

# Regulation Impact Statement

## Proposed changes to the regulation of Cellular Mobile Repeaters

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# Introduction

Cellular mobile repeaters (repeater) are currently regulated by the Australian Communications and Media Authority (ACMA) through the *Radiocommunications Act 1992* (the Radiocommunications Act).

Under section 314 of the Radiocommunications Act, the Governor-General may make regulations prescribing all matters required or permitted by the Act to be prescribed. Regulations are prepared by the Office of Legislative Drafting and Publishing (OLDP) on instructions from the department whose minister administers the primary legislation (see paragraph 5.4.4 of the *Federal Executive Council Handbook*).

This Regulation Impact Statement (RIS) is to inform a recommendation to the Minister for Broadband, Communications and the Digital Economy and his Department, to instruct the OLDP to prepare a new regulation for the purposes of section 301 of the Radiocommunications Act proposing changes regarding the supply of repeaters.

In particular, for the purposes of section 301 of the Radiocommunications Act, the regulations could be amended to:

- specify ‘repeaters’ as ‘eligible radiocommunications devices’; and
- set out the details required to be kept by a supplier in relation to the supply of a device.

This would have the effect of prohibiting a person supplying a repeater other than to a licensee or a person authorised in writing by the licensee.

# Background

## **What is a cellular mobile repeater?**

A repeater is a fixed powered device that is designed to wirelessly regenerate or replicate a mobile signal. Its function is to extend mobile phone coverage into areas where coverage may not exist or is too low in power to use due to local conditions (such as the underground floors of a building parking area).

## **Regulatory framework applying to cellular mobile repeaters**

A repeater operates within apparatus or spectrum licensed radiofrequency bands. Therefore, the licensee (in practice, the relevant mobile carrier) can authorise the use of a repeater. The unlicensed operation of a repeater is subject to the offence provisions in sections 46 and 47 of the Radiocommunications Act.

The interference management provisions in Part 4.2 of the Radiocommunications Act may also apply where a person is operating a repeater and causing interference to a mobile carrier's service.

## **Technical standards**

Currently, no technical standard has been made under the Radiocommunications Act or the *Telecommunications Act 1997* (the Telecommunications Act) in relation to repeaters.

A technical standard was considered as part of the ACMA's public consultation process. However, the majority of respondents did not consider the making of a technical standard was the most appropriate mechanism to regulate the supply of repeaters.

# The Problem

The ACMA has been approached by mobile carriers to consider regulatory options that would more effectively prevent interference caused by the unauthorised use of repeaters within mobile networks.

Repeaters may be deployed by mobile carriers as part of their ordinary network management practices. When used in this manner, repeaters are considered network equipment. Because the repeater is installed and configured by the licensee (the relevant mobile carrier), the risk of interference to the telecommunications network is minimised and is entirely manageable by the carrier.

However, repeaters can also be used by end-users without the carrier's authorisation. This type of use mainly occurs where an individual purchases a repeater to improve their personal mobile coverage. This typically occurs in rural or remote locations, or to address particular in-building coverage issues. However, when installed and used without the mobile carrier's authorisation, the repeater may benefit the end-user's coverage, but also has the capacity to disrupt or prevent other end-users' access to the cellular network, including preventing access to the emergency call service.

## Issues facing the current framework

The current regulatory arrangements only address the operation and possession of repeaters, not the past or current quality of service provision by mobile carriers which may have been an incentive for some end-users to use unauthorised repeaters. While the use of repeaters can be managed through the application of regulatory requirements relating to licensed operation, no regulatory mechanism currently exists that prohibits or limits the **supply** of repeaters to end users.

Currently, the use of repeaters is regulated through licensing and interference management. While this enables the ACMA to take action in relation to the unauthorised use of repeaters, it is only effective after interference has been detected. An alternative solution is to regulate the supply of repeaters, before interference occurs. The ACMA's experience is that incidents of interference caused by unauthorised use of repeaters have increased in recent years (as outlined in the Telstra example provided in the 'Extent of the problem' section).

Arguably, the supply of repeaters used in contravention of licensing requirements may also be subject to the *Criminal Code Act 1995* (complicity and common purpose—aiding and abetting); however, this is difficult to pursue and is 'after the fact' (that is, interference is likely to be already occurring). There may also be recourse under consumer protection legislation (The Australian Consumer Law applied under the *Competition and Consumer Act 2010*) if suppliers do not disclose at the point of sale the restrictions on the operation of these devices.

Under the current approach, end users may be unaware of the restrictions on the operation and possession of repeaters, and unwittingly be committing an offence under the Radiocommunications Act by using a repeater. A regulatory solution directed at the point of supply, as opposed to pursuing enforcement action against individuals using repeaters, may be a preferable approach to manage the risk of interference by unauthorised use of repeaters.

## Extent of the problem

### **Known reports of interference to the ACMA caused by repeaters**

The ACMA has experienced an increase in the number of reported incidents of interference caused by the unauthorised use of repeaters over the last ten years. Within the previous 12 months, there have been 10 reported incidents to the ACMA alone. However, not all incidents of interference are reported to the ACMA to investigate. Based on industry information, the number of incidents of interference caused by the unauthorised use of repeaters but not reported to the ACMA is much higher than those incidents referred to the ACMA to investigate.

The ACMA considers that specific regulatory arrangements to address the supply of repeaters will directly reduce the number of instances of interference reported to the ACMA.

### **Carriers' experience with identified incidents of interference caused by unauthorised use of repeaters on its network**

Carriers have also identified the operation of unauthorised mobile network repeaters to be a serious problem in terms of:

1. the negative impact of repeaters on network performance, along with negative customer experience and reduced revenue; and
2. the additional operational costs incurred by carriers to manage related customer complaints, to identify and isolate devices, and undertake physical and legal action to disable the repeaters.

### **Scale of the problem:**

While the use of unauthorised repeaters commonly introduces interference into mobile networks and degrades performance, it is only practical to track down a subset of the devices that are causing a serious impact (for example, those that substantially block coverage and access to customers). Carriers believe that for every device that it discovers causing a serious impact there are many others that either cannot be located or are causing a low level of interference which is not sufficient to justify the expense involved in identifying and disabling those devices. Carriers believe that several thousand such devices could currently be active, however it is not possible to provide an accurate estimate of the number of unauthorised mobile repeaters that are currently being used nationally on mobile networks.

### **Network Impact:**

In serious cases the unauthorised repeater devices can effectively shut-down or block an entire mobile network cell, meaning that no-one can make calls, including emergency calls, to or from the affected area.

Less serious, but more common and difficult to track down, are cases where the interference generated causes reduced cell coverage, call dropouts and significantly lower broadband speeds in the affected areas. The remainder (majority) of these unauthorised repeater deployments cause a marginal degradation in network performance. Carriers have advised that it is virtually impossible to find individual devices in this latter category and it would not be cost effective to attempt to find those devices, even though their cumulative impact can be significant.

### **Case study - Shepparton**

An example of a serious interference issue caused by unauthorised repeater deployment is that which occurred in the regional city of Shepparton, where the scale of interference and impact was significant as it effectively shut down an entire sector/cell delivering service to several thousand Shepparton residents.



In this case, Telstra was alerted by complaints from customers that they had difficulty in accessing the Telstra network, and were also experiencing unacceptable levels of call dropouts in one area of the city. Subsequent investigation using network diagnostic tools, and portable interference tracking equipment, confirmed the problem being due to a local interference source. Telstra advised it took a week for its field team to track down and disable the source of the interference, which turned out to be an unauthorised repeater device.

**Financial Impact:**

Telstra has indicated that the use of unauthorised repeater devices is having a negative impact on its financial performance in three areas as explained below.

- *Operational expenditure:* Telstra is incurring ongoing costs to manage related customer complaints, to conduct field surveys to find the rogue repeater devices, and to arrange the physical and legal actions required to disable them. Telstra estimates that several hundred customer complaints per annum can be attributed to the use of unauthorised repeater devices. The cost of following up and investigating these complaints are in the order of \$100,000 per annum.
- *Revenue foregone:* Unauthorised repeater devices are causing Telstra to forgo revenue because of their negative impact on the availability and performance of the network for telephony and broadband traffic. Telstra also considers that revenue is foregone when the experience affects its brand and causes customers to choose an alternative provider. Telstra has advised that it is not possible to calculate the value of this lost revenue with any accuracy, however estimates that it could be in the order of millions of dollars per annum.
- *Capital Expenditure:* Unauthorised repeaters have the general effect of marginally reducing the coverage and capacity of the mobile network, leading to a requirement for Telstra to expand and bring forward its capital investment programme for the augmentation of network infrastructure. Telstra has advised that it is not possible to estimate the size of this financial impact.

# Objectives

Based on representations from industry and consideration of the issues raised, the ACMA has identified the following policy objectives with respect to repeaters:

- > prevention of the potential for repeaters to cause unacceptable interference to mobile networks
- > facilitation of innovative repeater technologies (for example, smart repeaters) that provide for effective interference management
- > prevention of the inadvertent restriction of the ability of mobile carriers to continue using existing repeaters, or to develop and deploy new cellular mobile repeaters, within their networks in accordance with their spectrum and apparatus licences.

These objectives derive from the regulatory policy and the ACMA's responsibilities under the Radiocommunications Act and the Telecommunications Act. Under the Radiocommunications Act, the ACMA is responsible for managing the radiofrequency spectrum so that its benefit to the community is maximised, while limiting interference to an acceptable level. The ACMA facilitates access to the radiofrequency spectrum through licensing, managing interference between services and ensuring industry compliance with mandatory standards.

The objectives of the Telecommunications Act include promoting the development of an Australian telecommunications industry that is efficient, competitive and responsive to the needs of the Australian community, and promoting the supply of diverse and innovative carriage and content services. The Telecommunications Act also provides that telecommunications should be regulated in a manner that, among other things, does not impose undue financial and administrative burdens on participants in the Australian telecommunications industry.

Interference to the radiofrequency spectrum reduces its value. It can degrade or disrupt the operation of radiocommunications devices for existing users and can also deter prospective spectrum users. Because the spectrum is a limited resource, it has significant economic value and must be managed to maximise its overall benefit

Equally, repeaters—particularly smart repeater technologies—assist carriers to extend mobile coverage to end users, which, in turn, allows end users to take advantage of diverse and revolutionary mobile communications services.

# Options for achieving the objectives

In considering how the ACMA can resolve the problem and achieve the objectives outlined in this paper the ACMA has analysed five options for the purposes of this RIS. These options are outlined below.

**Option 1 – Status quo**—continue to rely on the unlicensed operation and unlawful possession provisions in the Radiocommunications Act (sections 46 and 47), supplemented by the interference provisions in Part 4.2 of the Radiocommunications Act. Further reliance may also be placed on existing provisions in the Criminal Code Act (complicity and common purpose—aiding and abetting) and the Competition and Consumer Act (Schedule 2: The Australian Consumer Law—misleading or deceptive conduct provisions and unfair practices provisions).

**Option 2 – Section 162 radiocommunications device standard under the Radiocommunications Act**—make a section 162 standard in relation to repeaters (or a subset of repeaters). This would prohibit the supply of unauthorised repeaters unless written permission was provided by the ACMA (section 174 of Radiocommunications Act) of a non-standard device (section 160 of the Radiocommunications Act).

**Option 3 – Section 376 telecommunications customer equipment technical standard under the Telecommunications Act**—make a technical standard under section 376 of the Telecommunications Act in relation to repeaters (or a subset of repeaters). The ACMA may make a technical standard relating to specified customer equipment as necessary to protect the integrity of a telecommunications network or facility.<sup>1</sup> This would restrict the supply and connection of unauthorised repeaters to a telecommunications network as customer equipment to end users. However, unauthorised repeaters could still be connected to a mobile network if carrier permission is obtained; the repeater could also be supplied if labelled as non-compliant as per the requirements of the *Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice 2001*. The ACMA may also issue a connection permit under section 394 of the Telecommunications Act or make connection rules under section 404.

**Option 4 – Regulation under the Radiocommunications Act for the purposes of section 301 to restrict supply to carriers/authorised persons**—prohibit the supply of unauthorised repeaters to unlicensed persons or persons not authorised by the licensee under section 301 of the Radiocommunications Act.

**Option 5 – Prohibition under section 190 of the Radiocommunications Act**—make a declaration under section 190 of the Radiocommunications Act to prohibit the operation or supply, or possession for the purposes of operation or supply, of a specified device.

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<sup>1</sup> When supplied to end users, repeaters are considered to be customer equipment as defined under section 21 of the Telecommunications Act.

# Impact analysis

This section sets out the overall costs and benefits and expected disadvantages of each of the suggested options regarding regulating the supply of unauthorised mobile repeaters.

## Option 1—Status quo

Under the current regulatory arrangements, the unlicensed operation and unlawful possession of a repeater is subject to offence provisions in sections 46 and 47 of the Radiocommunications Act. The ACMA has the option to maintain the current regulatory arrangements under the Radiocommunications Act and address the supply of unauthorised repeaters via targeted compliance action and education.

### Benefits

- The status quo option would provide continuation of the current regulatory arrangements. As this option would not require changes to existing regulation or new regulation to be made, there would be no impact on suppliers.

### Costs and Disadvantages

- The ACMA believes that maintenance of the status quo would have the likely effect of increasing the potential for interference caused by repeaters to mobile networks as there has been an increase in the number of reports of unauthorised repeaters over time and there would be no disincentive under status quo option to obtain unauthorised repeaters.
- By relying only on the interference management provisions of the Radiocommunications Act, the ACMA can only address repeater interference issues where it has evidence of interference (as well as establishing the actual criminal intent element of the relevant provisions in Part 4.2 of the Radiocommunications Act).
- The status quo option would penalise end users that may be otherwise unaware that they are committing an offence by using an unauthorised repeater.
- The interference is usually already occurring before the unauthorised repeater is detected.
- While the current arrangements address the use of unauthorised repeaters, this option would not adequately address the supply of repeaters to the market.
- This option makes it difficult to rely on the complicity and common purpose (aiding and abetting) type infringements under the *Criminal Code Act 1995* and/or the *Competition and Consumer Act 2010* due to the difficulty in establishing the evidential basis for prosecution or other compliance action.
- Service providers would continue to experience negative impact on their financial performance (refer Telstra example above) due to revenues foregone and required expenditure to address and manage interference complaints and activity.
- This option would impose costs on the ACMA in the form of staff resources required to investigate and resolve interference complaints.

## **Costs and benefits are outlined specifically for suppliers and end-users below:**

### **Suppliers**

This option does not prevent the supply of a repeater and the unauthorised use of repeaters to resolve individual mobile network coverage issues will potentially continue

### **End-users**

An end-user will not be prevented from purchasing a repeater *if* it holds an appropriate licence. However, this option also does not prevent the purchase of such a device by an end-user (to address network coverage issues) who may be otherwise unaware of the existing regulatory arrangements that are subject to its use and possession.

## **Option 2—Radiocommunications device technical standard**

The ACMA may make a mandatory standard for radiocommunications transmitters and receivers under section 162 of the Radiocommunications Act. Part 4.1 of Radiocommunications Act provides that it is unlawful for a person to supply or possess for the purpose of operation a non-standard device.

The ACMA could make a section 162 standard to apply to repeaters, while specifying requirements that would only allow a subset of repeaters (for example, smart repeaters) to meet the standard. Therefore, the supply of repeaters not covered by the standard would be prohibited unless the ACMA provided written permission (section 174 of Radiocommunications Act) for a non-standard device (section 160 of Radiocommunications Act).

In conjunction with section 174 (supply with permission), a person may apply to the ACMA for a permit (section 167 of Radiocommunications Act) to possess and operate a non-standard device. This provision would apply to end users prior to purchasing a repeater; it would also enable carriers to operate non-standard repeaters in their own networks.

### **Benefits**

- This option would make it an offence to knowingly supply a non-standard device.
- The standard could be drafted to only apply to a particular category of repeaters.

### **Costs and Disadvantages**

- Significant development time is likely to be required to draft an appropriate standard.
- The standard has the potential to restrict the deployment of innovative repeater technologies by affecting the technical and operational attributes of repeaters supplied to the market, including devices that are intended for use by mobile carriers.
- The standard would apply equally to end user and carrier-operated repeaters, and therefore may restrict the use of repeaters by carriers.
- This option would impose additional administrative requirements on the ACMA and industry to provide written permission to supply repeaters (section 174), and issue permits for possession and operation of a repeater (section 167).
- If this option was to be implemented, the ACMA would need to consider the initial and ongoing administrative requirements on both it and industry to issue permits (section 167) and provide written permission to supply a non-standard device (section 174).

## **Costs and benefits are outlined specifically for suppliers and end-users below:**

### **Suppliers**

This option will allow the supply of a repeater to an end-user and a mobile carrier *only* if the repeater is compliant with the relevant mandatory ACMA technical standard. Section 160 of the Radiocommunications Act sets out penalties for the supply of a non-standard device.

If this option was imposed, additional regulatory imposts would be placed on the supplier in terms of:

1. Labelling – To assist with managing the radiofrequency spectrum, the ACMA requires manufacturers and importers of radiocommunications devices and their authorised agents comply with its supplier-based labelling scheme. The scheme aims to ensure that radiocommunications devices meet applicable mandatory ACMA standards, are appropriately labelled before these devices are placed on the Australian market and hold appropriate records (for example test reports) associated with the device's compliance.
2. Supply with permission – a supplier that intends to supply a non-standard device to an end-user, must have written permission to do so by the ACMA under section 174 of the Radiocommunications Act. This would include the supply of devices to mobile carriers.

### **End-users (including mobile carriers)**

Section 157 of the Radiocommunications Act prohibits a person from causing a radio emission to be made by a transmitter that the person knows is a non-standard transmitter. This provision would apply to the operation of a non-standard device by an end-user.

Section 158 also sets the penalties for possession for the purpose of operating a device that the person knows is a non-standard device.

For an end-user to not contravene these sections of the Radiocommunications Act, the end-user will be required to apply in writing to the ACMA for a permit to have in his/her/their possession and operate the specified non-standard device.

The provisions relating to operation of non-standard devices operate in addition to the licensing requirements.

## **Option 3—Telecommunications customer equipment technical standard**

The ACMA has responsibility under the Telecommunications Act to regulate customer equipment (CE) and customer cabling. To achieve this, the ACMA has in place industry self-regulatory arrangements based on compliance with applicable standards and labelling. The ACMA regulates these arrangements through the *Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice 2001*.

These regulatory arrangements aim to ensure that items meet minimum mandatory technical standards (made under section 376 of the Telecommunications Act) and are appropriately labelled prior to connection to a telecommunications network.

The ACMA could make a section 376 technical standard to apply to repeaters of customer equipment while specifying requirements that would only allow a subset of repeaters (for example, smart repeaters) to meet the standard. This would restrict the supply of non-standard repeaters and prohibit the connection of the repeater to a mobile network without the permission of the network operator.

## **Benefits**

- This option provides a viable option for carriers to continue to possess and operate repeaters (classified as network equipment).
- This option would impose restrictions on the supply of repeaters to end users.
- A section 376 technical standard could distinguish between different types of repeaters.

## **Costs and Disadvantages**

- Significant development time is likely to be required to draft an appropriate standard.
- A telecommunications technical standard has the potential to affect the technical and operational attributes of repeaters supplied to the market, including devices that are intended for use by mobile carriers, and thereby has the potential to restrict the deployment of innovative repeater technologies.
- Suppliers/manufacturers may incur initial costs to implement additional labelling requirements.
- Additional labelling and record keeping requirements would be placed on the supplier to indicate the customer equipment (repeater) complies with the applicable standard.
- The supplier would also need to clearly indicate that 'carrier repeaters' were not being supplied to end users.
- Under this option, it is still possible for a person to supply a 'non-standard' repeater, provided the device bears a non-compliance label.

## **Costs and benefits are outlined specifically for suppliers and end-users below:**

### **Suppliers**

This option would impose restrictions on the supply of a repeater to end-users. However, it is still possible for a person to supply a non-standard repeater, provided the device bears a non-compliance label. Therefore, while mobile coverage maybe improved for an individual user, the impact on surrounding cells and users would remain.

If this option was imposed, additional regulatory imposts would be placed on suppliers in terms of:

1. Labelling - Suppliers of specified items are required to label the item with either a compliance or non-compliance label and keep compliance records to indicate the customer equipment (repeater) complies with the applicable technical standard.
2. The supplier would also need to clearly indicate that 'carrier repeaters' were not being supplied to end-users.

### **End-users**

If this option was imposed there is a potential for the 'problematic' repeaters that were once available to end-users to be no longer supplied to the market and subsequently reduce the incidents of interference to mobile networks. However, as described above it is still possible for a person to supply a non-standard repeater (one that does not comply with the applicable standard), provided it bears a non-compliance label.

A person could only connect a non-standard repeater to a mobile network with the permission of the network operator.

The section 376 and associated labelling and record keeping requirements operate in addition to the provisions under the Radiocommunications Act concerning licensed operation.

## **Option 4—Restriction of supply under the Radiocommunications Act**

Section 301 of the Radiocommunications Act provides that a person (the **supplier**) must not supply another person with an eligible radiocommunications device unless the other person holds an appropriate licence or a third party authorisation that authorises them to operate the device. An eligible radiocommunications device is a device specified in the regulations.

The sale of repeaters through online vendors (off-shore or within Australia) is a recognised problem within the ACMA. The operations branch within the ACMA is responsible for investigations and subsequent enforcement of the ACMA's technical regulation and interference management arrangements. It is currently developing a strategy to manage the issues of online supply as part of its repositioning approach to technical regulation.

### **Benefits**

- This option allows carriers to continue to possess and operate repeaters, and also addresses the supply issue to end users.
- Additional record keeping requirements imposed on suppliers could also assist with possible interference investigations and subsequent enforcement action.
- This option would allow the ACMA to prohibit the supply of repeaters to unlicensed persons or persons not authorised by the licensee under section 301 of the Radiocommunications Act.
- This will also provide the ACMA with additional powers of enforcement action to address incidents of interference caused by the unauthorised use of repeaters currently in operation.
- Implementing this option, the ACMA would expect the reported incidents of interference caused by the unauthorised use of repeaters will reduce over time. This is because of the restrictions this option would impose on the supply of repeaters to end-users.

### **Costs and Disadvantages**

- The ACMA would be required to write to the Minister requesting that DBCDE instruct OLDP to prepare a new regulation for the purposes of section 301 of the Radiocommunications Act, regulating the supply of repeaters. This option may not provide an adequate regulatory solution in the short to medium term due to administrative constraints beyond the direct control of the ACMA.
- Additional record keeping requirements would be placed on suppliers.
- The sale of repeaters through online vendors (off-shore or within Australia) will continue to be a problem in limiting the use of unauthorised repeaters.
  - The ACMA is currently developing a strategy to manage the issues of online supply.
- While the proposed reform under this option will apply to new sales of authorised repeaters, the problem of interference caused by the unauthorised use of repeaters will not be entirely resolved given the existing stock of illegal repeaters and their ongoing use in Australia.

### **Costs and benefits are outlined specifically for suppliers and end-users below:**

#### **Suppliers**

This option will prevent the supply of a repeater to an end-user *unless* the end-user holds an appropriate licence or an authorisation from the licensee.

The quantum impact of this is unknown because the number of repeaters currently being made available to unlicensed persons is also not known.



This option has the potential to affect suppliers already in the business of supplying repeaters to unlicensed/unauthorised persons.

### **End-users**

The purchase of a repeater by an unlicensed/unauthorised person is typically independently made due to a lack of adequate mobile network coverage in their local area.

When installed and used in this manner, the repeater may benefit the end-user's coverage, but also has the capacity to disrupt or prevent other end-users' access to the cellular network, including preventing access to the emergency call service.

## **Option 5—Declaration of prohibited device**

Section 190 of the Radiocommunications Act provides that the ACMA may declare that operation or supply, or possession for the purpose of operation or supply, of a specified device is prohibited.

### **Benefits**

- This option will resolve the issue of supply of repeaters to unlicensed and unauthorised end users. However, it should be noted that, carriers regularly use repeaters as part of their network management. The implementation of this option will also prohibit the use of repeaters by mobile carriers.
- A declaration could distinguish between different categories of repeaters.

### **Costs and Disadvantages**

- This option would not allow carriers to possess or operate a repeater.<sup>2</sup>
- A section 190 declaration does not discriminate between categories of persons—it prohibits the operation, supply and possession of a specified radiocommunications device, regardless of who uses it or how it is used.

### **Costs and benefits are outlined specifically for suppliers and end-users (including mobile carriers) below:**

#### **Suppliers**

This option will prohibit the supply of repeaters to any person including end-users and mobile carriers. There is provision for the ACMA to 'exempt' supply of repeaters that are prohibited under a section 190 declaration.

#### **End-users**

Under this option a repeater would be classed as a prohibited device; therefore its possession and operation by an end-user would be prohibited. It would also be an offence for a mobile carrier to possess a repeater.

#### **Mobile carriers**

The implementation of this option would prohibit the possession and use of repeaters by mobile carriers. Therefore, all repeaters currently in operation by mobile carriers will have to be removed from existing networks. This would have significant financial and operational impact for mobile carriers.

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<sup>2</sup> While the ACMA may, under section 27 to the Radiocommunications Act, exempt certain parties from the effect of a prohibition made under section 190, such exemptions may only be given to certain organisations (primarily law enforcement agencies).

# Consultation

## Consultation undertaken

In September 2011, the ACMA released a public consultation paper, *Cellular mobile repeaters – a proposed regulatory approach* seeking public comment on proposed regulatory options to address the supply of cellular mobile repeaters. The ACMA had committed previously to consult on the issue following representations from mobile network carriers in relation to interference caused by unauthorised use of repeaters.

The discussion paper presented five options (outlined previously) to manage the supply of repeaters. The ACMA indicated that a regulation made for the purposes of section 301 was its preferred approach to regulate the supply of repeaters to the market.

The ACMA received five submissions during the consultation period. The majority of submissions to the discussion support the ACMA's preferred approach. It should be noted that no suppliers (including retailers) made a submission to the public consultation process.

## Stakeholders

The ACMA's discussion paper was made available on the ACMA website and circulated to interested parties via existing ACMA stakeholder distribution lists. Mobile carriers and suppliers (including retailers) of repeaters are considered to be the two major stakeholder groups that will be affected should a new regulation be made.

## Views expressed by respondents

### General observations

All respondents noted the legitimate use for repeaters in mobile telecommunications networks. Therefore, any new regulatory solution should be directed at ensuring repeaters were only supplied for authorised use by network operators.

Four of the five respondents agreed with the ACMA's preferred approach of Option 4 – restrict supply under the Radiocommunications Act (s301).

Only one respondent had recommended Option 2 – making a radiocommunications device technical standard – as the most effective mechanism to regulate the supply of repeaters.

### AMTA/CA

The Australian Mobile Telecommunications Association and Communications Alliance agree with the ACMA with regards to Option 4, to restrict supply to unlicensed persons or person not authorised by the licensee under section 301 of the Radiocommunications Act, is the practical solution to regulate the supply of cellular mobile repeaters.

### Communications Law Centre, University of Technology Sydney

The Communications Law Centre believes that measures that seek to prevent harmful interference from occurring are a more appropriate solution. Therefore the regulatory framework should directly deal with the supply of repeaters.

Compliance actions are more effective when directed towards a manageable number of suppliers, rather than a significant number of customers.

Consequently, the Communications Law Centre considers Option 4 (restriction of supply under section 301 of the Radiocommunications Act) to be the most suitable measure.

### **Optus**

Optus agrees with the ACMA that it's recommended Option 4 (restriction of supply under section 301 of the Radiocommunications Act), is the most practical solution to regulate the supply of cellular mobile repeaters.

### **SpectrumWise Radiocommunications Consulting**

SpectrumWise believes the rising use of illegal repeaters is due to the frustration formed from the poor coverage of some major mobile networks. SpectrumWise recognises the appropriate action now is not to ban repeaters but to legitimate and control their use.

SpectrumWise further stated, ownership, or the right to import, should not be confined to licensed carriers.

While SpectrumWise agreed with the ACMA that a regulatory framework should explicitly address the supply of repeaters, it believes the most effective mechanism to accomplish this is by means of regulation by making a technical standard (Option 2).

### **Telstra**

Telstra supports the adoption of new regulatory measures to address the illegal use of repeater devices, by targeting the sources of supply of these devices.

Telstra does not support distinguishing between different types of repeaters. Licensees are best placed to identify which repeaters are acceptable for use in their licensed spectrum.

Properly designed and installed repeaters whose use is authorised by mobile carriers provide a cost-effective, targeted and non-interfering means of improving mobile coverage.

Telstra supports the ACMA's Option 4, namely restriction of supply using the section 301 mechanism in the Radiocommunications Act, as the preferred option.

## **Outcome of the consultation**

As a result of the responses to the public consultation process, the ACMA considers that a regulation made for the purposes of section 301 is the most appropriate regulatory solution to regulate the supply of repeaters. The ACMA believes that such a regulation is suitable for the following reasons:

- it is directed at the point of supply, as opposed to pursuing 'after-the-fact' enforcement action against individuals using a repeater;
- it limits the supply of an eligible radiocommunications device (a repeater) to those persons that hold a licence or persons authorised by means of a third party authorisation;
- it allows mobile carriers to continue to use repeaters as part of their normal network management practices;
- restricting the supply of a repeater to those persons who hold an appropriate licence, or those authorised by the licensee, should reduce the instances of interference caused by repeaters; and
- placing obligations on the supplier to keep records generated through the sale of a repeater will assist the ACMA in pursuing enforcement action.

# Conclusion and recommendation

The ACMA recommends that a regulation made for the purposes of section 301 be adopted as the regulatory solution to address the supply of repeaters (Option 4). The making of such a regulation for the purpose of section 301 of the Radiocommunications Act has the effect of prohibiting a person supplying an “eligible radiocommunications device” (in this case, a repeater) other than to a licensee or a person authorised in writing by the licensee.

It is expected that adopting this option will have the effect of reducing the occurrence of interference as a result of restricting the supply of repeaters to the market to mobile carriers (or persons authorised by a mobile carrier).

# Implementation and review

## Process for developing section 314 regulation

Under section 314 of the Act, the Governor-General may make regulations prescribing all matters required or permitted by the Act to be prescribed. Regulations are prepared by OLDP on instructions from the department whose minister administers the primary legislation<sup>3</sup>.

The *Radiocommunications Regulations 1993* (the Regulations) are administered by the Department of Broadband, Communications and the Digital Economy (DBCDE).

Initial discussions have commenced at officer level with DBCDE regarding the ACMA's proposal to regulate repeaters. Assuming the Minister agrees to the recommendation, future meetings will be convened between ACMA staff and DBCDE to discuss the logistics of developing, consulting on, and making a regulation.

## Implementation implications for external stakeholders

**Mobile carriers** – Under the new approach, any person intending to purchase a repeater (including an employee of a mobile carrier) would be required to present to the supplier a licence, or a duplicate of the licence, that authorises them to operate the repeater. Similar conditions would need to be met by those persons authorised by mobile carriers (licensees) by way of a third party authorisation.

**Suppliers** – Assuming a regulation is made, the regulation would require supplier to keep records of information specified in the regulation. The ACMA proposes that suppliers be required to keep (at a minimum) the following information:

- the name of the purchaser;
- the date of the purchase;
- the identity of the licensee/authorised person;
- a copy of the relevant licence; and
- details of the device (for example, a serial number).

The ACMA intends that the next round of public consultation to be managed by DBCDE and the ACMA seek comment specifically on the information required to be maintained by suppliers. It is the ACMA's intention that only information generated as part of the sale of a repeater (in addition to the identity of the licensee) be required to be kept by the supplier. This should minimise the regulatory burden imposed on suppliers.

Section 301(3) requires that the supplier must retain the document specified in the regulation for at least two years after the supply.

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<sup>3</sup> paragraph 5.4.4 of the *Federal Executive Council Handbook*