

Media Reform Green Paper - modernising television regulation in Australia

**Department of Infrastructure, Transport, Regional
Development and Communications**

May 2021



Introduction

- Ericsson welcomes the opportunity to respond to the Department of Infrastructure, Transport and Regional Development's Media Reform Green Paper - modernising television regulation in Australia (**Green Paper**).
- Ericsson's response is focused on issues raised in '*Chapter four: promoting the public interest derived from spectrum*'¹ that acknowledges:
 - spectrum is a critical input for Australia's digital economy and our future productivity and growth.
 - there is an opportunity to rationalise the spectrum currently used for television broadcasting and to realise a second digital dividend.
- Radiofrequency spectrum is a finite resource and its efficient use serves as a critical input to drive Australia's transition to a digital economy.
- Sufficient spectrum to support 5G deployment and meet forecast growth in demand for mobile data is fast becoming a measure of global competitiveness.
- Ericsson supports an allocation for IMT in the 600MHz band.
- There is a large existing device ecosystem to support IMT allocations in the 600MHz band.²
- A recent report by the GSA on the **Use of low-band spectrum for LTE and 5G**³ notes:
 - 37 operators are identified as investing in spectrum in the 600 MHz band (n71) with at least three launched both LTE and 5G services in the range and another two launching 5G.
 - spectrum has been awarded in Canada and the USA (plus territories).
 - Guatemala, Mexico, Hong Kong and Saudi Arabia have plans for assignment of spectrum in the 600 MHz band (n71).
- Ericsson also supports the submission made in response to the Green Paper by the Australian Mobile Telecommunications Association (**AMTA**).

Growth in demand for mobile data

- As of April 2021 there were 140 live 5G networks, 703 5G devices, with 751,000 new 5G connections each day.⁴

¹ [Media Reform Green Paper](#)

² There are 375 devices for LTE (375) and 5G (118) that are supported in the 600MHz n71.

³ [Low-Band Spectrum for LTE and 5G - May 2021 - GSA \(gsacom.com\)](#)

⁴ Ericsson, Ericsson Mobility Report, GSMA Intelligence



- Mobile network data traffic grew 50 percent between Q3 2019 and Q3 2020 and 25% of the world's population will be covered by 5G by the end of 2021.
- By 2026 it is forecast⁵ that:
 - 5G networks will carry more than half of the world's mobile data traffic.
 - In South East Asia and Oceania, 5G subscriptions will account for more than 30 per cent of all mobile subscriptions, compared with 40 per cent of all mobile subscriptions worldwide.
 - FWA connections will reach more than 180 million and account for a quarter of all mobile network data traffic globally. *(Out of these, 5G FWA connections are expected to grow to more than 70 million by 2026, representing around 40 percent of total FWA connections.)*
- Over the long term, traffic growth will be driven by both the rising number of smartphone subscriptions and an increasing average data volume per subscription, fueled primarily by more viewing of video content.⁶

Support for Additional Low-Band Spectrum for 5G

- Sufficient spectrum to support the evolution of 5G across low, mid and high bands:
 - should remain a key spectrum policy priority.
 - is increasingly being seen as a key measure of global competitiveness and a hook for attracting new investment as part of a digitally led COVID recovery.⁷
- A recent report on low band spectrum for LTE and 5G by the GSA⁸ (**Report**) notes that low-band spectrum:
 - is very important for expanding network coverage in all urban, suburban and rural deployment scenarios.
 - supports service continuity across different geographies, enhancing service quality in indoor environments and helping to close the digital divide.

⁵ [Ericsson Mobility Report - November 2020 - Ericsson](#)

⁶ Ibid, Video traffic currently accounts for 66 percent of all mobile data traffic and is forecast to account for 77 percent of all mobile data traffic by 2026.

⁷ [Why Australia - Benchmark Report - Austrade](#)

⁸ [Low-Band Spectrum for LTE and 5G - May 2021 - GSA \(gsacom.com\)](#)



- The Report also found that:
 - 515 operators in 173 countries/territories hold licences that enable the launch of LTE or 5G using low-band spectrum.
 - 396 operators in 158 countries/territories are known to have launched LTE or 5G networks using low-band spectrum.
 - Guatemala, Hong Kong, Mexico and Saudi Arabia have all announced formal (date-specific) plans for allocating 600 MHz band spectrum for mobile telecommunications.
 - spectrum has been awarded in Canada and the USA (plus territories).
 - there are 375 devices for LTE 118 devices for 5G that are supported in 600MHz (n71).
- The Green Paper indicates⁹ that mobile telecommunications is the likely candidate for spectrum recovered through more efficient use of the ultra-high frequency (UHF) broadcasting band (526-694 MHz).
- Ericsson considers the 600 MHz band is suitable for use by 5G mobile networks due to its propagation characteristics that enable both wide area and in-building coverage.
- Ericsson supports the position outlined in the Green Paper:
 - for more efficient use of low-band spectrum due to its scarcity.
 - that the mobile telecommunications industry is the most likely recipient for spectrum recovered via this process.
 - that the outcome of a decision to reallocate spectrum in the 600MHz band would see 84 MHz for future mobile broadband use.

Conclusion

- Radiofrequency spectrum is a finite resource and its efficient use serves as a critical input to drive Australia's transition to a digital economy.
- Ensuring a pipeline of spectrum in low, mid and high band to support the significant forecast growth in demand for mobile data and 5G should remain a priority policy objective for government.
- A decision to re-allocate 84 MHz of spectrum in the 600MHz band for future 5G use will be an important part of achieving this objective.

⁹ [Media Reform Green Paper](#)