



FreeTV
Australia

Submission by Free TV Australia

Department of Communications and the
Arts

*Modernising Australia's Spectrum
Framework*

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1 Executive Summary

- Free-to-air television is highly valued by the Australian public. It is the only media platform which provides universal free access to audio-visual content to all Australians and will continue to be the primary way that people access content into the future.
- Regulation of the Australian broadcasting industry reflects a delicate balance of concessions, obligations and regulations designed to ensure that important social and cultural objectives are met. Unlike many countries where public policy objectives are largely funded by the public purse, Australia has relied heavily on commercial broadcasters, funded solely by advertising revenues, to deliver these objectives.
- It is critical that the spectrum management framework and spectrum pricing model adopted by Government do not frustrate or undermine the capacity of commercial broadcasters to deliver these objectives. The spectrum management framework must continue to provide broadcasters with certainty of access and must not drive broadcast policy objectives.
- Broadcast spectrum should be explicitly excluded from the opportunity cost pricing model set out in the pricing consultation paper. Such a model fails to account for the broader social benefits delivered by broadcasters that cannot be captured in advertising revenues. This is why the international best practice approach to pricing of broadcast spectrum is based on the recovery of costs associated with administering the spectrum.
- The Government has stated its commitment to maintaining commercial free-to-air broadcasters' spectrum holdings and entitlements in support of its broadcasting policy objectives. However, the consultation package does not reflect this commitment—the table in section 2 highlights the significant reduction in broadcasters' existing rights.
- A number of fundamental changes are required to meet the Government's commitment:
 - Critical links to the Broadcasting Services Act (BSA) need to be reinstated in the Bill to ensure certainty of access to spectrum, including designation of the broadcasting services bands for planning in-line with the objects of the BSA and a clear statutory entitlement to spectrum for holders of a broadcasting licence;
 - Key policy matters must be covered in the Bill rather than in non-binding guidance documents and subordinate instruments that lack Parliamentary oversight;
 - Key policy responsibilities of the Government must not be devolved to the ACMA whose role is appropriately regulatory, technical and administrative rather than policy-setting;
 - Where the ACMA has been provided with additional discretion on policy matters, the Bill should include sufficient detail to guide that discretion. Additional review mechanisms should also be introduced in light of the ACMA's expanded powers to ensure appropriate checks and balances exist and that licence certainty is not undermined; and
 - Resumption rights should not be applied to broadcasters, in line with the existing framework which does not currently provide for any legislative right of resumption.
- The sustainability of the free-to-air model necessitates Government balancing broadcasting policy objectives, the obligations imposed on broadcasters and access and use of spectrum. This is appropriately the role of Government and should not be devolved to a regulator that is not responsible for the achievement of broader social objectives enshrined in the BSA.
- For Free TV to be able to confidently assess whether the reforms will meet the Government's commitment to commercial free-to-air broadcasters, the full suite of legislative provisions, transitional arrangements, Ministerial policy statements and licence terms should be released together in the next consultation round.

2 Summary of key areas where broadcasters' rights diminished

Issue	Current Act	Proposed Bill	Reduced certainty?
Guaranteed access to spectrum for broadcasting purposes	Guaranteed in section 102	No equivalent guarantee included yet in Bill.	Less than current situation for the moment – pending equivalent of section 102 being included.
Ministerial policy statement	No equivalent provision – Minister is directly responsible for many decisions	Discretionary and non-binding on the ACMA	Less than current situation.
Legislative objectives	<ul style="list-style-type: none"> Multiple objects that cover efficiency and other factors Equal weight to be given to objects 	Primarily focused on economic efficiency and long-term public interest	Less than current situation, as less focus on and weighting given to non-efficiency factors.
Licence term	Perpetual for as long as BSA licence remains in force Other apparatus licences: up to 5 years	Not specified in Bill in relation to licences for broadcasters Other licences: up to 20 years	Less than current situation for the moment.
Licence renewal	Strong presumption in favour of renewal, so long as BSA licence remains in force	Designated statement in licence can specify circumstances for renewal (or give the ACMA discretion or prevent renewal entirely)	Less than current situation, as dependent on licence-specific statements rather than legislative presumption
The ACMA powers to vary licence	Largely limited to additional (non-mandatory) licence conditions	Not limited in this way. No guarantee that the ACMA will restrict its ability to vary or revoke designated statements or regulatory undertakings	Less than current situation
Designation of spectrum for broadcasting purposes	BSB bands are designated by the Minister	The ACMA to plan spectrum for broadcasting as part of preparing radiofrequency spectrum plan	Less than current situation, as limited scope for Ministerial involvement / designation
Review mechanisms	Specified decisions by the ACMA can be appealed to Administrative Appeal Tribunal	Specified decisions by the ACMA can be appealed to Administrative Appeal Tribunal	Less than current situation, as no reflection of increased scope of the ACMA decision-making powers
Spectrum sharing	Spectrum sharing is not permitted	Licencees can initiate spectrum sharing (may be subject to Government approval)	Less than current situation, as sharing rights are unclear and subject to the ACMA discretion
Resumption rights	Do not apply to broadcasters' licences (only spectrum licence)	Resumption rights apply broadly to all licences and do not specify the mechanism for determining compensation payable	Less than current situation as resumption does not currently apply to broadcasters' licences

Key: ■ Significant diminution, high to risk broadcasters
■ Significant diminution

3 Introduction

Free TV welcomes the opportunity to respond to the Department of Communications' spectrum reform consultation package.

Free TV represents Australia's commercial free-to-air television broadcasters. At no cost to the public, our members provide a wide array of channels across a range of genres, as well as rich online and mobile offerings. The value of commercial free-to-air television to the Australian public remains high. Free-to-air television delivers high-quality Australian programmes including news, current affairs, sports and culture to all Australians for free. 97 per cent of Australian households receive digital terrestrial television,¹ and on average 13 million Australians watch commercial free-to-air television every day.² Nearly 70 per cent of Australian households rely exclusively on free-to-air television.³

A strong commercial free-to-air broadcasting industry delivers important public policy outcomes for all Australians and achieves important social and cultural objectives. In order to continue to meet these objectives, it is critical that the spectrum management framework that is developed through this process does not reduce the current level of certainty of access to broadcasting spectrum and thereby undermine the Government's broadcast policy objectives which reflect the importance of commercial free-to-air broadcasting to Australian society.⁴

It is also critically important to ensure that the future pricing arrangements for commercial free-to-air broadcasters do not undermine the free-to-air business model and put at risk the cultural and social objectives delivered by commercial free-to-air television.

Free TV is pleased that the Government has committed to ensuring that the transition to a new legislative framework will not diminish the rights broadcasters' have under the existing framework. The Minister at the Radiocommunications Conference noted 'the Government is committed to ensuring that broadcast licence holders will continue to have certainty of access to spectrum to deliver their broadcasting services'.⁵ The Department's Spectrum Review Report similarly noted that the reforms will 'ensure that the rights of existing licence holders are not diminished in the transition to the new framework'.⁶ The Broadcasting Policy Paper also reflects this commitment, indicating that:

'the goal of the reforms is to embed planning, allocation and licensing arrangements for broadcast spectrum within the new framework while maintaining the same arrangements, including entitlements, as broadcasters currently have.'

*The reforms proposed in this paper are intended to maintain current broadcasting policy objectives and the spectrum holdings of any broadcasters.'*⁷

We are concerned however that this commitment is not borne out in the Government's spectrum reform package and the *Radiocommunications Bill 2017* (the Bill) in particular. The proposed reform package:

- Removes the prescriptive and certain legislative provisions which currently apply to broadcasters and replaces with a skeletal legislative structure for all spectrum users;

¹ Australian Multi-Screen Report, Quarter 4, 2016.

² Source: OzTAM and RegionalTAM, 5 capital cities, 6 aggregated regional markets, 1 January - 31 July 2016, all day, metro and regional average daily reach figures are combined to form a national estimate, excludes spill, based on Free TV channels, consolidated 28 day data.

³ OzTam Universe Estimates Quarter 1, 2017 – Individuals; 30.2% of homes have subscription TV.

⁴ *Broadcasting Services Act 1992*, s 3.

⁵ Senator the Hon Mitch Fifield, Speech to Radiocommunications Conference 2016, 10 March 2016.

⁶ Department of Communications, Spectrum Review, Final Report, March 2015, 6.

⁷ Broadcasting Spectrum, Consultation Paper, May 2017, pp 8-9

- Proposes to address key matters that currently give broadcasters certainty in subsidiary documents which will be non-binding, will not have any Parliamentary oversight, and which have not yet been provided to stakeholders;
- devolves a number of key policy functions which currently reside with the Minister to administrative decisions by the ACMA; and
- does not explicitly exclude broadcast spectrum from the pricing approaches outlined in the consultation documentation that cannot adequately reflect the public and social benefit of free-to-air broadcast services. This leaves significant uncertainty over how broadcasters' rights will continue under the new framework.

While the Broadcasting Policy paper reiterates the Government's commitment to ensuring broadcasters' rights are not diminished, we have responded to the consultation package on the basis of the information we have been provided. As we have previously indicated, broadcasters cannot confidently support the package without first seeing key legislative provisions and documents, including key licence terms, provisions relating to transitional measures and Ministerial policy statements.

The table in section 2 clearly shows that, on the information we have, the proposed reforms will significantly diminish broadcasters' existing rights, contrary to the Government's intentions. This would threaten the Government's own public policy objectives by allowing broadcast policy objectives to be driven by the spectrum management framework.

Similarly, the opportunity cost pricing approach outlined in the pricing consultation paper is inappropriate for broadcast spectrum and is inconsistent with the Government's broader policies in relation to free-to-air television. Such an approach would ignore the public good character of free-to-air broadcasting and cause free-to-air services to be cut at the expense of social and economic welfare.

Further, given the regulatory barriers and coordination issues that prevent broadcasters and alternative users from responding to pricing signals, opportunity cost pricing will simply be an inefficient tax on the sector. This will act to undermine its viability relative to its less regulated competitors.

We set out our concerns in the following sections below:

- Part A – responds to the issues raised by the Bill, the accompanying Information Paper and the Broadcasting Policy paper;
- Part B – responds to our concern in relation to the Spectrum Pricing paper.

4 Value of Commercial Free-To-Air Broadcasting To The Public

4.1 Economic and cultural value that the sector generates

Free-to-air broadcasting confers wider economic and social benefits beyond the screen. As outlined further in section B.2.2, these benefits include societal benefits such as the value derived from:

- universal access and facilitating access to public services;
- the news and current affairs programming provided by our members that facilitates democratic debate; and
- services which reflect and strengthen cultural identities or promote diversity and understanding of other cultures.

These free-to-air broadcast services are also economically important to the Australian creative sector as well as culturally important for all Australians. A 2015 study found that:⁸

- Commercial free-to-air television is by far the largest contributor to domestic content production in Australia and underpins the entire production sector, spending over \$1.5 billion a year on Australian programming increasing at 6% YOY and is responsible for the majority (\$6 out of every \$10) of spending on domestic content. Around 80% of production spend is on Australian content.
- Commercial free-to-air's direct contribution to the Australian economy is unmatched by any other television provider, inputting \$2.8 billion per year back into the economy through production, payroll, technology, advertising and taxes.
- Networks support over 15,000 jobs in broadcasting and the independent production sector (7,200 of which are directly employed by the broadcasters).
- Through direct investment, the commercial free-to-air TV broadcasters provide a substantial proportion of expenditure in the independent production sector. It is estimated that of the total 13,098 jobs in the production sector, around 7,500 to 8,000 are supported by investment from the free-to-air broadcasters. Absent such investment, the sector would lose significant revenues and it is likely that the independent production sector would lose critical mass; ultimately the sector could potentially not be commercially viable.
- Consequently, the economic health of the domestic production sector (notwithstanding broader cultural and societal benefits) that flow from having a thriving domestic production and creative ecosystem, directly flow from the continued investment of the commercial free-to-air TV industry.⁹

Importantly, the investment by the free-to-air sector also adds diversity to the TV production base that otherwise would comprise only ABC and SBS. This injects alternative forms of ideas and creativity into the sector, which in turn creates further spill over effects, leading to more diverse productions.

4.2 Spectrum framework must take this value into account

Spectrum is the critical conduit which delivers this value to the public. The spectrum framework, and indeed any future intervention in relation to spectrum allocation and pricing, needs to

⁸ Venture Consulting (2015), "The Value of Free TV: The contribution of commercial Free-to-air television to the Australian economy."

⁹ The study additionally provided estimates of the value to viewers.

recognise this value and support broadcasters in delivering on the Government's policy objectives.

Currently, a number of obligations act to limit the commercial value that can be generated by using spectrum by the free-to-air broadcasters. These include but are not limited to:

- Restrictions under the BSA regarding the areas covered by the licences and media ownership rules.
- Free-to-air television broadcasters are also subject to content obligations and restrictions including through standards controlled by the ACMA. These include classifications, advertising time restrictions, accuracy, fairness and privacy requirements for news and current affairs, and the Australian Content Standard (ACS).
- Under the ACS, all commercial free-to-air television licensees are required to broadcast a minimum of 55% of Australian content between 6am and midnight on their primary channels. In addition, there are specific minimum annual sub-quotas for Australian (adult) drama, documentary and children's programs. Content and advertising is subject to a range of further restrictions through other regulation, standards and codes of practice.
- Broadcasters are also required to provide closed-captioning services. This requires that between 6am and midnight, all content shown on the primary commercial television broadcasting service must be captioned. All news and current affairs programs on the primary channel must be captioned, regardless of timeslot. Broadcasters are required to provide a captioning service for programs transmitted on their SDTV or HDTV multi-channels if the program has previously been broadcast with captions on their primary channel or multi-channel.

The achievement of these public policy objectives is only possible if spectrum licensing and pricing arrangements recognise the public nature of free-to-air television services. These considerations are not taken into account by a price-based model that values use of spectrum from an alternative use perspective.

PART A Policy Response

In this part we set out our response to the issues raised by the Exposure Draft of the Bill, the accompanying Information Paper and the Broadcasting Spectrum Consultation paper.

A.1 Legislative objectives

Summary

Issue:

- Objectives as currently drafted focus the regulator on achieving the highest willingness to pay, without adequately taking into account broader social and public benefits of particular uses.
- Objectives do not expressly acknowledge the need for spectrum management decisions to support broadcasting policy objectives.

Free TV Recommendations:

- The objects section of the Bill should be amended to take greater account of intangible and social-value objectives and to expressly reference support of broadcasting policy objectives. The objectives should also reflect the desirability of providing a regulatory environment with sufficient certainty to promote investment and business confidence.
- The "long-term public interest" test also requires additional legislative guidance to ensure it is applied in a consistent and predictable manner that takes adequate account of both commercial and non-commercial benefits.
- The Explanatory Memorandum for the Bill should specifically clarify that the objects section has been drafted to recognise the existence of public benefits associated with certain types of spectrum usage by both commercial and non-commercial users.

The objects section of the Bill has been substantially revised from those in the current Radiocommunications Act to increase the focus on economic efficiency and away from other relevant factors. Free TV is very concerned that the objectives as currently drafted will expose users to a regulatory decision-making bias in favour of spectrum uses with the highest willingness to pay, without adequately taking into account broader social and public benefits of particular uses. These broader benefits are created not just by defence, public or community uses, but also by services such as free-to-air broadcasting – where the full value of the service to society exceeds the private value to broadcasters.

The objectives in the Bill are as follows:

- (a) *to promote the long-term public interest derived from the use of the spectrum by providing for the management of the spectrum in a manner that:*
 - (i) *facilitates the efficient planning, allocation and use of the spectrum; and*
 - (ii) *facilitates the use of the spectrum for defence, public and community purposes; and*
 - (iii) *supports the communications policy objectives of the Commonwealth Government; and*
- (b) *to establish an efficient system for the regulation of equipment.*

Free TV's view is that instead of narrowing the objectives to focus on efficiency, the objects section needs be expanded to:

- acknowledge that broader social benefits flow from certain use of spectrum and give them equal weighting to economic factors;

- acknowledge that spectrum uses that deliver these benefits may be subject to regulations or other constraints (e.g., from local content requirements) which affect the charges those users can pay; and
- require that spectrum allocation and pricing decisions are made taking into account the value of both commercial and non-commercial use of spectrum and the public benefits associated those uses.

Free TV is also concerned that the revised objects do not expressly acknowledge the need for spectrum management decisions to support broadcasting policy objectives. Under the current spectrum management framework, spectrum that is designated by the Minister as being primarily for broadcasting purposes is then planned by reference to the objectives of the BSA and the planning criteria in section 23 of the BSA. It is critical that this recognition of consistency with broadcasting policy objectives is maintained in the new spectrum management framework.

The focus on efficiency in the objectives of the Bill appears to be indicative of a policy shift in spectrum management, towards a rationale that spectrum is always best allocated to the use that has the most ability and willingness to pay, rather than the use that produces the most social surplus or highest total welfare. Allocating spectrum to whoever is willing to pay the most for it does not necessarily lead to the greatest welfare gains to Australians. Public broadcasting is one clear example where this is not the case. Section 6 below outlines the flaws with this approach and the external and social values of free-to-air broadcasting that would be neglected or ignored in a predominantly efficiency-oriented framework. It is essential that the objects are amended to ensure that regulatory decision-making is not detrimental to consumer and public welfare, through weakening of the free-to-air broadcasting sector.

In addition, we believe it would be beneficial to add a further objective of providing a regulatory environment with sufficient certainty to promote investment and business confidence. Given the very generalised nature of the proposed scheme with wide ranging powers devolved to the ACMA it must be acknowledged that the desire for flexibility should not come at the expense of business certainty, particularly for current spectrum holders.

The removal of objects which recognise factors other than economic factors also increases uncertainty as to whether the ACMA, in exercising its powers and functions under the Bill in accordance with its objects, will act in a similar way to today (even where the operative provisions have remained consistent). This is particularly important given the discretion afforded to the ACMA under the Bill. As discussed in section A.8, many of the ACMA's new or enhanced decision-making powers are not subject to statutory criteria or thresholds.

Free TV therefore recommends amendments to incorporate these objectives. These could be included as follows:

3. Objects

The objects of this Act are:

- (a) *to promote the long-term public interest derived from the use of the spectrum by providing for the management of the spectrum in a manner that:*
 - (i) *facilitates the efficient planning, allocation and use of the spectrum;*
 - (ii) *facilitates the use of the spectrum for defence, public and community purposes, and commercial uses with associated public benefits;*
 - (iii) *promotes the availability of accessible and affordable services that enhance social and cultural objectives for the benefit of Australians;*
 - (iv) *supports the communications and broadcasting policy objectives of the Commonwealth Government;*

- (v) *provides an efficient, equitable and transparent system of charging for the use of spectrum, taking account of the value of both commercial and non-commercial use of spectrum and the public benefits associated with use of that spectrum; and*
 - (vi) *provides a regulatory environment with sufficient certainty to promote investment and business confidence;*
- (b) *to establish an efficient system for the regulation of equipment.*

In addition to ensuring that non-economic factors are incorporated into the objects and given appropriate weighting, the legislation should include a clearly articulated set of factors that the ACMA must have regard to when it applies the "long-term public interest" test. This is particularly important if this test is retained in a primary object, therefore carrying more weight than other objects. This is consistent with approaches in other analogous pieces of legislation.¹⁰ For example, particularly if the objects of the Bill are not expanded, Free TV is concerned that the approach in the Bill fails to provide the ACMA (or the industry) with any real clarity as to how the ACMA should apply the primary legislative objective, resulting in long-term uncertainty.

We also suggest that the Explanatory Memorandum for the Bill should specifically clarify that the objects section has been drafted to recognise the existence of public benefits associated with certain types of spectrum usage by both commercial and non-commercial users. In particular, it should note that these benefits are created not just through public and community uses, but also by commercial uses that facilitate free access to services (such as free-to-air broadcasting which relies on advertising revenue to offer free services to viewers and which advances social and cultural objectives).

A.2 Designation of BSBs

Summary

Issue:

- The designation of spectrum should not be devolved to an administrative decision.
- The power of the Minister to designate spectrum as being primarily for broadcasting purposes should be included in the Bill.

Free TV Recommendation

- Section 31 of the current RadComms Act or a substantive equivalent needs to be incorporated into the Bill.
- Unallocated spectrum that currently falls within the BSB should retain its designation as being primarily for broadcasting purposes, as such spectrum will be required for testing and the introduction of advanced broadcasting technologies.
- The Bill should deem the current Ministerial designation to continue to apply as a transitional measure, until such time as a new designation is made.

The Broadcasting Spectrum Consultation Paper proposes to remove the broadcasting services band (BSB) concept and Ministerial designation of BSBs and devolve responsibility for spectrum designation and high-level planning decisions to the ACMA. It is proposed that Ministerial policy statements will be introduced to guide the ACMA.

As outlined in Free TV's submission to the Legislative Proposals Consultation Paper,¹¹ ensuring certainty around the designation of spectrum bands for broadcasting purposes is critical. The

¹⁰ For example, section 152AB of the *Competition and Consumer Act 2010*.

¹¹ Free TV Australia submission to Legislative Proposals Consultation Paper June 2016, p13.

power of the Minister to designate spectrum as being primarily for broadcasting purposes reflects in legislation that broadcasting and media concentration and diversity raise broader strategic policy decision are not technical administrative decisions. As reflected in the recent Inquiry into the Future of Public Interest Journalism, the role that broadcasters play in informing the community is fundamental to democracy. So it follows that the designation of spectrum for broadcasting should not be devolved to an administrative decision.

The Broadcasting Spectrum Consultation Paper provides that Ministerial policy statements will include a policy that, in planning spectrum, the frequencies currently used by existing commercial, community and national broadcasters and HPONs within current licence areas should be allocated on a primary basis for broadcasting. However, it is uncertain whether under the new framework the Minister will have sufficient power to prevent any potential disruption of the current designations. This uncertainty arises because:

- the nature and scope of Ministerial policy statements is unclear (as indicated in Section A.6).
- it is unclear to what extent the ACMA will be bound by Ministerial policy statements; and
- it is unclear to what extent the Minister will otherwise be able to influence the ACMA given that section 14 provides that the Minister may give a direction to the ACMA in relation to its "broadcasting, content and datacasting functions", **but only if that direction is of a general nature**. Therefore, if a direction in relation to the designation of the BSBs is not a 'direction of a general nature', the provision suggests that the Minister may not give such a direction.

In relation to this last point, while the Broadcasting Policy Paper indicates that "it does not remove the Minister's role in strategic policy settings governing the broadcasters' access to spectrum",¹² and the RadComms Bill Information Paper states that "section 14 of the ACMA Act provides a broad power that enables the Minister to direct the ACMA in the performance of its functions and exercise of its powers",¹³ it is unclear how the draft Bill provides for this.

In addition, the new framework does not allow for the retention of the unallocated spectrum that currently exists as part of the BSB. It is critically important that unallocated spectrum that currently falls within the BSB retains its designation as being primarily for broadcasting purposes, as such spectrum will be required for testing and the introduction of advanced broadcasting technologies, which will enable broadcasters to achieve more efficient spectrum use in the future.

We note that the Bill should also deem the current Ministerial designation to continue to apply as a transitional measure, until such time as a new designation is made.

¹² Broadcasting Spectrum Consultation Paper 2017, Department of Communications and the Arts Paper, p. 9

¹³ Radiocommunications Bill 2017: a platform for the future Information Paper, Department of Communications and the Arts Paper, p. 7.

A.3 Maintaining links to the BSA and broadcasting policy

Summary

Issue:

- While the Broadcasting Spectrum Consultation Paper proposes to maintain the linkage between licences under the BSA and access to spectrum, the precise formulation has not been provided.

Free TV Recommendation

- Section 102(1) and 103(4A) of the current RadComms Act, or substantive equivalents, need to be incorporated into the Bill to ensure that broadcasters that are licensed under the BSA have a clear statutory entitlement to spectrum.
- Licences granted under the equivalent of section 102(1) should be exempted from the renewal provisions in the Bill.

The Broadcasting Spectrum Consultation Paper proposes that the reforms will maintain the linkage between licences under the BSA and access to licences under the Radiocommunications Bill for incumbent broadcasters.

Under section 102 of the current RadComms Act, if a licence is allocated to a broadcaster under Parts 4 and 6 the BSA, the ACMA must issue a RadComms Act licence. Section 102(1) of the RadComms Act provides that:

Subject to subsections (2AA) and (2AB), if a broadcasting services bands licence (the related licence) is allocated to a person under Part 4 or 6 of the Broadcasting Services Act 1992, the ACMA must issue to the person a transmitter licence that authorises operation of one or more specified radiocommunications transmitters for transmitting the broadcasting service or services concerned in accordance with the related licence.¹⁴

In addition, under s 103(4A), the RadComms licence continues in force while the related BSA licence remains in force. In other words, broadcasters are guaranteed spectrum under the Radcomms Act for as long as they hold a commercial television broadcasting licence. These links between the RadComms legislation and the BSA are critical and must continue to give effect to the Government's stated intention in the Broadcasting Policy Consultation Paper.

In addition, as Free TV has previously indicated, this legislative presumption of renewal for broadcasting licences combined with the right to spectrum that continues in force as long as the broadcasting licence is in force is also crucial for broadcasters from a financial and valuation perspective as it means that broadcasters can continue to treat these licences as perpetual assets for accounting purposes. If this certainty is weakened, accounting rules may require licences to be amortised over the (relatively short) term of the licence. This will have significant financial impacts on broadcasters.

While the Broadcasting Spectrum Consultation Paper proposes to maintain the linkage between licences under the BSA and access to spectrum, the precise formulation has not been provided. Free TV considers it is imperative that provisions are enshrined in the Bill which are substantially equivalent to the current section 102 and section 103(4A). It would be insufficient protection for broadcasters if these critical rights were merely reflected in Ministerial policy statements or licence terms (for the reasons set out in sections A.2 and A.6). Additional clarifications may be required in the Bill to ensure that designated statements in licences issued to broadcasters must be consistent with this linkage and cannot be varied.

¹⁴ Subsections 2AA and 2AB relate to commercial radio and community radio, respectively, and so are not relevant for current purposes.

A.4 Variation of licences

Summary

Issue:

- These provisions go materially beyond current variation rights in the Act and are not fit-for-purpose. They grant the ACMA exceedingly wide powers to vary licences (including licence conditions, designated statements and regulatory undertakings) while at the same time omitting constraints on the ACMA's power under current legislation.

Free TV Recommendations:

These provisions should be deleted and then re-drafted from first principles. In particular:

- The rights of the ACMA to vary a licence should be no greater than the variation rights currently in section 111 of the Act. The ACMA should only be permitted to vary additional or non-standard licence terms (imposed under s 51 of the Bill), rather than the entirety of the licence being subject to change.
- The ACMA should not be permitted to vary or revoke any regulatory undertaking in the licence – this right is fundamentally inconsistent with the concept of an undertaking, and undermines the certainty that regulatory undertakings are intended to provide.
- The ACMA should not be permitted to vary or revoke any aspect of a licence in a way that is inconsistent with the BSA or the licensee's associated broadcasting licence.
- If the ACMA does vary or revoke any aspect of a licence, it should be required to:
 - Consult with the affected licensee before doing so;¹⁵ and
 - Provide, on request, a written statement of its reasons for the decision.

Section 57 of the Bill grants the ACMA broad rights to vary a licence upon written notice to the licensee. Specifically, the ACMA may vary a notice to:

- include one or more further conditions;
- revoke any conditions of the licence (other than the conditions in sections 46 to 50);
- vary any conditions of the licence (other than the conditions in sections 48 to 50);
- include one or more designated statements in the licence;
- revoke any designated statements included in the licence, other than the renewal application period;
- vary any designated statements included in the licence;
- vary any regulatory undertaking included in the licence; or
- revoke any regulatory undertaking included in the licence.

By comparison, the current variation rights in relation to apparatus licences in the Act are more constrained. Section 111 relevantly provides that the ACMA may:

- impose one or more further conditions to which the licence is subject;

¹⁵ Free TV notes that s 72 of the Bill which requires consultation before a licence is cancelled provides a useful model.

- revoke or vary any such further condition; or
- revoke or vary any condition specified under paragraph 109(1)(f), which covers any non-mandatory condition of a licence granted to a broadcaster under section 102.¹⁶

Under existing variation rights therefore, the ACMA can only vary “further” or non-standard conditions.

In addition, there is currently a further statutory constraint in section 109(2) of the Act, which has not been retained in the Bill. Section 109(2) provides that the conditions of a licence issued under section 102, including any further conditions imposed by the ACMA under section 111(1)(a), must not be inconsistent with the associated broadcasting licence as issued under the BSA. This establishes a clear statutory order of precedence. Without it, it is possible that the ACMA could vary a licence under section 59 of the Bill in a way which was inconsistent with, or caused the licensee to breach, its associated broadcasting licence.

The very broad scope of this expanded variation right under the Bill has clear and material adverse implications for certainty and means licensees will be limited in their ability to rely upon their licences.

The Bill appears to rely on two mechanisms to constrain the indiscriminate use of this power by the ACMA:

- section 58 of the Bill, which allows a licence to include a statement restricting or limiting the ACMA’s powers to vary the licence; and
- the potential for a decision by the ACMA to vary a licence to be reviewed under Part 18.

We see several issues with this approach:

- there is no explicit requirement for the ACMA to include a statement under section 58, or any guidance as to when it will do so. The scope and frequency of these statements is a fundamental component of how the variation rights would work in practice, and without clear and binding obligations on the ACMA to use them regularly, any assessment needs to assume that they may be rare or have limited power;
- the review mechanism is time-consuming – even if a decision is reversed through the review mechanism, the harm may have been suffered;
- there are no criteria for variations against which the ACMA’s decision could be reviewed, other than compliance with generic licence amendment provisions in section 57 of the Radiocommunications Bill and with the objects of the Bill in section 3; and
- unlike the current variation rights in section 111 of the Act, there is no right for the licensee to request a statement of reasons for the change. This further limits the certainty of the review mechanisms, as the licensee will have limited visibility of whether the change is justified or on what grounds the change could be challenged.

A.5 Resumption of licences

Sections 86 – 89 of the Bill provides for the resumption of licences upon written notice given to the licensee.

A legislative right of resumption does not currently apply to broadcast spectrum and Free TV opposes the introduction of resumption rights in respect of new licences granted to

¹⁶ the ACMA may also vary additional conditions of licences granted to organisations other than commercial television broadcasters. It may vary conditions of licences granted under sections 107(1)(g) (the general licence condition provisions), 108A(1)(f) and 108(2)(a)-(c) (which both apply to temporary community broadcasters), 109A(1)(d) and (k) (which apply to datacasting transmission licences) or 109B(1)(t) (which applies to digital radio multiplex transmitter licences).

broadcasters. Resumption rights are inconsistent with the Government's stated intention of ensuring broadcasters' certainty of access to spectrum holdings is retained in the new legislative framework.

Free TV notes that unlike the resumption provisions in the current Act, which only apply to the holders of spectrum licences and have extensive provisions for determining the compensation that will be payable for resumption,¹⁷ the Bill applies broadly to all licence holders and does not specify the mechanism for determining any compensation payable and the ACMA can determine this by legislative instrument. These provisions therefore provide even less certainty in relation to the circumstances of resumption of licences compared to equivalent provisions under the existing framework.¹⁸

Accordingly, we suggest that:

- the Bill should provide that the ACMA's powers to resume licences under section 86-89 of the Bill should not apply to licences granted to entities holding broadcasting licences under the BSA; and
- the Minister should be required to issue a binding Ministerial Policy Statement in relation to the ACMA's determination of a compensation regime, stating that the compensation regime determined by the ACMA should leave licensees no worse off than under the statutory compensation scheme currently set out in the Act.

A.6 Ministerial policy statements

Summary

Issue:

The new Ministerial Policy Statement mechanism raises three key issues:

- Even though Ministerial policy statements are positioned as an effective means of Ministerial direction and oversight, they are discretionary and ultimately non-binding.
- There is no certainty as to the scope of the Minister's powers and the process that will be exercised before a Ministerial policy statement is issued.
- The Ministerial policy statement concept is relatively uncommon in Australia, and it is uncertain how both the Minister and the ACMA will utilise and respond to this mechanism.

Free TV recommendations:

- Key aspects of the existing framework that provide broadcasters with certainty of access to spectrum should be included in the Bill rather than Ministerial policy statements
- Where matters are left for inclusion in Ministerial policy statements, the legislation must:
 - Set out a requirement that the Minister must make a policy statement in relation to certain matters and include the matters that must be/can be included in the statement;
 - Require that every Ministerial Policy Statement be consistent with the objects of the Act (and, where the Ministerial Policy Statement affects a licence granted under the equivalent of s 102 of the Act, the Ministerial Policy Statement should also be consistent with the objects of the BSA);
 - Make compliance with the relevant Ministerial Policy Statement compulsory (i.e. they should be binding);

¹⁷ *Radiocommunications Act 1992*, Part 2 of the Schedule.

- Require the ACMA to provide reasons and an explanation of how it has complied;
- Expressly state the need for public consultation on Ministerial policy statements (this is contemplated in the Information Paper, but not in the Bill);
- Require periodic review of a Ministerial Policy Statement, and specify the term for which it is to apply (review is contemplated in the fact sheet on Enhancing Ministerial Guidance to the Regulator, but is not reflected in the Bill);
- Provide for increased use of Ministerial directions in relation to specified matters (as opposed to general directions under section 14 of the ACMA Act); and
- Ministerial policy statements should be recharacterised as a legislative instrument.

Part 2 of the Bill provides for the Minister to issue Ministerial policy statements.

Free TV understands that:

- Ministerial policy statements provide a mechanism for the Minister to provide the ACMA with policy guidance in relation to the exercise of its spectrum management powers and functions;
- The ACMA will be required to “have regard to” any relevant Ministerial policy statements.

This is a departure from the recommendation of the Spectrum Review, which stated in its recommended framework that “the ACMA would be required to act consistently with policy statements.”¹⁹

The Information Paper suggests that Ministerial policy statements are likely to be issued in relation to, among other things:

- The ACMA’s annual work program;
- the single licensing system, including license issue and conditions and end of licence term, processes and renewal rights;
- the protection arrangements for the radio quiet zone for the square kilometre array; and
- matters relating to broadcasting spectrum.

The fact that such a statement could be discretionary and non-binding on the ACMA raises significant concerns from a regulatory certainty perspective. There is also no certainty around issues such as what it can deal with, how long it will be valid for, whether there is a mechanism for review or any requirement for public consultation etc. Free TV is also concerned by the characterisation of these statements as notifiable instruments, rather than a legislative instrument. When these concerns are taken together, it means that certainty can only be achieved by ensuring key licence conditions are contained in legislation. Given the importance of spectrum management to other Government policy and objectives, we believe there are significant risks in taking such an informal approach to Ministerial guidance to the regulator.

The Ministerial policy statement concept is also relatively uncommon in Australia, with there being only a few examples of this mechanism.²⁰ However where this approach (or a similar

¹⁹ Spectrum Review, March 2015, page 22.

²⁰ For completeness, we note there are also a number of examples of Ministerial policy statements being made pursuant to an Act, but not in the same context as proposed under the Bill. In these cases, a policy statement is made to clarify or guide a particular provision in an Act or the policy a regulator should follow to interpret a specific term in the legislation (as opposed to being a broader statement of Government policy).

approach) is used, the nature and scope of these powers are significantly more robust than those proposed by the Department in the Bill in that:

- the statements are a strict binding obligation on the statutory body—this is much more stringent than a non-binding document, or an obligation to merely have regard to the statement; and
- the statements are subject to more prescriptive obligations in relation to form and content of the statement by the Minister.²¹

Further, it is not clear how the proposed Statement of Expectations mechanism will work in connection with Ministerial policy statements. The Statement of Expectations is described as 'outlining the Government's expectations of the ACMA in the performance of all its roles and responsibilities'. The Information Paper also states that the Statement of Expectations will differ from Ministerial policy statements in that Ministerial policy statements will 'be specific to the ACMA's spectrum management functions and powers, rather than to the ACMA more generally'.²²

However, it is unclear how the Statement of Expectations would work in conjunction with a Ministerial Policy Statement or override, or counteract any deficiencies in, a particular Ministerial Policy Statement. This is because:

- a Statement of Expectations would not be sufficient to direct the ACMA on specific policy matters or approaches to legislative provisions to the same level of detail as Ministerial policy statements;
- the use of Statements of Expectations is also a relatively new mechanism in the public sector: there is little guidance in legislation or case law outlining their legal status or the extent to which they bind the relevant agency. We also note that in the limited instances where an SoE has been used (i.e. in relation to NBN Co²³ and the CSIRO²⁴), the expectations have been set at high level and have been subject to frequent changes in relation to a number of substantive elements; and
- the possibility that a Statement of Expectations could be revised or withdrawn at any time at the discretion of the Minister.

²¹ For example, see sections 8-10 of *Airspace Act 2007*, which provide for the Minister to issue an Australian Airspace Policy Statement and set out the matters to be addressed by that statement

²² Radiocommunications Bill 2017: a platform for the future Information Paper, Department of Communications and the Arts Paper, p11.

²³ <http://www.nbnco.com.au/content/dam/nbnco2/documents/soe-shareholder-minister-letter.pdf>

²⁴ <https://www.csiro.au/en/About/Leadership-governance/Minister-and-Board/Statement-of-Expectations>

A.7 Licences and Licence Area Plans

Summary

Issues:

- The proposal to abolish Television Licence Area Plans (TLAPs) and move technical detail from Licence Area Plans (LAPs) into spectrum licences is unworkable and will increase the potential for errors and interference with broadcasting services.
- The principle of a single licencing framework will be undermined by relying on bespoke individual licences that contain critical technical and planning parameters that should be common across spectrum users.

Free TV Recommendations:

- LAPs should include the technical and planning parameters that are common to all users and fundamental to television planning. The Bill should provide for the ACMA to develop appropriate sector-wide technical documents, such as the TLAPS and Technical Planning Guidelines. The framework for the development of these documents needs to be enshrined within the legislation itself, rather than devolved to individual licence conditions which unlike the LAPs are not expressly subject to consultation prior to amendment
- The existing LAPs and the TPGs should be carried into the new framework as part of the transitional package.
- The requirements which are to be set out in regulatory undertakings to be introduced in the single licensing framework should be included in binding Ministerial policy statements and transitional legislative provisions and Section 58 of the Bill should be amended to preclude the ACMA from varying the terms of those regulatory undertakings.

The Broadcasting Consultation Paper proposes that the ACMA will plan for broadcasting services by reference to criteria similar to those in s23 of the BSA, which will continue to include the management of potential interference. However, it is also proposed that the LAPs will no longer determine the technical specifications of broadcasting services – these will be conditions of individual licences, determined under the Bill.

It is unclear how this would work in practice. In particular:

- Is it intended that the ACMA determine the number and types of services that would be available in a licence area separately from considering and planning the technical specifications of the relevant services?
- Is it intended that the ACMA would refer to the BSA objectives and planning criteria only when determining the number of services in a licence area, but then refer to objectives of the general radiocommunications framework when planning the technical characteristics of individual services?

If so, we do not believe that what is proposed would be workable in practice. For example, different technical parameters being applied to individual licences could impact network planning, reduce the number of channels that could be provided, or reduce interference protection. It would not make sense to plan the number of services in a licence area separately from considering the technical specification of individual licences. The decisions are interrelated and the BSA objectives and planning criteria need to be applied to both.

The Broadcasting Spectrum Consultation Paper suggest this distinction between the LAPS and the technical specifications is being done so that the cost of any planning work by the ACMA is recoverable. We do not believe that is an appropriate justification for such a decision.

Free TV considers that the technical and planning parameters that are common across all users in a geographic area and fundamental to television planning should be retained in a LAP. Pursuant to section 17 of the Legislation Act 2003, TLAPS and LAPS are subject to consultation before change. If key technical parameters are devolved to individual licences rather than being dealt with in LAPS, it is unclear whether the ACMA will consult with industry prior to determining key planning aspects of broadcaster licences.

The reliance on the bespoke individual licences could also create the potential for coordination issues and interference with highly sensitive broadcast services because key technical licence characteristics and parameters are not contained in common documents available and transparent to all stakeholders. It increases the risk of errors or variations which could lead to interference issues and could negatively impact on TV reception.

Using this approach would minimise the potential for coordination issues across users. Less duplication and reliance on bespoke licence conditions is also more consistent with the single licence framework principle that forms the basis of this reform process.

In addition to the planning issues raised above, Free TV is concerned that key aspects of the rights attaching to the spectrum licences issued to broadcasters are currently unknown and may be left to be specified in licence terms of individual licences, which can ultimately be varied by the ACMA at any time. The Department and the ACMA have not yet provided examples of the licences for spectrum which are to be issued to broadcasters.

We understand that there will be three primary mechanisms built into licences issued under the Bill to regulate spectrum matters:

- **Conditions:** these will cover the fundamental scope of the licence – for example, the part of the spectrum authorised by the licence, and the relevant geographic area. Conditions will also require the registration of equipment, the relevant payment obligations of the licensee and a condition against disqualified persons. The ACMA can also impose discretionary conditions on licences. Some of these conditions can be set by a legislative instrument setting out common conditions, much like the function of a licence condition determination currently.
- **Designated statements:** these will restrict the manner in which the licence may be treated, including in relation to renewal, and restrictions on subdivision and third-party authorisation, among other matters.
- **Regulatory undertakings:** these bind the ACMA in how it issues future licences or makes spectrum authorisations in similar parts of the spectrum. In effect, the ACMA is undertaking to the licensee to take specific steps (such as consultation, interference assessments or seeking approval) before issuing additional licences in the spectrum bands of the first licence.

One of the critical ways in which spectrum licensing should offer certainty to broadcast licensees is to limit access to that spectrum to the licensed entity and ensure that the relevant spectrum cannot be adversely affected by interference from other spectrum users.

However, the licence-by-licence implementation of regulatory undertakings will mean that a prospective licensee (including incumbent broadcasters initially) will have limited ability to anticipate the scope of regulatory undertakings that will apply in that licensee's circumstances prior to the issuance of a licence.

For this reason, in order to provide broadcasters with sufficient certainty, the requirements which are to be included in regulatory undertakings within licences should be set out in transitional

legislative arrangements or prescribed in the Bill as a matter for the Minister to include in a binding Ministerial Policy Statement, rather than being completely open for the ACMA to develop.

The default position should be that each licence of a commercial broadcaster will include a regulatory undertaking which entitles the licence-holder to exclusive access to the spectrum, or at least approval rights over any additional licence with a relevant connection to that spectrum.

Regulatory undertakings should be “locked down” within individual licences through the inclusion of a statement under section 58 of the Bill precluding the ACMA’s ability to vary those terms. There is currently no guarantee that the ACMA will do so.

A.8 Inadequate review mechanisms

Summary

Issue:

- While the ACMA’s powers (and discretions) have been expanded considerably, there has been no proportionate increase to the level of review or oversight available under the Bill relative to what exists today.

Free TV Recommendations:

- To ensure that broadcasters rights are not diminished under the framework, the following additional review mechanisms should be included:
 - A merits review process for broader policy decisions, such as the determination of a Licence Issue Scheme or a Licence Issue Limit instead of just administrative law review of the ACMA decisions; and
 - In conjunction with the use of Ministerial policy statements, a process for certain the ACMA industry-wide decisions to be referred to the Minister for approval.

The Bill substantially expands the ACMA's powers and responsibilities in relation to key spectrum policy decisions, however there is very limited statutory guidance as to how the ACMA should exercise these increased powers and there has been no increase in the level of review or oversight of these decisions.

To maintain certainty of access to spectrum for broadcasters, the legislative framework needs to incorporate additional checks and controls on the expanded the ACMA powers, including robust review and appeal mechanisms.

These mechanisms should include:

- Merits review of key policy decisions including decisions relating to determination of a Radiofrequency Plan, a Licence Issue Scheme or a Licence Issue Limit. These decisions should not be non-reviewable; and
- A process for certain industry-wide decisions to be referred to the Minister for approval.

While the Bill contains an administrative review process for certain decisions of the ACMA, which broadly reflects the approach taken currently under the Act, these decisions are limited and only apply to decisions that affect a single licensee or potential licensee.²⁵ This is insufficient in the context of the ACMA's expanded decision-making scope.

In terms of direct Ministerial oversight, the Information Paper provides that "Section 14 of the ACMA Act provides a broad power that enables the Minister to direct the ACMA in the

²⁵ Part 18, Draft Exposure Bill, Review of decisions.

performance of its functions and exercise of its powers. This includes the spectrum management functions listed in section 9 of the ACMA Act.²⁶ However, as discussed in section A.2, to the extent that matters relates to the ACMA's broadcasting, content or datacasting functions (or the ACMA's powers in relation to those functions), section 14 only permits the Minister to give directions "of a general nature".

Free TV notes that, in particular, there is little statutory guidance as to how the ACMA will exercise its powers under:

- sections 33(1) and (2) - which allow the ACMA to refuse to issue a licence – but do not specify the grounds on which it may make that refusal;
- section 51 - which allows the ACMA to include additional conditions in a licence as it thinks appropriate – but it does not set out what they are;
- section 58 – which allows a licence to include a statement restricting the ACMA's power to vary the licence – but it gives no guidance as to what criteria or considerations should apply for such a statement to be included;
- sections 59(2) and 61(3) of the Bill – which allow for certain licences to be renewed at the ACMA's discretion – there is no indication of which licences will be subject to this discretionary approach, or what criteria the ACMA will be required to apply when exercising that discretion.

In summary, if the expanded scope of the ACMA's powers is maintained, consideration should be given to expansion in the number and type of the ACMA decisions that could potentially be subject to review by industry participants. The existence of more expansive review rights would be positive for the quality of regulatory decision making and will create stronger incentives for the ACMA, notwithstanding the expansion of its regulatory discretion, to exercise that discretion in a more considered way having regard to its statutory objectives and administrative law principles.

A.9 Spectrum sharing

The Bill, Information Paper and Broadcasting Paper each place material emphasis on the possibility of spectrum sharing and secondary trading.

In particular, the Broadcasting Paper indicates that sharing will be possible "particularly for non-broadcasting purposes".²⁶ However, if a broadcaster wants to share, trade or lease its spectrum for a non-broadcasting use, Government approval will be required.²⁷

The Broadcasting Paper further states that:

"It is important to note that any such arrangements would need to be initiated by broadcasting spectrum holders, and agreed by Government (...) The Government will not impose forced sharing or trading arrangements".²⁸

Consistent with our response to the Consultation Paper in 2016, while we are not opposed to additional flexibility in principle, we are still unclear what the extent of this flexibility would be and what benefits this additional flexibility provides. In any event, we agree that sharing must be optional rather than mandated.

It is important to note that from a broadcasting perspective spectrum sharing and secondary trading will only be possible if broader changes are made to the regulatory environment. As we

²⁶ Broadcasting Spectrum Consultation Paper 2017, Department of Communications and the Arts Paper, p 13.

²⁷ *ibid*, p 20.

²⁸ *ibid*, p 13.

previously outlined in our 2016 submission, it is unclear how spectrum sharing would operate in the context of:

- Section 37A of the BSA, which limits the number of commercial television BSB broadcasting licences in a particular licence area to 3; and
- The various ownership and control limitations in the BSA, such as s 53 which prohibit any person from being in control of more than one commercial television broadcasting licence in the same licence area.

As set out in the introduction to this submission, it is important that broadcasting policy not be dictated by the spectrum management framework. In the absence of further detail about how the Government sees the ability to transfer or share spectrum working in practice, we remain concerned this is another example of broadcasting policy being determined outside of the BSA.

Accordingly, we still consider that these matters are more appropriately dealt with in the context of a discussion and considered process around the future of broadcasting policy, rather than falling out of a process to simplify spectrum licensing.

In addition, a number of other regulatory limitations would also need to be further considered for spectrum sharing to be viable. As the Government has noted:

a range of technical constraints, including from an interference management perspective, and the need for costly upgrades to broadcasting technology to allow for further rationalisation of current spectrum holdings; and

*the legal constraints associated with the use of spectrum for broadcasting purposes.*²⁹

In particular, there are number of issues associated with sharing broadcasting spectrum. While digital radio operates on a multiplex basis, this functionality is not in place within the current television transmitting arrangements.

Further, as set out in the attached Plum Consulting report, Ofcom has previously examined the possible efficiency gains that might be achievable by networks taking unilateral action. It found that the gains were “negligible compared to those that might be achieved with platform-wide changes.”³⁰

²⁹ *ibid*, p 13.

³⁰ Plum 2016, AIP in the UK: the broadcasting market perspective, pp 10-11

PART B Pricing Broadcast Spectrum

Summary

Issues:

- There is a large difference between the overall benefit to society from free-to-air broadcasting and the value able to be captured in the revenues of the broadcasters. This risks free-to-air broadcasters being incentivised to give up spectrum even when its use for broadcasting delivers the greatest benefits to society.
- Broadcasters have little ability to unilaterally change their use of spectrum and, without any change in use, there are no gains in efficiency.

Free TV Recommendations:

- The Government should use this process to explicitly exclude broadcast spectrum from opportunity cost pricing as part of its final proposals.
- In preference, pricing from 1 July 2022 should be based on a cost recovery approach to set fees for broadcast spectrum, in-line with international best practice.

B.1 Overview

This section responds to the Spectrum Pricing Consultation Paper. Free TV has been assisted by expert advice from the Competition Economists Group (CEG) in forming this response. CEG has also undertaken an international comparative study that is attached to this submission.

Under the proposed *Commercial Broadcasting (Tax) Bill 2017*, an interim spectrum tax will be locked in until 2022. The related *Broadcasting Legislation Amendment (Broadcasting Reform) Bill 2017* proposes that the ACMA be required to review the spectrum tax arrangements to apply following the initial five-year period. In the absence of any additional guidance to the ACMA, there is a clear risk that the pricing principles proposed in the Spectrum Pricing Consultation Paper could be inappropriately applied to broadcast spectrum.

Opportunity cost pricing is inappropriate for broadcast spectrum and is inconsistent with the Government's broader policies in relation to free-to-air television. Such an approach would ignore the public good character of free-to-air broadcasting and the sector's wider social and economic benefits. This would not promote efficiency and would certainly harm broader social welfare.

It is also the case that regulatory barriers and coordination issues prevent broadcasters and alternative users from responding to pricing signals in the way that is envisaged from the application of opportunity cost pricing to spectrum more generally. Imposing fees for this spectrum will simply be an inefficient tax on the sector that acts to further undermine its viability relative to its less regulated competitors

Free TV urges the Government to use this process to explicitly exclude broadcast spectrum from opportunity cost pricing as part of its final proposals. Rather, pricing from 1 July 2022 should be based on a cost recovery approach to set fees for broadcast spectrum, in-line with international best practice.

B.2 The economics of broadcast spectrum

Spectrum is a valuable resource and policies should encourage spectrum to be used in a manner that maximises overall benefits to society. The primary economic objective of spectrum management is to encourage the efficient allocation and use of spectrum. That is, to ensure spectrum is allocated to the uses that produce most value to society and spectrum holders are

encouraged to adopt spectrally efficient technologies so as to maximise the services that can be supplied over the finite range of usable spectrum.

Australia has historically been at the forefront of using market-based mechanisms to manage spectrum. Market transactions promote efficiency because they encourage owners who obtain relatively little value from the use of an asset to sell the asset to someone who can obtain greater value from its use (and hence would be prepared to pay a price that exceeds the current owners' value).

The consultation paper proposes (draft proposal 8) that where spectrum is not allocated competitively, the ACMA should apply opportunity cost pricing to encourage more efficient use of spectrum. Opportunity cost pricing seeks to achieve this efficiency benefit through encouraging current spectrum holders to give up spectrum where they value the spectrum by less than the value the spectrum would generate in an alternative use.

The use of opportunity cost pricing is said to provide a pricing signal that mimics the signal that would otherwise be communicated through market forces (such as through effective secondary trading). The price signal is summarised in the consultation paper as follows:

Opportunity cost is a sophisticated form of administered pricing. It reflects that in using spectrum, users deny spectrum for others, and that alternative use has value. Opportunity cost approaches set the price at that foregone value. This generally mimics the price a market would have reached, as it means the company who purchases the spectrum likely values it somewhat more than the opportunity cost (leading to profits), and the person who misses out would prefer to put their dollars to another use³¹

However, the effectiveness of opportunity cost pricing breaks down when the value to the company (i.e., its financial return) differs to the value to society from the use of the spectrum. As a result, opportunity cost pricing risks encouraging broadcasters to limit their services and their use of spectrum even when the greatest benefits to society would be obtained by the continuing use of the spectrum for broadcasting.

This is because free-to-air broadcasting generates substantial benefits to society that are not reflected in the revenues earned by broadcasters. As set out in the following sections:

- Broadcast is a “public good,” where the full value of the service to society exceeds the private value to the broadcasters (section B.2.1); and
- There are sizeable “positive externalities” which benefit society as a whole that would not be reflected in an opportunity cost approach to pricing broadcast spectrum (section B.2.2).

There are also a range of regulatory and technical reasons why price signals will not achieve an efficient allocation of broadcast spectrum (section B.2.3).

This analysis has important implications for the appropriate pricing mechanism for broadcast spectrum. As set out in these sections:

- Opportunity cost pricing cannot be readily adapted for broadcasting (section B.3.1);
- The free-to-air business model would fail under an opportunity cost model for spectrum (section B.3.2); and
- It is the role of Government to balance societal benefit, obligations and spectrum charge (section B.3.3).

In addition to providing the expert economic input into this section, CEG has also undertaken an international comparative study on the approach to pricing broadcast spectrum. The CEG report is attached to this submission.

³¹ Spectrum Pricing Consultation Paper 2017, Department of Communications and the Arts, p.19.

B.2.1 Free-to-air commercial television is a “public good”

Commercial free-to-air television is a two-sided market, in which broadcasters act as intermediaries between viewers and advertisers. The business model involves providing a platform of channels which on one-side is attractive to viewers because of the content the channels contain, and on the other-side is attractive to advertisers because of the viewers watching the channels. Commercial broadcasters compete with each other for both viewers and the advertising dollars those viewers attract.

In economic terms, free-to-air television in Australia fits the definition of a public good in that the service is both non-excludable and non-rival, that is:

- there is no cost-effective way to exclude any one viewer from watching programs for free and attempting to do so would be inconsistent with the BSA; and
- free-to-air broadcasts are non-rival in that several individuals can consume broadcast content without diminishing its value to others.

These public good characteristics of the free-to-air model results in what economists term ‘market failure’ that can result in under-provision compared with what is socially optimal in the absence of a government subsidy or other form of support.

In the free-to-air model, broadcasters can only capture the value of providing the platform to advertisers. They cannot capture the value of the broadcast to viewers (as they, by definition, receive the content free of charge). This contrasts with subscription television or pay-per-view which can capture some of the value to viewers (as well as to advertisers).³² As individual viewers are not able to be excluded from receiving a free-to-air broadcast, there is no incentive for them to pay for the cost of free-to-air broadcasting even where they value the service by more than its cost. In the absence of government intervention, this risks too little free-to-air broadcasting being produced.

B.2.2 There are significant societal benefits from free-to-air broadcast services

As noted in section 4, free-to-air broadcasting confers a wide array of benefits to the Australian economy. In addition to these direct benefits, free-to-air television also gives rise to a range of societal benefits—or “positive externalities”.

An externality occurs when consumption or production of goods or services impacts on third parties. For example, vaccination programs help protect children too young to be vaccinated (a positive externality) while pollution from a factory may harm people living near the factory (a negative externality). The presence of externalities can mean that markets fail to deliver efficient outcomes.

Free-to-air broadcasting is recognised as giving rise to significant positive externalities. For example, Ofcom in the UK has recognised that the availability and consumption of free-to-air broadcasting generates broader social value including in terms of:³³

- access and inclusion – for example value derived from universal access and facilitating access to public services;

³² The extent to which the value accruing to viewers can be captured will depend on the degree to which the provider engages in price discrimination. If a single price is charged to all viewers, viewers who get greater value than the marginal viewer will get to keep that value. If the provider can charge viewers different prices, the provider can extract more of the value accruing to viewers. Subscription television providers typical bundle different genres of content as a means to engage in this type of price discrimination. The nature of the content that is broadcast is likely to determine whether a free-to-air or subscription television charging model would generate the greater returns.

³³Ofcom (2006), “Digital Dividend Review Annexes,” Annex 7, Capturing consumer and citizen interests, page 12.

- quality of life – for example value derived from providing access to services which promote quality of life, perhaps by helping to support or promote work-life balance or family life;
- belonging to a community – for example value derived from allowing people with similar interests to communicate or from participating in your local community;
- cultural understanding – for example value derived from services which reflect and strengthen cultural identities or promote diversity and understanding of other cultures; and
- informed democracy – for example value from the news and current affairs programming provided by our members that facilitates democratic debate.

However, as explained above, these positive externalities cannot be captured by the broadcasters. Therefore, an administered opportunity cost pricing model would result in the loss of these societal benefits as broadcasters would be incentivised to cut or limit services, even if the benefits to society would be maximised by the continuing use of the spectrum for broadcasting.

The magnitude of the difference between the revenues able to be captured by free-to-air broadcasters and the overall social benefits from their use of spectrum is likely to be much greater than for rival uses of the spectrum. As such, opportunity cost pricing risks encouraging the re-allocation of spectrum to uses that generate higher revenues even where this would reduce overall social benefits.

The inability of markets and market-based pricing of spectrum to address market failure are well known to include cases where spectrum is used to produce public goods and where there are externalities created when the spectrum is used. These points were summarised in a paper commissioned for the ACMA in 2007 as follows:³⁴

Seminal contributions by Nobel Prize winner Paul Samuelson (among others) established long ago that markets can 'fail' to produce outputs that maximize social welfare. The most notorious economic arguments describing market failure are: (i) the presence of externalities, also known as spillovers (in which market operations generate costs not 'internalised' by the parties); (ii) the public good nature of some markets (in which markets undersupply or fail to materialise); and (iii) the presence of nonnatural monopolies and other sources of market power (which overprice, undersupply and reduce consumer surplus).

Even with the emergence of competing technologies, the case for addressing this potential market failure remains strong. As stated by Ofcom:

*"Broadcasting is an industry with many special characteristics and there are a number of reasons why a completely unregulated market may lead to market failures. Intervention in public service broadcasting has traditionally been the solution to these failures. Changing technology may eliminate some of these reasons for intervention, but some may remain and, indeed, new ones may emerge."*³⁵

In particular, Ofcom noted:³⁶

- the fact that content is non-rivalrous implies that it is efficiently priced at zero and to instead subject it to a positive price not only inefficiently reduces the private value to viewers but also reduces the broader social value ("*Therefore, exclusion of viewers, especially in some genres such as news and current affairs (although this may also apply to other genres, particularly those that give a sense of belonging to a community), has a greater impact than a failure to capture some consumer's private willingness to pay*");

³⁴ *The Economics of Spectrum Management: A Review*, Paper commissioned by the Australian Communications and media Authority (the ACMA), June 2007.

³⁵ Ofcom's Second Public Service Broadcasting Review, 2008, Annex 11, page 1.

³⁶ Ofcom's Second Public Service Broadcasting Review, 2008, Annex 11, para 1.15-1.23.

- there will be continuing large positive externalities (both quantifiable and unquantifiable) which will create enduring market failure (“*The purposes and characteristics of public service content defined by Ofcom are intended to address these citizenship issues – and so address the problem that the market is unlikely to provide the full set of content and services that will maximise the benefit to society*”); and
- “The rationale for intervention in public service broadcasting does not rest exclusively on quantifiable, preference-led, market failures. For this reason, the broader decisions around the level and nature of public service broadcasting are political and taken within a broader context than expressed preferences alone.”

B.2.3 Regulatory, administrative and coordination barriers

For the overall value to society from the use of spectrum to be increased as a result of opportunity cost pricing, spectrum must be freed from existing use and re-allocated to higher value uses. There is limited benefit in providing opportunity cost signals unless this results in a realistic expectation of a reallocation of spectrum to a higher-value use.

Conceptually, there are two ways in which broadcasters might tangibly improve spectral efficiency:

- within the current transmission standard – individual broadcasters could increase the compression of their transmissions (from MPEG-2 to MPEG-4 and/or to HEVC) and therefore improve spectral efficiency within the current generation of technology and televisions (albeit not all current televisions are capable of receiving beyond MPEG-2); and
- by adopting the next generation of transmission standard – this would require a coordinated migration to the DVB-T2 transmission standard, requiring broadcasters to invest in new transmitters and for viewers to buy new televisions or receivers.

It is notable that some free-to-air television content is already broadcast in MPEG-4. This is a commercial decision by individual broadcasters and has been made in the absence of any material spectrum charge.

In terms of migration to an alternative spectrum band or to new transmission standards, there are a variety of reasons why broadcasters will not be able to respond to pricing signals in the same way as other spectrum users:

- broadcasters are subject to detailed regulatory obligations including coverage obligations, transmission formats and transmitter power. These leave little room to unilaterally seek efficiency improvements;
- the need for industry coordination further makes it difficult for individual broadcasters to react to price signals to increase the efficiency of spectrum use. Broadcasting platforms are operator inter-dependent and moves to significantly improve spectrum efficiency will depend on coordinated action. The need for operator coordination is less critical for other users of spectrum; and
- adoption of more efficient transmission technologies by some broadcasters would risk leaving viewers stranded with equipment unable to receive their broadcasts.

In the transition to a new technology, broadcasters are likely to need to continue legacy transmissions through simulcasting programming in both old and new technologies. Legacy transmissions will be required until such time as almost all viewers upgrade their receivers which can take years given that free-to-air broadcasters do not have retail relationships with viewers. In contrast to subscription TV providers, free-to-air broadcasters are unable to subsidise receivers compatible with more advanced technologies. More efficient use of spectrum from advanced technologies will only be possible once legacy transmissions are able to be ended. In the meantime, simulcasting can lead to greater spectrum requirements.

It is also unclear how useful the release of broadcasting spectrum would be for alternative uses of spectrum such as for mobile services. If only marginal quantities of 600MHz can be released, these may be of little value to mobile operators as:

- there are currently no IMT standards for the 600MHz spectrum block (these will need to be agreed in forthcoming ITU - World Radio Conferences); and
- it is unlikely that the lot sizes, configuration and location within the band will be attractive to mobile operators without significant reorganisation (for example, mobile operators may need to have paired spectrum to allow for uplink and downlink capabilities).

B.3 Implications for choosing right approach for broadcast spectrum

B.3.1 Opportunity cost pricing cannot be readily adapted for broadcasting

The consultation paper has mixed messages in relation to potential modifications to opportunity cost pricing:

- on the one hand, it highlights the flexibility of opportunity cost pricing to account for “public good value” and for the effect of “government regulation (for example, a broadcaster’s content obligations)”; but
- on the other hand, it asserts that taking into account social benefits/externalities from spectrum use would “introduce allocative and pricing distortions” that would be better addressed through “other subsidy mechanisms”.

Even if the Minister were to provide guidance that required the ACMA to explicitly consider the public benefit and positive externalities of free-to-air broadcasting, it is unlikely that these features could be adequately incorporated into a technical calculation of efficient prices. This is the case, even if we assume that Ministerial guidance captures all relevant aspects.

In other words, even if Ministerial guidance were to capture all aspects, there is very little certainty that the ACMA could take them into account in a manner which is consistent with how the general public values the benefits generated by free-to-air broadcasters.

This is because the ACMA would face substantial difficulty in quantifying the effects associated with broadcasting’s broad societal benefits. That is, there would be significant challenges in estimating the discount that would be required to be applied to take into account the public good nature of broadcasting (a discount would be required to reflect the fact that broadcasters cannot capture the private benefits to viewers of free-to-air television).

Even estimates of the cost of regulation involve challenges due to the fact that the regulations not only impose direct costs (e.g., requiring broadcasters to incur costs for, say, closed captioning) but also indirect costs (e.g., lost advertising revenue opportunities due to, say, classification restrictions).

There are few studies on the social value of the use of spectrum for broadcasting. Studies that do reference social value tend to provide qualitative appraisals, with very few providing quantitative estimates of that value.³⁷ Prior to 2015, two studies that have attempted to provide estimates of the social value of broadcast spectrum were:

- Ofcom (2006), “Digital Dividend Review.” Consultation.³⁸

³⁷ For example, Oliver and Ohlbaum and DotEcon (2008), “The Effects of a Market-Based Approach to Spectrum Management of UHF and the Impact on Digital Terrestrial Broadcasting.” Available at: https://www.ebu.ch/CMSimages/en/Executive_summary_ENG_FINAL_tcm6-57752.pdf

³⁸ Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0032/28796/ddrmain.pdf

- Analysys Mason, DotEcon and Hogan Hartson (2009), "Exploiting the digital dividend – a European approach." Report for the European Commission.³⁹

Ofcom provided "indicative" estimates of the incremental public value associated with certain uses of the digital dividend spectrum. These ranged from 5% to 15% of the private value of the uses. While subject to many caveats, Ofcom concluded that:

"...this analysis can help us to assess whether there are significant differences in the relative level of external value generated by the different potential uses of the UHF spectrum."⁴⁰

Ofcom found that the rankings of alternative uses under both private and public value were unlikely to change.

In the second study, which was produced on behalf of the European Commission in support of assessing the digital dividend across EU member states, no re-worked estimates of public value were provided. The authors applied the same indicative estimates as Ofcom.

Most recently, in 2015, a study conducted on behalf of the UK's DCMS tabled three alternative research-based approaches that could be used to provide estimates of the public value of alternative uses of spectrum.⁴¹ Each research method has shortcomings, but the study suggested that they could be used together to rank uses of spectrum based on public value. The study emphasised that the various approaches would not deliver point estimates of value but, rather, they would aid the evaluation of alternative uses on an "in the round" basis.

Based on the review of the literature, there appears to be a paucity of quantitative estimates of broader social value arising from broadcast spectrum. The DCMS study, the most recent investigation, suggests that three research-heavy methods are required yet these still do not arrive at an "answer".

While it is unlikely to be practical to quantify the full benefit to society from free-to-air broadcasting, pricing for broadcast spectrum that fails to take into account these benefits is likely to result in significant harm and loss of public benefits.

B.3.2 The free-to-air business model would fail under an opportunity cost model for spectrum

It is unlikely that spectrum prices would be able to be passed through into advertising rates particularly with growing competition from alternative advertising channels. Competition from outside free-to-air has led to the long-term decline in gross advertising revenue for the commercial television networks which fell a further 4.3% between January to July 2016.⁴² Attempting to pass-through spectrum licence fees in advertising rates would accelerate the shift in advertising spend to rival channels.

It is notable that the proposed structure of the interim spectrum tax, which is levied based on transmitter density and power does not give broadcasters the ability to reduce their spectrum costs if they were to improve their spectral efficiency (e.g., by producing the same content with less spectrum). This largely negates any perceived benefit from spectrum charges as free-to-air broadcasters cannot lower their costs in response to the spectrum fees. Setting aside the anti-avoidance measures in the Bill, the only way a broadcaster could, in theory, lower their spectrum fee is to relocate the tower to a lower density area or reduce the power of the signal. Each of these responses are completely impractical and unrelated to spectral efficiency. As

³⁹ Available at: <http://www.analysismason.com/contentassets/eb1ed9b98d7c4c569842a9f5cd7e8568/analysys-masons-final-report-exploiting-the-digital-dividend---a-european-approach-20090814.pdf>

⁴⁰ Ofcom (2006), "Digital Dividend Review." Consultation, paragraph 4.124.

⁴¹ DCMS (2015), "Incorporating Social Value into Spectrum Allocation Decisions." Report.

⁴² [http://www.freetv.com.au/Media/News-](http://www.freetv.com.au/Media/News-Media_Release/Free_TV_Advertising_Revenue_Figures_Jan_to_Jun_2016.pdf)

[Media_Release/Free_TV_Advertising_Revenue_Figures_Jan_to_Jun_2016.pdf](http://www.freetv.com.au/Media/News-Media_Release/Free_TV_Advertising_Revenue_Figures_Jan_to_Jun_2016.pdf)

such, the fee structure means that free-to-air broadcasters are in effect facing a lump sum tax which cannot be passed on.

Faced with declining advertising revenues, Australian broadcasters have already undertaken substantial rationalisation and efficiency programs. Payments for spectrum would instead require reductions in content spending. This would be likely to include reductions in spend on local content as well as less ability to buy quality content internationally. If future spectrum charges are substantial, this will also negatively impact the free-to-air commercial broadcasters' viability.

Broadcast spectrum fees channels would reduce the overall spending on Australian original content market. This will affect audiences (less diverse content to view) and would have a knock-on effect on the creative industry and on the wider economy.

In addition, less money invested into the original content market could have wider economic effects. The scale of this impact has not been quantified yet, but the potential effects can be summarised as follows:

- less exports of original programs and formats;
- less valuable inwards investments into the Australian creative sector;
- less investments in innovation and knowledge transfer that can be used more widely in the creative economy; and
- fewer jobs in the content industry.

B.3.3 Role of Government to balance societal benefit, obligations and spectrum charge

The traditional free-to-air broadcasting model employed around the world recognises its public good features and public value, and provides for access to spectrum in return for obligations to meet the Government's public policy objectives. The existing obligations on Australian's free-to-air broadcasters are summarised in section 4.2.

Ongoing access to and pricing of broadcast spectrum is a critical component of being able to achieve the Government's broadcasting public policy objectives. In June 2017, the Government proposed Bills that would remove the world's highest licence fee and replace it with an interim spectrum tax. The interim spectrum tax should be used as a transition to cost-recovery model that is in line with international best practice, as explained in the next section.

Free TV submits that the Government should use its response to this consultation process to make clear that opportunity cost pricing will not apply to broadcast spectrum. Such a pricing model could not achieve any of the efficiency benefits for broadcast spectrum, but would certainly lead to a failure of the free-to-air broadcasting business model and a failure of the Government's public policy objectives.

The ongoing sustainability of the free-to-air model in Australia necessitates Government balancing the costs of the obligations imposed on broadcasters against the revenue potential stemming from the access to spectrum. This is appropriately the role of Government and should not be devolved to a regulator that is not responsible for the achievement of broader social objectives enshrined in the BSA.

The international case studies demonstrate that in valid comparator countries (i.e. those with policies regarding domestic content, terrestrial broadcasting and universality), generally administrative incentive pricing (AIP) has not been applied. There are also no plans to introduce it, save from a plan to consider its introduction in the UK around 2020.

The attached CEG report concludes:

We have not identified any jurisdiction with a comparable free-to-air broadcasting sector and content obligations, which charges for spectrum beyond fees for spectrum management.⁴³

Rather than pursuing harmful pricing models, the prevailing international best practice model is one in which access to spectrum is provided by the government and attracts limited fees for the regulator. In return for this, the broadcasters meet costly obligations. Individual countries that depart from this still tend to apply the balancing approach, which is, at the extremes: no spectrum fees and substantial obligations or spectrum fees and relatively light obligations.

Accordingly, Free TV urges the Government to exempt broadcast spectrum from opportunity cost pricing as part of its final proposals and default to a cost recovery approach to set fees for broadcast spectrum as is applied in comparable international jurisdictions.

A more comprehensive CEG international comparison is attached to this submission.

⁴³ CEG, International approaches to pricing for broadcast spectrum, Memo to Free TV, p1



Memorandum

To: Free TV

From: Competition Economists Group

Date: August 2017

Subject: **International approaches to pricing for broadcast spectrum**

Status: Final

1. This memorandum provides a survey of approaches to pricing broadcast spectrum in countries with comparable free-to-air broadcasting industries to Australia.

1 Observations

2. The key observations from this survey are:
 - International regulators have recognised the need to balance the benefits received by free-to-air broadcasters with the costs they bear in meeting their obligations (including local content, universality and technology requirements).
 - We have not identified any jurisdiction with a comparable free-to-air broadcasting sector and content obligations, which charges for spectrum beyond fees for spectrum management.
 - Ofcom in the UK has discussed at length the introduction of spectrum pricing for digital terrestrial television spectrum and has decided to not introduce incentive prices until at least 2020 at which time it will further consider the spectrum environment and the likely effects of incentive pricing.

2 Introduction

3. The international survey demonstrates that in comparator countries (i.e. those with policies regarding domestic content, terrestrial broadcasting and universality), generally administrative incentive pricing (AIP) has not been applied and there are no plans to introduce it, save from a plan to consider its introduction in the UK around 2020. The traditional free-to-air broadcasting model is one in which spectrum is generally gifted and attracts (if any) limited fees for the regulator. In return for this, the broadcasters meet costly obligations. Individual countries that depart from this still tend to apply the balancing approach, which is, at the extremes:

no spectrum fees and substantial obligations or spectrum fees and relatively light obligations.

4. In the remainder of this section, we discuss key issues arising in the UK and then provide an overview of aspects from several other broadcasting regimes.

3 The UK

5. The UK is probably the jurisdiction that has given the most consideration to whether to introduce incentive pricing for digital terrestrial television (DTT) broadcast spectrum: despite policy proposals and discussions since 2002, the UK regulator (Ofcom) has still not introduced such pricing and only intends to re-examine whether there is a case for doing so in 2020.

6. An analysis of the historical debate in the UK is illustrative of the issues that have been considered in deciding whether to apply AIP to broadcast spectrum. As far back as 2002, the UK regulator recognised a need to consider the broader effect on public policy in relation to broadcasting and the effect on broadcasting output. In later consultations, Ofcom has recognised the effect of competition from online and on-demand players on any decision to introduce AIP for broadcast spectrum. The most recent statements from Ofcom is that it has “made no decision” in relation to AIP for broadcast spectrum.

7. In 2002 Professor Martin Cave conducted a review of radio spectrum management in which it was recommended that:^{1 2}

“[...] spectrum pricing should be applied over the coming decade to all spectrum which is used for broadcasting. The level of prices would be determined by the RA [Ofcom] using the methodology outlined by the RA’s original spectrum pricing study and would be based on the opportunity cost of spectrum use.”

8. The UK Government and Professor Cave recognised the need for the manner and timing of the introduction of AIP on spectrum used for terrestrial broadcasting to take account of several factors, including for example the need to ensure that wider public policy is taken into account, and that the existing regulatory agreements with broadcasters were respected (for example the licence fees paid by Channel 3 and Channel 5 licensees at that time were an implicit payment for access to spectrum).

9. In 2004 Ofcom set out in a wide-ranging review of spectrum pricing consultation, how AIP might be applied to spectrum used for terrestrial broadcasting. This was

¹ Cave, Martin (2002), “Review of Radio Spectrum Management An independent review for Department of Trade and Industry and HM Treasury.”

² Ibid, page 29. “RA” denotes the Radiocommunications Agency, the then regulator for managing spectrum, prior to the formation of Ofcom.

followed by a 2006 consultation, “Future pricing of spectrum used for terrestrial broadcasting.”³ The statement that followed in 2007 concluded that:⁴

it is right that broadcasting use of spectrum should be subject to appropriate charges in future, in the same way as almost all other uses are or will be; the right time to introduce charging for spectrum used for digital broadcasting – both television and radio – is the end of 2014;... before introducing any charges, we will consider carefully any potential effects on broadcasting output, and the right options to address or mitigate them.

10. In 2013, Ofcom again consulted on the issue, this time on the implementation of AIP, setting out the potential fee-setting mechanism and its application to DTT multiplexes. The ensuing statement determined that from 2014, multiplex operators would pay administrative charges and that:⁵

...in view of the fact that we are not now intending to introduce AIP for spectrum used by broadcasters until around 2020, we consider it premature to re-address the underlying rationale in detail at present. It is entirely possible that the spectrum environment for broadcasters will have changed by then, and so any analysis conducted now will be outdated. We have given a firm commitment that we will consult again on AIP before it is introduced. In particular, we have said we will consider its impact on broadcast content, and the measures that might be taken to mitigate those impacts.

11. During the period of AIP discussions and consultations, there have been several developments in the UK free-to-air broadcasting sector. Free-to-air broadcasters’ (with public service obligations) licence fees based on revenues have been reduced over time as digitisation, convergence and competition has increased.
12. Ofcom has recognised the impact of digitisation and convergence in the context of its consideration of whether to introduce AIP in 2020:⁶

If the trends towards online and on-demand viewing accelerate, and we see more rapid changes in audience behaviour over the next few years, the current PSB system is likely to struggle to deliver Parliament’s intentions. Under more accelerated scenarios, it is possible that the current interventions of access to spectrum and prominence on electronic programme guides, designed to support easy access to universally available public service content, will cease to be effective.

³ Available at: https://www.ofcom.org.uk/data/assets/pdf_file/0032/53789/futurepricing.pdf

⁴ Ofcom (2007), “Future pricing of spectrum used for terrestrial broadcasting – Statement,” p.1.

⁵ Ofcom (2013), “Spectrum pricing for terrestrial broadcasting Statement,” para. 3.12-3.13

⁶ Ofcom (2015), “Public Service Broadcasting in the Internet Age Ofcom’s Third Review of Public Service Broadcasting Statement,” paragraphs 2.11 and 2.16. Available at: https://www.ofcom.org.uk/data/assets/pdf_file/0025/63475/PSB-statement.pdf

Given Parliament's aims, the importance of PSB to audiences, and the system's role in supporting the wider creative sector, questions are emerging about whether the current interventions will continue to be sufficient. There is a risk that if broadcasters cannot adapt their models sufficiently to maximise commercial revenues and efficiencies, they will have to make increasingly difficult choices about which public service content and services to fund. Decisions to increase funding in one area may lead to reductions in funding in other areas.

13. In the same document, Ofcom also notes:⁷

Administered Incentive Pricing for spectrum: Ofcom has made it clear that, in relation to national digital terrestrial television (DTT) we will not (for now) introduce charges based on the opportunity cost of using the spectrum (AIP). Instead, we will apply a pricing mechanism to reflect our spectrum management costs (cost-based fees). This position will be kept under review, acknowledging the balance between our duties to ensure efficient use of spectrum and our responsibilities towards public service broadcasting.

14. Ofcom also clarified in 2015 that the introduction of AIP to broadcasting has not been decided yet:⁸

Vodafone and EE both referred also to the consultation on broadcasting AIP which put forward a working hypothesis that AIP would be phased-in over a 5 year period. However, in our subsequent statement we said that we would consider, and consult on, the issue nearer the time (i.e. we have made no decision in this regard).

4 Other countries

4.1 France

15. In France, broadcasters (unlike mobile operators) have the right to use the spectrum assigned to them by the media regulator, le Conseil supérieur de l'audiovisuel ("CSA"), at no charge; no licence fees are payable by either private or public broadcasters. The law prevents broadcasters from being charged for the use of spectrum; the reason for this, as stated by the national frequency regulator (Agence Nationale des Fréquences) and set out in a Senate report, is the high number of obligations faced by broadcasters (both PSBs and commercial). These include: respect for the principals of human dignity, public order, pluralism, honesty of

⁷ Ibid. Paragraph 6.15.1.

⁸ https://www.ofcom.org.uk/data/assets/pdf_file/0033/79764/statement.pdf

information, protection of children, defence and the use of the French language, all of which translate into a wide range of specific obligations.^{9 10}

16. These obligations also include rules on advertisements and the content obligations, which apply to all broadcasters, are that broadcasts must be 60% European, 40% French in origin throughout each 24 hours. DTT multiplex coverage is mandated at 95% according to the law, but is fixed by the CSA on regional basis.¹¹
17. We have not identified any plans to introduce broadcast spectrum pricing in future; given the policy statements, it is unlikely that the current law against spectrum charges would be changed.

4.2 Germany

18. In Germany, frequency management is managed by the Federal Network Agency (Bundesnetzagentur). According to the Joint Management Office of the Media Authorities, commercial broadcasters pay a small administrative charge for the granting of the licence and an annual fee for use of frequency for broadcasting (licences are usually valid for 8 years).¹² There is no pricing for frequency assignment by the Federal Network Agency, because broadcasting is exempted from auctions (according to Article 57 of the “Telekommunikationsgesetz”).
19. For PSBs, assignment is conducted by the Chancelleries of the German States; they do not need to obtain a broadcasting licence and pay a small administrative charge for frequency use.
20. Commercial multiplex operators pay an administrative charge for spectrum use. There is no pricing by the Federal Network Agency and licences are awarded following a “beauty contest”). PSB multiplex operators also pay an administrative charge for spectrum use (again, no pricing by the Federal Network Agency) and assignment is by the Chancelleries of the German States.
21. Regarding content obligations, commercial broadcasters are subject only to the minimum EU regulations as well as some quality standards set by specific German regulations. The PSBs’ obligations are slightly stricter as most films shown has to be produced within the EU and a considerable amount of the total programme should be filled with content produced locally or in the EU.¹³ Content needs to have respect for human dignity, adhere to religious standards, pluralism, honesty of information,

⁹ Agence Nationale des Fréquences (2008), “rapport du groupe de travail du conseil d’administration de l’ANFR, Organisation et evolution de la gestion du spectre”.

¹⁰ Senate report (June 2017), “Dix ans apres, la regulation a l’ere numérique”.

¹¹ CSA, “Les obligations de couverture de la TNT”.

¹² Email correspondence with CEG.

¹³ Interstate Broadcasting Agreement (Rundfunkstaatsvertrag). Available at: <https://germanlawarchive.iuscomp.org/?p=655>

ensure diversity of opinion, and must not have too much political influence (commercial broadcasters).¹⁴

22. We have not identified any plans to introduce broadcast spectrum pricing in future.

4.3 Italy

23. The Ministry of Economic Development sets spectrum fees in Italy. According to the latest law decree of April 13th 2017, the fees have to be paid on an annual basis by every multiplex operator with a usage right to television frequency bands, regardless of the broadcast technology.
24. The spectrum fee in 2017 – which amounts to EUR 2.04 million per DTT multiplex – is obtained by applying a 7.5% scale factor to 2013-2015 average annual revenue of broadcast sales activities, which amounted to EUR 27.23 million. In Italy both the PSB and commercial broadcasters pay this annual fee around €2 million per DTT multiplex (to put this in perspective, Rai, the PSB, earned revenue of €2,335 million during 2015).¹⁵
25. To encourage greater competition and the use of new technologies, these charges are discounted either when multiplex operator transfers their broadcast capacity to other operators or when they use DVB-T2 technology.^{16 17}
26. In addition to the spectrum fees, administrative costs apply for the spectrum licence management. The amount of these additional costs is based on the population that might be potentially reached by each multiplex operator.¹⁸
27. Multiplex operators have an 80% broadcast coverage obligation to be achieved in the first 5 years.¹⁹ The PSB has 100% broadcast coverage obligation.²⁰
28. At the national broadcaster level, Italian regulation requires differing levels of content obligations applied to total broadcasting time:

¹⁴ Interstate Broadcasting Agreement (Rundfunkstaatsvertrag).

¹⁵ Ministry of Economic development decree of 13 April 2017 on spectrum fees, available at: http://www.sviluppoeconomico.gov.it/images/stories/normativa/Decreto_ministeriale_13aprile2017_contributi_frequenze%20_2017.pdf

¹⁶ 1) 20% discount with a transfer of 30-50%, 2) 40% discount with a transfer of 50-75%, 3) 60% with a transfer of 75-100%.

¹⁷ A 20% discount applies if this technology is used for at least 80% of the broadcast capacity.

¹⁸ Ministry of Economic Development's explanatory note of 22 December 2015 on administrative costs payment deadline, available at:

http://www.sviluppoeconomico.gov.it/images/stories/normativa/Circolare_DGSCERP_22%20dicembre_2015.pdf

¹⁹ Art 18 of Annex A of AGCOM 353/11/CONS. Available at:

<https://www.agcom.it/documents/10179/539615/Allegato+22-06-2011+4/7b04938a-08c9-4420-b2d0-48aa84112713?version=1.0>

²⁰ Art. 45 of Italian AVMS Code. Available at: <http://www.camera.it/parlam/leggi/deleghe/05177dl.htm>

- Commercial broadcasters: at least 10% to European works produced in the last five years (of which at least 10% - 30% to Italian film-making).
 - The PSB broadcaster: at least 20% to European works (of which at least 6.5% - 20% to Italian film-making).^{21 22 23}
29. Other obligations, such as those related to the quality and other standards (e.g. protection of children, no discrimination and respect for human dignity and plurality, encouragement production of European television programmes and independent production, advertisement rules, promotion of Italian language) are aligned to those provided by the European guidelines.
30. We have not identified any plans to introduce broadcast spectrum pricing in future.

4.4 Canada

31. Industry Canada (“IC”), in its latest version of the Spectrum Policy Framework for Canada stresses the need to use market forces in assigning the radio spectrum, in order to ensure that the economic and social benefits derived are maximised. More particularly, in those bands where demand is not expected to exceed supply, a first come first served basis will apply, and when this is not the case, Industry Canada will use a competitive process (auctions).²⁴
32. Through these auctions, licences are assigned with the aim that the spectrum be used efficiently.²⁵ Therefore, IC aims to provide licences with the highest flexibility to adapt to changing demand from consumers (that is in terms of services and technology used), but always accounting for interference management.

²¹ Lower bound of the range refers to the compulsory quota to generalist channels while the upper bound applies only to thematic channels.

²² Art. 44 of Italian AVMS Code available at: <http://www.camera.it/parlam/leggi/deleghe/05177dl.htm>, and Art. 2 of Inter-ministerial decree of Ministry of cultural affairs and of economic development of 22 February 2013, available at: http://www.sviluppoeconomico.gov.it/images/stories/documenti/Definizione_opere_cinematografiche.pdf

²³ There are additionally the revenues quota that the Italian operators must invest into Italian filmmaking with 3.2% for commercial broadcasters and 3.6% (plus a 0.75% educational children animation) for PSB. Art. 3 of Inter-ministerial decree of Ministry of cultural affairs and of economic development of 22 February 2013. Available at: http://www.sviluppoeconomico.gov.it/images/stories/documenti/Definizione_opere_cinematografiche.pdf

²⁴ Industry Canada (June 2007), “Spectrum Policy Framework for Canada, Spectrum Management and Telecommunications”, available at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sfo8776.html>

²⁵ Industry Canada (March 2011), “Framework for Spectrum Auctions in Canada, Spectrum Management and Telecommunications”, available at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sfo1626.html>

33. The use of auctions will not apply to all uses, and in particular it does not apply to broadcasting:²⁶

In all of this, however, market mechanisms for granting access to broadcasting spectrum have not been employed by the CRTC.

34. There was largely a positive reaction to the use of market forces, although some stakeholders stated that this should be monitored to ensure that it would not threaten the use of the spectrum to comply with public interest requirements. Guidelines were revised to acknowledge the need to assign spectrum for services serving the public interest, and that these may not be driven by market forces.
35. For an undertaking to operate in broadcasting, a licence from the CRTC as well as a licence from Industry Canada are required and licence fees, payable by both PSB and commercial broadcasters are in two parts as follows:
- Part I is a nominal fee calculated to cover regulatory costs. Part II is a percentage of revenues (but capped at \$100,000.00).²⁷
 - Part I fees are calculated as: $(A / B) \times C$
 - Where A is the licensee's fee revenues for the most recently completed return year, less that licensee's exemption level for that year; B is the aggregate fee revenues for the most recently completed return year of all licensees whose fee revenues exceed the applicable exemption levels, less the aggregate exemption level for all those licensees for that year; and C is the estimated total regulatory costs of the Commission for the current fiscal year as calculated in accordance with section 9.
 - This amount can be adjusted given difference between estimated total regulatory costs and actual total regulatory costs.
 - Part II fees are calculated as: $X/Y \times Z$
 - Where X is the licensee's fee revenues for the return year terminating during the previous calendar year, less that licensee's exemption level for that return year; Y is the aggregate fee revenues for the return year terminating during the previous calendar year of all licensees whose fee revenues exceed the applicable exemption levels, less the aggregate exemption level for all those licensees for that return year; and Z is the lower of (a) \$100,000,000, and (b) 1.365% multiplied by the amount determined for Y.

²⁶ Industry Canada (2014), "Study of Market-based Exclusive Spectrum Rights", available at: <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sfo9402.html>

²⁷ CRTC (March 2017), "Broadcasting Order CRTC 2017-81".
CRTC (2017), "Broadcasting Licence Fee Regulations, 1997".

36. Private broadcasters are required to show 50% of Canadian content during evening and 60% during broadcast day.²⁸ The PSB, CBC, has committed to devote at least 75% of the broadcast day and 80% of prime time to Canadian programming, which, according to the CRTC, illustrates a strong commitment to be predominantly and distinctively Canadian content, as the Act requires.²⁹ Other obligations include: “broadcast at least 7 hours per week of programs of national interest during prime time on French-language television and at least 9 hours per week of such programming during prime time on English-language television”.³⁰
37. We have not identified any plans to introduce broadcast spectrum pricing in future.

4.5 United States

38. The US appears to be the only country in the sample we reviewed that has a market approach to spectrum for broadcasting. This was an incentive auction and many broadcasters realised revenues from giving up their unwanted spectrum. The US, has minimal content obligations (news and children’s) as it has no need to focus on the promotion of domestic production.
39. Recently, due to high demand for mobile data and the scarcity of available spectrum, the FCC ran the incentive auction to free some of the 600 MHz spectrum used by television broadcasters.
40. Each stage of the auction involved two auctions:
- A reverse auction, where broadcasters offered to give up some or all their spectrum voluntarily, in exchange for payment
 - A forward auction for wireless carriers and other parties to reclaim those licences.
41. The first stage was preceded by the determination of the spectrum clearing target, where broadcasters will indicate their willingness to give up spectrum at the opening prices. Following this, the reverse auction serves at estimating the total amount of incentive payments needed for broadcaster to clear the spectrum³¹, and the forward auction happens subsequently.
42. Both stages were interlinked, as both parties needed information about the willingness of the other. The forward auction continued to run until all excess demand is exhausted only is the “final stage” rule (constituted of conditions on the proceeds of the forward auction, based on benchmarks determined by the Commission) is satisfied. If it is not, other stages will be run, where the FCC will have to reduce the

²⁸ CRTC regulation (1999), “Public Notice CRTC 1999-97”, paragraph 58.

²⁹ CRTC regulation (2013), “Broadcasting Decision CRTC 2013-263 and Broadcasting Orders CRTC 2013-264 and 2013-265”, paragraph 39.

³⁰ CRTC regulation, see footnote 5.

³¹ “Staff summary: Incentive auction report and order, May 15, 2014.”

amount of spectrum it purchases from broadcasters and restart the process for another stage.

43. The incentive auction took place in four stages, and was deemed successful as it permitted to clear spectrum as intended, using a novel approach. However, it is worth noting that the proceeds from this auction were lower than had been expected:^{32 33}

After Stage 4 of the incentive auction, broadcasters asked for \$10 billion to clear 84 MHz of spectrum—down from \$86 billion to clear 126 MHz in Stage 1. Assuming that wireless providers will bid enough to allow the auction to close, FierceWireless noted, “that would bring a disappointing end to an auction that once was predicted to generate \$60 billion or more...”

44. Fees were as follows:³⁴

Licensees of commercial VHF, UHF (“Digital TV Stations) and satellite television stations, and holders of construction permits for new stations, provided that such licenses or permits were granted on or before October 1, 2015, even if the license or permit expired after October 1, 2015. (In FY 2014, the Commission consolidated the UHF and VHF Television stations into a single Digital Television Stations fee category, by market size, for purposes of paying regulatory fees.

Fees for commercial television stations are based upon the size of the Nielsen Designated Market Area (DMA), [...]. Holders of construction permits (CPs) for new television stations for which a license had not been granted as of October 1, 2015, owe \$5,000 for Digital Television construction permits, and \$1,750 for Satellite TV licenses, regardless of market size. Finally, licensees no longer owe a regulatory fee for broadcast auxiliary licenses.

³² Reuters, David Shepardson, “FCC spectrum auction bidding ends at \$19.6 billion.”

³³ Scott Wallsten (2017), “Don’t be disappointed by the FCC’s incentive auction”, Technology policy institute.

³⁴ FCC (September 2016), “Regulatory fees fact sheet.”

AIP in the UK: the broadcasting market perspective

A report for Free TV Australia

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2 September 2016

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Executive summary

This report, commissioned by Free TV Australia, explores the debate and ultimate rationale for not applying administered incentive pricing (AIP) to the spectrum used by terrestrial TV broadcasters in the UK. The purpose of the report is to inform similar discussions in Australia.

Ofcom's rationale for considering the introduction of AIP is that it would help to achieve its objective to promote efficient use of spectrum. However, in this report we show that AIP is not a sufficient measure for achieving this objective (as there are a number of constraints on broadcasters' behaviour which may prevent them using spectrum efficiently, from regulatory, legal, political or commercial sources) and indeed it may not even be a necessary one (broadcasters have multiple drivers to be as efficient as possible). We also present evidence that spectral efficiency has increased over time, even without the use of AIP.

Against this, however, there is a high likelihood of AIP fees harming the broadcasting industry and, in turn, the consumer. Higher fees for spectrum will lead to higher costs for broadcasters, who have a low ability to increase their revenues. This will therefore lead to cost-cutting measures, likely impacting on the quality and range of content produced.

This marginal benefit, combined with a significant downside, indicates that the introduction of AIP for broadcasting is not currently a policy to be followed. In its latest review, in 2013, Ofcom agreed with this conclusion, and decided not to proceed with AIP for broadcast spectrum – instead using a cost recovery model to price broadcasting spectrum.

1 Introduction

This draft report for Free TV Australia provides a case study discussing the debate around applying AIP to spectrum used by terrestrial TV broadcasters in the UK. The purpose of the report is to inform similar discussions in Australia, but the scope of this report does not include discussion of how these arguments may apply to the Australian market.

The potential application of AIP to broadcasting, among other markets, has been raised a number of times since 1998, when the radiocommunications regulator introduced AIP fees for congested frequency ranges used by mobile and fixed link services. In particular, the Radiocommunications Agency and then Ofcom reviewed the spectrum fee regime for broadcasting in 2002, 2006/7, and 2013.

Following each of these reviews, Ofcom decided to postpone the introduction of AIP to the broadcasting market to a future date. This report sets out the arguments why AIP should not be applied to broadcasting, and examines Ofcom's decisions in its reviews.

Structure of this report

This report is structured as follows.

- Section 2 provides a general description of the methodologies Ofcom uses when setting spectrum fees in the UK.
- Section 3 examines the application of spectrum fee calculations to broadcasting, starting with a historical context and moving onto an examination of arguments made by broadcasters and multiplex operators against AIP for spectrum used by terrestrial TV. This section also considers Ofcom's response to each of these arguments.
- Section 4 describes why AIP has not so far been applied to spectrum used by terrestrial TV in the UK.
- Section 5 concludes.

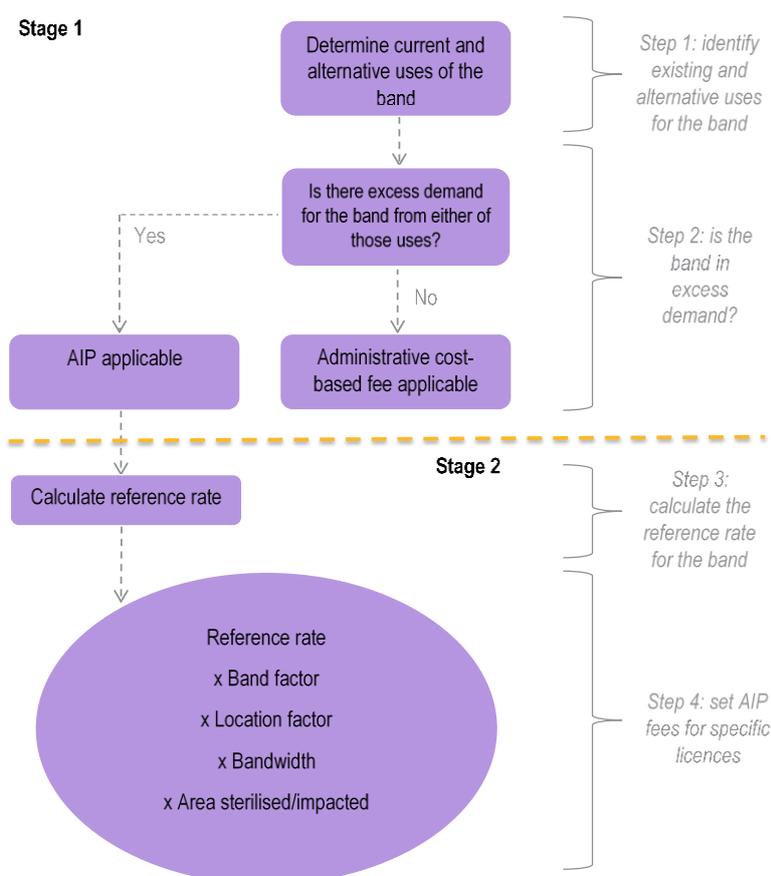
2 Spectrum fees in the UK

In the UK spectrum fees are now either based on cost-recovery principles or opportunity cost, depending on whether frequency bands currently, or might in future, experience excess demand from existing or alternative services.

- Cost-based fees are designed to simply recover the administrative costs that Ofcom incurs from spectrum management and award. In other jurisdictions, the costs to be recovered can include other costs of general regulation.
- AIP are designed to incentivise spectrum users to forgo their use of the spectrum where this is inefficient – that is, where other users would gain more value from the use of the spectrum (and would be willing to pay for it), whether these other users are in the same industry or not.

This approach to setting fees derives from Ofcom’s duty to secure optimal use of the radio spectrum. Ofcom formalised the approach, setting out principles and methodologies for calculating fees in its Strategic Review of Spectrum Pricing (SRSP).¹ The SRSP described four steps in setting AIP. A chart summarising these steps is reproduced in Figure 2-1.

Figure 2-1: Ofcom approach to setting spectrum fees



Source: Ofcom SRSP consultation, Appendix A

¹ Ofcom (2010): SRSP: “The revised Framework for Spectrum Pricing” from <http://stakeholders.ofcom.org.uk/binaries/consultations/srsp/statement/srsp-statement.pdf>

However, the decision to implement AIP fees has been more nuanced than suggested by this framework. The remainder of this section looks at the principles used when applying AIP fees or cost-based fees, and the next section examines the arguments against the unilateral application of AIP.

2.1 Principles of AIP fees

The following principles listed in the SRSP are particularly relevant to determining whether AIP should apply to spectrum used by TV broadcasting:

- **AIP principle 1: role of AIP:** AIP's role is to secure optimal spectrum use by providing long-term signals of the opportunity cost of spectrum.
- **AIP principle 2: when AIP should be applied:** AIP should apply to spectrum that is expected to be in excess demand from existing and/or feasible alternative uses, now and in future.
- **AIP principle 3: the 'relevant timeframe' to assess future demand for spectrum:** This is the timeframe to assess excess demand, congestion and feasible alternative use. It is a timeframe that reflects the typical economic lifetime of existing users' radio equipment.
- **AIP principle 5: role of AIP in securing wider social value.** Uses of spectrum that deliver wider social value do not, as a general rule, justify AIP fee concessions, because direct subsidies and/or regulatory tools other than AIP are normally more likely to be efficient and effective.

Applying Principles 1 and 2 to use of spectrum by broadcasters means it is necessary to show that broadcasters can respond to price signals over the long term and that the relevant frequency bands are congested. The latter is not in doubt, as there is unmet demand from both TV broadcasters and a variety of mobile services (such as public mobile and emergency services networks). The debate over the applicability of AIP to broadcasting has therefore focussed on whether broadcasters can respond in the long term to price signals. What constitutes the long term is not directly stated by Ofcom but it could be taken as the 'relevant timeframe' as given in Principle 3, namely the economic lifetime of existing users' equipment. Principle 5 appears to rule out any special treatment of broadcasting because of the wider social benefits arising from public service TV. Section 3 discusses Ofcom's application of these principles to broadcasting and other comparable services.

There are also two principles that provide guidance on the basis for setting AIP values, namely:

- **AIP principle 7 – use of market valuations:** Observed market valuations from auctions and trading alongside other evidence where available will be used when setting reference rates and AIP fee levels. However, such market valuations will be interpreted with care and not applied mechanically to set reference rates and AIP fees.
- **AIP principle 8 – setting AIP fees to take account of uncertainty:** Where there is uncertainty in the estimate of opportunity cost Ofcom will consider the risks from setting fees too high, or too low, in light of the specific circumstances.

The way these principles have guided recent AIP estimates for TV broadcasting spectrum produced for Ofcom is discussed in Section 4.

2.2 Principles of cost-based fees

Ofcom's approach to setting cost-based fees has only recently been clarified, in the sense that the spectrum management costs and the attribution of those costs to different TV broadcasters were first published in 2014². Ofcom's approach has been to set fees to fully recover its spectrum management costs and to only apply discounts where the cost of collecting fees is unduly high or where the fees are likely to result in a loss of wider social benefits or unfairly and adversely affect consumers or citizens. The cost-based fees paid per national TV multiplex are £188,000 per annum³.

² Ofcom (2014): 'Spectrum pricing – a framework for setting cost-based fees, a Statement'

³ See <http://stakeholders.ofcom.org.uk/binaries/consultations/cbfframework/statement/CBFstatement.pdf>

3 The application of AIP

Ofcom has applied AIP to congested frequency bands used by most services; frequency bands below 20 GHz are typically defined as congested in the UK. The main services that do not pay AIP in these frequency ranges are broadcasting, aeronautical and maritime radars and radio-navigation, and PMSE. Against each of these, Ofcom has considered the use of AIP against its general objectives, and in each case has found that there are significant reasons why AIP should not be applied.

This section first sets out the historical background to the application of AIP to broadcasting, and then considers Ofcom's general principles which must be followed when setting spectrum fees. It then looks at how these principles are applied in the broadcasting market, and the implications for the use of AIP.

3.1 Historical context

Up until 1998, spectrum fees in the UK (for all services and frequency bands) were loosely based on recovering the cost of spectrum management. This was the case for broadcasting, although some commercial broadcasters also paid Broadcasting Act licence fees that included an implicit charge for the use of spectrum. Such charges applied to analogue TV but not digital TV broadcasts which commenced in 1998.

In 1998, the regulator (the Radiocommunications Agency) introduced administrative incentive pricing (AIP) in congested frequency ranges used by cellular mobile, private land mobile and fixed link services⁴. In 2002 an Independent Review of Radio Spectrum Management⁵ recommended extending AIP (based on opportunity cost) to broadcasting⁶ and other services where use of auctions or trading was not likely to be practical (including satellite, defence and other public services).

The Government response to this Review agreed that AIP should be applied to all broadcasters⁷. The introduction of AIP was to take account of existing regulatory agreements between broadcasters and the Government and the Government's commitment to promote and support the take-up of digital TV. In practice this meant AIP would not be applied to spectrum used by analogue TV before 2006 and digital TV before 2010. The switchover from analogue to digital TV took place between 2005 and 2012⁸.

Ofcom put forward its initial ideas on the application of AIP to spectrum used by broadcasting in 2004⁹ and followed this with a more detailed consultation in 2006/7¹⁰. It concluded that in principle AIP should be applied to spectrum used by terrestrial TV but not until 2014. Ofcom undertook a further

⁴ Wireless Telegraphy Act 1998.

⁵ Cave (2002): Review of Radio Spectrum Management for Department of Trade and Industry and HM Treasury

⁶ Para 11.4, op cit.

⁷ Recommendation 11.4 and Paragraph 9 of Government Response to the Independent Review of Radio Spectrum Management 2002

⁸ Trials of switching off analogue TV signals started in 2005, with the main switchover programme occurring between 2008 and 2012. See DigitalUK (2012): 'Digital TV switchover 2008-2012, Final Report' from http://www.digitaluk.co.uk/_data/assets/pdf_file/0019/82324/DigitalUK_Switchoverfinal_report_Nov2012.pdf

⁹ 'Spectrum Pricing: A consultation on proposals for setting wireless telegraphy act licence fees', 29 September 2004

¹⁰ Ofcom (2006): 'Future pricing of spectrum used for terrestrial broadcasting, Consultation', and Ofcom (2007): 'Future pricing of spectrum used for terrestrial broadcasting, Statement'

consultation on the issue in 2013.¹¹ It proposed to apply only cost-based charges by the end of 2014 and postponed the application of AIP until around 2020.

3.2 Objectives of AIP

The starting point for considering possible motivations for applying AIP is Ofcom's statutory duty "to secure the optimal use for wireless telegraphy of the electro-magnetic spectrum." AIP is intended as a proxy for market prices and is not, for example, applied where spectrum has been allocated by auction. Ofcom, in the 2010 Statement on Spectrum Pricing, states that:¹²

"AIP's role in securing optimal use is in providing long-term signals of the opportunity cost of spectrum." (AIP principle 1)

"When discussing setting AIP fees to reflect the value of spectrum we have usually meant that these fees would be set at the price that would emerge in a well-functioning market. In a well-functioning market, the price of spectrum would be equal to the value of that spectrum in the next highest value use, rather than the value that the current user ..."

There are a number of caveats in relation to these principles:

- Legal, policy and physical constraints may prevent an otherwise efficient change of use. AIP may nevertheless provide long term signals, but the nature and implications of any constraints on efficient spectrum use should be considered in setting AIP.
- Pricing and trading may interact with AIP reducing the value attached to trading and therefore reducing the incentive to trade. Given that trading may provide a more dynamic signal of opportunity cost than a fixed AIP, administrative pricing should be applied more conservatively or not at all where trading is feasible.¹³
- Any estimate of opportunity cost is uncertain. AIP tends to be fixed for a time unlike many market prices and may therefore be set inefficiently high or low. It follows that if the economic costs of setting prices too high (non-use) outweigh the economic costs of setting them too low (potentially inefficient use) then AIP should be set conservatively relative to an unbiased estimate of opportunity cost.¹⁴
- In a well-functioning market the price of spectrum would only be revealed if the value of that spectrum in the next highest use was greater than the costs of clearing and releasing the spectrum, since otherwise no trade would occur.

These issues are addressed by Ofcom's AIP Principles 2, 4 and 8 (and related to this Principle 3) respectively. Ofcom also acknowledged these three points in the following statement:

"Where there is uncertainty in our estimate of opportunity cost, for example arising from uncertainty in the likelihood of demand for feasible alternative uses appearing, we will

¹¹ Ofcom (2013a): 'Spectrum pricing for terrestrial broadcasting, Consultation', and Ofcom (2013b): 'Spectrum pricing for terrestrial broadcasting, Statement'

¹² Ofcom (2010)

¹³ Plum Consulting (2009): 'Is spectrum pricing compatible with spectrum markets?' http://www.plumconsulting.co.uk/pdfs/Plum_July09_Is_spectrum_pricing_compatible.pdf

¹⁴ See Annex E of Indepen and Aegis (2007): 'Aeronautical and Maritime spectrum pricing' from <http://stakeholders.ofcom.org.uk/binaries/research/spectrum-research/aipreport.pdf>

consider the risks from setting fees too high, or too low, in light of the specific circumstances. When spectrum is tradable we will consider the extent to which trading is expected to promote optimal use, and will also have particular regard to the risk of undermining the development of secondary markets.”

“In determining feasible alternative uses, we will consider over the relevant timeframe, any national or international regulatory constraints...”

Ofcom’s AIP Principles 5 and 6, address the issue of whether AIP fee concessions may be justified by either the wider social value delivered by spectrum uses or a policy objective to promote innovation. Both principles are clear that in general concessions are not appropriate, for example, Ofcom states that¹⁵:

“Uses of spectrum that deliver wider social value do not, as a general rule, justify AIP fee concessions, because direct subsidies and/or regulatory tools other than AIP are normally more likely to be efficient and effective.”

Finally, Ofcom’s Principle 7 considers the role of market valuations in setting AIP fee levels and indicates that such valuations will be interpreted with care and not applied mechanically to set AIP rates. This issue is particularly important in relation to the alternative use value of spectrum used by broadcasters.

3.3 The use of AIP for broadcasting

Following the principles of AIP as set out in Section 2.1, and comparing Ofcom’s objectives with the mechanics of AIP as shown in Section 3.2, it may at first appear that there is a strong case for applying AIP to spectrum used by broadcasters. However, this is a market with many unusual factors, including large social welfare externalities, significant investments in consumer equipment, and a substantial additional value chain.

Therefore, in respect of TV broadcasting, the main arguments against the application of AIP are as follows.

- Broadcasters and multiplex operators face significant constraints on how they can use their spectrum and hence have limited flexibility to respond to incentive pricing. This will mean that the introduction of AIP by itself will not lead to efficient use of spectrum.
- There is a secondary market in multiplex capacity¹⁶ that means broadcasters and multiplex operators face the opportunity cost of spectrum and will respond as far as possible to the incentives this provides¹⁷. This means that even without the imposition of AIP fees, users will have the incentive to strive for efficient use of spectrum.

¹⁵ See also Section 2 of Indepen and Aegis (2005): ‘Study into the potential application of Administered Incentive Pricing to spectrum used for Terrestrial TV & Radio Broadcasting’ from <http://stakeholders.ofcom.org.uk/binaries/consultations/futurepricing/annexes/aipstudy.pdf>

¹⁶ That is, existing multiplex operators are able to sell capacity on their multiplexes to other broadcasters or even other multiplex holders, meaning that there is a more fluid market for capacity and allowing broadcasters to launch new channels, even temporary ones.

¹⁷ Evidence of trades in the period 2008-2013 is given in Aetha (2013): ‘Should AIP be applied to broadcasting spectrum? Report for BBC and Channel 4’

- The number of programme channels supported by each multiplex has increased significantly over time providing evidence that multiplex operators do respond to these incentives¹⁸. This proves that AIP fees are not required to meet Ofcom's objectives.
- AIP will reduce budgets for public service broadcasters' (PSBs) programming and this will be detrimental to viewers. Therefore, while there is likely to be no real benefit from the introduction of AIP fees, there is likely to be a cost to consumers.
- Broadcasters should receive discounts to AIP because of the social value they generate.

These arguments, along with Ofcom's responses, are detailed below.

3.3.1 Constraints limiting the scope for enhancing efficiency

When considering how broadcasters are able to react to AIP spectrum fees by increasing efficiency, it is useful to consider analogies to other industries. For example, aeronautical and maritime spectrum users face significant regulatory and technical constraints on changing their spectrum use in some bands. The constraints arise from international harmonisation and treaties specifying the use of particular bands, both at a European and a global level, and the fact that bands in the UK must support use by craft from all over the world. In addition use of some bands (including VHF communications and radar bands) is managed and co-ordinated at a European level for operational and interference management reasons.

Ofcom first proposed setting AIP to aeronautical and maritime spectrum use in July 2008¹⁹. It proposed applying AIP to bands used for VHF communications, and primary and secondary surveillance radars and radio-navigation systems. It also proposed that the Department for Transport should pay AIP for bands reserved for use by aeronautical and maritime users. At this time Ofcom acknowledged that

"...there are some aeronautical and maritime uses for which we are not proposing to set licence fees based on AIP, because we do not currently see an efficiency benefit from doing so. Examples are airborne-only radionavigation uses, and the allocations for EPIRBs and distress communications channels." Paragraph 1.21

In this case Ofcom recognised the importance of constraints on changing spectrum use and decided to apply AIP would only be considered after co-ordinated action had been taken that would allow the spectrum to be released for an alternative use.

There are strong parallels between the situation with changing spectrum use in bands allocated for radio-navigation and changing spectrum use in bands used by TV broadcasters. Any significant change in both cases requires co-ordinated action with neighbouring countries and European harmonisation measures for any spectrum released to be of significant value. This suggests AIP should only be considered after any plan to implement a change of use in the 700MHz band has been agreed at European level. Further, there are global harmonisation questions to be considered for some parts of the spectrum, particularly in VHF bands, which are currently not allocated to any other use.

¹⁸ The number of programme channels on DTT multiplexes increased from 32 to 46 over the period 2005 to 2012. Evidence of specific initiatives to increase the capacity of multiplexes is also given in Aetha (2013).

¹⁹ Ofcom (2008): 'Applying spectrum pricing to the Maritime and Aeronautical sectors, Consultation document'

Given this, the constraints on multiplex operators' ability to respond to price signals can be summarised to include²⁰ the following.

- Interference to and from TV transmissions outside the UK, in particular France, Belgium, the Netherlands and Ireland.
- Legislative and licence requirements in relation to the power and location of DTT transmitters that derive from the Geneva 2006 plan for TV transmission in Europe and bilateral agreements with neighbouring countries.
- Licence conditions governing technical aspects of transmissions (such as standards used, picture quality)²¹ and governing the use of multiplexes (including percentage of video versus data carried).
- Coverage and regional broadcasting requirements of both commercial and public service broadcasters (PSBs) – for example, PSBs must provide 98.5% population coverage.
- Obligations on PSBs to be receivable by almost all households. This means the PSBs cannot move away from legacy technologies (such as MPEG2 and DVB-T) until almost all viewers have adopted equipment that supports a new technology (MPEG4 and DVB-T2).
- Wireless Telegraphy Act licences held by multiplex operators are not tradable²².

Also multiplex licences that extend to 2022-2026, and contracts between channel owners and multiplex operators for TV transmission that extend to 2032, may also act as constraints on changes to spectrum use. While multiplex licensees can apply to Ofcom to change their licence conditions (including technical codes) stakeholders have stated that achieving minor changes can take several years because Ofcom is reluctant to approve any changes that have a negative impact on a relatively small number of viewers even if there are benefits for many more viewers.

From this, it is clear that there are significant issues that will constrain broadcasters and multiplex operators from increasing the efficiency of their spectrum use. For regulators where spectrum efficiency is a key objective, removal of some of these constraints is likely to have a much greater impact than the setting of AIP fees.

Ofcom's response

In its 2006/7 review Ofcom did not examine the impact of these constraints in any detail but rather asserted that in the long term broadcasters could respond to price signals by applying to Ofcom for changes in their licence conditions.

In the 2013 review Ofcom undertook a detailed examination of the possible efficiency gains that might be made by multiplex operators acting unilaterally. It found that these gains were negligible compared to those that might be achieved with platform-wide changes. The platform-wide changes required co-ordinated action by all multiplex operators and one or more of changes in multiplex or broadcaster

²⁰ These are also listed in paras 4.18 and 4.20 of Ofcom (2013a)

²¹ Ofcom's Television Technical Performance Code and accompanying Reference Parameters for Digital Terrestrial Television Transmissions in the United Kingdom, from <http://stakeholders.ofcom.org.uk/consultations/broadcast-tv-technical-codes/>; <http://stakeholders.ofcom.org.uk/broadcasting/guidance/tech-guidance/transmitter-frequency/>

²² In the UK spectrum licences are held by multiplex operators not broadcasters. The multiplex licences and their accompanying frequency licences can only be traded as a single package i.e. the frequency licence or a subset or the frequencies cannot be separately traded.

licence conditions, reduced access to TV services by late adopters of new technology, and changes to frequency assignments in neighbouring countries²³. Ofcom recognised these constraints made achieving efficiency gains challenging.

However, in the 2013 Statement it reiterated its commitment to the principle of applying AIP to spectrum used by terrestrial TV²⁴:

“Our overall policy remains that determined through the 2007 statement i.e. that spectrum used for broadcasting should be paid for in the same way as spectrum used for other purposes – and that AIP is an appropriate pricing mechanism. Though we note the opinions expressed by broadcasters, we remain of the view that AIP is intended to create on-going (long term) incentives for efficient use of spectrum. In publications since the 2007 statement, including the Strategic Review of Spectrum Pricing (SRSP) we have consistently emphasised this long term nature of the pricing incentives.”

Given the results of the 2013 review (which are set out in more detail in Section 4.2), it is impossible to state with certainty how Ofcom’s desires for a long-term efficiency incentive compare with the short-term difficulties that they recognise. However, it is clear that Ofcom acknowledges that the introduction of AIP will have a detrimental impact on broadcasters and some consumers in the short term, and as discussed below it is unclear how large long-term benefits actually are when reduced to incremental improvements in efficiency.

3.3.2 Existing incentives to maximise efficiency

Multiplex operators have incentives to maximise the efficiency with which they utilise existing spectrum given constrained spectrum availability and the opportunity to sell multiplex capacity. The constraint itself ensures that the multiplex operator faces the own use opportunity cost irrespective of whether or not spectrum is priced. An analogy which illustrates the point is to imagine three farmers – one who has inherited his land, one who purchased his land outright and one who rents his land. Assuming the focus is on their incentive to use their land efficiently, as opposed to buying or selling land at the margin, they are all motivated to produce the most profitable crop or livestock and to use their scarce input of land efficiently to maximise production irrespective of whether they inherited, purchased or rent their land. At the margin the extra revenue and profit from choosing the right produce, minimising costs and using land (or spectrum) efficiently are the same since the amount paid for land (or spectrum) is fixed. This argument is not dependent on a conclusion that the market is competitive since a profit motive to utilise scarce capacity efficiently would apply in any case.

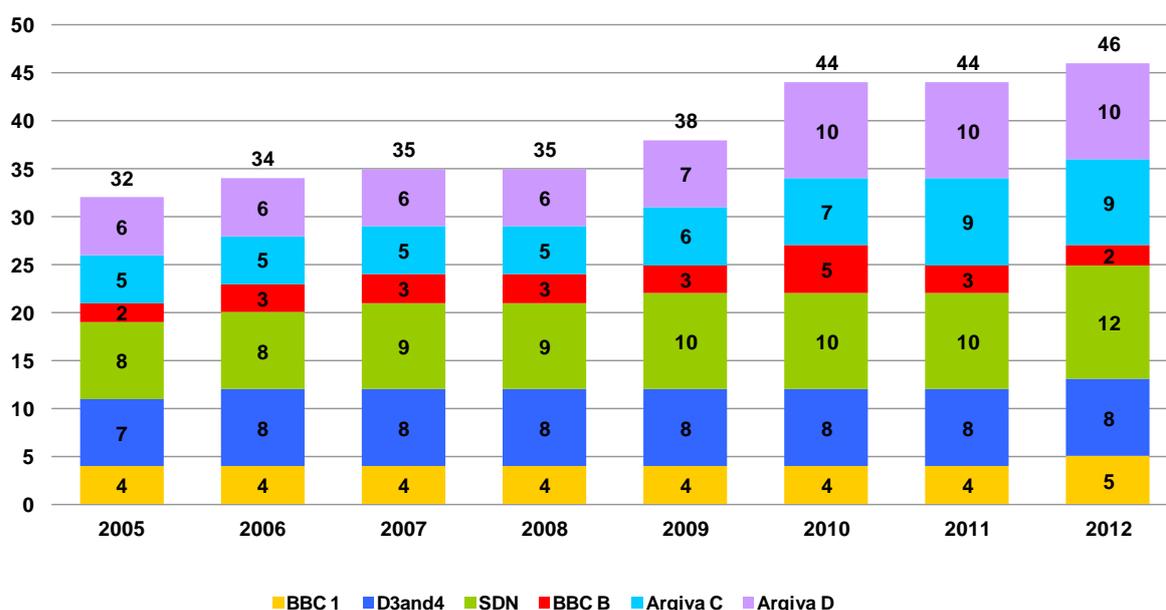
These existing incentives appear to be working in the UK. There is clear evidence that the wholesale capacity market is competitive, and that have been significant efficiency improvements. Evidence of competition in the wholesale market is given by programme channels switching amongst multiplexes. Further, looking forward over the remaining life of the multiplex licences (which run to 2026), Arqiva (and other terrestrial multiplex operators) will face growing competition from alternative platforms, including cable, satellite and a rapidly expanding footprint of fibre and VDSL and LTE from 2012/2013. The implementation of high efficiency video coding (HEVC) from 2013 on IP platforms will also intensify competition by halving the required bit rate for a given quality.

²³ Figures 4.1 and 4.2, Ofcom (2013a)

²⁴ Para 3.47, Ofcom (2013b)

Since Ofcom drew their conclusions on the efficiency of use of multiplex capacity in 2006, there has been a significant growth in the number of programme streams carried on multiplexes, which has increased by more than a third as a result of initiatives taken by the mux operators (see Figure 3-1). It needs to be recognised that implementing technology improvements can take many years, because of the regulatory approval process, and each multiplex operator faces different licence constraints on the changes that can occur. This is in part why change occurs slowly and at different rates on different multiplexes.

Figure 3-1: Number of programme channels for each DTT multiplex 2005-2012



Source: Arqiva

While incentives on multiplex operators that are also broadcasters are arguably weaker than those on Arqiva, all mux operators have increased the utilisation of their multiplexes, where policy has allowed. All of these changes have been driven by the desire to maximise utilisation of the scarce spectrum input which AIP (reflecting the own use opportunity cost) would not alter.

It is clear from this evidence, therefore, that the objective to increase spectrum efficiency is being met even without the introduction of AIP, and as a result there would be no real benefit from introducing AIP fees. On the contrary, as shown in Section 3.3.3 below, there are likely to be significant negative impacts from the introduction of AIP.

Ofcom's response

Ofcom does not address this point directly in their consultations or decisions. In 2007 Ofcom considered that the wholesale multiplex market was not sufficiently liquid or competitive to be operating efficiently²⁵. In 2013 broadcasters provided evidence of an active market in multiplex capacity. Ofcom's Statement noted this but went on to reiterate its commitment to the implementation

²⁵ Para 3.29, Ofcom (2007)

of AIP once broadcast multiplex operators are operating with long term licences and certainty of tenure over their spectrum holdings²⁶. Ofcom anticipated that this would be the case around 2020.

3.3.3 The impact of AIP on programming

Spectrum fees based on AIP are generally expected to be significantly higher than fees currently paid by multiplex operators (and indirectly paid by their customers the broadcasters). AIP will therefore reduce the money broadcasters have available for programming²⁷ which in turn will have a negative effect on viewers through a reduction in programme quality and the range of programmes broadcast. This is particularly true in the current economic climate and changes to the industry, as viewing patterns move to international content and alternative entertainment media.

This conflicts with Ofcom’s statutory duties in respect of broadcasting, for example “ensuring that a wide range of TV and radio services of high quality and wide appeal are available throughout the UK”²⁸. This has implications across other governmental departments as well; the Department for Culture, Media and Sport has identified British-produced television content as a key sector for policy in recent years.

Further, with increased competition for content rights from other platforms (in particular, from Virgin Media’s cable network, Sky’s satellite network, and BT’s IPTV platform), existing broadcasters will find it hard to compete commercially. This is particularly true for platforms such as BT’s and Virgin’s, where the television distribution can be subsidised by other services such as broadband or telephony. Increasing the cost of these broadcasters further will inevitably lead to lower funding of esoteric or socially valuable content, and may even make some of the smaller, more specialist, free-to-air channels uneconomic. Any closure of such channels, reducing consumer choice, will cause harm to social welfare.

Ofcom’s response

In considering AIP for spectrum used for broadcasting Ofcom has taken explicit account of the impacts of AIP on broadcasters programming budgets. For example:

- Ofcom’s 2007 statement on AIP and broadcasting noted that²⁹:

“If it seems likely that there could be material detriment to citizens or consumers from the effects of AIP on broadcasting output, there are a number of ways available to Ofcom, government and spectrum users to address this. For example, changes to regulation could be made, or additional public support made available, to ensure that the required output was safeguarded if this was thought necessary. Finally, as we made clear in the consultation document, these means could include potentially not introducing AIP, or levying it at a reduced rate, if this was necessary to ensure public service broadcasting requirements could be met.”

²⁶ Para 3.40 and 3.47, Ofcom (2013b)

²⁷ It should be noted that broadcasters tend to have little ability to increase revenues, which come either from advertising or from the licence fee – the competitive market for advertising in particular prevents any one channel or even platform from increasing rates.

²⁸ See <http://www.ofcom.org.uk/about/what-is-ofcom/statutory-duties-and-regulatory-principles/>

²⁹ Para 1.30, Ofcom (2007)

The 2007 Statement also noted that there were a number of policy and regulatory measures that could be adopted to mitigate the impact of AIP.

- In its report to the Secretary of State on the licensing of Channels 3 and 5 Ofcom states³⁰ that *“the application of AIP should take account of the potential impact on the ability of licensees to deliver public service broadcasting”*. Options for doing this include potentially not introducing AIP or levying it at a reduced rate if this was necessary to ensure that public service broadcasting requirements continued to be met.
- In its Statement on Licensing Local TV, Ofcom stated that³¹ *“an important issue with applying AIP to spectrum used for broadcasting is its potential impact on the ability of broadcasters to deliver against the specific conditions set out by Government and underpinned by the Local Digital Television Programme Services Order 2012. If it seems likely that this impact would be material, it will be important to consider any means by which this impact could be mitigated. We have stated previously that these means could include potentially not introducing AIP at the end of 2014, or levying it at a reduced rate if this was necessary to ensure that broadcasting requirements for local TV continued to be met.”*

In addition Ofcom has proposed phasing in AIP applied to spectrum used by broadcasting over a 5 year period to allow industry time to adjust to any increase in fees³².

Therefore, while Ofcom has accepted that the impact of AIP on programming budgets must be taken into account when determining the impact of AIP, it has suggested there may be other regulatory measures that could be taken to mitigate these impacts. The impact of these measures is, however, unproven.

3.4 Summary

This section has demonstrated that the driving force behind the introduction of AIP fees for broadcasting is Ofcom’s objective to promote efficient use of the spectrum. However, there is clear evidence that broadcasters and multiplex operators are already incentivised to use spectrum in an efficient way, and are increasing their efficiency over time. There are a number of regulatory, political and commercial issues which are preventing broadcasters from becoming more efficient, and Ofcom should look to address these (where possible) before introducing AIP. Finally, against this likely minimal benefit arising from AIP fees, there is likely to be a high cost to consumers due to lower quality and less socially-valuable programming.

³⁰ Para 6.97, Ofcom (2012a): ‘Licensing of Channel 3 and Channel 5, A report from Ofcom to the Secretary of State for Culture, Olympics, Media and Sport’

³¹ Para 3.160, Ofcom (2012b): ‘Licensing Local Television, Statement’

³² Ofcom (2013b)

4 A summary of Ofcom's decisions

Following a discussion of the key arguments against the use of AIP, Section 3.3 set out Ofcom's specific responses to those arguments. However, the reviews carried out by Ofcom in 2006/7 and 2013 examined the markets in much more detail, looking at impacts on the supply chain and consumers.

This section therefore outlines the overall statements given by Ofcom during its reviews in 2006/7 and 2013, which both recommended that AIP fees should not be introduced to the broadcasting market at that time. Following this, Section 4.3 considers how Ofcom's decisions may have changed by 2020, which has been set as the next possible review date.

4.1 The 2006/7 review

In 2006/7 Ofcom consulted on whether or not to apply AIP to use of spectrum by terrestrial TV services. Although Ofcom concluded that it was "*both practical and appropriate to apply AIP to the spectrum used for terrestrial broadcasting*"³³, it decided that AIP would be applied to digital TV from 2014 when new multiplex licences would be in place even though earlier Government commitments stated that AIP would apply to spectrum used by digital TV after 2010. Furthermore, AIP was not be applied to analogue TV broadcasts because Ofcom judged broadcasters already had sufficient incentive to migrate to digital TV in accordance with the government's switchover plan.

This delay in implementation was a strong indication that Ofcom felt that the introduction of AIP would cause a social welfare loss. However, Ofcom noted the following.

- Broadcasters can respond to the incentives provided by AIP over the longer term by coming to Ofcom with proposals for changes to licence conditions and technical regulations. This statement is intended to reduce the impact of the argument set out in Section 3.3.1, that there are a number of constraints on operators which prevent them from acting efficiently.
- AIP was beneficial because Ofcom and Government may respond by making more efficient policy and regulatory decisions³⁴.
- It was not clear that the secondary market in multiplex capacity was working effectively and, in any event, this does not reflect the opportunity cost of spectrum in alternative uses. This raises doubt as to the appropriate level of AIP fees.
- Any detrimental impacts on consumers or citizens (for example, through changes in programming) could be mitigated through other mechanisms. This issue was deferred to numerous forthcoming broadcasting policy reviews that would be undertaken by Ofcom or government.

It is clear from Ofcom's conclusions and actions that it was felt that it was not appropriate to apply AIP to broadcasting in 2007, but it recognised there was an existing commitment to apply AIP to all congested spectrum bands. Overall, Ofcom made a decision to postpone the introduction of AIP until 2014 at the earliest.

³³ Para 1.26, Ofcom (2006)

³⁴ Page 4, Ofcom (2007)

4.2 The 2013 review

In 2007 Ofcom had expected that by 2014 digital switchover would have been completed and TV broadcasters would not be facing the prospect of further major changes in their spectrum use. However, a decision at WRC 2012 had permitted the use of 700MHz for mobile broadband in Europe and Ofcom had stated in 2012³⁵ that it would support the harmonised release of 700MHz spectrum in Europe. As with digital switchover, the only way the 700MHz band could be released in the UK and co-ordinated with the release in neighbouring countries in Europe was through joint action by the broadcasting industry led by Ofcom and government³⁶.

This is the primary reason why Ofcom's 2013 review of the application of AIP to spectrum used by terrestrial TV concluded that the decision should be postponed again – this time to 2020, by which time 700MHz clearance should be largely complete. Ofcom proposed that cost-based fees (reflecting the costs of spectrum management) should be applied to spectrum used by terrestrial TV broadcasters by the end of 2014. These fees have now been applied.

Ofcom commissioned consultants to estimate a range of indicative values for AIP for broadcasting. The estimates were produced using a least cost alternative approach rather than any indication of market values. The implied values for annual fees ranged from £10m to £40m per national multiplex and were based on the costs that would hypothetically be incurred by multiplex operators to release a given amount of spectrum. It was assumed the multiplex operators would have to compensate consumers for any upgrade in equipment. This approach to calculating values was criticised by respondents to Ofcom's consultation on the grounds that the spectrum release scenarios underlying the calculations were unrealistic as they all assumed reactions to a loss of spectrum that would not be permitted under current regulation³⁷. Ofcom indicated that it would need to undertake fresh calculations if AIP were to be implemented in future³⁸.

4.3 What might have changed by 2020?

It is a matter of speculation as to how the spectrum environment for broadcasters in the UK might change over the next 4 years. Ofcom has noted that digital terrestrial TV (DTT) is the cornerstone for the provision of free to view TV in the UK due to wide coverage and low consumer equipment costs and expects DTT to be an important delivery technology for free to view TV over the next decade.³⁹

As shown in Figure 4-1 the DTT platform accounts for a relatively stable share of households – around 40%. If this situation continues, then any major changes to the platform that have negative impacts on numerous viewers, as is normally the case with the adoption of more efficient technology, are unlikely to be permitted by Ofcom.

³⁵ Ofcom (2012c): 'Securing long term benefits from scarce low frequency spectrum, UHF strategy statement'

³⁶ Government is to provide £550m subsidy and the clearance project is expected to be completed in 2020.

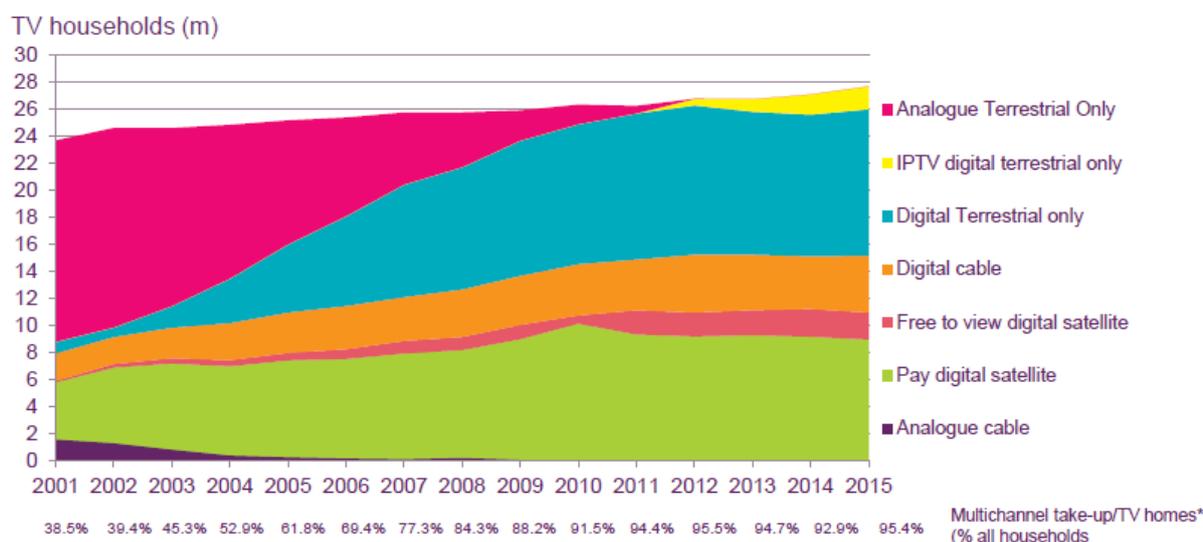
<https://www.gov.uk/government/publications/spending-review-and-autumn-statement-2015-documents/spending-review-and-autumn-statement-2015#investing-in-britains-future-1> and <http://stakeholders.ofcom.org.uk/binaries/consultations/maximising-benefits-700-MHz-clearance/summary/maximising-benefits-of-700MHz-clearance.pdf>

³⁷ Aetha (2013)

³⁸ Para 3.15, Ofcom (2013b)

³⁹ Ofcom (2014): 'The Future of Free to View TV – a discussion document'

Figure 4-1: Platform take-up in the UK 2001-2015



Source: Communications Market Report 2016, Ofcom

The following policy and market developments could also affect the situation:

- The status of 600MHz
 - The US 600MHz incentive auction will have been completed potentially giving clarity of the extent of interest in this band from mobile operators and the feasibility (or otherwise) of incentive auctions to refarm spectrum from broadcasting to mobile use.
 - The allocation of the band to mobile broadband may be considered at WRC 2023.
- The possibility moving to converged mobile broadband and broadcasting networks at UHF in Europe will be reviewed by 2025⁴⁰.
- The rate of mass market shift from DTT to IPTV which is dependent on availability and take-up of superfast broadband, take-up of IP capable consumer equipment and quality of experience.⁴¹

There will need to be considerable shift in viewing patterns, however, to minimise the impacts of lower quality programming and the possibility of a fall in the number of free-to-air channels over DTT. Unless there is a fundamental change in the way television is consumed, the arguments set out in Section 3 of this report would mean that the use of AIP for broadcasting markets would remain valid.

⁴⁰ See article 4 (use of sub-700 MHz) and article 6 (2025 review) of 'DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the use of the 470-790 MHz frequency band in the Union. COM(2016) 43 Final' from <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-43-EN-F1-1.PDF>

⁴¹ Ofcom (2014)

5 Conclusions

This report has examined the historical and current situation regarding the use of AIP fees in the UK broadcasting sector. The use of such fees has been reviewed by Ofcom twice in the last decade, and in each case the regulator has decided that there is no beneficial case for the introduction of such fees. We have set out Ofcom's arguments as to why these decisions have been made.

The primary objective for introducing AIP fees for broadcasting is to encourage the efficient use of spectrum. However, we have shown that there is evidence that UK broadcasters and multiplex operators are already improving the spectral efficiency of their operations even without the imposition of AIP fees – there exist multiple incentives for efficiency already. Further, AIP fees by themselves would not lead to efficiency, as there are many constraints on broadcasters' behaviour which prevent them from changing their use of spectrum, including international harmonisation, coverage obligations, and other licence conditions.

While it is uncertain that the introduction of AIP would lead to an improvement in efficiency (and therefore it is uncertain that it would help Ofcom to meet one of its objectives), it is clear that another of its objectives would be impacted – the production of high-quality content. In a rapidly changing market, where DTT broadcasters lack certainty over their long-term future, an increase in spectrum costs could make some channels and some types of content uneconomic. This would lead to direct harm to consumers.

Ofcom is committed to reviewing the market, to examine the possibility of AIP fees, by 2020. Given the changing marketplace and the continued importance of PSB in the UK, we believe there would need to be a significant change in costs or benefits for Ofcom to decide to introduce AIP at that stage.

Appendix A: About Plum Consulting

Plum Consulting is a world-renowned economics and engineering consultancy firm focussing on telecommunications, broadcasting and digital platforms, with a particular focus on the use of spectrum and the network infrastructure.

A London-based partnership founded in 2007, we work for governments, regulators, service providers and equipment suppliers around the world. Our partners and staff have extensive experience in spectrum policy work, including the award and allocation of spectrum for mobile telecommunications, the impact of spectrum sharing on incumbent users, and the impact of different spectrum fees. We have worked for Arqiva in the UK, advising on the potential impact of AIP fees on broadcasting spectrum use, and for the GSMA on the efficient use of spectrum for broadcasting across the Middle East.

We publish white papers on cutting-edge policy and strategy, and participate in conferences and seminars around the world to promote our thought leadership. Our recent work and studies can be found on our website at <http://www.plumconsulting.co.uk>