Compliance priorities 2023–24

Tackling the online supply of dodgy devices – outcome report

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Executive summary

The rapid growth of ecommerce has profoundly changed the way Australian-based consumers purchase goods and services. ACMA research shows that online shopping by Australian-based consumers increased from 83% of adults in 2020, to 87% in 2023.[[1]](#footnote-2)

As Australian consumers are making more purchases online, we are observing an increase in the prevalence of non-compliant and illegal devices (also described as ‘dodgy devices’ in this report) listed for sale on online platforms. At the same time, we are seeing a rise in the level of complaints about non-compliant and illegal radiocommunications devices purchased and/or advertised on online platforms. These devices may not meet safety standards and may also cause interference to communications, GPS and emergency services, which can put Australians at risk.

In response, we have focused on the issue of the online supply of dodgy devices as a compliance priority in recent years.

To recap, in June 2022 we announced as part of our [2022–23 compliance priority program](https://www.acma.gov.au/compliance-priorities-2022-23) that we would be focusing on suppliers’ compliance with the [Radiocommunications Equipment (General) Rules 2021](https://www.legislation.gov.au/F2021L00661/latest/text) and educating consumers about the risks of buying devices online.

Through this program, we undertook an initial audit to assess the level of non-compliant and illegal devices being sold on online platforms to Australian-based consumers. The emphasis was on online platforms with a focus on ecommerce activities.

We used the audit results to develop revised consumer webpages and to ensure that consumers had easy to understand information about the rules. The audit results also informed an advertising campaign to raise consumer awareness about the rules and the risks of purchasing non-compliant and illegal devices.

In 2023–24, we continued and expanded the program to focus on emerging technologies, including Internet of Things (IoT) network deployments used in AgTech solutions, and by conducting a longer audit over 2 periods. We also conducted research to learn more about purchaser motives and behaviours and to test messaging to sellers of non-compliant and illegal devices. This research informed an expansion of our advertising campaign which aims to better educate Australian based consumers about the rules and the harms dodgy devices can cause. Figure 1 provides an overview of the program.

1. **Components of our dodgy devices compliance program 2023–24**

This report presents the key outcomes and observations from our dodgy devices compliance priority program in 2023–24.

## Our 2023–24 findings

We conducted an audit over 12 weeks in 2 phases, to test whether any changes in the scale or type of non-compliant and illegal devices being sold to consumers based in Australia had occurred compared to last year’s audit. As discussed in the body of this report, the platforms audited were eBay, Facebook Marketplace, Kogan, DHGate, Gumtree, Trading Post, Kogan and Amazon Australia.

Majority of devices were new products

While the majority of platforms audited were primarily ecommerce businesses, we also included platforms providing ecommerce services alongside social media functions. Over the course of the audit, we found a total of 2,209 non-compliant and illegal devices listed for sale. Although the majority of these devices were for new products, a notable proportion – around 25% of all non-compliant devices listed – were second-hand products.

Most sellers were overseas resellers

As we observed in the audit we conducted in 2022–23, most sellers were overseas suppliers utilising drop shipping models. For these suppliers, radiocommunications devices did not appear to be the main product type sold. We observed the vast majority appeared to be individual third-party resellers and none appeared to specialise in the supply of radiocommunications equipment.

Removal response rate needs to be improved

The time taken for a platform to remove a listing varied from several hours to several months. We note that eBay provided the best example of a platform addressing concerns promptly.

While the majority of platforms were responsive, the response rate for some platforms was far slower, and that needs to be improved, particularly where Australian-based consumers are shopping on Australian subsidiaries of platforms, or platforms based in Australia, and may reasonably expect that the goods advertised are compliant with Australian laws.

Removal of listings from online platforms is a key intervention in what is often a global supply chain, and where more direct compliance actions can involve lengthy information gathering and compliance processes. We will continue to work with the platforms to expedite removal of listings of non-compliant and illegal devices in a timely manner. Our view is that a standard timeframe of ‘within 24 hours of notification’ is appropriate to manage the risks for Australian-based consumers.

Many purchasers believed their device was permitted in Australia

We also conducted consumer research to further our understanding of who is purchasing dodgy devices, where and why they are purchasing them and behavioural research focusing on factors that may deter purchasers and sellers. Through this research, we identified:

* the main purchaser group was males aged 18 to 34, living in metropolitan areas, working full time and their motivations for purchasing these devices varied
* that some purchasers had a limited awareness of the risks associated with a range of non-compliant and illegal devices and there was a significant proportion of purchasers who believed that the non-compliant and illegal devices they had purchased were permitted for use in Australia
* for some device categories, price was a major factor, while for other categories, purchasers believed the device provided safety and security.

The findings of the research will enable us to better target the ACMA’s education and compliance activities.

## Engagement with the AgTech industry

We also conducted an education and information campaign focused on the AgTech industry. We ran 2 advertising campaigns between November 2023 and June 2024. We received positive levels of engagement from consumers during the advertising campaign and we also noticed an increase in device compliance enquiries during the second campaign.

Through our AgTech education campaign we engaged with a range of stakeholders, including regulators and industry participants, as well as attending the Future AgTech expo as an exhibitor.

This broad range of engagement enabled us to identify key players in the AgTech market and develop a more in-depth understanding of the market. We observed that industry participants either had a strong awareness of the ACMA and the rules we regulate or had limited to no awareness of the ACMA or the rules we regulate. Following this engagement, we will work to enhance our educational material for the sector in future education campaigns.

# Background

As a part of our 2022–23 compliance priorities, we undertook an initial audit to assess the level of non-compliant and illegal devices being sold on online platforms to Australian-based consumers. This included identifying key search terms used by consumers that lead to the purchase of dodgy devices.

The result of the 2022–23 audit identified a large number of non-compliant and illegal devices being sold on popular online platforms. Although we successfully requested the devices identified at that time to be removed from sale, our concern is that suppliers are still listing these types of devices for sale and making them available for purchase by consumers in Australia.

Our 2023–24 dodgy device audit aimed to again reduce the volume of these devices listed for sale on online platforms and to also focus on identifying suppliers and purchasers of these devices so that more focused educational resources can be developed. These resources will aim to ensure that suppliers and purchasers are aware of the risks and consequences which accompany the supply and operation of non-compliant and illegal devices, with the intention of deterring them from engaging in this activity.

We used the 2022–23 audit results and complaints data to identify the main categories of non-compliant and illegal devices being sold to consumers in Australia. This informed our focus for the 2023–24 audits.

This information was also used to revise our consumer resources to provide easy-to-understand information about the rules relating to the main categories of non-compliant equipment we identified. We also undertook an advertising campaign across 2 periods to make sure Australian-based consumers were better informed of the rules relating to radiocommunications equipment.

A particular focus this year was on the AgTech sector. IoT deployments in AgTech are increasing and our intelligence suggested a limited familiarity with communications regulation in that sector. We actively engaged with a range of stakeholders to increase awareness of our regulatory role and how AgTech can intersect with our regulatory framework.

## Audit scope

The ACMA makes equipment rules, which may prescribe standards for the performance of radiocommunications devices and maximum permitted levels of radio emissions of devices under the *Radiocommunications Act 1992*. The Radiocommunications Act imposes obligations and prohibitions in relation to the operation, possession, and supply of such devices, including the importation of these devices.

The ACMA may also impose permanent bans on equipment. We have imposed a permanent ban on mobile phone and GPS jammers[[2]](#footnote-3) and made a declaration prohibiting mobile phone boosters.[[3]](#footnote-4)

The audit focused on identifying and removing from sale non-compliant 2-way radios, unauthorised mobile phone repeaters as well as illegal mobile phone and GPS jammers and illegal mobile phone signal boosters.

The 2023–24 audit program followed a similar methodology to the 2022–23 program, in that it involved a desk-based audit of online platforms that are widely used by Australian-based consumers to purchase electronic goods. The 2023–24 audit program included a range of large and established, as well as smaller, and newer platforms.

The audit was conducted in 2 phases. During the first phase, 7 platforms were audited, but during the second phase, an eighth platform was included in the sample. This was a smaller platform with no Australian presence that specialised in the sale of electronic equipment. This platform was included in phase 2 of the audit program after the ACMA identified that this platform was supplying a variety of jammers worldwide.

The platforms audited were eBay, Facebook Marketplace, Kogan, DHGate, Gumtree, Trading Post, Kogan and Amazon Australia.

## Limitations

Our audits were conducted using key word terms. The key words were informed by staff research, previous audit findings and compliance trends. However, the key words used to identify and market devices continue to evolve and we predict that this impacts the efficacy of our audit processes in identifying all non-compliant and illegal devices listed on a platform at any given time.

ACMA staff reviewed the listings flagged for attention by our webcrawler[[4]](#footnote-5) application to determine the compliance status of devices. Due to the volume of data assessed, and difficulty in contacting suppliers on some platforms, staff do not seek additional information from the suppliers as to the compliance status of every device.

As a result, there is the potential for suppliers of some devices flagged as non-compliant in this process to be able to demonstrate compliance by providing further details on the technical specifications of the device. We consider there is a low likelihood of this occurring however, as the [regulatory compliance mark](https://www.eess.gov.au/rcm/regulatory-compliance-mark-rcm-general/) (RCM) is in most instances easily identifiable for compliant devices. Should an issue arise, both suppliers and users on all platforms audited can query the reasons for removal.

Methodology

## Audit sample

We selected a sample of online platforms by considering:

* complaints data
* length of time the platform has been available
* estimated monthly user data, results from the 2022–23 audit along with findings from the consumer research.

As noted earlier, we selected 7 platforms for phase one of the audit and we selected an additional platform to include in phase two of the audit following intelligence received during the first phase of the audits. This ensured we had a diverse mix of online platforms to audit.

## Develop keyword list for searches

To develop a keyword list, we considered complaints data, frequency of keyword searches used, findings from the consumer research and audit findings from the 2022–23 audit.

We used intelligence received during the audit to finesse the keyword list from phase one to phase 2 of the audit. We tested the keyword searches before the desktop audit to ensure the results provided focused on non-compliant and illegal equipment.

## Online platform audit

**Scan of online platforms**

* We used a webcrawler tool[[5]](#footnote-6) to scan the online platforms being audited against the keyword list.
* ACMA staff then reviewed the list of hits produced by the webcrawler and assessed whether each flagged item was compliant with the ACMA’s regulatory framework.
* We conducted the audit over 2 phases for the selected online platforms.
* Phase one of the audit was conducted from October to November 2023. Phase 2 was conducted from February to March 2024.

**Seek removal of non-compliant and illegal listings**

* Where matters were assessed as non-compliant or illegal, we contacted suppliers and online platforms seeking the immediate removal of listings of non-compliant and illegal devices from sale to Australian consumers.

**Engagement with online platforms**

* We identified trends and worked with online platforms to expedite processes to remove non-compliant and illegal devices.
* We met with online platforms to:
* educate them about the Australian regulatory framework
* seek cooperation to expedite the removal of advertisements for non-compliant and illegal devices
* seek cooperation to prevent the sale of non-compliant and illegal devices to Australian-based consumers on their platform
* seek cooperation in obtaining the contact details of suppliers and buyers of non-compliant and illegal devices.
* We notified the platforms of the findings of the audits and how their platform compared to others audited in terms of the types and numbers of non-compliant and illegal devices identified for sale.

**4. Engagement with suppliers**

* We educated suppliers on requirements and legislation relating to device compliance by writing to them and directing them to ACMA online resources regarding the responsible supply of devices in Australia.
* Where we identified that suppliers had sold non-compliant and illegal devices to Australian-based consumers, we engaged with suppliers to ensure the destruction or forfeiture of the devices.

**5. Engagement with buyers**

* We educated buyers on requirements and legislation relating to device compliance by writing to them and directing them to ACMA online resources regarding non-compliant and illegal equipment.
* Where we identified Australian-based consumers who had purchased banned devices, we engaged with them to ensure the destruction or forfeiture of the devices.

# Outcomes

Of the 8 platforms we audited, all had non-compliant and illegal products listed for sale. Two platforms accounted for over 75% of all non-compliant and illegal devices listed for sale. Over the course of the audit, we identified a total of 2,209 non-complaint and illegal devices listed for sale and all of those listings were removed from sale to consumers based in Australia.

We conducted the audit over 2 phases, for a total of 12 weeks. Phase one of the audit ran for 6 weeks during October to November 2023 and examined 7 of Australia’s online platforms, which were the most popular with Australian-based consumers. Phase 2 of the audit also ran for 6 weeks, during February to March 2024. It examined a total of 8 online platforms. As noted, the platforms audited were eBay, Facebook Marketplace, Kogan, DHGate, Gumtree, Trading Post, Catch.com and Amazon Australia.

This year’s program also focused on the emerging AgTech sector. With our intelligence suggesting a limited familiarity with communications regulation in that sector, we undertook active engagement with a range of AgTech stakeholders to increase awareness of our regulatory role and how AgTech can intersect with our regulatory framework.

## Desktop audit findings

Phase one aimed to reduce the number of non-compliant devices for sale during peak shopping periods. Phase two aimed to test whether there were any changes in the type or amount of non-compliant and illegal devices listed for sale at different periods.

During phase one of the audit, we identified a total of 1,129 non-compliant devices listed for sale. All these listings were removed by the platforms following removal requests by the ACMA. The types of non-compliant and illegal devices identified were:

* non-compliant 2-way radios (1,037)
* unauthorised mobile phone repeaters and boosters (69)
* GPS jammers (23).

During phase 2 of the audit, we identified a total of 1,080 non-compliant and illegal devices listed for sale and all of these listings were removed by the platforms following removal requests by the ACMA. The types of non-compliant and illegal devices identified were:

* non-compliant 2-way radios (665)
* Wi-Fi, GPS and mobile phone jammers (405)
* unauthorised mobile phone repeaters and boosters (10).

The increase in jammers for sale in phase 2 is of concern as jammers can block access for people making emergency calls and interfere with radio services. However, the ACMA concluded that the increase was in part due to the inclusion of an additional platform in the audit.

The types of non-compliant devices identified are shown in Figure 2 below.

Main type of non-compliant devices identified

Compared to audit results last year, we saw a significant reduction in the number of unauthorised mobile phone repeaters listed for sale. In the 2022–23 audit, we identified 335 unauthorised mobile phone repeaters for sale while in the 2023–24 audit, we identified a total of 79 unauthorised mobile phone repeaters for sale. This is a positive trend.

However of concern, we saw a notable increase in jammers listed for sale. In the 2022–23 audit, we identified 12 jammers for sale while in the 2023–24 audit, we identified a total of 428 jammers for sale, with most sold by overseas suppliers who appear to be utilising drop shipping models.[[6]](#footnote-7)

Although we also observed a small number of overseas-based sellers that appeared to specialise in telecommunications equipment (with listings selling unauthorised mobile repeaters to Australian-based consumers) our findings indicate that the majority of suppliers are third-party resellers whose main source of income is the sale of products via online platforms. Analysis of these suppliers indicated that the sale of non-compliant radiocommunication devices generally constituted a small part of the product range sold to consumers in Australia. For example, we observed suppliers with over 100 different products (including clothing, toys and electronic equipment) were also selling non-compliant 2-way radios. This finding was consistent with the 2022–23 audit and these sellers were reported to the platforms for action.

Additionally, there were several individual sellers selling a small number (1 or 2) non-compliant devices on an ad hoc basis. This was particularly the case for the sellers of the GPS jammers who appeared to be individuals based overseas who were selling only one unit of a GPS jammer along with various other unrelated products.

As we conducted each phase of the audit, we noticed a significant decline in the number of non-compliant and illegal listings advertised each week. During each week of the audit, we notified the online platforms when non-compliant and illegal devices were identified on their platforms and sought the removal of these listings. This may have contributed to more focus by the platforms as the audit phases progressed.

Number of non-compliant devices identified during each week of the audit

## Engagement with online platforms

During the audit, we met with a range of online platforms to inform them about our regulatory requirements, explore opportunities to streamline removal of non-compliant listings and to share information on our findings. All of the platforms cooperated with our requests, with several taking proactive steps to prevent non-compliant radiocommunications devices being listed for sale to Australian-based consumers.

While contacts with sellers on individual platforms were generally successful, we encountered challenges in contacting sellers on some platforms, particularly where ecommerce was not the primary function of the platform. For example, ACMA staff attempted to send a direct message to a seller who had listed a mobile phone jammer for sale to educate them about the rules, and to request removal of the listing and the destruction of the device. The platform did not permit direct messaging by organisations to users and ACMA staff were unable to send a direct message to the seller.

Obtaining seller information via platforms can also be difficult and time consuming. Some platforms have business models which make accessing user information for these purposes difficult. For example, global platforms holding user information in overseas-registered but Australian-operating businesses may require a request for user data to be lodged in a different jurisdiction (for example, reflecting where the platform’s compliance team is based), despite the user being based in Australia and using an Australian subsidiary of the platform – and with relevant personal information about users/sellers being governed under the Privacy Act in Australia. While ACMA staff are able to request that platforms remove listings, we are concerned that non-compliant and illegal equipment is being listed for sale contrary to the stated policies of the platforms, contrary to Australia’s regulatory framework. We are also concerned that action cannot be taken in a timely manner to address this.

While we appreciate that platforms are actively working to ensure that the privacy of user data is protected, it is also important that the safety of the Australian community not be put at risk through the supply of unsafe non-compliant and illegal devices. We continue to work with platforms to address these issues.

Methods to request removal also differed across platforms. Some have deployed dedicated portals for regulators to request removal of non-compliant listings while others required letters with URLs of listings, along with details of how the product does not meet our regulatory requirements.

As a positive example, it was encouraging to see that eBay has deployed a regulatory portal which allows selected authorities to efficiently report, and to directly take down, listings.[[7]](#footnote-8) The regulatory portal allows for the prompt and efficient removal of listings of non-compliant devices, which is to be commended.

Our experience with some of the other platforms was more challenging. We are exploring alternative means of engaging with platforms that do not have an Australian-based presence. We have arrangements in place with Australian Border Force for the identification and destruction of jammers, where these devices are detected and will consider whether these arrangements can be strengthened or broadened to include other devices.

We also found that there were significant differences in the response times between platforms in actioning our requests, even where platforms had tools set up to streamline these processes. In particular, we noted that platforms specialising in ecommerce activities were generally able to action requests faster. This raises concerns for us that some platforms are not doing enough to protect their users, particularly where global platforms have an Australian subsidiary, or the platform is Australian-based, and consumers may expect that goods for sale on those platforms are compliant with Australian laws. These concerns are backed up by findings from our consumer research which indicate that consumers in Australia generally assume and expect that devices listed for sale on these platforms comply with Australian laws.

In our view, the prompt removal of listings of non-compliant devices from online platforms is a key intervention to support consumers buying goods online in Australia, as it reduces the risk that consumers will inadvertently purchase non-compliant devices. We will continue to work with the platforms to expedite removal of listings of non-compliant and illegal devices in a timely manner. Our view is that a standard timeframe of within 24 hours of notification is appropriate to manage the risks for consumers.

Rapid action by the platforms is also important given we have identified through our audit activity that there are malicious actors in the market. During the audit, we noted a small subset of sellers that appeared to be attempting to evade efforts to prevent listing of non-compliant products targeted to Australian-based consumers. Methods included adjusting how their products were advertised, such as changing keywords used in listings, there was also a high prevalence of false information provided by sellers to some platforms and allegations of identity fraud from purchasers of non-compliant and illegal devices with a number of sellers. This suggests that some sellers are evading attempts by online platforms and regulators to prevent the sale of non-compliant and illegal devices.

## Engagement with suppliers and purchasers

We engaged with Australian-based suppliers where we identified they were selling non-compliant and illegal devices. We wrote to these suppliers to educate them on the regulatory requirements and to seek the immediate removal of the devices advertised for sale and details of purchasers of the devices.

For this audit program, the primary focus was on education and removing the devices from the community to reduce the risk of potential interference to radiocommunications services.

We engaged with Australian-based purchasers of non-compliant devices throughout the audit, focusing on purchasers of jammers, given the risks associated with the use of jammers in the community. We educated purchasers about the rules and made arrangements with purchasers to either forfeit or destroy jammers purchased. This included the forfeiture of 5 jammers, while 38 jammers were voluntarily destroyed by purchasers.

One increasing challenge in engaging with purchasers is the prevalence of email and telephone scams. This has made purchasers wary of responding to emails and messages, including those from the ACMA. We have sought alternative methods of contacting purchasers to address this, including via postal services, in-person visits from our field staff and messages being sent via in-platform messaging services.

Through our research, we also engaged with Australian-based purchasers to enhance our understanding of why individuals were purchasing non-compliant and illegal devices and to gauge their understanding of the risks and consequences associated with the purchase of non-compliant devices. This is discussed later in this report.

# Education in the AgTech sector

The AgTech market in Australia is expanding and, according to the Australian Trade and Investment Commission, AgTech attracts $800 million in investment per year.[[8]](#footnote-9) The Australian Government has also implemented a range of measures to facilitate the rollout of AgTech in Australia, such as the [On Farm Connectivity Program](https://www.infrastructure.gov.au/media-communications-arts/better-connectivity-plan-regional-and-rural-australia/farm-connectivity-program) which aims to assist primary producers to take advantage of AgTech solutions.

While the AgTech sector continues to expand, intelligence received during the 2022–23 dodgy devices audit indicated that the sector had a limited awareness of the ACMA and our regulatory framework. This is of concern as a lot of AgTech equipment needs to comply with the *Radiocommunications Act 1992* and the *Telecommunications Act 1997*. As a result, we decided to conduct an education campaign targeted at the AgTech sector. AgTech deployments may intersect across our regulatory framework at various points, from the supply and possession of radiocommunications devices (which may include AgTech equipment) to licensing and cabling.

We met with a range of stakeholders in the AgTech sector, including with various state and federal government agencies to identify the main stakeholders in the sector and to raise awareness of the ACMA – including how our regulation intersects with the AgTech sector. These meetings were informative and valuable. We also attended the [FutureAg](https://futureagexpo.com.au/) expo as an exhibitor and provided various informative fact sheets and other educational material to attendees.

In our engagement with the AgTech sector, we observed that industry participants either had a strong awareness of the ACMA and the rules we regulate, or had limited to no awareness. We focused our engagement where we observed participants had low awareness of the ACMA. Through our engagement, we received valuable feedback on how we could enhance educational material for the sector which we will consider for future education campaigns.

We will continue to engage with the AgTech sector to raise awareness of our role and the regulatory framework.

# Research on purchasers and sellers

We conducted research toexplore consumer awareness and motivations for purchasing non-compliant devices. This was comprised of quantitative and qualitative studies with purchasers and potential purchasers of non-compliant devices. We also undertook behavioural research to assess the effectiveness of compliance messaging with sellers.

**Research on purchasers**The ACMA engaged SEC Newgate to conduct the purchaser research. This research was comprised of 3 components:

* an online quantitative survey
* mini groups with purchasers and potential purchasers
* qualitative in-depth interviews with purchasers.

In the online quantitative survey, participants were asked whether they had purchased or considered purchasing wi-fi jammers, mobile phone jammers, GPS jammers, unauthorised mobile repeaters, and non-compliant 2-way radios in the past 5 years. A representative sample of 15,341 Australian adults participated in the study, and of those, 875 indicated they had either purchased (313) or considered purchasing (562) a dodgy device. Unauthorised mobile repeaters were the most common type of device that participants had purchased (133) or considered purchasing (334).

We found that overall, males were more likely than females to purchase or consider purchasing dodgy devices. This gender difference was most pronounced for non-compliant 2-way radios, with 78% of purchasers or potential purchasers being male. We also found that purchasers and potential purchasers of dodgy devices tended to be younger (see Figure 4). Purchasers and potential purchasers of most dodgy devices were also more likely to be university educated. This was particularly true for wi-fi jammers (69% university educated), GPS jammers (68% university educated) and mobile phone signal jammers (66% university educated), but less so for unauthorised mobile repeaters (58% university educated) and non-compliant 2-way radios (54% university educated).

Finally, we found that overall, purchasers and potential purchasers of dodgy devices were more likely to live in metropolitan areas compared to regional areas. However, there was variation in this, with GPS jammers the most concentrated in metropolitan areas (78% metro), followed by non-compliant 2-way radios (74% metro), mobile phone signal jammers (72% metro), wi-fi jammers (71% metro), and finally, unauthorised mobile repeaters (63% metro).

Distribution of device types by age groups

The online survey also identified that some purchasers and potential purchasers of dodgy devices had limited awareness of the risks associated with these devices. As shown in Figure 5, of those who had either purchased or considered purchasing a jammer device, only 54% were aware that these devices can interfere with other people’s phone and internet services. Fewer than half were aware that they can interfere with emergency service communications, that they are not compliant with Australian standards and that they are not permitted for use in Australia. Fewer than one third of people were aware they do not meet Australian radio frequency standards.

Awareness of jammer function and legality

Furthermore, as shown below in Figure 6, we found that the majority of purchasers of non- compliant two-way radios and unauthorised mobile phone repeaters believed their devices were permitted for use inAustralia**.**

Belief that device is legal

|  |  |
| --- | --- |
| Non-compliant 2-way radios | Unauthorised mobile repeaters |
|  |  |

Australians who had either purchased or considered purchasing a dodgy device were asked how they had intended to use it. Only a minority indicated their purpose had an intent to do wrong, as shown below in Table 1. Many of these themes were echoed by participants who took part in the in-depth interviews.

Intentions for purchasing dodgy devices

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Any jammer | Mobile phone signal jammer | GPS jammer | Wi-Fi jammer | Dodgy 2-way radio | Unauthorised mobile phone repeater |
| Security / privacy (21%) | Security/privacy (14%) | Stop location tracking (22%) | Security / privacy (28%) | Use in vehicle (29%) | Improve signal (42%) |
| Blocking / disrupting signals (11%) | Block calls / messages  (14%) | Security / privacy (22%) | Stop others using my wi-fi (27%) | Travelling / camping / hiking (28%) | Improve signal at home (25%) |
| Stop others using my Wi-Fi (8%) | Block internet / social media (8%) | Blocking / disrupting signals (11%) | Blocking / disrupting signals (16%) | Communicate / talk to people (28%) | Improve signal while travelling (7%) |
| Stop location tracking (7%) | Blocking / disrupting signals (6%) | Stop vehicle being tracked (7%) | Recreation / fun (6%) | Recreation / fun (8%) | Improve signal in vehicle  (4%) |
| Block calls / messages (5%) | Stop others using phones  (3%) | Recreation / fun (7%) | Research / testing (5%) | Work purposes (5%) |  |

Finally, Australians who had either purchased or considered purchasing a dodgy device were shown a series of statements and asked how likely it was that knowing this information would deter them from purchasing a dodgy device. The statements they were shown were:

* Knowing it is not compliant with Australian standards (e.g., power levels, labelling etc).
* Knowing it is not permitted for use in Australia.
* Knowing it could interfere with emergency service communications.
* Knowing it may interfere with other people’s phones / internet.
* Knowing they don’t ’meet Australian radio frequency standards.

Of these, knowing it could interfere with emergency service communications was the most important, with 77% of participants saying it would either stop them from purchasing or make them a lot less likely to purchase the device. This was followed by knowing it is not permitted for use in Australia, with 76% of participants saying it would either stop them from purchasing or make them a lot less likely to purchase the device.

**Behavioural research**  
The ACMA engaged the Behavioural Insights Team (BIT) to conduct the behavioural research. The behavioural research was conducted in 3 parts:

* Part 1 involved BIT reviewing and redesigning the ACMA’s current suite of compliance-focused communications for dodgy devices, including messaging for both purchasers and sellers. This work also involved creating new advertising copy for future advertising on online platforms about dodgy devices. This work was delivered in late-2023 and early-February 2024.
* Part 2 involved BIT working closely with SEC Newgate, the consultant for the purchaser questionnaire, to improve the messaging and communications sent to prospective purchasers of dodgy devices. This work also resulted in the creation of personas for purchasers of dodgy devices, created with the assistance of an artificial intelligence tool belonging to BIT called Personify.
* Finally, Part 3 involved a behavioural experiment to test the ACMA’s current compliance messaging to deter sellers from listing on online platforms.

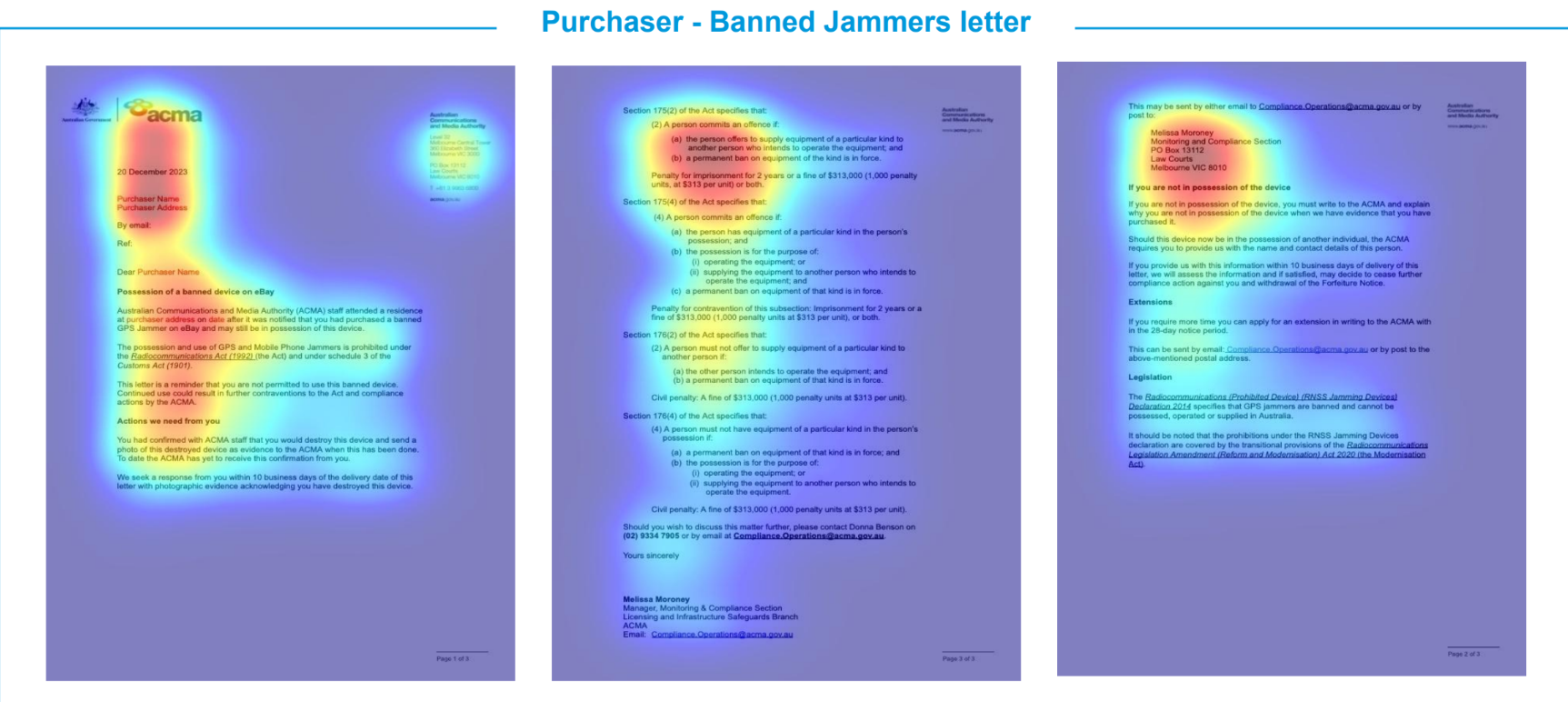
### Purchaser and seller communications

In February 2024, the BIT completed a review of the ACMA’s current compliance communications for dodgy devices.

Using best-practice techniques in behavioural science, including theories and techniques known to influence behaviour in compliance-related settings, the BIT developed a new suite of communications for the ACMA. This included several new letters to purchasers, and a catalogue of new advertising collateral for use on online marketplaces.

In addition, a novel feature of the project involved using eye-tracking technology to improve the ACMA’s current communications suite. Simulated eye-tracking technology uses a database to determine how a person might respond to the layout of written communication, and how they first engage with written sources. This can provide valuable insights into how people engage with things they can see, without the time, expense, and expertise needed to set up, collect and analyse real eye-tracking data. The technology is based on machine-learning algorithms that have been trained using real-world data. Figure 7 shows an example of the eye-tracking technology applied to a current ACMA dodgy device communication.

Eye tracking example



Comparing eye-tracking results from the new communications with the original communications, the BIT and ACMA were able to develop new communications which reliably redirect readers’ attention to the most crucial components of the letters, such as the call to action.

**Behavioural trial**  
ACMA staff undertook a randomised control trial to test whether behaviourally informed messages reduced sellers’ relisting behaviour.

Three different messages were tested to determine how effective these were at deterring sellers from relisting the device. The results of the trial showed that there was no significant difference of the type of message on relisting behaviour.

During the trial we found at least 64% of sellers selling non-compliant devices to Australian consumers were based overseas. Overseas based sellers were more likely to relist non-compliant devices compared to Australian sellers.

Of Australian based sellers who listed the item for sale, the shorter, succinct message appeared to be most effective in deterring the seller from relisting the device.

**ACMA webpage content**

As part of the behavioural study, respondents were asked to provide feedback on the ACMA’s current compliance communications aimed at educating the public about the risks of purchasing dodgy devices. In reviewing the ACMA’s webpage, respondents suggested that the text appearing on the page be reduced and more focus be placed on detailing the consequences of purchasing, supplying and operating a dodgy device.

The ACMA will consider these findings and will implement changes to refresh our content over the coming months.

# Communications program

We undertook a communications program which coincided with the audit. The main focus of the communications program was an advertising campaign which ran in 2 stages. Stage one ran from November to February 2024. Stage 2 ran from May to June 2024. The initial findings from the quantitative research were used to better target stage 2 of the advertising campaign.

### Advertising campaign

We developed an advertising campaign to educate people about the risks of buying radiocommunications devices online and encourage them to visit the ACMA website to learn more about how to spot a dodgy device. The campaign:

* targeted individuals 18+ years old intending to make online purchases of radiocommunications devices
* used social media and digital display channels to drive traffic to the ACMA website, raising awareness and education about the risk of buying radiocommunications devices online and how to spot a dodgy device, as well as reducing the number of complaints arising from the sale of dodgy devices
* targeted audiences at scale across popular social media platforms and feeds
* included digital display ads, such as display banners, using audience, keyword and private marketplace targeting.

For stage one of the advertising campaign, we saw a significant increase in the amount of traffic to the ACMA’s website, along with an increase in enquiries relating to the purchase of non-compliant and illegal devices.

Traffic to ACMA webpages during stage 1 campaign

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Web page | Total page views (during campaign) | Average daily page views | Average time on page | Traffic increase during campaign\* |
| [Buying Radiocommunications Devices](https://www.acma.gov.au/buying-radiocommunications-devices) | 34,460 | 415 | 00:59 secs | Increased average of 410 views per day (non-campaign daily average is 5) |
| [Beware two-way radios](https://www.acma.gov.au/beware-two-way-radios-overseas) | 25,720 | 309 | 2:20 mins | Increased average of 289 views per day (non-campaign daily average is 20) |
| [Illegal equipment](https://www.acma.gov.au/illegal-equipment) | 18,387 | 222 | 3:39 mins | Increased average of 195 views per day (non-campaign daily average is 27) |
| [Cellular mobile repeaters](https://www.acma.gov.au/cellular-mobile-repeaters) | 41,806 | 503 | 2:16 mins | Increased average of 451 views per day (non-campaign daily average is 52) |

\* Traffic increase is based on the average daily page views in the 6 weeks prior to the paid campaign period.

### Creative approach

We used our recently developed creatives across both social and digital display (below).

These assets include 2 main calls to action:

* Check it’s legal before you buy.
* Check the rules before you buy.



Stage 2 of the advertising campaign was informed by the preliminary results of our consumer research. As a result, we refined the target audience to males aged 18–34 years, but the focus of the campaign otherwise remained unchanged. The results of the campaign are below.

Traffic to ACMA webpages during stage 2 campaign

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Web page | Total page views (during campaign) | Average daily page views | Average time on page | Traffic increase during campaign\* |
| [Buying Radiocommunications Devices](https://www.acma.gov.au/buying-radiocommunications-devices) | 15,808 | 329 | 00:28 secs | Increased average of 323 views per day (non-campaign daily average is 6) |
| [Beware two-way radios](https://www.acma.gov.au/beware-two-way-radios-overseas) | 8,649 | 180 | 1:00 min | Increase average of 148 views per day (non-campaign daily average is 32) |
| [Illegal equipment](https://www.acma.gov.au/illegal-equipment) | 26,732 | 557 | 00:46 secs | Increased average of 510 views per day (non-campaign daily average is 47) |
| [Cellular mobile repeaters](https://www.acma.gov.au/cellular-mobile-repeaters) | 21,105 | 440 | 00:53 secs | Increased average of 400 views per day (non-campaign daily average is 40) |

## Next steps

Tackling the online supply of dodgy devices continues to be a compliance priority for the ACMA for the 2024-25 financial year.

Over the coming months, our [focus](https://www.acma.gov.au/compliance-priorities) will include further engagement and collaboration with the platforms to:

* facilitate improved information sharing and to develop a voluntary pledge
* address issues around response times to remove non-compliant and illegal device listings (noting that our view is that such listings should be removed within 24 hours of notification)
* provide information on keywords used in listings of non-compliant and illegal devices to enable the platforms to refine their algorithms.

We will also explore options with the platforms to ensure we can directly contact the sellers to educate them about the requirements of the Radiocommunications Equipment (General) Rules 2021.

If we do not see a noticeable improvement in industry performance in preventing and promptly removing listings of non-compliant and illegal devices, we will consider seeking government support for additional enforcement powers.

Following the completion of our advertising campaign and our consumer and behavioural research, we will apply those learnings to our educational resources, including for internationally based suppliers. The information we have collected through this program will assist us to ensure our educational materials are appropriately targeted, and assist all stakeholders to develop a good understanding of our regulatory requirements.

1. Australian Communications and Media Authority, [*Communications and media in Australia: How we use the internet*](https://www.acma.gov.au/publications/2023-12/report/communications-and-media-australia-how-we-use-internet), December 2023, accessed 22 April 2024. [↑](#footnote-ref-2)
2. [Radiocommunications (Jamming Equipment) Permanent Ban 2023](https://www.legislation.gov.au/Details/F2023L00214) [↑](#footnote-ref-3)
3. [Telecommunications (Prohibition of Mobile Phone Boosters) Declaration 2021](https://www.legislation.gov.au/Details/F2021L01177) [↑](#footnote-ref-4)
4. The webcrawler tool is an in-house application designed by ACMA staff for its audit purposes. It uses key word searches to identify listings of potentially non-compliant and illegal devices and flags these for review by ACMA staff. [↑](#footnote-ref-5)
5. The webcrawler tool is an in-house application designed by ACMA staff for its audit purposes. [↑](#footnote-ref-6)
6. In a drop shipping model, the store that listed the devices for sale does not keep the products in stock. Instead, the seller purchases the product from a third party (e.g., wholesaler or manufacturer, often registered outside of Australia) and it is shipped directly to the customer. The seller, which may be categorised as a ‘distributor’, does not handle the product directly at any stage of the sale process. [↑](#footnote-ref-7)
7. eBay, [*eBay launches new Regulatory Portal to further protect consumers*](https://www.ebayinc.com/stories/press-room/au/ebay-launches-new-regulatory-portal-to-further-protect-consumers/)*,* 24 May 2021, accessed 1 July 2024 [↑](#footnote-ref-8)
8. Australian Trade and Investment Commission, [*Agrifood Tech*](https://international.austrade.gov.au/en/do-business-with-australia/sectors/technology/agrifood-tech), accessed on 3 June 2024 [↑](#footnote-ref-9)