

2.1 SPECTRUM SYSTEMS

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The Australian Communications and Media Authority (ACMA) received \$27.7 million over 5 years to replace our spectrum management system and auction system. The 2 systems are vital for us to plan, allocate and licence spectrum which supports digital connectivity from modern wireless and satellite communications.

KEY ISSUES

- ACMA's spectrum management and auction systems have provided around \$2.3 billion of revenue from annual spectrum taxes to the Commonwealth over a ten-year period, with a further \$7.7 billion raised by spectrum auctions.
- In October 2022 the ACMA was allocated funding to improve its spectrum systems. The funding provides for:
 - \$21.9 million over four years to replace the spectrum management system
 - \$4.4 million over four years to further develop and maintain a spectrum auction capability and the development of an improved auction registration system.

Spectrum management system

- The current spectrum management system was not designed for the modern communications services and does not accommodate innovative licence products (e.g., area wide licences), bulk licensing transactions, or the range of digital services that Australian businesses expect from government.
- Replacing the spectrum management system will provide simple and fast online digital services, saving time and money for up to 40,000 licensees holding over 160,000 licences, many of which are small and medium sized enterprises.
- On 17 March 2023, ACMA issued a request for tender (RFT) for the new system. The RFT was issued to those entities short-listed in an earlier Request for Expressions of Interest (REOI) process conducted in 2021. The REOI process was an open-market process. Responses to the RFT closed at 2.00 pm on 23 June 2023, noting a two-week extension for responses was provided. Tender responses are under evaluation.

Spectrum auction system

- A spectrum auction system is critical to support the allocation of valuable spectrum, and along with an improved auction registration system, will allow the ACMA to take advantage of the latest auction formats.
- The funding provided is supporting the upcoming 3.4/3.7 GHz bands auction as well as the forward work program of spectrum allocations suitable for 5G, wireless broadband and satellite services, which are critical to fostering innovation and investment in Australia, including in regional and remote Australia.

BACKGROUND

Funding for improved Spectrum Systems

- The budget to replace the spectrum management system is \$21.9 million over 4 years (the forward estimates), comprising \$13.3 million in capital expenditure and \$8.6 million in operational costs. Annual ongoing operational funding \$1.2 million has also been provided through the budget measure.
- The budget for the online spectrum auction and registration system is \$4.4 million over the forward estimates, comprising \$1.9 million in capital and \$2.5 million in operational costs. Annual ongoing operational funding \$0.3 million has also been provided through the budget measure.
- A breakdown of the funding for 2022-23 financial year is provided in **Table 1** below.

Table 1: Spectrum system allocation and expenditure 2022-23

	NPP allocation for 2022-23					
	Opex	Capex	NPP total 2022-23			
Spectrum management	\$1,101,000	Nil	\$1,101,000			
Auction system	\$312,000	\$637,000	\$949,000			
Total	\$1,413,000	\$637,000	\$2,050,000			

***Note:** the opex expenditure figure includes amounts spent and accrued for various contracts such as probity, privacy and legal advice for spectrum management and, for the auction system, a security assessment and licensing fees. While some associated staffing costs of contractors are included, it does not include all of the ACMA's staffing overheads associated with the project.

- For the spectrum management system, the ACMA has engaged legal, probity and privacy professional services to assist with the preparation of tender documentation and the management of the project.
- In June 2022, the ACMA entered a 3-year contract (with the option to extend for a further 3 years) with successful tenderer Power Auctions LLC. The new auction system has been implemented and is ready for use in the upcoming auctions for the 3.4/3.7 GHz bands allocation process.
- The new auction registration system was designed and implemented in-house and successfully received applications for the 3.4/3.7 GHz bands allocation process.

Spectrum management system

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- Until a replacement spectrum management solution can be procured, the ACMA will continue to operate its existing licensing system.

Spectrum auction system

- Auction software is a highly specialised field and outsourcing to a specialist provider ensures the ACMA has access to the necessary economic expertise as well as highly customised software.
- The next spectrum auction is for the 3.4/3.7 GHz bands, which is scheduled for late October 2023.
- As detailed in the ACMA's *Five-year spectrum outlook 2023-28*, we are also proposing an auction of spectrum in the 2 GHz band to support mobile satellite services.

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