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AMTA

Australian Mobile Telecommunications Association

AMTA Submission

Department of Infrastructure, Transport, Regional Development and Communications

Media Reform Green Paper

About AMTA

The Australian Mobile Telecommunications Association (AMTA) is the peak industry body representing Australia's mobile telecommunications industry. Its mission is to promote an environmentally, socially and economically responsible, successful and sustainable mobile telecommunications industry in Australia, with members including the mobile network operators and service providers, handset manufacturers, network equipment suppliers, retail outlets and other suppliers to the industry. For more details about AMTA, see http://www.amta.org.au.

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Introduction

AMTA welcomes the opportunity to provide comments on the Government's Media Reform Green Paper (the Green Paper).

Radiofrequency spectrum is a finite resource and its efficient use is critical for Australia's digital economy, future productivity and growth. To ensure this resource is used efficiently to deliver the highest value use for Australians, it must be appropriately valued and priced, based on the opportunity cost of competing uses for the spectrum. Public benefit is also a factor that should be considered in the valuation of spectrum and calculating the opportunity cost associated with any spectrum allocation.

AMTA strongly maintains that allocating sufficient spectrum for mobile technologies, including 5G, will ensure that the highest value use of spectrum is achieved and that this will result in optimal social and economic benefits for the Australian public. We have outlined the economic impact of mobile technologies as well as the continuing exponential growth in demand for mobile services in detail below.

We take this opportunity to outline our views regarding the potential use of the 600 MHz band by mobile telecommunications, along with one minor comment on proposed broader media reforms outlined in the Green Paper for consideration below.

Realising a digital dividend

The proposed reforms outlined in the Green Paper, if implemented, would free up a significant amount of spectrum within the 600 MHz band (approximately 84 MHz), with the potential to create a public interest 'digital dividend'. The Green Paper contains commentary[1] indicating mobile telecommunications is the likely candidate for spectrum recovered through more efficient use of the ultra-high frequency (UHF) broadcasting band (526-694 MHz). AMTA supports the government's proposal for more efficient use of low-band spectrum due to its scarcity and its preliminary view that the mobile telecommunications industry is the most likely recipient for spectrum recovered via this process.

The 600 MHz band is low-band spectrum suitable for use by 5G mobile networks due to its propagation properties that enable both wide area and in-building coverage. International harmonisation of spectrum bands is generally desirable for Australia due to the relative size of our markets, and we note that North American countries have either re-allocated 70 MHz of spectrum from the 600 MHz band to 5G or are in the process of doing so. The Global mobile Suppliers Association (GSA) May 2021 report observes[2] that Guatemala, Hong Kong, Mexico and Saudi Arabia have all announced formal (date-specific) plans for allocating 600 MHz band spectrum for

[1]Media Reform Green Paper, pp.7, 8, 22 and 24.
[2]Low Band Spectrum for LTE and 5G, May 2021. Global mobile Suppliers Association (GSA) Table 2, pp.14-15.

mobile telecommunications. It can be reasonably expected that over the next few years, many other jurisdictions will look to make this spectrum available to mobile telecommunications.

In Australia, the re-allocation of this spectrum to mobile telecommunications would not only result in public benefit derived from moving spectrum to its highest value use in terms of economic and social outcomes.

While AMTA has indicated to the Australian Communications and Media Authority (ACMA) that its priorities, in terms of spectrum, are to identify and re-allocate more mid-band spectrum for 5G in the short-term, we also forecast demand for further low-band spectrum in the 600 MHz range toward the middle of this decade (notionally, 2025), and hence, AMTA considers this band a medium-term priority for the mobile industry.

In concluding our comments on the digital dividend, we express a small note of hesitancy in setting potentially unrealistic expectations regarding the magnitude and use of proceeds from the sale of the dividend spectrum. Chapter 5 of the Media Reform Green Paper states that *"… a portion of the proceeds from the auction of digital dividend spectrum would be set aside to support a stronger media sector and public policy outcomes*". Ostensibly, this policy position plans to use revenue generated from the mobile telecommunications industry to resolve economic sustainability and disruption issues in the broadcast and downstream industries. Australia's primary mobile network operators also face challenges with economic sustainability arising from rapid technology evolution and disruption from over-the-top providers targeting lucrative segments of our business model.

While we have no inherent objection to using a portion of the proceeds to assist the broadcast industry and associated downstream industries, we suggest there are programs in the mobile industry (for example, the Mobile Black-Spot Program) that are also worthy beneficiaries of auction proceeds, and we urge a note of caution in positioning proceeds from the sale of the digital dividend as a panacea for these industries, and against inadvertently setting unrealistic expectations of the magnitude of funds with potential future recipients.

Mobile's economic contribution

The Australian Government has designated 2021 as the 'Year of 5G' and industry acknowledges with appreciation the Government's policy priority to support the role and deployment of 5G networks as a key contributor to a digital led COVID recovery

Allocating sufficient spectrum for mobile technologies, including 5G, will ensure that the highest value use of spectrum is achieved which will result in optimal economic and social benefits for Australian businesses and the public. Allocation of sufficient spectrum for 5G is fast becoming a measure of global competitiveness. A recent Austrade benchmark report found that,

> "*Australia's 5G network is superb by international standards. Average download speeds are currently far faster than in many major economies, including the US,*

Germany, the UK and Canada. Access to high-speed internet and mobile networks is central to economic growth and job creation. A study across OECD countries found that an increase in internet speed positively affected GDP per capita."[3]

It is therefore critical for Australia's economy that Government ensures a pipeline of spectrum for 5G to meet forecast demand for mobile broadband.

We outline the economic and social impact of mobile technologies as well as the continuing growth in demand for mobile services in detail below.

Investment in 5G drives productivity and economic growth

In this 'Year of 5G' substantial private investment by Mobile Network Operators (MNOs) will continue to be the main enabler of mobile connectivity and the digitalisation of Australian businesses and the economy. As the MNOs continue to deploy 5G networks and adoption of 5G applications increases across industries and businesses, we see great value and opportunity for the Australian economy to be derived from mobile connectivity in the post-pandemic recovery.

Deloitte Access Economics estimates that the productivity impact of mobile will be equivalent to $2 500 for every Australian by 2023. This amounts to a total of $65 billion of additional GDP by 2023, or 3.1% increase in GDP which is more than the 2.8% contribution of the agricultural sector in 2018.[4]

The same research found that the mobile industry continues to make a significant contribution to Australia's economy and has an enabling impact on other industries, with an estimated contribution from mobile of $22.9 billion of value added to GDP in 2017-18. This figure includes $8.2 billion contributed directly from mobile industry activities as well as $14.7 billion supported through indirect activity in related sectors and across the economy. The mobile industry also supported approximately 116,100 full time equivalent employees. For every full-time employee in the mobile industry there are 3.7 full time roles supported in other sectors.[5]

Similarly, PwC predicts that the impact of 5G on Australia's GDP will amount to US$20bn by 2030 with a total global impact of US$1.3tn.[6] Looking at industries, PwC forecast the following impacts by 2030 from 5G:

- Healthcare by US$9bn
- Industrial manufacturing by $2bn
- Smart utilities $4bn
- Consumer and media $4bn

[3] Austrade benchmark report, Innovation & Skills, 2021
[4] Deloitte Access Economics, Mobile Nation 2019- The 5G Future, 2019
[5] Ibid
[6] The global economic impact of 5G. Powering your tomorrow. PwC 2021 p7 and p5

- Financial services $2bn

PwC observes:

> *"These numbers quantify impact, but perhaps, more important, our study findings reflect the value of 5G. The new levels of connectivity and collaboration that 5G enables will amplify and deepen the insight that organisations can gain from connected technologies. Companies will be able to see, attempt and achieve more, opening up new opportunities for growth as they rethink and reconfigure the way they do business in the post-pandemic world. 5G will be a key part of their new operating environment and technology toolkit."*[7]

And:

> *"With 5G, enterprises can take a fresh look at how they operate, reconsidering product offerings, go-to-market approaches, and even the industries and geographies in which they manoeuvre. Collaboration and partnerships will be key: as we highlighted in Making 5G pay, 5G opens the way to a wide array of business and revenue models powered by collaborative relationships between telecoms and partners in other sectors. Again, a positive and willing attitude from policy-makers will be vital."*[8]

Social benefits of 5G

Mobile phones have moved well beyond being a means of voice communications to being indispensable to how we live, work and enjoy entertainment, including increasingly video. Recent research by anthropologists concluded that smartphones have become a "place within which we live, rather than as a device that we use," with the study further describing the phenomena as "human snails carrying our home in our pockets".[9] This is consistent with Australian research that found that 94% of mobile users do not leave the house without taking their smartphone with them.[10] The same study found that mobile technology provides significant social benefits with 60% of Australians reporting that their smartphone has replaced 3 or more other devices or items, such as cameras, street directories, or calendars.[11]

5G applications and use cases are revolutionising the health, transport and education sectors. Mobile devices provide social connectivity as well as enable flexible work arrangements, promoting greater workforce participation.[12] Wearable mobile devices can help Australians track their health and reach fitness goals, and can also provide more critical health monitoring, enabling older Australians to live in their own homes for longer. Transport and logistics will be able to rely on IoT smart trackers to improve efficiency and autonomous vehicles will reduce costs as well as improve safety and accessibility for all road users. The NRMA notes that autonomous vehicles will

[7] The global economic impact of 5G. Powering your tomorrow. PwC 2021 p6
[8] The global economic impact of 5G. Powering your tomorrow. PwC 2021 p19
[9] The Global Smartphone, beyond a youth technology, 6 May 2021, UCL Press
[10] Deloitte Access Economics, Mobile Nation 2019: the 5G Future,
[11] Deloitte Access Economics, Mobile Nation 2019: the 5G Future, page 33
[12] Ibid

deliver improved safety, decrease congestion, provide options for young, elderly and disabled people, as well as reduce pollution and emissions.[13]

Demand for mobile broadband is unrelenting

AMTA notes that demand for mobile data continues to be strong despite the economic and social impacts of the global pandemic. This aligns with Ericsson's most recent global Mobility Report[14] that found, despite uncertainties caused by the COVID-19 pandemic, the pace of introducing new 5G functionality increased in 2020 in both the network and device domains.

Ericsson reported that by the end of 2020, mobile network data traffic grew 50 percent between Q3 2019 and Q3 2020.[15]

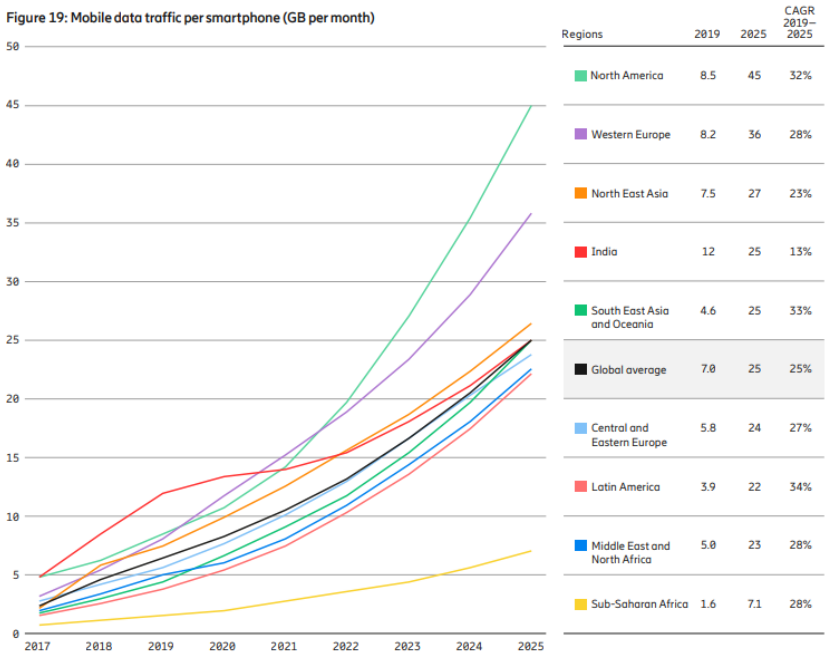
By 2026, Ericsson forecast:

- 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 percent of all mobile subscriptions, compared with 40 percent of all mobile subscriptions worldwide.
- 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.
- 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.[16]

The last point is of particular relevance. Consumers are shifting their media consumption habits and for some demographic groups in our community, watching television is less about scheduling time to watch on linear-TV program on a large screen in your loungeroom, and is becoming more about something you do when and where it is most convenient, including on public transport or in a food court at lunchtime. These scenarios are facilitated by mobile telecommunications networks.

While the take up of 5G in some markets can reflect consumers upgrading from 3G/4G, it is notable that Ericsson also forecast a 33% CAGR in mobile data traffic per smartphone for Australia and our region as illustrated in the chart below.

[13] NRMA, Driverless cars: the benefits and what it means for the future of mobility
[14] Ericsson Mobility Report, Nov 2020
[15] Ibid
[16] Ibid



AMTA also notes the Australian Communications and Media Authority's (ACMA) holds views and forecasts on the future demand for mobile data. The ACMA's Five-Year Spectrum Outlook (FYSO) observes "*over the next 5 years, data growth will inform continued investment in 5G networks and complementary technologies are likely to spur spectrum demand*" and "*Growing demand for data capacity remains a key environmental factor driving demand for new spectrum or changes to existing spectrum management arrangements*."[17] We agree with and reiterate the ACMA's conclusion that "*…further spectrum will be needed to support the growth in broadband applications and mobile data in the short and medium term*"[18].

Conclusion

AMTA supports the government's proposal, as outlined in the Green Paper, for more efficient use of the 600 MHz spectrum due to its scarcity and its preliminary view that the mobile telecommunications industry is the most likely recipient for spectrum recovered via this process. As outlined above, there is demand for more low-band spectrum for 5G and when the economic and social benefits of mobile telecommunications are considered, we submit that it would be the highest value use of the 600 MHz band. We look forward to further engagement with the Department and other stakeholders as the broadcasting and media reform agenda progresses.

Contact:

If there are any questions in relation to this submission, please contact Lisa Brown, Public Policy Manager, AMTA at lisa.brown@amta.org.au or (02) 8920 3555.

17 ACMA's draft Five Year Spectrum Outlook 2021-26 (FYSO) at pages 5 and 7.

18 FYSO at page 9.

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