the property market. Leasing arrangements are rare.

The ACA broadly agrees with this finding (see detailed comments in text of the submission).

Draft Finding 7.3
The availability of alternative licences in some bands from the ACA may reduce the level of trading in apparatus licences.

The ACA does not think that this has been true in practice (see detailed comments in text of the submission).

Draft Finding 7.4
The level of trading in spectrum and apparatus licences may indicate a restricted range of substitution possibilities created by the natural properties of the spectrum, planning arrangements and equipment availability.

The ACA agrees with this finding.

Draft Finding 7.5
The technology and site specific nature of apparatus licences severely restricts the potential for trade in these licences.

Agree in part. While there will be some restrictions on potential trading arising from these aspects, it is not clear that they will be "severe". There is evidence of quite free trading of particular types of apparatus licences.

Draft Finding 7.6
The public register of radiocommunications licences is a valuable tool to facilitate secondary trading. The provision of trading information, such as volumes traded and prices paid is likely to improve the functioning of secondary markets.

Agree, but see detailed comments in text of the submission.

Draft Finding 7.7
'Use it or lose it' provisions generally are not warranted as supplementary conditions in radiocommunications licences because of the protection afforded by the Trade Practices Act 1974.

The ACA agrees with this finding.

Chapter 8 Managing interference

Draft Finding 8.1

Mandatory standards are justified where they provide a cost-effective means of managing interference.

The ACA agrees with this finding.

Draft Recommendation 8.1
The ACA should not be able to refuse registration of a device where an accredited person certifies that the device will not breach spectrum licence core conditions.

While this is unlikely to be a significant issue in practice, the ACA remains to be convinced of the case for removing all discretion (see comments in text of the submission).

Draft Recommendation 8.2
In the case of 'lawful' interference, the ACA should recover the costs of interference investigation according to the cost recovery arrangements for indirect costs.

The ACA agrees with this recommendation.

Draft Recommendation 8.3
In the case of 'unlawful' interference, the ACA should endeavour to recover the reasonable costs of interference investigations from the person making the unlawful transmissions.

The ACA agrees with this recommendation.

Chapter 9 Charging for spectrum

Draft Recommendation 9.1
The ACA should assess the advantages of combinatorial auctions over simultaneous ascending auctions in the light of any forthcoming overseas evidence. If combinatorial auctions prove superior, following consultation, the Authority should consider this format for the future auctioning of spectrum licences.

Agree (see comments in text of submission).

Draft Finding 9.1
Spectrum auctions appear to have met the objectives assigned to them by the Government, namely efficient allocation of spectrum, accurate pricing of the resource, increased competition and revenue raising.

The ACA agrees with this finding.

Draft Finding 9.2
It is appropriate that administrative charges be imposed on licence holders to recover the direct and indirect costs of managing their use of the spectrum.

The ACA agrees with this finding.

Draft Recommendation 9.2

The ACA should examine the cost effectiveness of introducing a new system for recovering indirect costs, using a suite of rates designed to indicate the costs imposed by different categories of users.

Agree (see comments in text of submission).

Draft Recommendation 9.3
To achieve efficient outcomes, spectrum charges should be based on opportunity costs.

See comments in the text of the submission.

Draft Recommendation 9.4
The ACA should implement a more transparent and flexible model for calculating the apparatus licence Spectrum Access Tax. In particular, it should ensure that all the elements required for the calculation of fees are given to licensees, and that fees vary in a continuous – rather than a discrete – fashion.

Agree where practicable, but see comments in text of submission.

Draft Recommendation 9.5
Shadow pricing of apparatus licences is a suitable technique for avoiding distortions between different types of licence, but it should be undertaken in a transparent and predictable manner that incorporates necessary adjustments to make comparisons meaningful.

The ACA agrees with this recommendation.

Chapter 10 Managing spectrum for non-commercial and broadcasting services

Draft Recommendation 10.1
The Commission recommends that:

- *section 31 (1b) of the Radiocommunications Act 1992 should be repealed, transferring responsibility for the broadcasting services bands of the spectrum to the ACA, to be managed under the provisions of the Act;*
- *licences granting access to spectrum should be separated from content-related licences that grant permission to broadcast, and the spectrum access charges should reflect the opportunity cost of the spectrum used; and*
- *the ABA should retain responsibility for issuing licences to broadcast and for determining the number of non-commercial broadcasting licences in a licence area. It also should retain responsibility for regulating content, enforcing codes of practice and monitoring ownership.*

This is a policy matter for Government.

Draft Recommendation 10.2
A system of explicit budgetary support should replace the current system of granting exemptions and concessions from spectrum charges to some non-government, non-commercial spectrum users.

Agree with the principle (see comments in text of submission).

Draft Recommendation 10.3
Subsidies from the Commonwealth Government for eligible non-commercial users should exclude cost recovery charges levied by the ACA. In the first instance, the level of funding should reflect only the value of the Spectrum Access Tax component of apparatus licence fees.

Agree with the principle.

Draft Recommendation 10.4
The range of groups eligible for government assistance to meet the costs of spectrum access should not be extended.

Agree.

Chapter 11 Operations of the ACA

Draft Recommendation 11.1
The ACA's power to delegate the assessment of qualifications for radio device operators to accredited persons or organisations should be extended to include delegation of the issue of certificates of proficiency.

Agree. Section 122A of the Act already enables the ACA to delegate the power to issue certificates of proficiency. However it does not include the power to make a final decision to *refuse* to issue a certificate.

Draft Finding 11.1
Spectrum licensing, as introduced by the Spectrum Management Agency/ACA, provides greater flexibility of use than the concept originally envisaged by the Bureau of Transport and Communications Economics, but it is more prescriptive than was potentially provided for in the Radiocommunications Act 1992.

The ACA agrees with this finding.

Draft Finding 11.2
The current arrangements introduced by the ACA governing interference impact certificates for registration of spectrum licence devices are not inappropriate.

The ACA agrees with this finding.

Draft Finding 11.3
The deployment of spectrum licences has proceeded more slowly and has been applied in far fewer bands than was envisaged in 1995.

The ACA agrees with this finding.

Draft Finding 11.4

The design and implementation of spectrum auctions by the ACA has followed – and, in some cases, set – world's best practice. Nonetheless, the possibility exists that it has set reserve prices too high in some auctions.

The ACA agrees with the first sentence of this finding. In relation to the setting of reserve prices, we do not believe that there is any convincing evidence that reserve prices have been set too high. See comments in text of the submission.