



Australian Government

Department of Infrastructure and Regional Development

Acting Deputy Secretary

Contact: Charles Hausknecht, (02) 6274 6612

Mr Ian Robinson
Deputy Secretary – Infrastructure and Consumer
Department of Communications and the Arts
38 Sydney Avenue
FORREST ACT 2603

Dear Mr Robinson

Ion

Spectrum Reform Consultation Package

I am pleased to provide a copy of the Department of Infrastructure and Regional Development's (the Department) submission in response to the Department of Communications and the Arts' (DoCA) suite of consultation papers on spectrum reform. The Department has prepared this response in consultation with our portfolio agencies.

The Department's submission is attached and responds with comments on a number of the draft proposals put forward in the consultation papers, where relevant to the Infrastructure and Regional Development portfolio, namely:

- the Exposure Draft of the new Radiocommunications Bill 2017;
- the consultation paper: *A proposed approach to transition from the 1992 Act to the Radiocommunications Bill*;
- the consultation paper: *Spectrum Pricing*; and
- the consultation paper: *Commonwealth Held Spectrum*.

The Department has no specific comments in relation to the Consultation Paper *Broadcasting Spectrum*, nor the draft proposals canvassed in that paper, at this time.

I would highlight that several submissions provided by this Department since the second half of 2014, responding to the various consultation papers on spectrum review and reform, remain relevant to the development and implementation of spectrum policy, legislative and management framework initiatives over the short, medium and long-term.

The Infrastructure and Regional Development portfolio plays an integral role in driving national infrastructure priorities to enhance the safety, security, efficiency, capacity and sustainability of Australia's transport systems.

However, spectrum is not just an essential enabler for our national transport network, but is necessary for the interoperability and harmonisation of communication, navigation and surveillance (CNS) capabilities critical for safe and efficient international transport operations.

Australia has international obligations as a signatory to several international agreements, which rely on spectrum continuity to protect specific spectrum bands, supporting globally compatible systems, frameworks and standards, e.g. through membership to the International Telecommunication Union (ITU), the International Maritime Organisation (IMO) and the International Civil Aviation Organization (ICAO).

This responsibility is often undertaken not solely in cooperation domestically with state, territory and local governments but also internationally, including with our Asia-Pacific regional partners.

The key strategic policy issue for the Department remains the need for Government to ensure the continued security and continuity of access, and protection of spectrum for all transport modes (road, rail, maritime and aviation), to ensure that significant public good and safety-of-life functionality in the delivery of transport services is not compromised or at risk.

We consider that public good, safety-of-life and international obligation requirements should be recognised explicitly in the proposed primary legislation, and reinforced in relevant subordinate legislative instruments (e.g. through inclusion in a Ministerial Statement).

In providing our submission, we recognise that the legislative and policy reform initiatives proposed in the suite of spectrum consultation papers identify a substantial future work program, particularly for the Australian Communications and Media Authority (ACMA), which will need to be progressed in close cooperation with relevant Commonwealth agencies and other stakeholders.

We support a staged or phased approach to progressing spectrum reform, given the substantial work expected to be involved.

We will continue to cooperate closely with DoCA, ACMA and other relevant agencies to progress reforms, including through the work program of the proposed Government Spectrum Steering Committee.

The contact officer for the Department continues to be Charles Hausknecht, Director, Air Traffic Infrastructure, Air Traffic Policy (Phone: (02) 6274 6612; Email: Charles.Hausknecht@infrastructure.gov.au).

Yours sincerely



Pip Spence

2 August 2017

Infrastructure and Regional Development comments on Spectrum Reform consultation papers

Exposure Draft of the new Radiocommunications Bill 2017

The Department generally supports the approach to reforming the *Radiocommunications Act 1992* and using the policy and governance framework, to improve the efficiency, effectiveness and transparency of spectrum management and utilisation. The Department notes that modernising the current legislative framework is required as part of that process, to remove prescriptive processes and to streamline licensing and spectrum allocations as appropriate.

Preliminary (Part 1)

The Department generally supports the simplification of objectives proposed in the Exposure Draft of the Radiocommunications Bill 2017 (the Draft Bill).

As indicated in our earlier submissions to the spectrum review and reform process, a significant issue for all modes of transport – road, rail, maritime and aviation – is security of access and protection of spectrum to ensure that significant public good and safety-of-life outcomes in the delivery of transport services are ensured, including where Australia has international obligations to protect spectrum.

Notwithstanding that government spectrum holdings have to be robustly justified through an appropriately transparent vehicle - such as the biennial reporting proposed in the Consultation Paper *Commonwealth Held Spectrum* - we consider that the above three criteria (public good, safety-of-life and international obligations) should be highlighted by identifying them explicitly in the proposed Draft Bill.

Our preference is for this to be recognised in the primary legislation, directly in the Objectives Section of the Draft Bill and, as appropriate, in the Definitions Section.

Ministerial Policy Statements (Part 2)

The Department supports the issuing of clear Ministerial Statements, including the issuing of a Statement of Expectations (SOE) to ACMA, as effective vehicles for clearly enunciating whole-of-Government policy and expectations.

The Department also supports the proposal for Ministerial policy statements being developed prior to commencement of new legislation, given their fundamental importance in establishing the spectrum management legislative, policy and governance framework.

In addition to the subjects for Ministerial policy statements canvassed in the Information Paper *Radiocommunications Bill 2017: a platform for the future*, and our comments on Ministerial policy statements in the covering letter to this submission concerning recognition of public good, safety-of-life and international obligations, the Department would welcome a Statement or Statements addressing the following:

- the need to take account of impacts on Australia's regional and remote communities in formulating the Government's national and international approach to management of spectrum;
- the principles the Government expects to be applied in a whole-of-government approach to spectrum allocation and management, emphasising the need for detailed consultation processes between Commonwealth portfolios; State, Territory and local Governments; industry; and the community, before significant spectrum policy proposals are presented to the Government for consideration; and
- in addition to realising the Objectives included in the Draft Bill (once enacted), the need to apply criteria such as safety, security and sustainability measures in assessing future spectrum policy and management priorities for Government consideration.

The Department also recognises that further Ministerial policy statements may also result from work undertaken by the Government Spectrum Steering Committee proposed in the consultation paper *Commonwealth Held Spectrum*, and that as an alternate to inclusion in dedicated Ministerial policy statements, some of the above matters may be more appropriately reflected in the Ministerial SOE to ACMA.

ACMA's work program (Part 3)

The Department notes that ACMA currently publishes a Five-Year Spectrum Outlook (FYSO), which contains information about the ACMA's work program over that time period, as well as providing an overview of the ACMA's spectrum management priorities over the short- to medium-term, and the ACMA's plans to address them.

The Department supports the development of an annual work program by ACMA, to outline in a very public and transparent way for stakeholders, the strategic activities the authority will be undertaking and how ACMA intends to take forward work identified in any Ministerial policy statements and the SOE issued by the Minister.

In relation to the operation of this proposed Part, DoCA should consider whether the Government Spectrum Steering Committee proposed in the consultation paper *Commonwealth Held Spectrum*, should be given the opportunity to comment on the annual work program prior to finalisation.

Meaningful annual reporting on progress should be seen as the norm, and could also be expected to cover ACMA reporting on progress against their Statement of Intent (and by default, the Minister's SOE) and how any Ministerial policy statements have been addressed.

Radiofrequency plans (Part 4)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Operation of radiocommunications devices (Part 5)

Licences (Part 6)

Spectrum authorisations (Part 7)

The Department notes that the transition from the current spectrum, apparatus and class licences arrangements to a single licensing system and spectrum authorisations, represents probably the most significant operational change for stakeholders under the proposed new legislative framework and will need to be carefully implemented.

The Department agrees that a licensing system defined in part by conditions on licences and by designated statements will provide for more effective responses to new technology and spectrum demand.

The Department supports both the price-based and administrative pathways to a licence and the Department and portfolio agencies expect to work closely with ACMA as necessary in progressing consideration of relevant spectrum bands as that work is taken forward.

In relation to aviation, the operation of some aeronautical radiocommunications and navigational equipment fixed to, or carried on-board aircraft and certain ground-based aeronautical stations, is authorised under the radiocommunications (aircraft and aeronautical mobile stations) class licence. Part 7 of the Draft Bill explains that class licences will, at commencement of the main provisions of the Draft Bill, transition to spectrum authorisations with similar conditions to the existing class licences.

Airservices Australia (Airservices) has advised of their support for this approach, noting that the spectrum authorisations for aeronautical systems will require protection as they are safety related.

The Department notes that the Draft Bill is unclear on the issue of whether aeronautical systems that are licensed under spectrum authorisations are afforded protection and consequently we seek clarification of this issue from DoCA and/ or ACMA.

The Department has some concern with the ACMA adopting 'spectrum space' licences and private band management when developing the new licensing system (i.e. shifting away from the current relatively high levels of centralised control of spectrum access to a more decentralised approach).

In relation to aviation and maritime, Airservices and the Australian Maritime and Safety Authority (AMSA) could be seen as potential private band managers for bands used by aeronautical and maritime services, but in practice these agencies may not have the resources to effectively manage and coordinate the spectrum use in these bands without building that capability, the costs of which would be borne by industry under the current cost-recovery arrangements applying to their respective sectors.

The proposed staged approach to migrate from the apparatus licensing system to the single licensing system is sensible and is supported. In this respect, the AMSA and Airservices look forward to working with ACMA on the development of the proposed replacement licences and spectrum authorisations for their existing apparatus and class licences; progression of this work should ideally start well before the enactment of new legislation.

Certified operators (Part 8)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Interference management (Part 9)

The Department notes that the existing arrangements work reasonably well, and considers that a core function of ACMA should continue to be enforcement of regulations and interference resolution, to protect legitimate spectrum licensees from harmful interference.

The Department supports the proposal in Part 9 of the Draft Bill that simplifies the legislative arrangements relating to resolving interference disputes, including a process requiring parties to initially seek to resolve interference issues between themselves, with the provision for graduated escalation to ACMA as the regulator to resolve the issue in a timely manner.

The Department notes that ACMA proposes to develop guidelines to assist licensees and other users resolve their interference disputes. Ideally, these guidelines should be developed through stakeholder engagement and public consultation before the commencement of the new legislative framework.

The Department would also support ACMA continuing to play a role in investigating, as a priority, interference complaints that impact safety-of-life services and other safety-based systems, e.g. the aeronautical communications, navigation and surveillance (CNS) systems, including the Global Positioning System (GPS), which fundamentally support effective air navigation services provision in Australia.

Providing interference investigators with greater regulatory powers is supported, and will assist agencies such as Airservices, although it is important that timely assistance from ACMA will still be provided when needed.

Equipment (Part 10)

The Department supports the introduction of equipment rules that will prevent devices entering the market that are likely to cause interference or harm to human health, and to mitigate the risk from harmful equipment that has entered the market. A transition period will be required where suppliers are able to choose to comply with either the existing equipment regulation arrangements or the proposed equipment rules under the new legislative framework.

Emergency orders (Part 11)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Accreditation (Part 12)

The Department supports the inclusion of provisions in the Draft Bill to provide for expanding the use of accreditation arrangements by the ACMA, including accreditation of companies to undertake frequency coordination activities; and expansion of accreditation arrangements to support other spectrum management activities.

Again, proposals to devolve or delegate band/ spectrum management to facilitate private sector spectrum management (including of spectrum currently held by Government agencies) need to be tempered by the understanding that agencies will not necessarily have an existing capacity to execute that role and will need to build the required capability.

For example, depending on scope, Airservices may not have a capacity internally to execute additional accreditation arrangements, such as management rights, and may engage external accredited persons (APs) instead. Airservices currently has two APs that provide frequency assignment certificates (FACs) for systems operating in aeronautical bands - specifically the VHF aeronautical communications band. However, Airservices already use external APs for non-aeronautical service assignments.

Application of this part would need to be undertaken on a case-by-case basis as there is a risk that this approach may simply result in cost-shifting to other agencies from ACMA (costs which would then be passed directly to industry given the cost-recovery arrangements for Airservices) without providing a more effective, efficient and appropriate administrative solution.

Industry codes (Part 13)

The Department has no specific comments regarding this Part of the Draft Bill.

Information gathering powers (Part 14)

The Department supports providing ACMA with sufficient data collection powers to ensure it is able to carry out, efficiently and effectively, the legislated responsibilities proposed in the Draft Bill.

Enforcement (Part 15)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Spectrum access charges (Part 16)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Delegation (Part 17)

The Department notes that our comments provided on *Accreditation* (Part 12) above are also relevant to *Delegation* provisions.

Review of decisions (Part 18)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Provisions extending the concept of radiocommunications (Part 19)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Exemptions (Part 20)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Miscellaneous (Part 21)

Noted - the Department has no specific comments regarding this Part of the Draft Bill.

Consultation paper – A proposed approach to transition from the 1992 Act to the Radiocommunications Bill

General comment

The Department notes that ACMA intends to undertake further stakeholder consultation as it designs and settles its approach to give effect to the new legislative and policy framework.

The Department supports the principles for transitional arrangements specified in the consultation paper, and emphasises the need to mitigate disruption to stakeholder operations during transition. The Department would also like to highlight the need for ACMA to continue to work closely with the relevant transport portfolio agencies, including AMSA and Airservices to ensure an effective transition.

Proposed approach

- 1. What are the major issues to be addressed in designing the transitional arrangements?*
- 2. Are there other approaches to transition that could be considered?*
- 3. Are there other measures that would reduce complexity during transition?*

The Department supports the proposed “hybrid” approach to implementing a new legislative and operational framework, as it provides a practical solution to transition over several years, particularly given the expected magnitude of work required to put the proposed changes in place.

The main issue to be addressed in planning the proposed transition will be to ensure continuity between the old and new arrangements (i.e. no disruption to stakeholders operations due to transition); that stakeholders understand the timing, new legislative and regulatory arrangements and their roles and responsibilities during and after transition; and that there are no significant additional costs to industry/ spectrum holders either during transition nor as a result of changes at the end of the reform process.

The proposed stepwise change, which would see licenses come under the new framework as they expire and are considered for renewal, may allow stakeholders to familiarise, migrate and adjust incrementally to the operation of the new framework over an appropriate time-period rather than try to cope with a single significant operational change all at once.

A stepwise change process should better support resolution of single or small numbers of implementation problems as they emerge, compared to a single substantial change that may see ACMA having to resolve multiple significant issues simultaneously.

Consistent with this, we see it as important in being able to provide sufficient detail and clearly articulate the main elements of the transition and mechanisms for dealing with specific operational policy issues, to guide stakeholders through transition/ implementation.

This will be particularly important to mitigate against significant potential and unforeseen cost impacts emerging for portfolio agencies, industries and other stakeholders.

Proposed implementation

- 4. Should the Australian Radiofrequency Spectrum Plan be revised at commencement, or should it be considered “to be made” under the new arrangements/Bill?*
- 5. Are there any existing legislative band plans that should be remade at commencement?*
- 6. How should the transition to equipment rules occur? Should equipment rules start at commencement or should they be staged over time? Why?*
- 7. Are there other elements of the new legislation that should start at commencement?*
- 8. Are there any elements proposed to start at commencement that should be staged over time? Why?*

Whether a new Australian Radiofrequency Spectrum Plan (ARSP) would need to commence at enactment would depend on whether there were strong legal, policy or governance drivers requiring that to occur. For example, as the ARSP is reviewed on a regular basis and updated *inter alia* in response to the Final Acts of ITU World Radiocommunication Conferences (WRC), final decisions on timing for a new ARSP would need to be cognisant of the timing and expected magnitude of any outcomes from WRC-19 impacting Australia’s spectrum planning.

In the absence of legal impediments, consideration could be given to either rolling over the existing Plan or, as an alternative, for ACMA to develop a transitional plan addressing the required elements of the new legislative framework.

The Department supports a staged approach to transition unless there are legal impediments to doing so, and a staged/ incremental approach to implementing equipment rules may provide a better strategy in relation to managing a large number of stakeholders through the transition process, as long as it does not impose additional cost burdens on their operations.

Licensing

- 9. When should the work program for transition be available? What criteria should be used to determine which licences should transition when and in what order?*
- 10. Is 12 months notification for licence transition sufficient?*

The work program for transition should be available to stakeholders well before implementation, to enable stakeholders sufficient time to understand the planned changes, and to plan and affect any changes they need to make to ensure their operations are compliant with their obligations under the new arrangements.

ACMA should develop a clear work program and provide at least 12 months notice of when user licences would be required to transition to the new system. This will be especially important if new pricing arrangements are to be applied to the new licence.

Class licences

- 11. Should class licences become spectrum authorisations at commencement? Why/why not?*
- 12. Are there any existing class licences that should not transition to spectrum authorisations upon commencement because of interdependencies with existing apparatus licences?*
- 13. Should any interdependent class licences become spectrum authorisations as at commencement or remade as spectrum authorisations when the related apparatus licences are transitioned to the new licence system?*

Noted - the Department is not aware of any issues with the proposal that class licences transition to spectrum authorisations at the commencement of the new proposed Radiocommunications Bill.

Spectrum licences

- 14. If considered a licence under the new Act, are there any elements of an existing spectrum licence that would be adversely affected?*

Noted - the Department has no specific comments regarding this Part.

Transition of existing licence types

- 15. Should licences be grouped to transition? If so, how (e.g. by category/ band/ combination)?*
- 16. What is the appropriate duration of licence replacement windows?*
- 17. Do you have any other comments regarding transitional arrangements?*

The Department notes that ACMA has indicated in its supporting paper on the licensing system that it is considering the use of 'replacement windows' for transition of apparatus licences, with licenses being grouped together to be transitioned during the relevant timeframe.

The Department understands that grouping would be done either by licence category, by band, or by a combination of category and band based on consultations after the Bill has received royal assent.

In this respect:

- Airservices supports the grouping of Aircraft/Aeronautical licences in Group D for transition after 4 years, and
- AMSA supports the grouping of Maritime licenses in Group B for transition within 2 years, noting the proposal for 'spectrum space' licenses may complicate this transition.

Consultation Paper – Spectrum Pricing

General comment

The Department does not support market-based pricing of spectrum in all circumstances, particularly where there is a fundamental and demonstrable public good or national safety and security benefit, or where there are national obligations to international conventions, frameworks and standards.

Competition and a market-based pricing approach for commercial use may drive efficiencies in use of the spectrum allocated for commercial purposes and incentives could be developed to capture further efficiencies in commercial uses.

This is not necessarily true of spectrum supporting significant functionality in the public and community domain, including safety-of-life functions, where application of a market-based pricing approach may compromise safety outcomes within the national, regional and global framework.

For example, the Department would not support a market-based approach to public good users such as aviation.

Aviation spectrum is required to meet operational and safety requirements that are coordinated and harmonised within both a national and international framework. The safety frequencies are implemented to support approved services in relation to the specific nature of the operational environment. As a result, there is little flexibility to make changes to frequency requirements without jeopardising their operation.

Charging arrangements are therefore unlikely to deliver any efficiency benefit within the aeronautical bands. Efficiency improvements need to be managed and sought in an international context, so that changes are coordinated in a safe and efficient manner.

Allocation decisions

1. The ACMA should publish guidelines on how it approaches its spectrum pricing decisions.

The Department supports the incorporation of clear statements in the current framework regarding ACMA's approach to spectrum pricing decisions, including the publication of guidelines, as essential to demonstrating a high degree of transparency regarding Government decisions on spectrum pricing.

In this context, the Department would also support clear statements concerning what spectrum bands are out of scope in relation to availability for commercial allocation and why that is the case (e.g. spectrum protected because it enables significant public good, safety-of-life functionality and emergency services, including where Australia has international obligations to protect spectrum).

The Department notes that criteria may need to be developed to demonstrate the case for protection of such spectrum bands, and that this matter may best be considered as part of the work plan of by the Government Spectrum Steering Committee proposed in the consultation paper *Commonwealth Held Spectrum*.

2. To ensure efficient use of spectrum, the Government and the ACMA should endeavour to charge users of similar spectrum at the same rate.

The application of horizontal and vertical equity principles to spectrum charging would appear reasonable at a broad conceptual level. However, the Department requests clarification regarding what is specifically meant by the term “similar spectrum” in addition to determining when the use of spectrum is considered “inefficient”.

The approach proposed will be problematic for Government providers of public services.

For example, if a safety service operated in a band adjacent to where spectrum is licenced for commercial services, it would be unreasonable for a provider of the safety service to pay the same rate as the commercial user pays in the adjacent band. The commercial service may be able to pay a premium for licences, as they plan to derive an income from them, whereas this is not the case for safety services which provide a specific social and/ or benefit with potentially limited financial return.

Consequently, this licence pricing approach will not provide incentives for efficient use of spectrum as the public service provider may have no other option other than to provide the safety service.

Ultimately, a strong evidentiary basis would be critical for any serious future consideration of this approach, supported by the application of one or more sets of clear and robust criteria to support assessments and decisions, on a case-by-case basis.

3. Bespoke pricing arrangements will sometimes be necessary. Where spectrum fees are determined other than by auction or by the administered pricing formula, the ACMA, or the Government where it directs the ACMA on pricing, should publish the reasons for this decision.

The Department agrees that bespoke pricing arrangements, where applicable, will be necessary - to ensure issues such as safety-of-life and public good outcomes, international obligations, and the operation of national platforms are taken account of in any charging decisions - as fees determined by auction or the administered pricing formula may not always be appropriate.

For example, in respect of passenger rail, the current State licences were purchased at a 50 percent discount, to recognise safety and the public good that train control systems provide. We would like to continue to ensure that legislation allows for discounts to be provided where a public good is identified and a discount is considered appropriate.

As a more general comment, the Department would strongly support the publication of a statement of reasons for all significant decisions by ACMA, including on pricing.

Market-based allocations

4. The ACMA should further identify bands to transition from administratively set fees to competitive market-based allocations in its annual work program.

5. In setting reserve prices, the ACMA and the Government should consider the influence of the reserve price on competitive behaviour, and the scope for price discovery through upward movement toward the market value of the spectrum.

6. For spectrum access charges determined by auction, the ACMA should generally require upfront lump-sum payments. There may be circumstances where instalment payments are warranted shortly after the beginning of a licence term. In considering use of instalments, the ACMA should assess the risks to the state of default and the potential impact on competition.

The Department does not support complete adoption of a “highest bidder” policy approach to spectrum allocation and management in the future.

Specifically, the application of competitive market-based allocations for systems providing a public service, particularly a safety service, is not supported.

Specific users must be able to have allocated, and obtain access to, the appropriate parts of the spectrum to deliver public good functions particularly where these are critical to demonstrated safety-of-life functions. For example, aeronautical and maritime use of spectrum is subject to international legislation, which limit or neutralise the effectiveness of market mechanisms.

Any fundamental changes to the allocation and management of spectrum must be introduced in a way whereby the necessary safety and security controls and functions are not lost, have a cognisance of the long-term investment cycles of transport infrastructure, and take into account the ability of the transport sector to safely and efficiently transition to a new arrangement.

Administered allocations

7. The ACMA should undertake a detailed review of the administrative pricing formula’s parameters, including density areas, the number of pricing bands, and the number of power categories. The ACMA should implement regular updates to the location and band weightings to reflect changes in density, demography and demand.

The Department supports ACMA reviewing the administrative pricing formula’s parameters, which would need to be undertaken in close consultation with stakeholders.

The review could also examine the opportunity for including additional parameters, for example the extent to which the pricing formula might reward the deployment and use of spectrum efficient technologies or limit the extent of spectrum denial to other users.

8. The ACMA should apply opportunity cost pricing to a greater number of spectrum bands, especially where it is impractical to competitively allocate spectrum. This work should be identified in the ACMA's annual work program. The ACMA should consider more time effective approaches to implement these, and review fees as market conditions change over time.

There should also be clear recognition of the need to provide certainty and in some cases protection for certain incumbents and/or continued functionality, which may limit the application of a fully flexible commercial spectrum allocation approach.

In developing a valuation of spectrum allocation for different uses, commercial value on public good functions will need to overcome significant sensitivities and a degree of subjectivity in placing dollar values on these functions, which is fundamentally difficult. This is due primarily to the economic/social benefits of spectrum use often extending far beyond the sector in which it is used.

Bespoke pricing arrangements may provide a better option, in cases where pricing of spectrum supporting some public good outcomes and or national platforms functionality, is practicable.

The Department does not support the application of opportunity cost pricing (market-based) for spectrum utilised for safety-of-life or public good outcomes, e.g. for aeronautical CNS systems.

Opportunity cost pricing is aimed at incentivising a more efficient use of spectrum but, again using the aviation example, it is not apparent such pricing will improve efficiency of the delivery of critical and essential air navigation services.

International and technology specifications mean that there is currently limited scope to provide aeronautical radar, navigation and communications services through alternative technologies. Further, even if new technology was available it would take significant time to re-equip the aviation industry, and the costs of doing so, in addition to any costs for spectrum, would be passed on to industry and the flying public.

We strongly support any work on this matter to be clearly identified and detailed in ACMA's annual work program.

Legislative and cost recovery framework

9. The Government should consolidate the three existing spectrum tax Acts into one tax Act. The ACMA should continue to have the power to make determinations on the amount of tax under this Act. There should be no changes to the direct charges framework. In addition to the consolidation of the tax Acts, provisions of the separate Radiocommunications Taxes Collection Act 1983 and the Radiocommunications Taxes Collection Regulations 1985 should be consolidated with the remaining legislation.

Noted - the Department has no specific comments regarding this Part.

10. The apparatus licence taxes and spectrum licence spectrum access charges should be combined into a single spectrum access charge. This existing apparatus licence tax formula should become the administered incentive pricing formula and should dictate the price paid for administered prices under the spectrum access charge. This formula would be adjusted to remove the minimum tax constraint.

Noted - the Department has no specific comments regarding this Part.

11. The spectrum licence tax and the minimum tax constraint of the apparatus licence taxes should be subsumed into one radiocommunications licence tax. The ACMA may choose to set the amount of this tax to cover where the spectrum access charge would not otherwise recover the costs of managing the spectrum. The ACMA should continue to recover direct costs through charges. The ACMA should explore if there are any additional costs that can be recovered through the direct cost mechanisms.

Noted - the Department has no specific comments regarding this Part.

Consultation Paper – Commonwealth Held Spectrum

General comment

The Department supports the development of whole-of-government mechanisms to ensure Government spectrum holdings are managed efficiently and effectively, with a high level of transparency.

The Department would welcome future Ministerial policy statements that certain, essential safety and dedicated transport spectrum bands should not become at risk from being potentially allocated to other users.

Clear recognition of the need to provide certainty and in some cases protection for certain incumbents and/or continued functionality, will be an important aspect of future work around Government spectrum holdings.

This recognition will need to be based on a robust framework addressing the question of how the public good role of the spectrum for certain users might be assessed, considered, recognised and protected in the future policy approach and management framework.

The Department would strongly support the development of a framework to consider public interest spectrum issues, on the premise that spectrum, particularly bands supporting safety-of-life and emergency services functions are not compromised in favour of specific commercial interests.

There would also be benefit in clearly defining what is meant by the term “public interest” spectrum and developing a supporting assessment methodology, including criteria, to support a robust decision framework.

The framework would also need to be able to reflect Australia’s statutory commitments to meet particular national, regional and international transport obligations and commitments.

In particular instances global allocations are required for safe, efficient and cost-effective transport and provide a fundamental tenet for global and regional harmonisation with other benefits for Australia, including not imposing unnecessary costs on industry through applying different standards to those applied in the global marketplace.

For example, aviation spectrum use is well established with specific frequency allocations for the various types of equipment being operated (e.g. voice communications, air traffic control radar systems, radio frequency navigation aids). The Civil Aviation Safety Authority (CASA) has no scope to vary the allocated spectrum and has minimal approval requirements for this equipment and relies on being able to accept equipment approvals from recognised National Airworthiness Authorities (e.g. by the US Federal Aviation Administration) removing the need for re-approval in Australia.

Australia also has a policy to harmonise its vehicle standards with international standards developed through the World Forum for the Harmonisation of Vehicle Regulations where possible, many of which are based on European standards but are also widely applied by automatic trading partners in Asia as this helps facilitate international trade in motor vehicles.

1. A strong governance framework

Establish an advisory committee comprising relevant Commonwealth government agencies to provide advice to the Minister for Communications on issues of spectrum policy and identify and implement whole-of-government efficiency improvements that will deliver and enhance the management of Commonwealth spectrum holdings.

The Department supports the establishment of a Government Spectrum Steering Committee (the Committee) of relevant government agencies, supported by a working group arrangement.

The Department suggests the key to the successful operation of this proposed governance arrangement would be the establishment of clear terms of reference for both groups, and agreement on a well-defined strategic program of work.

This could include identifying and assessing opportunities for efficiency improvements in relation to management and use of government spectrum holdings, Australia's policy position in international fora and harmonisation and standards obligations as a signatory to a number of international conventions.

The Department also supports the proposal to reassess the ongoing need for the Committee and working group, and revision of the work plan after two years of operation.

Given the importance of spectrum to State, national and international transport systems and frameworks, the Department would expect to be represented on the Committee at an appropriate senior level, with support through representation from portfolio agencies on the working group as required.

We note also that there may be a number of Commonwealth agencies, which have small but important/ critical spectrum holdings, but may not have dedicated administrative capacity or resources to engage in the work of the Committee or working group directly. Further, the radio regulations may not be well understood by many government agencies and spectrum management may not be seen as core business.

Consideration will need to be given as to what avenues/ mechanisms can be made available or developed to enable and encourage all relevant entities to provide input (as necessary) to support the Committee's full consideration of spectrum issues, even if agencies are not represented directly on the Committee.

2. Improving transparency

The Government should publish a consolidated report outlining the value and use of Commonwealth spectrum holdings every two years. To facilitate this portfolio agencies should provide information on their spectrum holdings by value (price paid) and number of licences; the utilisation-over-time and purposes for which spectrum holdings are used; and future spectrum requirements including the timing of new spectrum allocations.

The Department supports the biennial publishing of a consolidated report on Commonwealth public sector holdings as a transparent mechanism for demonstrating the purpose for which specific spectrum is held and managed by Government agencies (noting this may not be possible where there are security considerations) and the extent to which these bands are being used or planned to be used in the future.

The Department understands that the proposed Committee will have a significant coordination and oversight role with respect to development of the Report.

In relation to valuing Government spectrum, the Department notes this presents a more challenging aspect of reporting on government holdings, as compared to pricing.

Where there are clear licensing arrangements in place, including fees, reporting the price paid would generally be a straight forward proposition. However, this is not as clear-cut in relation to government held spectrum supporting public good, safety-of-life, national network/ platform and international obligations or harmonisation outcomes.

The Department acknowledges that quantifying in commercial terms broader “non-economic” benefits remains challenging and open to subjective assessments.

The Department does not support market-based pricing or valuation based on opportunity cost of government held spectrum in all circumstances or in isolation, particularly where there is a fundamental and demonstrable public good or national safety and security benefit.

In such circumstances, as we have indicated in previous submissions, it may be more appropriate to apply an alternative approach, acknowledging that there are often many qualitative rather than quantitative aspects to spectrum valuation in such circumstances.

Ultimately, part of the work program of the proposed Committee under Draft Proposal 1 may be agreeing methodologies for valuing such spectrum. Again, this Department and some other portfolios would expect to see the work indicate how the public good role of the spectrum for certain users might be assessed, considered and protected under the new legislative framework.

3. Retaining benefits through sharing and trading of spectrum

The Government should explore the implementation of a whole-of-government approach to the identification of sharing and trading mechanisms, including the examination of foreign government approaches and emerging technologies and processes to determine if there are opportunities for the Government to engage in sharing and trading of Commonwealth held spectrum.

We continue to consider it is critical to apply a precautionary approach to the concept of spectrum sharing of existing allocations within the transport sector. A strong evidentiary basis, including robust safety risk assessments, would be necessary for any serious future consideration of this approach, on a case-by-case basis.

The Department does not support allowing access by other users to existing spectrum allocations, particularly where specific frequency bands are a critical enabler to safety outcomes, unless the portfolio is convinced that international and authoritative studies clearly indicate that sharing is feasible, and most importantly, safe.

Whilst there may be opportunities for greater flexibility in spectrum sharing by incumbents and new users, caution is necessary to ensure incumbents have suitable access to interference-free spectrum to meet operational needs well into the future, particularly when allocations are required for transport safety-of-life purposes.

It is important that planning instruments reflect the treaty framework established by the ITU Radiocommunication Sector, as for example, ITU Radio Regulations are used as the framework for the relevant ICAO Annexes, and Standards and Recommended Practices.

Again, proposals (for ACMA) to devolve or delegate band/spectrum management to facilitate trading need to be tempered by the cognisance that agencies will not necessarily have any or may have only limited existing capacity and resources to execute that role and will need to build the required capability.

There is a risk that this approach may simply result in cost shifting to other agencies from ACMA, without providing a more effective, efficient or appropriate administrative model. Arguably, ACMA may be best placed to undertake the role through for example the provision of an exchange/ trading desk and to ensure that any secondary trading arrangements/ agreements were consistent with the radiocommunications legislative framework.

Consideration could also be given to opportunities for greater collaboration and efficiency between agencies. For example, Airservices currently manages a number of spectrum bands, used for navigation and surveillance systems, and there may be opportunity to investigate whether these bands can be jointly managed in the future between Airservices and the Department of Defence, noting the current collaboration on developing a harmonised national civil-military air traffic management system.