



**Submission by  
Free TV Australia Limited**

Australian Communications and Media  
Authority

Spectrum Management Principles

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## 1 Executive Summary

- Free TV strongly supports the need for transparency and certainty in ACMA's spectrum planning and decision-making activities. Free TV welcomes the current consultation process and the general premise that ACMA should adopt a robust and defensible decision-making framework.
- Spectrum planning decisions involve enormous commercial and financial implications for industry. There are also serious implications for consumers. Long term strategies are needed to provide market stability for investment decisions by industry and for ongoing business planning.
- The overriding spectrum management issue facing broadcasters and government in the next five years is the need to ensure that all viewers who presently receive analogue free to air terrestrial television are able to receive digital free to air terrestrial television at switchover.
- The key policy and spectrum management decisions associated with digital television switchover are reserved for the Minister, and will be influenced by a range of complex issues. Free TV understands that the proposed Spectrum Management Principles will not play a role in those crucial policy decisions.
- However, the proposed Principles will be relevant to spectrum management decisions which affect broadcasters' use of spectrum outside the Broadcasting Services Bands (BSB). Free TV is concerned that the application of the Principles could impact on broadcasting policy objectives, matters which are reserved for the Government.
- Free TV supports the intention behind the draft Principles to maximise the overall public benefit derived from using the radiofrequency spectrum. However, Free TV notes that the proposed Principles rely on the "total welfare standard" to provide a framework for these considerations. As described in the draft Principles, the "total welfare standard" is an imprecise concept and further clarity is required.
- Purely market-based approaches to spectrum management have the potential to overlook the full range of non-market based values derived from spectrum use. Whilst this is acknowledged in ACMA's draft Principles paper, the lack of detail as to how the Principles will be applied in practice means that it is difficult to predict how effectively they will work within the existing policy and regulatory framework. Free TV believes that decisions on these issues are best left for Government.
- The high value that the Australian public places on free to air television broadcasting should not be underestimated. Consumers continue to expect high levels of quality Australian and localised. Content on the free to air platform continues to be more strictly regulated than on any other platform.
- Whilst the non-market based values of broadcasting are adequately reflected in the *Broadcasting Services Act 1992* and in the separate treatment of BSB spectrum, broadcasters also rely on spectrum outside the BSB to deliver free to air services. Free TV is concerned that the draft Principles as described will not be able to adequately quantify and weigh the public good benefits arising from the use of non-BSB spectrum for broadcasting services.
- Similarly, whilst Free TV welcomes the commitment to increased transparency and accountability, ACMA must provide further detail on how it will meet these aims on an ongoing basis. At the very least, ACMA should commit to ongoing review of the proposed Principles and explain how their effectiveness will be measured over time.



## 2 Introduction

Free TV represents all of Australia's free to air television broadcasters. Free TV welcomes the opportunity to comment on ACMA's draft Spectrum Management Principles.

Free TV strongly supports the need for transparency and certainty in ACMA's spectrum planning and decision-making activities. The next five to ten years are going to see significant change in the areas of spectrum demand and management.

Spectrum planning decisions involve enormous commercial and financial implications for industry. There are also serious implications for consumers, in regards to the availability, capacity and quality of communications services. Long term strategies are needed to provide market stability for investment decisions by industry and for ongoing business planning.

To this end, Free TV welcomes the current consultation process and the general premise that ACMA should apply its powers through a robust and defensible framework.

For Free TV, the critical issue will be the impact of the proposed Principles on decisions which affect broadcasting use of spectrum.

The overriding spectrum issue facing broadcasters government in the next five years is the need to ensure that all viewers who presently receive analogue free to air terrestrial television are able to receive digital free to view terrestrial television at switchover. The Government has also, understandably, placed an emphasis on the delivery of a 'Digital Dividend.'

However, the key spectrum management decisions associated with digital television switchover are reserved for the Minister. These are vital policy decisions which stand to have wide-reaching impacts for industry, government and the Australian public.

Free TV understands ACMA's role in digital television switchover to be that of the Government's technical adviser. ACMA will also assist in the implementation of decisions.

Hence, Free TV understands that the proposed Spectrum Management Principles will play no role in key policy decisions around switchover.

However, Australia's free to air commercial broadcasters are also significant users of non-Broadcasting Services Band (BSB) spectrum. Free TV is concerned that the application of ACMA's proposed Principles to decision-making around this non-BSB spectrum may have a significant impact on broadcasting policy objectives and outcomes even though these are matters which are properly reserved for government.

The proposed Principles and the total welfare standard provide an articulation of a predominantly market-based approach to spectrum. In accordance with the objects of the *Radiocommunications Act 1992*, the aim of the proposed Principles is to maximise the overall public benefit derived from using the radiofrequency spectrum. Spectrum is a scarce public resource and Free TV supports the intention behind the draft Principles paper.

However, purely market-based approaches to spectrum management have the potential to overlook the full range of non-market based values derived from spectrum use. Whilst this is acknowledged in ACMA's draft Principles paper, the lack of detail as to how the Principles



will be applied in practice means that it is difficult to predict how effectively these factors will be accommodated.

This is particularly important as regards spectrum used for broadcasting purposes because the provision of free to air broadcasting services provides public benefit outcomes that are not always properly quantified in purely market-based assessments.

The importance of free to air television broadcasting services to the Australian public remains high. Consumers continue to expect high levels of quality Australian and local content. Content on the free-to-air platform continues to be more strictly regulated than on any other platform. Today, as much as ever, free to air broadcasting is seen as a highly valued and publicly important platform.

The importance of free to air television services to the Australian community is recognised in the statutory objectives of the *Broadcasting Services Act 1992*, and in the separate regulatory framework for the management of broadcasting services bands (BSB) spectrum. As noted above, the fact that television broadcasting spectrum planning decisions are reserved for the Minister reflects the high public importance of the services carried on in that spectrum, and thus the need to apply a different set of principles than those applied elsewhere in the radiofrequency spectrum.

This underlines the need for Government and regulators to take a holistic view of broadcasting policy settings. To focus on just one part of the free to air television service (spectrum) and to not take into account the consequential effects on the other parts of the service (being the content delivered to viewers), risks compromising important public policy objectives and community expectations. Free TV is concerned that the proposed approach to spectrum management articulated by the Principles could impact on broadcasting policy objectives. It would not be appropriate for ACMA, as a regulator, to take decisions on matters which affect broadcasting policy in this way.

Taken broadly, the five proposed Principles represent a sound and workable framework for spectrum management issues. However, many of the decisions will ultimately need to be taken by Government.

Further, in order to properly assess their likely practical impact, greater detail and explanation of the principles and the key concepts that sit behind them, will be required. Once the Principles are finalised and implemented, detailed guidance on the Principles and how they will be applied should be published if the stated aim of increasing industry certainty is to be met.

Similarly, whilst Free TV welcomes the commitment to increased transparency and accountability, ACMA must provide further detail on how it will meet these aims on an ongoing basis. For industry to have confidence in the ACMA spectrum decision-making process, decisions must be justified in an open and transparent manner throughout the decision-making process and not just after a decision has been made.

Free TV would also welcome a commitment to ongoing review of the proposed Principles, and an explanation of how their effectiveness will be measured over time. Consideration should also be given to a regular review of past spectrum planning decisions, to ensure that key lessons and knowledge are fed back in to the regulatory decision-making process.

Free TV notes that the proposed Principles are presented as an additional tool to assist ACMA in responding to the demand pressures identified in the draft *Five-year Spectrum*



*Outlook 2009-2014*. In its submission to the draft Outlook, Free TV outlines the importance of a robust and defensible approach to demand analysis.

This submission addresses the proposed five Spectrum Management Principles, and makes some broader observations regarding the aims of certainty, accountability and transparency which sit behind the proposed Principles.

### **3 Accountability, transparency and regulatory certainty**

#### **3.1 ACMA's decision-making framework**

By proposing an additional set of spectrum management principles, ACMA has clearly identified a need for additional guidance in its decision-making. Regardless of the merits of the principles put forward by ACMA, consideration should be given as to the most appropriate way to provide ACMA with that additional guidance.

That is, whether it is appropriate for the regulator to determine additional guiding principles for its own regulatory decision-making, when such guidance has to date been set down by the Parliament. Decisions on spectrum matters which stand to impact on existing policy settings must remain with Government.

The legislative and policy framework for spectrum planning decisions is set down in the *Radiocommunications Act 1992* and the *Broadcasting Services Act 1992*. Those Acts set down key policy objectives that ACMA must have regard to it performing its functions. Those Acts also provide for the Minister to direct ACMA as to the performance of its functions.

Spectrum-planning decisions are clearly highly important decisions with far-reaching impacts. Any modification or refinement of ACMA's decision-making approach could have serious consequences for a wide range of stakeholders and the community.

As explained in more detail below in section 3.3.1 of this submission, Free TV is concerned that the proposed approach to spectrum management articulated by the Principles could impact on broadcasting policy objectives. It is not within ACMA's role to take decisions on matters which affect broadcasting policy.

Whilst Free TV would welcome additional clarity and certainty regarding regulatory decision-making processes, this must occur within the existing statutory and policy settings.

Free TV also suggests the description of the existing regulatory framework should note the importance of decisions made at each World Radio Conference (WRC), as agreed by Australia at each WRC. In spite of its geographical and continental separation, Australia does not have the economy, design or manufacturer base needed to isolate it from global trends in radiocommunication applications and technologies. As Australian stakeholders are 'standard takers', the role of ITU regulations as key spectrum management 'principles', should be explicitly acknowledged.



### 3.2 Certainty, transparency and accountability

Notwithstanding the concerns raised at 3.1 above, if additional spectrum planning decision-making principles are implemented, it is vital that there be a high-level of transparency and certainty as to how the additional principles will be applied.

The draft Principles document includes a brief description of each of the principles, but no discussion of how those principles will be applied in practice, how they will interact on a practical level with the existing statutory policy objectives and at what stage of the decision-making process they will be applied.

As noted by the paper, a key principle of good regulatory process is that “effective guidance should be provided to relevant regulators and regulated parties in order to ensure that the policy intent of the regulation is clear, as well as the expected compliance requirements.”

For stakeholders to have certainty, ACMA must publish detailed guidance on how the draft Principles would be applied in various circumstances. This is the approach taken by other Australian regulators such as the Australian Competition and Consumer Commission, which publishes detailed guidance on authorisations<sup>1</sup> and mergers<sup>2</sup>.

ACMA must commit to producing similar guidance outlining uniform approaches to various likely scenarios. There must be sufficient clarity and detail to enable stakeholders to forecast the likely outcomes of an application of the principles to particular circumstances.

ACMA must also provide further detail on how it will meet the aims of transparency and accountability, which are referenced throughout the draft Principles. For industry to have confidence in the ACMA spectrum decision-making process, decisions must be justified in an open and transparent manner throughout the decision-making process and not just after a decision has been made. A failure to commit to transparency in practice will lead to a lack of trust between industry and ACMA.

A useful example in this regard was the decision taken by the former Australian Communications Authority to require broadcasters to vacate the 2 GHz band. This band was being sought by proponents for the ICO-P satellite spectrum application. This decision came at great cost to regional commercial television broadcasters, but the proposal for satellite use of the band did not come to fruition. There has been no subsequent accountability or transparent review of this decision and its impact on broadcasters. A meaningful commitment to transparency and accountability would incorporate a review of past spectrum decisions, to ensure key mistakes are not repeated.

Further, there is no identification in the draft Principles of how their effectiveness and value in decision-making will be measured over time. The draft Principles paper would benefit from setting a timeframe for review of the Principles and identification of ‘key performance indicators’. This is particularly important given the impact of ACMA decisions on supply and demand (as acknowledged in the *Spectrum Management Decision Framework* depicted at Figure 1 on page 8 of the draft Principles document).

Finally, the broadcasters’ experience in recent years demonstrates that additional commitments from the regulator must be adequately resourced. Free TV has observed an overall reduction in the level of scientific expertise in the spectrum

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<sup>1</sup><http://www.accc.gov.au/content/item.phtml?itemId=788405&nodeId=4c85b343a3f8e51f845acf1e180044d8&fn=Guide%20to%20authorisation.pdf> viewed 14 July 2008

<sup>2</sup><http://www.accc.gov.au/content/item.phtml?itemId=304397&nodeId=a0adea340fc03710a12cf14b7e4fd803&fn=Merger%20guidelines%201999.pdf> viewed 14 July 2008



regulation areas of ACMA and is concerned about a further reduction in regulatory expertise in the future. In addition to the factors set out at section 4.2 of the draft Principles document, it should be acknowledged that a lack of relevant expertise within the regulator may also contribute to regulatory failure.

Regulatory failure may also arise if the decision-making framework is not informed by the review of previous decisions on related matters.

Transparency and accountability would also be enhanced if ACMA formally responded to issues raised by stakeholders in public consultation documents. In recent years broadcasters have raised a number of spectrum management issues covering Wireless Access Services, Electronic News Gathering services and spectrum demand analysis. Despite this, subsequent ACMA discussion papers and other documents do not appear to recognise or address the matters raised. This impacts negatively on stakeholder confidence in ACMA's consultation process, which is vital.

### 3.3 The total welfare standard

ACMA proposes to use a 'total welfare standard' in making spectrum planning decisions. It is of significant concern, however, that there is very limited discussion of this standard in the draft Principles document.

Free TV is concerned that ACMA is seeking to incorporate a complex economic principle into its decision-making processes with minimal discussion of its interpretation of this principle and its potential impact on stakeholders. For example, ACMA has not identified how it will define and determine which 'benefits' will be measured. This is an extremely important issue, and one that has been the subject of close examination and debate in the context of the ACCC and the Australian Competition Tribunal:

"the way in which welfare is measured has been a contentious topic in the literature discussing the role of competition legislation. Essentially, the contention revolves around the definition of benefits and the weighting of benefits. The issue of *whom* to recognise as a recipient of benefits and *which weight* different recipients of benefits should receive in the weighing process is of crucial importance."<sup>3</sup>

Further, the ACMA document gives the impression that the adoption of the total welfare standard would be relatively non-controversial, noting that the welfare principle "provides the foundation for the concept of economic surplus and the basis of most of the economic public interest tests used by competition authorities and other regulatory authorities in Australia and New Zealand."

However the ACMA document does not go on to explain that key regulatory bodies in Australia apply a different welfare test to that proposed by ACMA. For example, the ACCC is considered to have adopted the consumer welfare standard in applying its public interest tests.<sup>4</sup>

The consumer welfare standard is distinguished from the total welfare standard in that for an outcome to be acknowledged as superior, any gains in efficiency have to be

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<sup>3</sup> Consumer Action Law Centre *Defining 'public benefit' – social and environmental considerations in Part VII of the Trade Practices Act 1974 (Cth)* August 2007, p 13

<sup>4</sup> *Ibid.* p 19

greater than any losses accruing to consumers. The draft Principles document should explain and identify why the total welfare standard is considered the appropriate standard for spectrum management decisions, as opposed to other welfare standards.

Free TV notes that the application of the standard could potentially impact on Government policy and suggests its application must fully incorporate and be confined to the policy settings established by Government.

### **3.3.1 *The application of the standard to broadcasting uses of spectrum***

Free TV questions the value of the application of this principle to decisions involving spectrum used for broadcasting services. As noted above, whilst BSB spectrum is managed by the Minister through the BSA and BSB-related decisions will therefore not be subject to this principle, broadcasters also rely on non-BSB spectrum to deliver highly-valued free to air services to the public. These services include live coverage of sporting events, news coverage and reporting of critical incidents.

As already noted, Australians continue to place high importance on free to air television.

The application of the total welfare standard to spectrum planning decisions involving non-BSB spectrum used by broadcasters could impact upon the continued deliver of these highly valued services that the community has come to expect and rely on.

It is therefore questionable whether the application of the standard will produce outcomes that are consistent with government objectives in broadcasting policy, as it requires that all recipients of gains be treated equally in a net cost-benefit analysis. Whilst consumer impact is of paramount importance in broadcasting policy,<sup>5</sup> under a total welfare standard (as described by ACMA), it would be given a neutral treatment as compared to other impacts.

Free TV submits that the application of the standard would, in these circumstances, be at cross-purposes with broadcasting regulatory policy and objectives. Reliance on the standard in isolation could potentially result in ACMA effectively making decisions on broadcasting policy issues, matters which are reserved for government.

The potential complexity of this test, and the concerns outlined above further underlines questions regarding the appropriateness of the regulator instituting its own decision-making framework.

## **4 Proposed Spectrum Management Principles**

The proposed spectrum management principles provide a clear articulation of a market-based approach to spectrum management, with the objective of maximising the overall public benefit derived from the radiofrequency spectrum.

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<sup>5</sup> Refer to the objects of the *Broadcasting Services Act 1992*, which focus on audience and consumer benefit.



On the face of it, this is a sound public policy principle and allocating bandwidth to licensed operators in a planned environment will achieve greater public benefit than spectrum left idle. However, close examination is required of the principles ACMA has proposed, how they will work in practice and their relationship to existing Government policy priorities.

Free TV can point to several cases where a market-based approach has not always translated to the highest value use of spectrum because not all spectrum that has been won at a licence auction has in fact been put to use. As there are no “use it or lose it” provisions, the owner of the spectrum is able to let it lie fallow if they choose to. Notwithstanding the benefits to Government revenue of spectrum auctions, it is questionable whether such an outcome maximises overall public benefit.

Specific comment is made on each of the proposed principles below. However, as a general observation, the draft Principles paper would greatly benefit from a more detailed explanation of how the economic criteria in the proposed Principles will interact with the technical criteria in ACMA’s draft Five-Year Spectrum Outlook. That explanation should address how the draft Principles will be applied at a practical level. That is, whether they will be applied to decisions on a service by service, band by band approach, or whether a broader, more high-level application is anticipated.

Greater clarity is also required as to how the principles will be applied to spectrum planning projects which are ongoing. For example, ACMA has already undertaken planning work for spectrum for wireless access services, releasing two consultation papers in 2006.<sup>6</sup> It is not clear whether work undertaken as part that project will be reassessed in light of the proposed principles, or whether the principles will apply to the project only as it goes forward. It would not seem appropriate for the decision-making framework for a significant spectrum planning project to change part-way through, without a review of work completed to date.

#### **4.1 Allocate spectrum to the highest value use or uses; and Enable and encourage users to move spectrum to its highest value use or uses**

As described, these principles seek to maximise public benefit by ensuring spectrum allocations and any subsequent trading of spectrum result in the highest value use or uses. However, the draft Principles paper provides only a limited discussion of these principles and how they will be applied. It is therefore difficult for industry to forecast how the application of these principles will affect key spectrum planning decisions expected in the initial and subsequent five-year time frames.

The draft Principles paper notes that the “highest value use will sometimes be a commercial use, and will sometimes be use by government or community organisations.” These are key concepts and ACMA must provide further explanation of how it will determine ‘value’.

In terms of determining the highest value use, the draft Principles state that a “higher willingness to pay will reflect higher value to society”. Free TV welcomes the acknowledgement that “in some circumstances, a simple price-based allocation may not efficiently allocate spectrum to its highest-value use. This may be the case if the

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<sup>6</sup> Spectrum Planning Discussion Paper SPP 1/06 *Strategies for Wireless Access Services* (April 2006) and Spectrum Planning Discussion Paper SPP10/06 *Strategies for Wireless Access Services – Spectrum Access Options* (December 2006).



bidders' willingness to pay does not reflect the total value generated by their use of the spectrum.”

However, it is vitally important that ACMA makes clear which non-market-based values can be attributed to spectrum use, how they will be measured and how they will be weighed against market-based values. ACMA must explain how it will deal with scenarios in which market-based valuations are inconsistent with public expectations regarding the ongoing availability, quality and diversity of existing services.

It is not clear from ACMA's paper in what circumstances public benefit impacts will be deemed sufficiently important to make a market-based approach inappropriate, suggesting the matter would be left entirely for ACMA's discretion.

These matters are of crucial importance, as experience to date shows that the broader social value derived from free to air television broadcasting services can not always be accommodated in a purely market-based approach. Such crucially important decisions, which could have significant policy implications, should be informed by Government policy.

Australians continue to be reliant on free to air television to receive highly valued news, entertainment and information services. Any consideration of what represents the 'highest value use or uses' of spectrum must acknowledge that free to air television broadcasting provides these services free of charge to 99% of Australian homes, unlike the predominantly subscription based models that operate on other, competing platforms.

On any given day, an average of more than 13.4 million Australians watch free to air terrestrial television. Free TV continues to dominate other technologies in the home with 99.7% household penetration. Over 70% of Australian households rely exclusively on free to air television and virtually all Australian households rely on free to air television for some of their television services.

The majority of households (68 per cent) have two or more TVs.

Whilst the public benefit of broadcasting services is adequately acknowledged and protected as regards BSB spectrum,<sup>7</sup> as noted above broadcasters also rely on non-BSB spectrum to deliver the content that Australians value so highly. It is the content that consumers receive via the spectrum, not the spectrum itself, that has value and meaning in every household in Australia. Content that is unlikely to be produced by content providers on other platforms due to the high cost in comparison to cheaper overseas material.

Public expectations regarding television content, and its unique role in Australian society, show no signs of receding. Content on free to air television continues to be the most closely regulated, and is still the primary focus when questions of content regulation are debated. The high public importance of free to air television content is reflected in the legislated policy objectives of the BSA, with the ten of the sixteen broadcasting objectives relating to content (and the majority of those are tied to audience and community benefit). The BSA objectives recognise that through meeting

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<sup>7</sup> Television broadcasting in Australia has operated within a delicately crafted policy setting which balances the reservation of television broadcasting spectrum on one hand, with obligations to produce and deliver public service broadcasting outcomes on the other.

broader policy objectives the highest value to society of broadcasting-related spectrum use is obtained.

With ever increasing competition for spectrum, there is an emerging danger that the policy principles of market-based spectrum allocation will come at the expense of the policy principles of public benefit broadcasting. There is clearly a potential mismatch between what regulators and economists view as the 'highest value use' on the one hand and what the Australian community expects and values on the other. Proponents of a more neutral treatment of broadcasting spectrum must articulate the likely outcomes of such an approach to the viewers who stand to lose access to highly valued services.

In this regard, it is instructive to look overseas, where a purely market-based approach to spectrum allocation in the United Kingdom is putting clear pressure on public service broadcasting outcomes. Broadcasters are being forced to compete for audiences in a fragmenting marketplace where the business case for producing expensive local content is rapidly disappearing.

Further, it is open to argument whether a market-based approach will always deliver the greatest financial return to Government. Table 1 on page 14 of the draft Principles document puts forward ACMA's views on the advantages and disadvantages of market and administrative approaches to spectrum management. One of the key advantages of an administrative approach is 'more certainty for licensees'. This can be a crucial factor in *increasing* the financial value of the spectrum in question. Conversely, the higher risk of interference under a market-based approach could potentially devalue the spectrum.

When faced with spectrum decisions that will impact on broadcasters, government and regulators must take a holistic view and consider all television broadcasting policy settings. To focus on just one half of the equation (being spectrum) and to not take into account the consequential effects on the other half of the equation (being public benefit outcomes and viewer expectations) would be a serious mistake. Any assessment of the 'highest value use' must take into account community expectations and broader government policy objectives.

The question of the appropriate balance between these important policy issues should be determined by Government. As presently drafted, the draft Principles document suggests these issues would be left entirely for ACMA's discretion. Free TV assumes ACMA would act within existing statutory and policy parameters.

If the draft Principles are to fulfil the stated aim of promoting predictability and transparency in ACMA's decision-making, a much fuller explanation must be provided of how the principles will accommodate these key considerations.

#### **4.2 Use the least cost and least restrictive approach to achieving policy objectives**

Free TV welcomes a commitment by ACMA to regulatory practices which minimise costs to government, licensees and the community.

However, it is difficult to understand from the limited discussion in the draft Principles paper how this will be applied in practical situations.



The brief overview provided of this principle notes that “minimising the cost of spectrum management will require ACMA to improve efficiency across the range of its spectrum management functions.” This is welcomed in principle, however without any practical examples of possible operational changes which might help ACMA achieve this additional efficiency, it is difficult to assess any potential impact for stakeholders. Improvement across the range of spectrum management functions should not be at the expense of resources required to maintain ACMA’s technical and regulatory expertise.

The overview goes on to note that “only regulations that generate the greatest net benefit for the community, taking into account all the impacts, will be adopted.” Free TV assumes this is an extension of the total welfare standard discussed earlier in the draft Principles paper, however clarification from ACMA on the practical implications of this approach is required. As noted above in relation to the total welfare standard, ACMA must explain its proposed definition of “benefit” and “impact” and further explain how these factors will be weighted.

In the absence of a detailed consideration of these factors, Free TV is unable to provide further comment on the practical implications of this Principle.

#### **4.3 Balance certainty and flexibility**

As spectrum is a scarce and highly valuable public resource, Free TV supports the principle that the overall efficiency of spectrum use must be maximised. Free TV has previously supported measures to facilitate the greatest use of existing spectrum allocations as a means of responding to demand pressures, before consideration is given to relocation of incumbent users.

However, as noted in the draft Principles paper, security of tenure and appropriate interference protection are vital to facilitate investment and business decisions.

Free TV submits that the appropriate balance between technological flexibility and certainty of tenure should be determined on a service by service and band by band basis and in many cases will require a determination by Government. As the draft Principles paper notes “the ideal balance between certainty and flexibility may be at different points for different licensees”.

For broadcasters, the balance would tend more towards certainty than flexibility. The business model for free to air television broadcasting requires a very stable regulatory environment as regards radiofrequency spectrum. Broadcasters also require lengthy consolidation periods to minimise establishment and maintenance costs and inconvenience for consumers. Without security of tenure, it is extremely unlikely that broadcasters will have sufficient confidence to make the long-term investment and business planning decisions required to support the platform.

Broadcasters also require a high degree of certainty regarding interference protection, to ensure the continued availability and quality of free to air digital television services. This is particularly important as broadcasters complete the crucial conversion stages of the transition to digital television broadcasting (and establish platforms for successful migration to future formats within digital television broadcasting).

Whereas in analogue a viewer may suffer a ‘snowy’ or ‘noisy’ picture from interference, interference with a digital signal is more likely to result in a digital viewer

suddenly receiving no service at all. This is referred to as the 'cliff-effect'. These factors mean the tolerable level of interference to digital television broadcasting from other services in the BSBs is low.

With such critical margins in the planning for digital television, broadcasters require full consultation before change is considered in the BSBs. Any changes to spectrum planning arrangements that could potentially impact on broadcasting use of spectrum must always be subject to full consultation and a thorough prior assessment of the impact of the proposed changes on the availability and quality of free to air television services.

Hence, Free TV welcomes ACMA's commitment to "seek to balance the need for certainty and flexibility in regulating use of the spectrum". However, as noted in relation to the other proposed Principles, the discussion of this Principle would benefit from greater clarity as to how it will be implemented on a practical basis. In this case, a more fuller exploration of the methodology ACMA will use to determine the appropriate balance of certainty and flexibility would assist industry in assessing the impact and utility of the Principle.

#### **4.4 Balance the cost of interference and the benefits of greater spectrum utilisation**

As noted above, Free TV supports an approach to spectrum management that facilitates more efficient use of existing spectrum allocations. This is particularly important where a perceived increase in spectrum demand gives rise to pressure for incumbent users to be relocated or re-planned.

Free TV welcomes the acknowledgment by ACMA that greater spectrum utilisation is only prudent to the extent that it does not create an intolerable level of interference to existing services.

To this end, a key task for ACMA and stakeholders will be to determine what constitutes a 'tolerable' level of interference. The methodology for determining this element should be addressed in an open and transparent manner, in consultation with all stakeholders.

Unfortunately, the draft Principles paper provides little detail on how this important element will be determined.

Based on past experience, Free TV submits that the appropriate methodology will include a reliance on the most up to date and relevant technical studies. If no relevant studies exist as regards the local market, they must be commissioned. Reference to overseas studies may only be of limited use. In some cases, reference to overseas studies may be inappropriate, particularly where Australia has taken the lead in the implementation of a particular technology or where Australian stakeholders have unique requirements.

For example, ACMA has previously cited ITU-R Recommendation SA 1154 in support of its proposal for sharing of the 2.0 GHz band by space services and ENG. However, Free TV has previously noted that the studies referred to in the recommendation were undertaken in 1985 and examined the probability of analog FM ENG systems interfering with spacecraft and earth station receivers.

Those studies were not applicable to ENG in Australia due to the greatly increased usage of ENG since 1985 and the fact that the operational characteristics of analogue FM ENG systems are not compatible with the digital ENG systems used in Australia.

The tension between the need to greater maximise spectrum use and the need to carefully manage interference levels is exemplified in ACMA's work to date on WAS spectrum issues.

In its Discussion Paper SPP1/06 *Strategies for Wireless Access Services Spectrum Planning Discussion Paper*, ACMA identified the Extended C-Band as a candidate band for WAS services. Satellites in the Extended C-Band are used by television broadcasters to receive satellite video feeds from overseas broadcasters and content providers. Free TV has noted that further studies are needed to ensure that earth stations will continue to be able to be protected from interference by WAS. Free TV also noted that further studies will be required to understand the extent to which mobile services can co-exist with broadcasting services in the UHF Bands.

Broadcasters would welcome greater certainty and transparency as regards how ACMA will balance the competing pressures of spectrum efficiency and interference protection. Whilst Free TV welcomes ACMA's commitment to properly consider these issues, industry would draw greater comfort from a more detailed explanation of how ACMA will make its judgments on these key issues and how this fits within the existing government framework relating to analogue switch-off.

For example, if the total welfare standard is proposed to be applied to determine the appropriate 'balance', explanation should be provided of how the 'costs' or impacts of increased interference will be defined and measured. This would also assist industry to better understand the practical implications of the proposed application of the standard, and whether it can properly accommodate and weigh the full range of impacts that spectrum planning decisions give rise to.

#### **4.5 Additional principles**

Free TV supports two additional spectrum management principles not discussed in the draft Principles paper.

Firstly, when new users of spectrum acquire access to spectrum by displacing incumbent users, they must directly compensate the existing users of the spectrum for the cost of migrating into a new spectrum band or vacating spectrum all together.

Businesses based on radiocommunications services need guaranteed access to spectrum for a reasonably long period. Otherwise these business face unacceptably high risk. Business plans can not be made without security of tenure or certainty of the duration of tenure. Inherent in the Australian apparatus licensing system is a presumption of renewal, particularly where licensees have complied with all regulatory requirements during the term of the licence. Hence, the onus should properly be on ACMA to justify any proposed relocation of incumbents and to make suitable provision for incumbents to continue to operate the relevant service using the same or roughly similar equipment, if the decision to relocate is finally made.

This issue was address through the RCC Working Group on Radiocommunications Provisions for New Telecommunications Services as far back as 1994. The RCC



recommended the FCC transitional arrangements that made provision for the relocation of incumbents as part of the conditions of spectrum sales.

Secondly, Free TV supports a 'use it or lose it' approach to spectrum allocations. Once spectrum has been allocated, the licensee must commence usage within a reasonable time or surrender the licence. Such an approach would offer an incentive to efficiency of use (and therefore greater public benefit) and would reduce the likelihood of overstatement of demand for spectrum.