

Discussion Paper

Radio Spectrum Policy and Planning Group

Resources and Networks Branch

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[Introduction](#)

Broadband Wireless Access (BWA) is increasingly being viewed as a viable alternative to wired and cellular broadband delivery. This paper considers recent developments in BWA technology and the current allocation of spectrum suitable for its deployment. It solicits the opinions of broadband wireless vendors, operators, suppliers, users and other stakeholders on the policies and processes by which such spectrum could in future be allocated.

[Glossary](#)

List of abbreviations used in the discussion paper.

[Background](#)

There is increasing recognition that broadband is a key enabler of economic growth and development. It is a key component of the Government's agenda of transforming New Zealand into a high-income, knowledge-based economy, through its Digital Strategy.

[Current Usage](#)

This section illustrates the current usage of spectrum allocations and bands in New Zealand.

[Technology Drivers](#)

The frequency range 800 MHz to 6 GHz represents a large proportion of the radio spectrum in common usage today, and the density of services in this frequency range exceeds that of all other radio frequency ranges combined.

[Spectrum Allocation Options](#)

New wireless broadband access technologies such as WiMAX provide additional opportunities for the competitive delivery of broadband services and can already be deployed in some existing spectrum allocations.

[Allocation Opportunities](#)

A number of spectrum bands were examined, as detailed in Appendix 1, and the bands 2.3 GHz, 2.5 GHz, 5.4 GHz and bands above 60 GHz appear to have the most potential at the present time for additional BWA allocations.

[Summary of Questions](#)

[Appendix 1](#)

[Appendix 2](#)