Remaking the Radiocommunications (Cordless Communications Devices)
Class Licence 2014

Consultation paper

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Executive summary

The [Radiocommunications (Cordless Communications Devices) Class Licence 2014](https://www.legislation.gov.au/F2014L01800/latest/text) *(*the CCD class licence) authorises the use of a selection of frequency bands for cordless communications devices. This instrument is due to sunset on 1 April 2025.

We are reviewing the CCD class licence to address the following matters:

1. Removal of the authorisation to use 857–861 MHz and 861–865 MHz bands from 1 July 2024.

Updating arrangements in the 1880–1900 MHz band.

Remaking the CCD class licence ahead of its sunsetting date of 1 April 2025 to ensure continuity of arrangements for cordless communications devices.

We are proposing to remake the CCD class licence prior to 1 July 2024. A draft new instrument – the Radiocommunications (Cordless Communications Devices) Class Licence 2024 – is included in the key documents section of this consultation.

To ensure support for future digitally enhanced cordless telecommunications (DECT) in the 1880–1900 MHz band, amendments are required to the Radiocommunications Equipment (General) Rules 2021 (the equipment rules).

A draft amendment instrument – the Radiocommunications Equipment (General) Amendment Rules 2024 (No. 1) – is also included for consideration.

We are seeking your views on the authorisation of cordless communications devices into the future. This includes the potential to include the necessary arrangements in the Radiocommunications (Low Interference Potential Devices) Class Licence 2015.

# Issues for comment

This consultation does not pose specific questions. We welcome your feedback on the issues raised in this consultation, or any other issues relevant to spectrum arrangements for cordless communications devices.

# Introduction

The CCD class licence authorises the use of a selection of frequency bands for CCD. This includes cordless telephones used in both residential and commercial settings, as well as wireless microphones and headsets.

We are reviewing the CCD class licence to address the following matters:

1. Removal of the authorisation to operate CCD in the 857–861 MHz and
861–865 MHz bands from 1 July 2024.

Updating arrangements in the 1880–1900 MHz band.

Remaking the CCD class licence ahead of its sunsetting date of 1 April 2025. This will ensure continuity of arrangements for CCD.

These are discussed in further detail below.

In parallel, we are proposing amendments to the [Radiocommunications Equipment (General) Rules 2021](https://www.legislation.gov.au/F2021L00661/latest/text) (the equipment rules) to ensure support for future DECT in the 1880–1900 MHz band. This is discussed in a later section of this paper.

## Removal of CCD arrangements in the 800 MHz band

In November 2015, we released our [*long-term strategy for the 803–960 MHz band*](https://www.acma.gov.au/publications/2019-12/report/acmas-long-term-strategy-803-960-mhz-band-decision-paper). It outlined a plan to clear existing services from the frequency ranges 809–825 MHz and 854–870 MHz and facilitate deployment of mobile broadband services.

This strategy had been subject to numerous rounds of prior public consultation. It included the removal of arrangements for the cordless telephone service (CTS) in 857–865 MHz.

The then Minister for Communications, Cyber Safety and the Arts made [the Radiocommunications (Spectrum Re‑allocation—850/900 MHz Band) Declaration 2020](https://www.legislation.gov.au/Details/F2020L01407) on 27 October 2020. An auction to allocate spectrum licences in
the 850/900 MHz band was held in November/December 2021, including
859–870 MHz. These spectrum licences commence on 1 July 2024. The removal
of the 857–861 MHz and 861–865 MHz bands from the CCD class licence needs to occur prior to commencement of the spectrum licences.

## Updating CCD arrangements in the 1880–1900 MHz band

From November 2021 to November 2023, we conducted a review of spectrum arrangements in the 1880–1920 MHz band. This included 2 public consultation papers and concluded with the [*Replanning of the 1880–1920 MHz band: outcomes paper*](https://www.acma.gov.au/consultations/2021-11/exploring-future-use-19-ghz-band-consultation-402021#outcomes-for-this-consultation). An outcome of this review was to update arrangements in the 1880–1900 MHz band to support DECT and future DECT technologies, and remove support for personal handyphone system (PHS) technology, which has become obsolete.

## Sunsetting

Under Part 4 of Chapter 3 of the *Legislation Act 2003*, most legislative instruments ‘sunset’. That is, they are automatically repealed on 1 April or 1 October that first occurs 10 years after they are registered. This is an automatic process applying to most legislative instruments, regardless of their content.

The sunset date for the CCD class licence is 1 April 2025.

We can decide to revoke and remake the CCD class licence, or allow it to sunset. If an instrument is still required, our approach has been to revoke the existing instrument and remake it after consultation.

For the CCD class licence, we consider that this instrument continues to form a necessary and useful part of the legislative framework. Accordingly, we propose to remake it in a new instrument before the sunset date, so that its ongoing effect is preserved. Given the timing requirements of other changes, which are required by
1 July 2024, we are proposing to bring forward the remaking of this instrument to before 1 July 2024.

# Proposed legislative instrument

A draft Radiocommunications (Cordless Communications Devices) Class Licence 2024 (draft instrument) is included with this paper for consideration. Some of the key aspects of the instrument are discussed below.

## Frequency ranges

The frequency ranges of operation are included in the definition of ‘cordless communications device’ in section 5 of the draft instrument. These frequency
ranges are:

1.7175–1.7925 MHz

30.0625–30.3125 MHz

39.7625–40.250 MHz

1880–1900 MHz.

As discussed below, operation in the 1880–1900 MHz range is proposed to be limited to DECT technology.

The proposed changes to the frequency ranges of operation set out in the CCD class licence involve the removal of the 857–861 MHz and 861–865 MHz bands to implement the outcomes of the 803–960 MHz review.

## Technology

The draft instrument specifies that CCD operated in the 1880–1900 MHz range are only authorised if they use DECT technology. This includes future DECT technologies. Feedback from the replanning of the 1880–1920 MHz band process indicated that PHS technology is now obsolete. Therefore, we propose to remove support for this technology in the 1895–1899.8 MHz band.

While no specific technologies are prescribed for the use of CCD in the
1.7175–1.7925 MHz, 30.0625–30.3125 MHz and 39.7625–40.250 MHz frequency ranges, we propose equivalent isotropically radiated power (EIRP) limits, as
discussed below.

## EIRP limits

In the current version of the CCD class licence, EIRP limits are included for different technology types – namely, land stations using DECT and PHS. EIRP limits are not specifically included for each frequency band, meaning that in frequency bands where no technology is specified, there is currently no EIRP limit expressed in the CCD class licence. While not explicitly included in the CCD class licence, EIRP may be limited by other instruments, including the Equipment Rules.

We are proposing to include EIRP limits for each frequency band in the draft new instrument, as detailed in Table 1.

Maximum EIRP limits proposed for cordless communications devices

|  |  |
| --- | --- |
| Frequency range (MHz) | Maximum EIRP (dBm) |
| 1.7175–1.7925 MHz | 1.23 |
| 30.0625–30.3125 | 1.23 |
| 39.7625–40.250 | 1.23 |
| 1880–1900 | 36 for devices covered by Part 1 of ETSI 301 406 ‘Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard for access to radio spectrum’ (ETSI 301 406) |
| 30 for devices covered by Part 2 of ETSI 301 406 |

On 19 October 2017, the [Radiocommunications (Cordless Telephone) Standard 2008](https://www.legislation.gov.au/F2008L04652/latest/details) (the 2008 cordless telephone standard) was repealed. It was considered unlikely that medium-frequency and high-frequency cordless telephone equipment would continue to be supplied in Australia in quantities large enough that the need for a mandatory standard was justified. However, it was noted that operation of equipment that complied with the standard would continue to be authorised by the CCD class licence.

The 2008 Cordless Telephone Standard required that devices comply with AS/NZS 4281:2007 ‘Radiocommunications requirements for cordless telephones operating in the 1.7 MHz and between 30 and 41 MHz frequency bands’, which has also since been withdrawn. However, that AS/NZS standard included the following limits for the field strength of a transmitter:

In Australia, the field strength of the transmitter’s carrier shall not exceed 86 dBµV/m at a distance of 10 m.

In New Zealand, the field strength of the transmitter’s carrier shall not exceed 107 dBµV/m at a distance of 10 m.

A field strength of 86 dBµV/m at a distance of 10 m is equivalent to 1.23 dBm EIRP. Therefore, this is the proposed limit for devices in the 1.7175–1.7925 MHz,
30.0625–30.3125 MHz and 39.7625–40.250 MHz frequency ranges.

In New Zealand, cordless telephones are authorised by a [General User Radio Licence](https://www.rsm.govt.nz/about/publications/gazette-notices/general-user-radio-licence-gurl-notices/) (GURL). The maximum EIRP for cordless telephones in the 1.7125–1.7975 MHz, 30.0625–30.7875 MHz, 40.0125–40.2375 MHz and 39.7625–40.4875 MHz ranges[[1]](#footnote-2) is ‑8 dBW (which is approximately equivalent to a field strength of 107 dBµV/m at a distance of 10 m).

While the proposed maximum EIRP in the draft instrument for CCD operating in the 1.7175–1.7925 MHz, 30.0625–30.3125 MHz or 39.7625–40.250 MHz frequency ranges is 1.23 dBm, comment is sought on whether the EIRP limit should instead be aligned with the higher limit of 22 dBm[[2]](#footnote-3) allowed in New Zealand.

The maximum EIRP for devices operating in accordance with Part 1 of ETSI 301 406[[3]](#footnote-4) in the 1880–1900 MHz band is proposed to be 36 dBm This is in line with current arrangements which stipulate a peak EIRP of 36 dBm.

To ensure support for future DECT in 1880–1900 MHz, the maximum EIRP for devices operating in accordance with the Part 2 of ETSI 301 406[[4]](#footnote-5) in the
1880–1900 MHz band is proposed to be 30 dBm. This is in line with arrangements
for DECT-2020 NR (New Radio) detailed in Part 2 of ETSI 301 406.

This is also consistent with the Equipment Rules.

## Consumer equipment

The CCD class licence currently includes the following condition in section 6:

1. ….. it is a condition of the operation of a cordless communications device that the device:

(a) must be used only for private purposes; and

(b) must not be used for the provision of commercial cordless telecommunications services to the public; and

(c) must not be used for the provision of a connection under a wireless local loop arrangement.

This provision limits the application of the CCD class licence to CCD on the consumer side of the boundary of a telecommunications network. That is, the CCD class licence is for authorisation of consumer equipment for private purposes rather than commercial telecommunications services.

Conditions are included in the draft new instrument to maintain these limitations, but instead relying on the concepts of the boundary of a telecommunications network and immediate circle, as defined in the *Telecommunications Act 1997*.

# Consequential changes to the Equipment Rules

The [*Replanning of the 1880–1920 MHz band: Outcomes paper*](https://www.acma.gov.au/consultations/2021-11/exploring-future-use-19-ghz-band-consultation-402021#outcomes-for-this-consultation) details the outcomes of our review of the 1880–1920 MHz band. One outcome of this review was to update arrangements in the 1880–1900 MHz band to support both DECT and future DECT technologies.

As discussed in the previous section, provisions to authorise the use of future DECT technologies are proposed to be included in the draft new instrument. Further, amendments are required to Equipment Rules to ensure devices currently operating in the band using legacy DECT technology continue to be supported alongside devices using newer DECT technology. A draft amendment to the Equipment Rules – the Radiocommunications Equipment (General) Amendment Rules 2024 (No. 1) – is included as an attachment to this paper for consideration.

The relevant ETSI standard for DECT technology is ETSI EN 301 406. This standard is already referenced in Part 13 of Schedule 5 to the Equipment Rules, which defines the Digital Enhanced Cordless Telecommunications Equipment Standard. This includes:

* [ETSI EN 301 406-1](https://www.etsi.org/deliver/etsi_en/301400_301499/30140601/03.01.01_60/en_30140601v030101p.pdf) Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard for access to radio spectrum; Part 1: DECT, DECT Evolution and DECT ULE (legacy DECT technology).

[ETSI EN 301 406-2](https://www.etsi.org/deliver/etsi_en/301400_301499/30140602/03.01.01_60/en_30140602v030101p.pdf) Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard for access to radio spectrum; Part 2: DECT-2020 NR (future DECT technology).

ETSI EN 301 406-2 for future DECT technology stipulates a different maximum EIRP than ETSI EN 301 406-1.

The proposed amendment to the Equipment Rules includes provisions to address the differing maximum EIRP values.

# Future work

The [Radiocommunications (Low Interference Potential Devices) Class Licence 2015](https://www.legislation.gov.au/F2015L01438/latest/text) (the LIPD class licence) authorises the use of a broad range of radiocommunications transmitters by the general public. This instrument is due to sunset on 1 October 2025.

Given the similarities between the types of devices authorised by the CCD class licence and the LIPD class licence, there is an opportunity to include arrangements for cordless communications devices in the LIPD class licence instead of maintaining arrangements in a standalone instrument. However, the interaction between the LIPD class licence and the Equipment Rules needs to be investigated to ensure it is appropriate to include cordless communications devices in the LIPD class licence.

The Equipment Rules specify standards for many devices, including short range equipment in the Short Range Equipment Standard in Part 15 of Schedule 5. Short-range equipment includes all radiocommunications devices authorised by the LIPD class licence. By authorising CCD under the LIPD class licence, they would become, by definition, ‘short-range equipment’, and therefore the Short Range Equipment Standard would apply, where it does not currently.

This would mean that to determine whether a CCD meets the requirements of the Short Range Equipment Standard, the testing methods identified in the Short Range Equipment Standard for the device must be used. The testing methods are:

for the 1.7175–1.7925 MHz band: ETSI EN 300 330[[5]](#footnote-6)

for the 30.0625–30.3125 MHz and 39.7625–40.250 MHz bands: ETSI EN 300 220‑1[[6]](#footnote-7)

for the 1880–1900 MHz band: ETSI EN 300 440[[7]](#footnote-8)

Comment is sought on whether it would be appropriate to include CCD in a future update to the LIPD class licence.

# Invitation to comment

## Making a submission

We invite comments on the issues set out in this consultation paper.

[Online submissions](https://www.acma.gov.au/have-your-say) can be made by uploading a document. Submissions in PDF, Microsoft Word or Rich Text Format are preferred.

Submissions by post can be sent to:

The Manager

Spectrum Planning Section

Australian Communications and Media Authority

PO Box 78

Belconnen ACT 2616

The closing date for submissions is **COB,** **Monday 13 May 2024**.

Consultation enquiries can be emailed to freqplan@acma.gov.au.

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1. Note that the frequency ranges authorised for cordless communications devices in New Zealand differ slightly to those authorised in Australia. [↑](#footnote-ref-2)
2. 22 dBm is equivalent to -8 dBW. [↑](#footnote-ref-3)
3. [ETSI EN 301 406-1](https://www.etsi.org/deliver/etsi_en/301400_301499/30140601/03.01.01_60/en_30140601v030101p.pdf)- Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard for access to radio spectrum; Part 1: DECT, DECT Evolution and DECT Ultra Low Energy (ULE). [↑](#footnote-ref-4)
4. [ETSI EN 301 406-2](https://www.etsi.org/deliver/etsi_en/301400_301499/30140602/03.01.01_60/en_30140602v030101p.pdf)- Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard for access to radio spectrum; Part 2: DECT-2020 NR. [↑](#footnote-ref-5)
5. [ETSI EN 300 330](https://www.etsi.org/deliver/etsi_en/300300_300399/300330/02.01.01_60/en_300330v020101p.pdf) Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; harmonised standard covering the essential requirements of article 3.2 of Directive 2014/53/EU. [↑](#footnote-ref-6)
6. [ETSI EN 300 220-1](https://www.etsi.org/deliver/etsi_en/300200_300299/30022001/03.01.01_60/en_30022001v030101p.pdf) Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz;

Part 1: Technical characteristics and methods of measurement. [↑](#footnote-ref-7)
7. [ETSI EN 300 440](https://www.etsi.org/deliver/etsi_en/300400_300499/300440/02.02.01_60/en_300440v020201p.pdf) Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; harmonised standard for access to radio spectrum. [↑](#footnote-ref-8)