

Submission in response to Australian Communications and Media Authority Consultation Paper

Spectrum Review Potential Reform Directions

December 2014

Contents

Section 1.	Executive Summary	3
Section 2.	Responses to Questions for Stakeholders	5
Reform Opportunity		5
Principles for Reform		5
Response to Potential Reform Proposals		6
Proposal 1	: Policy Framework	6
Proposal 2	: Licensing Framework	7
Proposal 3	: Allocation and Reallocation	8
Proposal 4	: Pricing and Market Information	9
Proposal 5	: Structuring Payment Schedules for Licences	10
-	: The ACMA to take an open data approach to substantially improve the range, and quality of information provided to support an efficient spectrum market	11
<u>Compensa</u>	<u>tion</u>	11
Proposal 7	: Payment of compensation for resuming all or part of a licence	11
<u>User involvement in spectrum management</u>		12
Proposal 8	: Facilitate greater user involvement in spectrum management	12
<u>Technical Regulation</u>		13
Proposal 9	: Develop more principles-based device supply regulation	13
Complianc	e and Enforcement	14
Proposal 1 ACMA	0: Improve regulation be extending the suite of enforcement measures available to the	14
Moving Sp	ectrum to its highest value use	14
Proposal 11: ACMA to continually review options for allocating spectrum to alternative/higher value uses and to ensure that barriers to achieving this are reviewed and removed where appropriate. 14		
Other suga	gestions for reform	15

Section 1. Executive Summary

- 1.1 Optus welcomes the progress made to reform options for Australia's spectrum management framework presented in the 'Spectrum Review: Potential Reform Directions' Consultation Paper (the Paper) and the opportunity to provide comment.
- 1.2 Optus supports the review being conducted from the perspective of the increasing 'enabling' role spectrum plays in the Australian economy as the key underlying infrastructure that is driving economic productivity in Australia's transition to a digital economy.
- 1.3 Optus is keen to ensure that the reform process does not end up as just an incremental build on the Act, but sets as its objective a reset of how spectrum is managed in Australia. The regulatory framework for spectrum should be 'fit for purpose' and aligns with the pivotal role this infrastructure now plays in Australia's economic prosperity.
- 1.4 Optus supports the proposed principles of transparency, efficiency, flexibility, certainty, simplicity and considers that they will serve as an appropriate check to measure the utility of reform proposals.
- 1.5 In terms of specific reform proposals, Optus supports in-principle the proposal:
 - (a) that the Minister needs to be more engaged in setting spectrum policy direction and creating new levels of accountability to ensure policy objectives are met. However, Ministerial intervention should:
 - (i) not increase the regulatory burden for industry or the complexity of decision making processes and timeframes, or result in arbitrary interventions.
 - (ii) be removed from all pricing decisions. This includes the principle that policy statements should not reference pricing objectives.
 - (b) to create a single licensing framework to replace the current structure and the proposed parameter based approach to licensing.
 - (c) to provide the ACMA with greater flexibility to determine the most appropriate allocation process and method, with further detail required on how the ACMA would determine the allocation method without Ministerial intervention.
 - (d) to establish a more transparent and flexible approach to spectrum pricing to promote efficient use. However, this objective is congruous to Ministerial pricing principles. Therefore, Optus supports the power for Ministerial pricing interventions to be removed.
 - (e) to increase flexibility in payment scheduling for spectrum access charges as a licence parameter and that payment timing should be aligned with a licence start date, not paid in advance.

1.6 Optus does not support:

(a) the proposal to impose new data reporting obligations on industry and questions what utility will be gained by creating additional reporting requirements about Australia's spectrum market to the ACMA; and

- (b) the concept of private band management.
- 1.7 Optus believes that spectrum licence holders should be able to voluntarily surrender their licences and be compensated on a pro-rata basis for any unused term.
- 1.8 Optus also supports the ACMA being adequately resourced to perform its core spectrum management functions of:
 - (a) planning and coordinating the use of a band;
 - (b) licence assignment and renewal;
 - (c) dealing with interference and enforcement issues to protect a licensee's rights.
- 1.9 Optus does not consider that it is appropriate to devolve these core ACMA responsibilities to third parties.
- 1.10 Optus notes that invariably, interference disputes involving spectrum and apparatus licences require the ACMA's intervention and Optus strongly supports the ACMA being adequately resourced to perform this core spectrum management function.
- 1.11 The proposal for a dispute resolution guide is supported in-principle, however, it is critical that the Guide is developed with industry and includes process steps and outlines the roles and responsibilities for all involved: the licensee, the offending party *and* the ACMA.
- 1.12 Optus supports in-principle the proposal to change a range of criminal penalties in the Act to civil penalties, but notes there remain instances where criminal penalties will still be appropriate.
- 1.13 Optus supports the proposal for the ACMA to have a broader and more flexible 'sliding scale' range of powers to manage certain radiocommunications related compliance breaches and the capacity to order a product recall or order cease of supply, issue a public warning, or apply a consumer warning label.
- 1.14 Optus notes that the objects of the Act, along with the 'Spectrum Management Principles' contain the principle of moving spectrum to its highest value use and supports in-principle the proposal for the ACMA to give effect to objective by 'continually renewing options for allocating spectrum to its highest value use' via its annual work plan.
- 1.15 In terms of other issues, Optus:
 - (a) suggests that the reform processes are tested using case studies to ensure they are as streamlined and simple as possible from the perspective of the customers of these processes;
 - (b) continues to support a standard planning, allocation and management framework for all spectrum, including broadcasting spectrum;
 - (c) does not support spectrum sharing within spectrum licensed space and suggests that this should not be part of the proposed parameter based licensing framework.
- 1.16 It is too early to determine Optus' view on transition and timing of implementation of the new regime with the magnitude of change proposed and significant detail yet to be finalised. However, how existing rights are preserved in the transition process will be a key consideration.

Section 2. Responses to Questions for Stakeholders

Reform Opportunity

- 2.1 Optus welcomes the progress made to reform options for Australia's spectrum management framework presented in the 'Spectrum Review: Potential Reform Directions' Consultation Paper (the Paper) and the opportunity to provide comment.
- 2.2 Optus supports the review being conducted from the perspective of the increasing 'enabling' role spectrum plays in the Australian economy as the key underlying infrastructure that is driving economic productivity in Australia's transition to a digital economy.
- 2.3 The growing complexity and volume of communications is demanding significant network investment that to be efficient needs to be supported by streamlined spectrum allocation and renewal processes, market based pricing and enforcement of property rights established under the licencing framework.
- 2.4 This perspective is in contrast to the policy objectives that underpinned the development of the *Radiocommunications Act 1992* (the Act) which was conceived over twenty years ago at a time when a new approach to spectrum management was being introduced and mobile voice and data services were in their infancy. It is Optus' view that the 'command and control' approach that underpins the current Act is no longer warranted.
- Optus is also keen to ensure that the reform process does not end up as just an incremental build on the Act, but sets as its objective a reset of how spectrum is managed in Australia. This will ensure that the spectrum regulatory framework is 'fit for purpose' and aligns with the pivotal role this infrastructure plays in Australia's future economic prosperity.
- 2.6 Optus strongly supports the reform opportunity and:
 - (a) seeks to ensure lessons learnt from recent renewal and spectrum allocation processes, from the perspective of the 'customers of the process', are central to reform initiatives; and
 - (b) looks forward to engaging in further discussion about proposed options so that the momentum that has been created to date can be sustained.
- 2.7 Optus also supports the submission made in response to the Paper by the Australian Mobile Telecommunications Association and Communications Alliance.
- 2.8 Provided below is Optus' response to the five 'Principles for Reform' and the eleven 'Reform Proposals'.

Principles for Reform

- 2.9 The Paper proposes five principles to underpin and assess the reform proposals suggested.
- 2.10 Optus supports the principles of transparency, efficiency, flexibility, certainty, and simplicity, and considers that they will serve as an appropriate check to measure the utility of reform proposals as they develop.

Response to Potential Reform Proposals

2.11 Provided below is Optus' response to the eleven potential reform proposals.

Proposal 1: Policy Framework

Proposal 1: implement a clear and simplified framework of policy accountability

- 2.12 Optus supports the principle that the Minister needs to be more engaged in setting spectrum policy direction and creating new levels of accountability to ensure policy objectives are met.
- 2.13 However, Ministerial intervention should:
 - (a) not increase the regulatory burden for industry or the complexity of decision making processes and timeframes, or result in arbitrary interventions.
 - (b) be removed from all pricing decisions. This includes the principle that policy statements should not reference pricing objectives.
- 2.14 Recent delays in policy decision-making processes caused unnecessary complexity and significant cost for industry as well as delaying critical investment decisions. As the Minister acknowledged in his speech to *Radcoms14*:
 - 'it took seven years to release the digital dividend and three years to conclude the policy elements of the 15 year spectrum licence re-issue process'.
- 2.15 Optus would appreciate further detail and discussion on the proposal to issue Ministerial 'overarching' policy statements on an ad-hoc basis in terms of whether such statements will be consulted on with industry and the ACCC, the ACMA or central agencies prior to their formulation and release.
- 2.16 If consultation is proposed, it would be useful to understand how such consultation would interact with existing stakeholder engagement processes undertaken by the ACMA and the Department of Communications.
- 2.17 Clarity is also sought as to:
 - (a) how this reform initiative is different to the Minister's current ability to direct the ACMA to allocate spectrum for a specific purpose? For example, the allocation of 3.5GHz for NBN. ¹
 - (b) how the proposal to withdraw a Ministerial direction 'at any time' would improve, e.g. investment certainty for spectrum licensees.
- 2.18 It will also be important to review how the new framework will be perceived from the perspectives of the 'customers of the process' and to provide detail on the level of discipline will be applied to the proposed ACMA 'Annual Work Plan'. For example, is it intended that compliance with the work plan's commitments be reportable to Parliament?

¹ http://www.minister.communications.gov.au/malcolm_turnbull/news/nbn_spectrum_gap_-_consultation_on_draft_direction

Proposal 2: Licensing Framework

- 2.19 Optus supports in-principle the proposal to create a single licensing framework to replace the current structure that separates licences into three categories: spectrum, apparatus and class licences.
- 2.20 On a number of occasions Optus has directly experienced the impact of current licensing distinctions creating unnecessary barriers to more efficient spectrum allocation or utilisation. Optus would be pleased to share examples of its experiences of where the licensing framework has created such barriers.
- 2.21 In general, Optus supports the proposed parameter based approach to licensing and considers it has the potential to provide both greater flexibility to Optus in ensuring its spectrum assets can generate their greatest utility, are aligned with investment cycles, and provide more clarity and certainty on the prospect of licence renewal.
- 2.22 Specifically, Optus supports the proposed licence parameter for a maximum fifteen year licence term and the proposal for a presumption of renewal which, as noted, has the potential to provide greater investment certainty for licence holders.
- 2.23 However, more detail and discussion on the proposed parameters is required. For example:
 - (a) what is the basis for a licence not to be renewed that is suggested will be included in legislation and how is this different from current conditions of renewal;
 - (b) what parameters are proposed to be 'standard' to ensure consistency;
 - (c) will any parameters be mandatory and which will be specified in legislation;
 - (d) what aspects of a licence parameter could be negotiated and how would disputes be resolved;
 - (e) how would changes of use and replanning via licence terms work in practice;
 - (f) what technical parameters are proposed to form part of a licence and what parameters would be included to ensure future technologies are not precluded; and
 - (g) how would the existing separate interference management frameworks for spectrum, apparatus and class licence be merged into the proposed single licencing framework.
- 2.24 A view on how existing spectrum rights will be preserved as the transition to the new framework is developed is also a key issue for discussion, and would require developing a view on whether:
 - (a) it would it be mandatory to negotiate a parameter based licence at the expiry of a current fifteen year spectrum licences or when an apparatus licence expired; and
 - (b) the option of permitting current licenses to transition by choice before mandatory application of a parameter based licencing framework comes into effect, providing all property and technical rights of the current licence migrate to the new licence. This option would bring forward the potential economic benefits that a new flexible spectrum licensing framework could deliver.

- 2.25 It would also be valuable to further consider to what extent technical parameters should be included as a 'parameter of a licence', and which should remain as part of the debate within the current technical review process undertaken periodically by the ACMA with industry.
- 2.26 Without further detail as suggested above, it is difficult to provide any useful guidance on transition and implementation arrangements.

Proposal 3: Allocation and Reallocation

- 2.27 Optus supports in principle the proposal to provide the ACMA with greater flexibility to determine the most appropriate allocation process and method.
- 2.28 Further detail would be appreciated on the proposal for the ACMA to determine the allocation mechanism and process it seems appropriate, without a Ministerial Determination. For example:
 - (a) will the extent of the allocation mechanisms proposed be limited to the allocation methods suggested, that is: auction, tender, administration and incentive auctions;
 - (b) would the Minister retain any residual power to determine allocation or reallocation method or override any ACMA allocation or reallocation decision;
 - (c) would current extensive and serial consultation processes on selecting a proposed allocation or reallocation method still be conducted. For example: Optus is keen to avoid a repeat of the steps undertaken to set the framework for the 'Digital Dividend' auction process which required:
 - (i) engagement over an eight year period with four Ministers and their departments and two regulators;
 - (ii) preparation of nearly fifty submissions on draft policy proposals and auction rules;
 - (iii) attendance at five briefing sessions and participation at regular industry meetings; and
 - (iv) engagement of four different expert consultants by either Optus or the industry to support advocacy positions or to comprehend the complexity of proposed auction rules.
 - (d) would the ACMA have the ability to omit or shorten certain statutory steps in a reallocation decision if circumstances permit. For example, if a certain spectrum segment is currently fallow, a statutory two year period is required before it can be reallocated, even though there are no incumbents to clear. Optus recommends the ACMA should be permitted to make informed technical and industry decisions as to whether a two year clearance period is unreasonably long in a particular situation, or indeed be omitted altogether if circumstances allow.
- 2.29 Optus suggests it would also be useful to work through some case studies with industry to apply the new framework to test whether it would likely lead to allocation, reallocation and change of use processes that can be achieved in less time, using less government and industry resources than the current framework.

- 2.30 Optus supports in-principle the proposal for the ACMA to 'have the authority to allocate licences that are encumbered, that is, sell licences with incumbent users and devices in place' on the basis that, as proposed in the Paper:
 - (a) incumbent licensees 'would not have their licensing arrangements changed during the licence term'; and
 - (b) incumbent property rights are not infringed (e.g. spectrum licence property rights).
- 2.31 Further detail on the proposed role of private band managers to manage this process would be appreciated.
- 2.32 The proposal to include specific timing of allocation processes and for the ACMA to report against progress is a useful accountability suggestion and will help ensure industry and the ACMA are aligned on the status of these processes. It will be important for this reporting to be provided in a concise format and be regularly updated.
- 2.33 Optus also supports the new allocation and reallocation flexibility being extended to Broadcasting Service Band (BSB) spectrum under the *Broadcasting Services Act 1992* so that all spectrum is managed under a common framework.

Proposal 4: Pricing and Market Information

- 2.34 Optus strongly supports the proposal to establish a more transparent and flexible approach to spectrum pricing to promote efficient use. However, this objective is congruous to Ministerial pricing principles.
- 2.35 Experience with the recent Digital Dividend auction demonstrates how unfettered Ministerial pricing powers undermines the objective of the Act, and limits the economic benefits of spectrum liberalisation. For example, the ACMA adopted the Combinatorial Clock Auction (CCA) format as it assessed it to be the most appropriate format to promote the objectives of the Act. However, the high reserve price for 700MHz imposed by the then Minister, undermined the ability of the CCA to produce efficient outcomes.
- 2.36 Hazlett et al. (2012)² has demonstrated that under almost all circumstances the economic benefits from spectrum release and usage far outstrips any government budget windfall as a result of artificially high reserve price and artificial supply constraints. They find that the efficiencies associated with retail services in mobile markets "are about 240 times as large as those associated with license revenues".³
- 2.37 A spectrum policy that imposes an enormous impact in higher licence fees only needs to have a small negative impact on costs in mobile markets to undermine any social benefits. This is exactly what occurred in the 700MHz auction, where the abnormally high reserve price resulted in 15MHz of paired spectrum being unallocated resulting in social losses that are of a magnitude higher than the benefits of higher government budgetary revenues.
- 2.38 The conflicting role of maximising government revenue and promoting efficient outcomes is well recognised. For example, in the context of the United States of America, McMillan noted that:

_

Thomas W. Hazlett, Roberto E. Muñoz, and Diego B. Avanzini, What Really Matters in Spectrum Allocation Design, 10 Nw. J. Tech. & Intell. Prop. 93 (2012).

³ Hazlett et al., supra n.1, p.102

"The [USA] Act [enabling auctions] downplays revenue as an objective, and by its actions also the government showed that revenue was not its overriding objective (as, indeed, it should not be). If revenue had been paramount, the government could have offered a single monopoly license in each region—at the cost, obviously, of creating future inefficiencies" ⁴

2.39 Hazlett et al. similarly comments that:

"[to] maximize consumer welfare, spectrum allocators should avoid being distracted by side issues like government license revenues. By focusing on wireless market efficiency, getting abundant spectrum resources into a competitive marketplace, policy makers can pave the way for low prices, high outputs, and robust innovation. The economic forces unleashed will produce the highest social gains". ⁵

- 2.40 The economic literature is clear: focusing on high spectrum auction revenues undermines the economic benefits of spectrum allocation. The Act should therefore be reformed to provide stronger protection on the objective of efficient allocation of spectrum, and less on government revenue.
- 2.41 The current framework that provides the ability for the Minister to issue reserve price directions means it is not 'fit for purpose'. Under current market conditions, this risks creating auction outcomes that focus on short term budget considerations rather than longer term economic benefits.
- 2.42 Therefore, Optus supports the power for Ministerial pricing interventions to be removed.
- 2.43 Optus also supports the proposed review of administrative allocations and suggests a methodology should be developed in consultation with industry that:
 - (a) takes past industry input into account; and
 - (b) is simple, transparent and aligns with global best practice.

Proposal 5: Structuring Payment Schedules for Licences

- 2.44 Optus supports the proposal to increase flexibility in payment scheduling for spectrum access charges as a licence parameter.
- 2.45 Optus also strongly supports the principle, adopted in a range of other industries, (for example, licensing frameworks for mining leases and water rights), that payment timing is aligned with a licence start date, and not paid unduly in advance.
- 2.46 In terms of Ministerial oversight of payment scheduling, it would be helpful to understand in what instances this power is proposed to be used, for example, if the ACMA and a licensee can't agree on a payment timing or schedule.
- 2.47 In terms of other issues relevant to spectrum payments, Optus recommends:
 - (a) the ongoing relevance of an annual spectrum tax in the current market and its intended purpose as a policy lever to encourage the highest value use and to cover indirect costs should remain a key focus for review; and

10

⁴ John McMillan, Selling Spectrum Rights, 8 J. ECON. PERSP., Summer 1994, p.147

⁵ Hazlett et al., supra n.1, p.95

(b) a review of the current requirement to provide a deposit or a bank guarantee, which is the current practice during an auction process, on the basis that past experience has demonstrated that this practice is not commensurate with the perceived risk.

Proposal 6: The ACMA to take an open data approach to substantially improve the range, availability and quality of information provided to support an efficient spectrum market.

- 2.48 Optus does not support the proposal to impose new data reporting obligations on industry and questions what utility will be gained by creating additional reporting requirements about Australia's spectrum market to the ACMA.
- 2.49 Optus understands that the key purpose of this proposal is to increase the type of data available to drive efficiency in the market with its key purpose to encourage and stimulate the secondary trading market.
- 2.50 Optus is a frequent participant in the secondary trading market for spectrum and notes that:
 - (a) it is the responsibility of the participants in the secondary trading market to conduct the necessary due diligence on potential acquisitions, and in Optus' experience, information available to date has been sufficient to fulfil this task; and
 - (b) this initiative will not encourage trades between competitors. Optus has successfully acquired spectrum on the secondary trading market with non-competitor entities, for e.g. Qualcomm and Vividwireless/Unwired. Optus has also pursued commercial negotiations to trade with an incumbent fixed link operator with the objective of 'freeing up' 2100 MHz spectrum. This offer was rejected even though Optus offered to replace their existing system at no cost. In short, the secondary trading market is imperfect and the proposed changes will make little difference to where secondary trading market failures currently occur.
- 2.51 An alternative would be to target this new information gathering power to those entities that are not covered by the ACMA's general information gathering powers to specifically assist investigations related to illegal device importation. This would assist to overcome part of the current inability of the ACMA to interact with entities in the complex supply chain involved in this illegal practice.
- 2.52 It may also be appropriate that the ACMA managed 'Register of Radiocommunications Devices' be reviewed from a user's perceptive to ensure it is accurate, up to date and user friendly.

Compensation

Proposal 7: Payment of compensation for resuming all or part of a licence

- 2.53 Optus understands that this proposal is intended to permit common compensation provisions when a licence is returned to the ACMA during the licence term, to enable it to be replanned or reallocated.
- 2.54 In particular, Optus believes that spectrum licence holders should be able to voluntarily surrender their licences and be compensated on a pro-rata basis for any unused term. While most licensees in this situation will likely seek to trade their licences first, the secondary trading market is imperfect (as noted under **Proposal 6**) and all attempts at trading may fail. Voluntary relinquishment with compensation will promote more efficient spectrum

- utilisation and improve the ability of the market to identify and move that spectrum to its highest value use.
- 2.55 Optus supports this proposal in-principle which would create 'the right to compensation in the event of resumption', whether this is by agreement or in the rare event that a licence is compulsory acquired. Optus also notes that under the Commonwealth of Australia Constitution Act, Sec 51(xxxi), property compulsorily acquired by the Commonwealth is subject to compensation on just terms.
- 2.56 It would be important to further discuss how:
 - (a) the compensation value would be determined beyond the suggestion of 'a market value of the licence and any loss, injury or damage suffered or expense reasonably incurred as a consequence of resumption';
 - (b) who would adjudicate disputes and the process for resolution;
 - (c) whether any Ministerial intervention is proposed; and
 - (d) whether the proposal to exclude compensation being payable for a licence based on the length of its tenure (for e.g. five years) is a valid approach.

User involvement in spectrum management

Proposal 8: Facilitate greater user involvement in spectrum management

- 2.57 Optus supports the ACMA being adequately resourced to perform its core spectrum management functions of:
 - (a) planning and coordinating the use of a band;
 - (b) licence assignment and renewal;
 - (c) dealing with interference and enforcement issues to protect a licensee's rights.
- 2.58 Optus does not consider that it is appropriate to devolve this responsibility to third parties.
- 2.59 It is difficult to conceive that any privately-held, non-government entity could always be entirely impartial in all its dealings, no matter how strictly regulated, monitored and audited that entity is. Indeed the amount of government oversight required to maintain impartiality and transparency may negate any perceived efficiencies in outsourcing these functions.
- 2.60 Other functions, for example, the current role played by accredited persons to support spectrum planning activities, work well and should be retained.
- 2.61 Optus does not support the concept of private band management on the basis that it is problematic for the reasons stated at 2.59, namely the difficulties in ensuring that any non-government third party band manager would always be able to execute their functions in an entirely impartial, transparent and auditable way. These difficulties would increase, the more commercially valuable the spectrum under management is.
- 2.62 In order to minimise these risks, additional government regulation and oversight of private band managers would need to be introduced, which is seemingly at odds with the objective of reducing regulation and complexity for customers of these process.

- 2.63 Optus notes that spectrum is not equivalent to other areas of economic activity which are properly the province of private enterprise. Spectrum is finite in quantity, it cannot be manufactured or transported across borders, and spectrum ownership by one party naturally denies ownership by another party.
- 2.64 If outsourced functions are supported, it will be important to undertake discussion with industry on how any proposed increased outsourced functions would be funded. For example, whether the ACMA would continue to set rates or whether market rates would apply, and what contribution licence fees that are intended to fund such activities would play.

Technical Regulation

Proposal 9: Develop more principles-based device supply regulation

- 2.65 While Optus supports in-principle the proposal to increase incentives for users and suppliers to manage risk and resolve interference disputes in the market, Optus' past experience suggests that this is very difficult in view of limited industry technical resources to conduct radio frequency (RF) interference audits. For example, drive-by tests with spectrum analysers to identify 'rogue transmitters' as well as legal resources for dispute resolution if the offending party has been identified, are resource intensive and costly.
- 2.66 Invariably, interference disputes involving spectrum and apparatus licences require the ACMA's intervention and Optus strongly supports the ACMA being adequately resourced to perform this core spectrum management function.
- 2.67 The proposal for a dispute resolution guide (Guide) is supported in-principle, however, it is critical that the Guide is developed with industry and includes process steps and outlines the roles and responsibilities for all involved: the licensee; the offending party; *and* the ACMA.
- 2.68 Optus supports the Guide defining:
 - (a) the rights of licensees and the obligations on others not to interfere with licensed spectrum assets;
 - (b) the process steps involved to resolve issues; and
 - (c) at what point the ACMA would engage.
- 2.69 It would also be useful for the Guide to reference the most frequent issues raised in a case study format as a way to promote its easy application and use to common problem cases.
- 2.70 Optus is keen to ensure the Guide is not used as a way to cost-shift or devolve ACMA resources away from interference management. It is still important for the ACMA to be engaged in interference disputes as early as possible and have the adequate resources to perform this function.
- 2.71 The significant investment Optus and other carriers have made in their spectrum assets includes a licence condition to ensure our investment is protected from interference and that access to unencumbered 'clean' spectrum is maintained.
- 2.72 Also, Optus supports the proposal to:
 - (a) minimise existing record-keeping and labelling requirements to ensure that they are commensurate with the level of risk.

- (b) reform the definitions relating to the requirement to oblige all persons in the supply chain to take reasonable steps to ensure that compliant devices are supplied to the Australian market.
- 2.73 Optus suggests it would be useful to hold further discussions with industry on the proposal to construct 'device supply schemes' appropriate to specific circumstances to more clearly understand what devices would be considered low or high risk.

Compliance and Enforcement

Proposal 10: Improve regulation by extending the suite of enforcement measures available to the ACMA

- 2.74 Optus supports in-principle the proposal to change a range of criminal penalties in the Act to civil penalties. However, as flagged in the Paper, certain criminal penalties would still need to be retained in legislation as an effective deterrent to interference to carrier mobile networks which are used to provide essential services and considered to be critical national infrastructure. For example Sections 46 and 197 of the *Radiocommunications Act 1992* and Section 474.6 of the *Criminal Code Act 1995*.
- 2.75 Optus supports the proposal for the ACMA to have a broader and more flexible 'sliding scale' range of powers to manage certain radiocommunications related compliance breaches. The proposed change will help ensure that the penalty is proportionate to the risk created by a breach. For example, the ability to impose civil penalties, issue remedial directions and formal warnings for the purposes of managing and controlling interference or a breach of a licence conditions.
- 2.76 From a technical regulatory perspective, Optus also supports the proposal for the ACMA to have the capacity to order a product recall or order cease of supply, issue a public warning, or apply a consumer warning label. However, it will be important to engage with the ACCC and State and Territory based consumer affairs agencies to ensure there is no overlap with existing legislative frameworks with respect to product recalls, bans and warnings.
- 2.77 It also would be useful to conduct further discussions with industry, via the Mobile Carriers Forum of the Australian Mobile Telecommunications Association, on the proposals to introduce electromagnetic compatibility non-compliance and the suggestion to potentially align with recall practices in Norway and Sweden and bans in the UK.

Moving Spectrum to its highest value use

Proposal 11: The ACMA to continually review options for allocating spectrum to alternative/higher value uses and to ensure that barriers to achieving this are reviewed and removed where appropriate.

- 2.78 Optus notes that the objects of the Act, along with the 'Spectrum Management Principles contain the objective of moving spectrum to its highest value use. Optus supports inprinciple the proposal for the ACMA to give effect to objective by 'continually renewing options for allocating spectrum to its highest value use' via its annual work plan.
- 2.79 However, it will be important to further consider how this analysis will occur in practice, how industry would be engaged, and develop an agreed framework on the range of issues associated with transitioning spectrum to alternate 'higher value use'.

Other suggestions for reform

'Customers of the Process'

2.80 With respect to proposed reforms to spectrum planning, licensing, interference management and technical regulation outcomes, Optus suggest that the reform processes are tested to ensure they are as streamlined and simple as possible from the perspective of the customers of these processes.

Broadcasting Spectrum

2.81 Optus also continues to support a standard planning, allocation and management framework for all spectrum, including broadcasting spectrum, rather than continuing with the current separate administrative regime which is dependent on use.

Spectrum Sharing

- 2.82 Optus does not support spectrum sharing within spectrum licensed space and suggests that this should not be part of the proposed parameter based licensing framework.
- 2.83 Spectrum sharing in spectrum licensed space runs the risk of undermining the property rights that make spectrum licensing attractive in the first place, and hence would impact valuations, business cases and potentially spectrum utility to the licensee. Spectrum sharing in spectrum licensed space (or its post-reform equivalent) should be voluntary, and subject to the consent of the spectrum licensee.
- 2.84 It is Optus' view that once any spectrum sharing technology is 'out of the bottle' it cannot be put back should deleterious impacts to the spectrum licensee materialise over the long run. It is Optus' strong view that the risks of compulsory spectrum sharing in this instance outweighs any of the alleged benefits.
- 2.85 Spectrum sharing in apparatus licenced space is inherent in the existing framework and should be continued in any future equivalent licensing framework.
- 2.86 Optus also believes there should be some limits in the ability of licensees to arbitrarily geographically subdivide or amalgamate spectrum licences.
- 2.87 An example is the spectrum swap between Austar and Unwired in 2005 that resulted in licenses that had different geographic boundaries to the original boundaries at licence issuance. While it could be argued that if two or more licensees agree to carve up their licences in some arbitrary ways they should have complete and unfettered freedom to do so, such an approach runs the risk of longer term inefficiencies in spectrum management and a 'scrambled spectrum egg' that can never be unscrambled. For example, Optus owns a number of 2300 MHz licences in Brisbane which have different geographic boundaries, because some are in their original format while others were geographically amended by previous licensees. This prevents frequency amalgamation of those licences, and as a result, some geographic areas have in effect become 'dead spots' within the licence area.