Area-wide licensing

Summary and response to submissions

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Introduction

Thank you to all stakeholders who responded to the ACMA’s [proposed area-wide apparatus licence consultation](https://www.acma.gov.au/consultations/2019-08/proposed-area-wide-apparatus-licence-consultation-192019). The consultation paper proposed the introduction of a new transmitter licence type and new receiver licence type, collectively referred to as the area-wide apparatus licence (AWL) type. This new type of licence would have the following key attributes:

area-wide

broad application

scalable

aggregable.

The ACMA received submissions from 19 parties. Submitters included members of industry, peak bodies and government agencies.

This document provides a summary of submissions received to the consultation and the ACMA’s response to them—as set out in the ‘Issues for comment’ questions in the consultation paper.

## General feedback

Many stakeholders expressed positive views about the proposal to create a new AWL type. The Australian Mobile Telecommunications Association (AMTA), Australian Radio Communications Industry Association (ARCIA), NSW Government Telecommunications Authority (NSW Telco Authority), DB Telecommunications, Department of Defence, Vodafone Hutchison Australia (VHA) and Telstra each expressed broad support for the AWL type proposal.

Other stakeholders such as Motorola, NBN Co, Commercial Radio Australia (CRA), and the Australasian Railway Association (ARA) described ways an AWL would be beneficial and useful to their respective industries and businesses.

AMTA, Telstra, CRA, the Communications Alliance Satellite Services Working Group (SSWG), Motorola, and ARCIA all noted that the AWL is expected to provide support for new and emerging uses of spectrum. Telstra, for example, said that the broad application of AWL licences to different technologies and services, along with the fact they are area-wide, scalable and flexible ‘should provide for more efficient deployment of point-to-multipoint type radio infrastructure’, particularly in high-frequency millimetre wave (mmWave) bands. Other submitters, such as AMTA and Motorola, also anticipate that AWLs will enable the use of technologies such as 5G, which use high-frequency bands.

CRA noted that the use of the AWL type may allow the aggregation of certain types of transmissions into a single licence, which could provide operational and financial savings for both broadcasters and the ACMA. CRA said further information would be required to assess the costs and benefits in this regard.

Some concerns were raised about the design and implementation of AWLs.

The two most prominent areas of discussion related to the registration of radiocommunications devices and a request for further consultation on the implementation of AWLs. As AWLs will authorise access within a defined frequency range and geographic area and will include conditions at the frequency and area boundaries to manage interference, there is a reduced requirement for full device registration in comparison to other site-based apparatus licence types.

The starting position for registration is that there will be limited details for all AWLs in the Register of Radiocommunications Licences (the Register) and AWLs will be exempt from specific device registration requirements in section 10 of the Radiocommunications (Register of Radiocommunications Licences) Determination 2017 (RRL Determination). This will be the case unless the ACMA determines there is a need for these details to be included in the Register in order to manage interference for specific radiocommunications devices in a particular band.

The ACMA has indicated that where it intends to offer AWLs in a particular band, it expects to consult on additional regulatory requirements, technical arrangements and pricing. The ACMA has subsequently published an implementation paper setting out its approach to introducing AWLs in a specific band. See the paper titled *Area-wide licensing: ACMA approach to introducing area-wide licences*, located on the [list of apparatus licences](https://www.acma.gov.au/apparatus-licences) page.

# Issues for comment

The consultation paper raised a series of detailed questions seeking comment and feedback on the design of the area-wide licence model.

1. Do you think the proposed characteristics of the AWL type will support your current or intended network deployments? Are there any other kinds of deployments that you believe the AWL type should support?
2. Which bands and/or geographic areas do you believe would be conducive to the use of an AWL?
3. What technical and other matters do you believe the ACMA should consider in deciding to use AWL licensing in a particular band?
4. Do you have any other comments on the AWL concept?

Feedback received on each of the questions and the ACMA’s response to the feedback is outlined below.

# Network deployments

## Scalability and bandwidth

NBN Co suggested an AWL type would be beneficial to its business. It wants an AWL licensing framework that will help meet its ‘requirements for additional spectrum to service customers in homes and businesses for the entire FW [fixed wireless] access network footprint in metro-fringe, regional, and rural areas of Australia’. It also says that it ‘is desirable that the AWL type be flexible enough to accommodate future requirements’. More particularly, it supports a licensing system that:

is scalable to large geographic areas

supports interoperability between licences (interoperability between AWLs, and interoperability between AWLs and other types of apparatus licences and spectrum licences)

provides sufficient bandwidth.

NBN Co also advised that in order to facilitate efficient use of spectrum, an AWL licensee should be able to ‘treat spectrum licensed under AWLs, other apparatus licences and spectrum licences as a single holding for site registration purposes’.

Other stakeholders also commented on scalability and/or bandwidth. CRA, for instance, said that an AWL should be flexible and complementary ‘to existing licence types by providing a scalable licensing option to support area-wide multi-device deployments’.

AMTA said it ‘understands the desirability of a scalable licence that can be adapted to various uses’ but cautioned that ‘defined usage areas need to be reasonable and sensible’. Telstra said it supports ‘the objective of having a scalable licensing framework that can be adapted to various uses, with different size geographical areas’ but ‘caution[s] against arbitrary geographical boundaries that have the potential to lead to coverage gaps resulting in inefficient spectrum utilisation’.

Optus also expressed concern about arbitrarily dividing up geographic boundaries. It did not feel there was enough clarity regarding how geographic boundaries will be defined and determined. It suggested that ‘the geographic area should not be defined so small that it neglects the general physics of RF signals, but more importantly it should avoid defining arbitrary boundaries which risk slicing a regional town in half’.

Optus raised some issues regarding how the term ‘scalable’ is used in the consultation paper, particularly in the context of determining geographic areas for AWLs and planning and deployment options for licensees. It said the consultation paper described AWLs as being area-wide, scalable and having broad application. At the same time, the paper proposed that AWLs will operate ‘within smaller defined geographical areas and specified frequencies than those typically authorised by spectrum licences’. Optus proposed that this could be a contradiction. It also suggested it is not clear from the consultation paper what constitutes a ‘small area’.

Regarding bandwidth, CRA said that AWLs could be used within studio complexes ‘where wireless interconnect devices could conceivably become the RF cabling of the future’. However, it said it is unlikely such a migration would ‘be able to be done using the current ISM bands due to bandwidth constraints and hence is likely to require wide bandwidth spectrum in the mmWave band, possibly the 26 GHz band’.

### ACMA response

These design suggestions are welcome and can be addressed during further consultations on the implementation of AWLs in a particular band. For example, the ACMA will assess factors such as frequency range and the type of service expected to be deployed in the band to determine the minimum geographic size of any particular licence. The ACMA will use the [Australian spectrum map grid (ASMG)](https://www.acma.gov.au/sites/default/files/2019-08/australian-spectrum-map-grid-2012%20pdf.pdf) and the Hierarchical Cell Identification Scheme (HCIS) to define the geographic area of the licence. In order to allow licence areas to be accurately mapped to the area in which a licensee is planning to deploy services, and to minimise arbitrary boundaries that have the potential to lead to inefficient use of spectrum, careful consideration will be given to providing an underlying grid of sufficient granularity to define the area authorised by a licence. This may include new smaller HCIS levels than currently used in the ASMG. The ACMA will consult stakeholders as part of this consideration.

The geographic component of AWLs issued in any particular band will be considered in the context of developing the specific technical and other arrangements suitable for that band. The ACMA understands that tailored implementation will be required in different bands to reflect particular band characteristics. These include:

propagation characteristics

existing licences and/or other services in the band (if any)

the potential for future other licences or other services in the band

the likely technologies or services to be used in the band (noting the overarching intention is for AWLs to be of broad application).

The ACMA proposes to make the AWL type scalable in both frequency and area to suit the needs of individual licensees and support area-wide multi-device deployments. It will be necessary to specify some frequency assignment and licensing instructions—for example, in a Radiocommunications Assignment and Licensing Instruction (RALI)—to ensure spectrum efficiency and that the area/frequency combination of an AWL is large enough to support a service. However, an AWL is capable of being adapted to particular technologies and/or uses with different-sized geographical areas and frequency bandwidths. Specific geographical size and frequency bandwidth constraints, along with other conditions, will be developed as part of a planning process for each specific band where the ACMA intends to implement AWLs.

Regarding NBN Co’s desire for interoperability, AWLs will be interoperable with each other in the sense that different AWL licences in the same frequencies and in adjacent geographic areas will be able to be combined into a single licence. This means a number of AWLs, adjacent in geography, frequency, or both, can be aggregated into a single transmitter licence, with boundary conditions applying only to the boundary of the aggregated licence, not the component licences. Aggregation is expected to require the surrender of the component licences and the issue of a new transmitter licence that covers the areas of the component licences.

The ACMA also notes that registration requirements for radiocommunications devices under spectrum and apparatus licences differ under the *Radiocommunications Act 1992* (the Act). The ACMA does not see a strong case for determining whether NBN Co’s preference to contain different licence types under a single holding for site registration purposes can be accommodated under existing law.

## Small scale deployments and 5G

Several stakeholders said an AWL should provide support for new and emerging uses of spectrum, including the use of new technologies that use high-frequency bands, such as 5G. Telstra, for example, suggested that the AWL generally:

could be very attractive for network deployments at high frequencies   
(e.g. > 6 GHz) outside of spectrum licenced areas, which may involve

large numbers of transmitters for which it would be too administratively

time-consuming and unwieldy to use a conventional apparatus licensing approach.

The Wireless Internet Service Provider Association of Australia (WISPAU) offered several deployment scenarios that it said AWLs should be ‘modified to support’, including ‘cross-polarity and space diversity deployment methods’. These methods are usually implemented by operators to improve the reliability and/or capacity of radio networks and could potentially be used for spectrum sharing. Space diversity is part of technology standards such as 4G and 5G.

The AMTA said it:

broadly supports the ACMA’s objective to create a new transmitter and receiver licence type that can provide improved flexibility and more efficiently support the deployment of 5G applications including some IoT [Internet of Things] and other anticipated uses of spectrum across small areas involving multi-device deployments.

Support for the use of AWLs for small-scale areas also came from the Department of Defence, which said it is encouraging to see the ACMA issue AWLs in the 26 GHz band ‘to support campus-style, small area deployments’.

## Industry verticals and private networks

The ACMA’s [*Future use of the 26 GHz band: Planning decisions and preliminary views decision paper*](https://www.acma.gov.au/consultations/2019-08/options-wireless-broadband-26-ghz-band-consultation-322018) (26 GHz decision paper), released in April 2019, identified three broad categories of potential wireless broadband use:

Type 1—traditional subscriber-based wide-area mobile or fixed network operator deployments.

Type 2—smaller market/local subscriber-based networks.

Type 3—uncoordinated ad hoc deployments within the confines of private premises or property.

Various submitters to the consultation referred to the potential use of AWLs for non-traditional users of spectrum, such as independent, third-party users, and for various local, small-scale deployment scenarios, including ‘campus-style’ deployments.

Motorola suggested that businesses are ‘tailoring their 4G and 5G solutions’ in response to emerging changes in the digital economy, including new uses of technology. It said that while mobile network operators (MNOs) will continue to meet some industrial needs, and support diverse sets of services for different types of users, it ‘recommend[s] that the ACMA encourage third-party industrial and enterprise users to build their own captive and dedicated 4G/5G networks’ in order to provide ‘small, localised, independent, private broadband networks for specialised users including public safety, critical infrastructure, industrial, utilities and related’. It said the ‘development of the area-wide apparatus licence type is a key step in enabling this use and commends the ACMA on the proposal’.

ARCIA saw value in the AWL for users of Land Mobile Radio (LMR) equipment and future users of private LTE systems. It also believed there will be demand for AWLs from users of LMR spectrum for construction projects (such as transportation infrastructure). The ACMA may consider the use of AWLs in bands suitable for LMR and LTE deployments.

## Other proposed uses for the AWL type

The NSW Telco Authority (the Telco Authority) said that the AWL type would support its Mobile Radio Assets (MRA). These are mobile base stations deployed in areas where there are no permanent base stations. They are used to support the Telco Authority’s communications network during emergency situations or when maintenance is required. The Telco Authority said that under the AWL type it could ‘deploy multiple MRAs without the need to manage and maintain individual apparatus licences supporting each system’. It also said AWLs ‘could be used for the deployment of MRAs in locations where an HGS [Harmonised Government Spectrum] area licence is not available’.

The ARA believes the AWL type would support a range of current communications systems used by the railway industry. It said these systems presently operate on ambulatory apparatus licences:

Ambulatory licences are used for three main purposes in the rail industry, all of which revolve around moving trains. One purpose is for local voice communication either within the train or between the train and trackside staff. The other two purposes are for data communications within the train consist and are integral parts of systems providing for the safe and efficient running of certain types of trains.

The ARA said that AWLs will provide more certainty than ambulatory licences. The ARA said that, under ambulatory licences, train operators accept the risk that there will be a disruption to services because they may have to stop using particular communications systems in areas where they may cause interference to an apparatus licence user.

Some stakeholders also thought the AWL could be useful to the satellite industry. CRA, for example, suggested that there could be a role for AWLs regarding the use of Low-Earth Orbit (LEO) satellite data gathering by broadcasters to upload news information. It said: ‘a question arises as to whether satellite communication systems will be included in the AWL type to allow broadcasters [and other industries that use satellite data gathering] to deploy a network of devices to gather information within the field of interest’. The Communications Alliance Satellite Services Working Group (CA SSWG) saw merit in the AWL for some deployment scenarios, such as gateway earth stations.

Myriota said that it would increase licensing flexibility and reduce complexity if AWLs could be used to ‘enable communications with space stations’. It said that, currently:

to licence 1000 Earth stations in a frequency band not listed in the CSO [Communication with Space Object] Class Licence, it is not technically practical or financially feasible to obtain 1000 individual apparatus licences, and the ACMA might not deem suitable to implement a Class Licence in   
the band.

Myriota also suggested that licensing flexibility could be further enhanced if the AWL type could be used to enable communications between a range of different stations, such as between terrestrial and space stations.

Stakeholders also responded with a variety of other applications that could be authorised under AWLs, including temporary events (e.g. stadium events) and manufacturing plants.

### ACMA response

The ACMA is exploring implementing AWLs in the [26 GHz](https://www.acma.gov.au/consultations/2019-08/options-wireless-broadband-26-ghz-band-consultation-322018) and [28 GHz](https://www.acma.gov.au/consultations/2019-08/planning-options-28-ghz-band-consultation-092019) bands. Planning for both bands has involved extended review and consultation. To determine suitable licencing options for both bands, consideration has been given to a range of factors. These have included the necessary conditions for co-existence of services, and the likely technologies and deployment scenarios that will occur in each band. A technical framework for ‘area-wide’ apparatus licences to be issued in the ‘26/28 GHz bands’ is currently being developed and consulted on. This technical framework will define the technical conditions and constraints under which devices may be deployed and operated within the specified geographic area and frequency band of the licence.

The ‘26/28 GHz’ bands have become the focus for the potential rollout of mmWave band 5G wireless broadband services. The AWL type will be conducive to small-scale area-wide deployments that involve the coordination of multiple transmitters, such as those proposed for mmWave 5G services.

Wider-area deployments for AWLs will also be considered when the ACMA is planning or re-planning a particular band. The ACMA will consult on what the smallest geographic ‘building-block’ (or underlying grid) for AWLs might feasibly be for each specific band and will consider AWLs for businesses and industries that require Australia-wide or state-wide licences. See the paper titled *Area-wide licensing: ACMA approach to introducing area-wide licences*, located on the [list of apparatus licences](https://www.acma.gov.au/apparatus-licences) page.

The ACMA expects that AWLs in the 26 GHz and the 28 GHz bands will be suitable for the Type 2 and 3 uses identified in the 26 GHz decision paper. As noted in that paper, it is anticipated that ‘5G technologies appropriate for local deployments in the Type 2 and 3 categories will facilitate access to a range of diverse vertical industries’. Type 2 and 3 uses ‘may also require the flexibility to support a disparate set of location-specific business cases that do not align neatly with metro and regional   
centre boundaries or require only small areas within those boundaries’.

In addition, because AWLs are designed to be of broad application and technically flexible, users that fit the Type 1 category, such as MNOs, might also be able to use the new licence type in some circumstances.

The ACMA will consider whether AWLs provide a preferable means of authorising satellite-related radiocommunications services when considering changing planning arrangements relating to satellite services in particular bands. In relation to the 26 GHz and 28 GHz bands, the ACMA has decided to continue to use existing satellite-specific licensing arrangements for existing satellite services.

# Bands and geography

Stakeholder opinion on candidate bands for the AWL type varied with industry. Below is a list of bands and the stakeholders connected with them:

High-frequency bands (> 3 GHz)

**Telstra:** ‘AWLs probably have more applicability to high frequency bands (>6 GHz)’.

**Communications Alliance Satellite Services Working Group (CA SSWG):** potentially all bands could be tested, but for the satellite industry particularly, a range of ‘anything over 3 GHz or thereabouts’.

**Commercial Radio Australia (CRA):** 26 GHz, although it says that while it is reasonable for telcos ‘to provide 5G high data rate services’ in the 26 GHz band, ‘there could be other organisations and systems which could also utilise’ this band, including private systems.

**ARCIA:** sees the AWL proposal as ‘supporting some of the innovative spectrum allocations outlined in the recent discussion on the review of the   
26 GHz band’.

**AMTA:** foresees that ‘higher-frequency bands or bands with entirely different deployment and use cases in disparate geographies would likely be most suited to AWLs’—it also broadly supports the ACMA’s initiative to provide a licence that can more ‘efficiently support the deployment of 5G applications’.

**Vodafone Hutchison Australia (VHA):** currently believes ‘only the 26 GHz spectrum band is likely to warrant consideration of the AWL type’ given the ACMA’s stated planning arrangements for the 26 GHz band.

**Federated Wireless:** ‘Bands that can support 4G and 5G technologies are particularly suitable’ to the AWL type, and higher-frequency bands that support satellite services may also be relevant.

**Motorola:** encourages ‘the adoption of technology-neutral rules to allow access to shared spectrum in the range 5–6 GHz and in millimetre wave bands’ where, it says, ‘localised network licensing can be more efficient’.

3­–4 GHz

**Wireless Internet Service Provider Association of Australia (WISPAU):** all bands, but, as a priority, ‘bands that support point to multipoint bands in regional areas’, such as 3.6 GHz users.

**Motorola:** would like AWLs to be used in the 3.4–3.8 GHz band ‘for localised private licensing in small geographic areas’.

400 MHz

**NSW Government Telecommunications Authority (NSW Telco Authority):** would like AWLs for the Harmonised Government Spectrum (HGS) it uses in the 400 MHz band.

**Australasian Railway Association (ARA):** AWLs should be made available in the 400 MHz band to support its communication systems.

Lower-frequency bands

**Myriota:** said ‘the frequency bands most conducive for the AWL type are those under 960 MHz’, which, it says, ‘are ideally suited for low-cost Internet of Things applications’—150.05–156 MHz, 157.45–160.6 MHz, 160.975–161.475 MHz and 162.05–174 MHz.

Multiple bands

**Federated Wireless:** AWLs could be suitable for fixed satellite services (FSS) and fixed services (FS)—i.e. point-to-point links, in a range of different bands.

CRA specifically objected to AWLs being implemented in frequency bands used by the broadcasting industry to support particular links, such as studio-to-transmitter links, and other uses.

More generally, several stakeholders noted concerns with whether AWLs could be deployed in encumbered spectrum, especially in medium and high-density areas, without disrupting existing uses. For example, NBN Co had issues regarding the risks posed to the performance of its satellite network in the 26 GHz band by coexistence of AWLs for wireless broadband services in some parts of this band (including from 5G mobile networks). NBN Co also submitted that any consideration of using the proposed AWL type in the 28 GHz band be consistent with its proposed arrangements for different services and operators.

### ACMA response

Managing coexistence between authorised services is always a significant consideration when developing new planning and licensing arrangements. Following the review of the 26 GHz and 28 GHz bands, consideration will be given, where appropriate, to developing and consulting on implementation arrangements for AWLs in other bands. The approach the ACMA adopts for the 26 GH and 28 GHz bands will not necessarily be used for other frequency bands that are considered for AWLs.

# Technical and other matters relevant to licence development

The common points of interest and/or concern raised by stakeholders related to:

the ACMA’s proposal to adopt a minimal set of device registration requirements

managing interference.

Regarding managing interference, stakeholders asked a number of questions, including what safeguards will be in place to protect users, and whether more clarity can be provided on how boundaries will be defined and determined.

## Registration of devices

The consultation paper stated that the ACMA was proposing to amend the Radiocommunications (Register of Radiocommunications Licences) Determination 2017 (RRL Determination) so that licensees are only required to include details about radiocommunications devices authorised under an AWL if a condition applies to the licence that requires the device(s) to be registered. The consultation paper stated that in assessing interference risk as part of the technical planning and economic assessment process for implementing AWLs in a particular band, the ACMA may decide that devices will need to be registered if this is required to manage interference. This would lead to the imposition of a relevant licence condition. The ACMA expects that low-powered portable or mobile devices will not need to be registered as a general rule.

Several stakeholders (AMTA, CA SSWG, Optus, Telstra and CSIRO) raised concerns of varying degrees about the proposed approach to device registration, with Optus presenting the strongest concerns:

Optus does not agree that the starting presumption for AWL licence types should be a no-device registration requirement, with all deferment of the registration requirement to be established during the course of the technical and economic assessment on the applicability of the AWL construct in a new specific band.

Instead a more conservative approach that would assume that registration is needed unless it can be demonstrated that it would be unnecessary or unduly burdensome for any particular use type or licensee should be required.

The Department of Defence and NBN Co offered reasons why registration is important without raising concerns per se about the proposed amendment. Federated Wireless noted that knowledge of incumbents’ equipment deployments and operating characteristics is critical to ensuring protection. CRA requested more information about the proposal, stating that it would ‘be useful to understand what limits will be applied to the number of devices under an AWL’.

Some submitters also commented on the request for information provision condition within the proposed Radiocommunications Licence Conditions (Area-Wide Licence) Determination 2019[[1]](#footnote-1) (AWL LCD) and the process for requesting and maintaining information about radiocommunications devices. The draft AWL LCD required that, with some exceptions, the ACMA, or any other person, may request information on ‘the location of all area-wide stations under the licence’ and ‘the maximum total radiated power for each such area-wide station’. CRA queried why mobile stations are exempted. Optus suggested that the amount of information that can be requested is not adequate and of the information that can be asked for it is not clear what the requisite level of detail is. Telstra acknowledged that while the information provision will ‘aid in the management and resolution of interference issues’, it ‘is unlikely to provide the same degree of legal certainty that the ACMA’s register provides’, and there is a risk that if licensees ask information of each other this will slow down resolution processes.

### ACMA response

The ACMA formed the view that the information provision arrangements in the draft AWL LCD are adequate. The information provision offers another means for managing interference in addition to the technical analysis that will be done each time AWLs are rolled out in a band. Regarding the exemption of mobile stations from the information provision, it is not practical to provide location details for radiocommunications devices that are portable. In terms of interference, mobile devices are also generally low-risk devices.

The ACMA’s proposed starting position regarding licence and device registration of AWLs is best described as minimal registration. As stated in the consultation paper:

Section 147 of the Act [*Radiocommunications Act 1992*] prescribes that for each apparatus licence, the licensee’s name, postal address, and the date of issue and expiry of the licence must be included in the RRL [Register of Radiocommunications Licences].

In addition to these mandatory details, the device information requirements under subsections 10(2) and 10(3) of the RRL Determination will apply to all AWLs.

The ACMA is proposing that the device information requirements under subsections 10(4), 10(5), 10(6) and 10(7) of the RRL Determination will apply to AWLs only if the licence is subject to a condition requiring the licensee to register radiocommunications devices prior to operation. Any such condition as determined by the ACMA will be contained in the AWL LCD or on the licence itself. If technical and other implementation arrangements for the introduction of AWLs in a given band reveal that it is necessary or appropriate that the subsections above, or some of these subsections, of the RRL Determination apply to all AWLs in the band, then the ACMA can detail these in the AWL LCD.

The main reason for reducing device registration requirements is because, in comparison to other site-based apparatus licences in which the issue of the licence is contingent on the coordination of a device at a particular location, AWLs will authorise one or more radiocommunications devices within a defined frequency range and geographic area. Interference issues will be primarily managed at the frequency and area boundaries of the licence and not by reference to the device.

Another reason for minimal device registration is to lessen the administrative reporting cost on licensees. For example, if the overall risk of interference is sufficiently low, registration of radiocommunications devices may become an unnecessary regulatory burden on AWL licensees in a given band, especially when the licensee is potentially deploying many devices.

## Interference management/boundary conditions

There was concern from several stakeholders regarding how interference will be managed and whether boundary conditions will be sufficient for interference management between AWLs.

Stakeholders (particularly AMTA, Myriota, CRA and Optus) would like the ACMA to outline the process by which interference assessment and management is conducted. CRA, for instance, stated: ‘It would be useful for the ACMA to provide descriptions of the methods which would be used to undertake AWL interference studies for different bands. Such methods would be used to assess the power footprint in a particular area and the limits which cannot be exceeded’.

Optus also said that the scalable quality of AWLs could lead to an increase in the:

number of geographic boundaries and frequency combinations in which other

licensees (including any adjacent geographic and/or frequency bandwidth

licensees, regardless of their current licence type) may need to consider in their planned or current deployments and technical planning. (p. 5)

### ACMA response

The ACMA intends that specific arrangements for interference management will be considered and consulted on as part of the implementation of AWLs in any particular band. The ACMA will take into account the result of technical studies and any potential licence conditions which may be required to provide coexistence between different services in the band (and adjacent bands, as required). Guidance can be included in Radiocommunications Assignment and Licensing Instructions (RALIs) that aim to ensure licences are issued in an orderly fashion. It is anticipated that this will help to support issues such as boundary and frequency coordination.

# Other comments on the AWL concept

Three submitters (Optus, AMTA and VHA) believe the ACMA should go through a second round of consultation before introducing AWLs into the licensing system. AMTA, for example, said not enough detail had been provided and, as such, the ACMA should ‘engage in a second round of industry consultation … based on a modified and more detailed consultation paper’.

AMTA, CA SSWG, CRA, Defence, NBN, Optus and VHA were concerned over a perceived lack of implementation details (e.g. criteria used to determine which bands AWLs would be implemented in, and technical parameters).

Many stakeholders supported a second round of consultation on the AWL type prior to implementation. This was on the basis that such a consultation would provide further detail on aspects of implementation, including:

how geographic areas will be described/lot size

technical parameters for interference

pricing, i.e. ‘how is pricing going to be determined in the most effective and fair manner’ (Department of Defence)

future plans for the AWL concept (e.g. which bands would the AWL be implemented in).

One stakeholder (Sirion Global) also recommended that the ACMA undertake a trial implementation of AWLs in a particular band before moving to more widespread deployment.

Optus, in particular, is opposed to the idea of establishing a framework now and then consulting on implementation details for the 26 GHz band. This is due to concerns the ACMA will use the 26 GHz model to establish and ‘lock in’ the framework for future bands. Optus would prefer the ACMA establishes a set of principles or overarching framework for future AWL design.

### ACMA response

As noted in the consultation paper, the ACMA intends to consult on the specific details of implementation (e.g. technical, pricing and licence design) prior to the implementation of AWLs in a particular band.

The ACMA’s view is that all of the specific areas of concern that require further consultation are matters that can only be dealt with in the context of a particular band. For example, the propagation characteristics of different frequencies may play a critical role in whether AWLs are suitable for that band, and if they are, the impact on specific technical, geographic and pricing arrangements for AWLs in the band.

The ACMA expects that the initial implementation of AWLs will offer opportunities to learn lessons that can be taken up in future band-by-band implementations.

1. The instrument was made on 28 January 2020 and is now the Radiocommunications Licence Conditions (Area-Wide Licence) Determination 2020. [↑](#footnote-ref-1)