

# **FYSO 2021–26:**

# **Annual progress report**

## For the 2021–22 annual work program

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# FYSO 2021–26: Annual progress report

Each year we publish our spectrum management work program in the five-year spectrum outlook (FYSO), consistent with section 28E of the *Radiocommunications Act 1992*.

The *Australian Communications and Media Authority Act 2005* at subsection 57(h) provides that we must report on the activities that give effect to the work program.

This FYSO annual progress report outlines the status of activities set out in the 2021–22 annual work program in the FYSO 2021–26, from 1 July 2021 to 30 June 2022.

It also provides additional information about changes where we departed from our intended timeframe and prioritisation.

We expect to release the FYSO 2022–27 in Q3 2022.

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## Band-planning activities

Planning stage	Project priorities	FYSO timeframe	Progress/update
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>&gt; 600 MHz (617–698 MHz)</li> <li>&gt; 3.3 GHz (3300–3400 MHz)</li> <li>&gt; 4.5 GHz (4400–4500 MHz)</li> <li>&gt; 4.8 GHz (4800–4990 MHz)</li> <li>&gt; 13 GHz (12.75–13.25 GHz)</li> <li>&gt; 40 GHz (37–43.5 GHz)</li> <li>&gt; 46 GHz (45.5–47 GHz)</li> <li>&gt; 47 GHz (47.2–48.2 GHz)</li> <li>&gt; Bands being studied under WRC-23 agenda item 1.2</li> <li>&gt; Bands being studied under WRC-23 agenda item 1.4</li> </ul>	<p>Continue to monitor domestic and international developments in these bands to identify usage trends.</p> <p>For 600 MHz, follow Media Reform Green Paper developments</p>	Ongoing
<b>Initial investigation</b>	1.5 GHz (1427–1518 MHz)	Q2 2022: discussion paper Simultaneous review with the extended mobile satellite service (MSS) L-band	Completed
	Extended MSS L-band (1518–1525 MHz and 1668–1675 MHz)	Q2 2022: discussion paper Simultaneous review with the 1.5 GHz band	Completed
	1880–1920 MHz	Q4 2021: discussion paper	Completed
	2300–2302 MHz	Not scheduled for 2021–22	Not applicable
	5030–5091 MHz	Q3 2021: consideration of submissions following earlier discussion paper	Completed. A summary of submissions and interim radiocommunications assignment and licensing instructions (RALI) was published in Q1 2022

Planning stage	Project priorities	FYSO timeframe	Progress/update
	6 GHz	Q3 2021: Consideration of submissions following earlier discussion paper, with follow-up paper discussing more detailed options and proposals in Q4 2021	Completed In Q1 2022, we updated the LIPD class licence for the lower 6GHz band, released a summary and response to submissions received in response to the consultation undertaken in Q4 2021 and provided information on next steps
<b>Preliminary replanning</b>	No activities in this stage	Not applicable	Not applicable
<b>Implementation</b>	850 MHz expansion band (814–825 MHz and 859–870 MHz)	Band is being cleared progressively. Allocation timeframes are tied to those of the 900 MHz band	Auction concluded December 2021. Clearance and/or relocation of incumbent services is in progress, with a view to finalising the clearance of the band by 30 June 2024
	900 MHz (890–915 MHz and 935–960 MHz)	Allocation timeframes are tied to those of the 850 MHz expansion band Late Q4 2021: expect to commence auction	Auction concluded December 2021
	1800 MHz (1710–1785 MHz and 1805–1880 MHz) in remote areas	Q4 2021: discussion paper	Moved to Q3/4 2022. Work on this item has been delayed, due to a need to assess in more detail the impact of changes to the process for setting allocation limits <sup>1</sup>
	2 GHz (1980–2010 MHz and 2170–2200 MHz)	Q4 2021: consultation paper on updates to RALI FX3	Moved to Q1 2022 as part of work on the spectrum planning framework, see <a href="#">Frequency coordination requirements review work program 2021–22</a> Consultation published Q2 2022

<sup>1</sup> Amendments to the Act made by the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020* came into force in June 2021. Under the Act as amended, we have the power to determine allocation limits in consultation with the ACCC. We will also be required to have regard to any relevant ministerial policy statement before setting allocation limits. In developing allocation limits, we would take into account matters such as relevant market conditions and the technical properties of the frequency bands under consideration.

Planning stage	Project priorities	FYSO timeframe	Progress/update
		Q4 2021: consultation on updates to the Television Outside Broadcast Service (1980–2110 MHz and 2170–2300 MHz) Frequency Band Plan 2012	Completed. New band plan made Q2 2022
		Q4 2021: consultation on technical and licensing arrangements to support MSS narrowband use in 2005–2010/2195–2200 MHz	Completed. Arrangements implemented Q2 2022
	3400–3575 MHz	Q3 2021: consultation on variation to 3.4 GHz technical framework to support urban excise	Completed. Follow-up consultation held in Q1 2022
		Q1 2022: consultation on wireless broadband apparatus licence technical arrangements. This work will be combined with 3700–4200 MHz implementation activities	Completed
	3700–4200 MHz	Q1 2022: Consultation on RALI FX3	Completed
		Q3 2021 – Q1 2022: development of the apparatus and spectrum licensing technical frameworks	Consultation on apparatus licensing framework for remote areas published Q1 2022. Work on frameworks for areas other than remote to begin Q4 2022
		Q4 2021: Public consultation and finalisation of licensing, allocation and tax arrangements for apparatus licences in 3400–4000 MHz remote areas	Delayed due to further engagement with stakeholders; subsequently completed in Q1 2022
		Q1 2022: Public consultation and finalisation of technical frameworks including any RALIs	Consultation published Q1 2022. Finalisation delayed due to further engagement with stakeholders

Planning stage	Project priorities	FYSO timeframe	Progress/update
		Q1–Q2 2022: Allocation of apparatus licences in remote areas, which will include spectrum from 3400–4000 MHz	Allocation will take place not before Q4 2022, due to additional work required on technical frameworks
		Q2 2022 – Q4 2023: Develop allocation approaches and conduct allocations for metropolitan and regional areas	No change to projected timeline

## Forward allocation timing

Band	Stage	FYSO timeframe	Notes	Allocation method	Progress/update
850/900 MHz	Finalise allocation instruments	Q3 2021		Spectrum licence auction	Completed
	Auction of spectrum licences	Q4 2021			Completed: auction concluded 6 December 2021
3400–4000 MHz (remote areas)	Implementing planning decision	Q1–Q2 2022	Administrative allocation of apparatus licences for remote areas. Incorporates spectrum from the recent 3700–4200 MHz planning decision and previous decisions on 3400–3700 MHz in remote areas	Administrative allocation	Allocation to take place not before Q4 2022
3400–3575 MHz (excluding remote areas)	Implementing planning decision	Q1 2023	The allocation of spectrum licences in any additional frequencies and areas could occur with the 3700–3800 MHz band	Spectrum licence auction for new allocations	Ongoing

Band	Stage	FYSO timeframe	Notes	Allocation method	Progress/update
3700–4200 MHz and 3400–3575 MHz (excluding remote areas)	Implementing planning decision	2023	For both spectrum licences and apparatus licences in areas that are not remote	3700–3800 MHz band: spectrum licence auction. Apparatus licence allocation to be determined	Ongoing
2 GHz (mobile satellite services)	Implementing planning decision	Not before Q3 2023: apparatus licences (our preliminary view is subject to further consideration) <sup>2</sup>	New services will not commence until TOB services have transitioned to new arrangements; anticipated to occur over 5 years	To be determined	No change to projected timeline

## Optimising established planning frameworks

Planning area	Project priorities	FYSO timeframe	Progress/update
Broadcasting	Consolidate and update broadcast spectrum planning documents, including ACMA general approach to broadcast planning and retransmission policies	Q3 2021	Completed
	Develop and consult on a proposal to vary the Deniliquin licence area plan (LAP)	Q4 2021: consult	Completed Q2 2022
	Develop and consult on proposals for variations in a number of licence areas in NSW and VIC <sup>3</sup> to enable AM–FM conversions	Q4 2021 and ongoing: consult	Consultation on Mudgee and Mount Gambier proposals in Q1 2022
	Following extension of Part 3 of the <i>Broadcasting Services Act 1992</i> (BSA) to Norfolk Island, licence various incumbent broadcasting services in accordance with the provisions of the BSA and the Radiocommunications Act	Q3 2021	Ongoing, to be completed by Q3 2022

<sup>2</sup> As per the 2 GHz outcomes paper, our preliminary view, given demand is likely to exceed supply (as expressed in responses to the 2 GHz options paper), is that the most appropriate mechanism to resolve competing demand is a price-based allocation mechanism via auction. With price-based allocations under section 106 of the *Radiocommunications Act 1992* limited to the allocation of transmitter licences (in this case, space apparatus licences in 2170–2195 MHz), the ACMA would only issue the associated space receive apparatus licences in the paired band 1980–2005 MHz to those successful in the priced-based allocation process.

<sup>3</sup> This may include a subset of the following areas: Inverell, Moree, Gunnedah, Tamworth, Lismore, Mudgee, Young, Parkes and Wangaratta. We are consulting with the licensees to determine indicative timelines and relative priorities. Proceeding with these variations may depend on the relevant licensees making timely strategic business decisions on available implementation options.

Planning area	Project priorities	FYSO timeframe	Progress/update
	Develop and consult on proposals for variations to the Remote Central and Eastern Australia Radio LAP	Q4 2021: consult	Completed
	Develop and consult on proposals for variations to the Remote Western Australia Radio LAP	Q1 2022: consult	Deferred to Q3 2022 due to reprioritisation and additional work on a range of issues
	Following extension of Part 3 of the BSA to Norfolk Island, prepare or vary a licence area plan to include Norfolk Island	Q2 2022: consult	Deferred to Q4 2022 due to reprioritisation and additional work on a range of issues
	Consult on the digital radio channel plan (DRCP) for the licence areas where the incumbent broadcasters have committed to rollout digital radio in 2021 or 2022	Timing will be driven by the demand from broadcasters	No requests received
	Consult on potential for replanning analog radio services in Perth, following the clearance of Band II television in Bunbury	TBA based on consultation in Q2 2021	Further information to be published in Q3 2022
Satellite	Consider applications for test and demonstration purposes in the 2 GHz band	Ongoing	Ongoing
	Manage filing and coordination of Australian satellite systems	Ongoing	Ongoing
Low interference potential devices (LIPD)	Monitor developments	Ongoing – Q1 2022: consultation on regular update to the LIPD class licence	Ongoing. Most recent update in Q1 2022; next update scheduled for Q3 2022
	Targeted update to add the 5925–6425 MHz band for RLAN access	Q4 2021: Consult	Completed

Planning area	Project priorities	FYSO timeframe	Progress/update
Intelligent Transport Systems (ITS)	Monitor the developments in cooperative ITS. Review ITS class licence to accommodate V2X technology and consider channelisation arrangements	Ongoing	Deferred. Advice from industry is current arrangements are fit for purpose. Further, European arrangements will be reviewed in 2022, which may affect Australian arrangements. Therefore, any review is deferred until at least late 2022
Spectrum planning, assignment and coordination requirements	Ongoing review of the spectrum planning technical framework to ensure its currency and consistency with current technologies and operational practices	Ongoing	Ongoing
Spectrum licence technical frameworks	Ongoing program of review of technical frameworks below 4 GHz	1800 MHz band –Q4 2021: implementation of consultation outcomes	Completed. Licence variations implemented Q1 2022
		2.1 GHz band – Q4 2021: commence review and form a technical liaison group	Completed
		Other bands: ongoing	Ongoing
Spectrum-sharing approaches	Ongoing consideration of new approaches to spectrum sharing	Ongoing – will consider proposals as they are submitted	Ongoing

## Licensing and licensing systems

Project priorities	FYSO timeframe	Progress/update
Radiocommunications legislative reform	Ongoing	Substantive reforms implemented
Trial of mobile phone jammers in prisons	Ongoing: Corrective Services NSW commenced a 2-year trial on 13 December 2019	Trial completed. Ongoing exemption determination made in Q4 2021
Drone regulation	Ongoing: continue monitoring licensing requirements	Ongoing. An interim RALI was released in Q1 2022 to allow access to the 5055–5065 MHz band for line-of-sight remotely piloted aircraft systems control and non-payload communications (LoS RPAS CNPC) links
Radionavigation-satellite service (RNSS) repeater trials	2021–22: facilitate and monitor trials, and progress development of long-term licensing solution	Ongoing
Review of prohibition declarations and exemption determinations	Q3 2021: implementation of new exemption powers	Completed
	Q1 2022: consultation on reviewed framework, new and amended instruments	Deferred to Q3 2022 due to necessary reprioritisation
Review of non-assigned amateur and outpost licensing arrangements	2021–22: consider the submissions to the consultation and update the amateur and outpost community on our next steps	Completed. Response to submissions published in Q4 2021. Outpost licensees are transitioning to the new class licence. Further consultation on the draft amateur class licence is scheduled for Q3 2022
Options for higher power amateur operation	Q2 2022: consultation	Deferred to Q3 2022 to coordinate with further consultation on amateur class licensing
Review of scientific assigned and non-assigned apparatus licensing arrangements	Q1 2022: consultation	Deferred to Q3/Q4 2022 due to necessary reprioritisation

## Pricing

Project priorities	FYSO timeframe	Progress/update
Second tranche of changes arising from the implementation of the Spectrum Pricing Review	Q4 2021: consultation	Completed. Response to consultation and implementation of second tranche reforms concluded Q2 2022
Pricing review implementation considering the new technologies and trials	To be generally aligned with the review of scientific licensing arrangements in 2022	Ongoing. Additionally, we have implemented new pricing arrangements for technologies in frequencies above 100 GHz as part of the second tranche of Spectrum Pricing Review reforms
Commercial broadcasting tax arrangements	Ongoing assessment of taxes throughout 2021–22	Ongoing
Preparations for the outcomes of the review of the <a href="#">Commercial Broadcasting (Tax) Act 2017</a>	2021–22	Ongoing
Ongoing maintenance of the current apparatus licence tax regime for matters like adjusting for inflation	Q4 2021	Ongoing. In finalising the outcomes of the second tranche of proposals for the Spectrum Pricing Review, the ACMA proposed to adjust taxes based on population rather than inflation
Ongoing licensing or band reviews that also have pricing implications will be undertaken throughout the year	2021–22	Ongoing. For example, price settings proposed for area-wide licences in the 3400–4000 MHz (remote areas) as part of that allocation process
Cost recovery initiatives	Q3 2021: consult on new spectrum licence taxes for the Defence bands, 26 GHz band, 850/900 MHz and 3.4 GHz and other related changes	Completed
	Q3 2021: Make new spectrum licence tax arrangements	New spectrum licence tax determination made in September 2021 to include the Defence bands, 26 GHz band, 850/900 MHz and 3.4 GHz

## Compliance and enforcement

Project priorities	FYSO timeframe	Progress/update
5G compliance program to check compliance with electromagnetic energy (EME) standards and deployment code obligations, and provision of accurate information for the public on mobile phone base stations	2021–22	Ongoing. Measurement studies and audits in QLD and NSW completed

## International engagement in 2021–22

Meeting	FYSO timeframe	Progress/update
International Telecommunication Union (ITU)-R Working Parties 4A-C	5–28 July 2021	Completed
Asia-Pacific Telecommunity (APT) Wireless Group Meeting 28 (AWG-28)	6–14 September 2021	Completed. Next meeting (AWG-29) scheduled 21–29 March 2022
ITU-R Working Party 5D	4–15 October 2021	Completed
ITU-R Study Group 4 and Working Parties 4A-C	20 October – 5 November 2021	Completed. Next SG meeting scheduled September 2022
Third meeting of APT Conference Preparatory Group (APG 23-3)	Meeting expected November 2021	Completed. Next meeting (APG 23-4) scheduled July/August 2022
ITU-R Study Group 5 and Working Parties 5A-C	15 November – 17 December 2021	Completed. Next SG Meeting scheduled 28–29 November 2022
ITU-R Working Party 5D	7–23 February 2022	Completed
APT Wireless Group Meeting 29 (AWG-29)	21–29 March 2022	Completed. Next meeting (AWG-30) scheduled 5–9 September 2022
ITU-R Working Party 5B	29 March – 8 April 2022	Completed. Next meeting scheduled 11–22 July 2022
ITU-R Working Party 5D	19–22 April 2022	Completed
ITU-R Working Parties 4A-C	4–20 May 2022	Completed. Next meetings (SG 4 and WP 4A-C) scheduled 7–23 September 2022
ITU-R Working Parties 5A and 5C	23 May – 3 June 2022	Completed. Next meeting (SG 5 and WP 5A-C) scheduled 14–29 November 2022
ITU-R Working Party 5D	13–24 June 2022	Completed. Next meeting scheduled 10–21 October 2022