29 January 2021

Pre-budget submission

Priorities for Australia's Mobile Industry

The Hon Michael Sukkar MP

Assistant Treasurer, Minister for Housing and Minister for Homelessness, Social and Community



Dear Minister,

Introduction

The Australia Mobile Telecommunications Association (AMTA) welcomes the opportunity to outline the mobile industry's view regarding priorities for the Government's 2021-22 Budget.

AMTA is the is the peak industry body representing Australia's mobile telecommunications industry. Its mission is to promote an environmentally, socially, economically responsible, and sustainable mobile telecommunications industry in Australia. Its members include the mobile network operators and service providers, handset manufacturers, network equipment suppliers, retail outlets and other suppliers to the industry.

5G and Australia's economic recovery from COVID-19

Mobile telecommunications continue to have an enabling impact across all sectors of the economy and society. As Australia recovers from the impacts of COVID-19, we expect that the mobile ecosystem will continue to create jobs, drive economic growth and play a key role in supporting our economic recovery as service providers offer cost-effective mobile technology-based solutions to meet consumer and industrial demand.¹ 5G in particular will be central to realising Industry 4.0 – otherwise known as the 4th Industrial Revolution – agendas.

Mobile infrastructure to drive productivity

To fully capture the economic and social opportunities enabled by mobile telecommunications and meet the ever-increasing demand for mobile data – there are two fundamental infrastructure elements required – namely radio-frequency spectrum and deployed mobile networks.

AMTA acknowledges the Government's recent significant reforms made in the area of spectrum management by amendments to the *Radiocommunications Act 1992*. We believe the reforms will support more efficient use of and timely access to radiofrequency spectrum. AMTA strongly supports a continued and expeditious allocation of spectrum to mobile to ensure that the ongoing demand for all types of services can be met and Australia remains at the forefront of rolling out 5G to enable transformative social and economic benefits across industries such as transport and logistics, health, education and the automotive industry, as well as consumer benefits. In the context of our current economic climate, we believe that 5G can provide the requisite connectivity to provide the foundation for Industry 4.0.

¹ Ericsson and Arthur D. Little, <u>5G for business: a 2030 market compass</u>, Oct 2019, page 3

Australian mobile network operators are initially utilising spectrum in the bands below 6 GHz as well as additional spectrum in the mmWave bands in the 26-28 GHz range for the deployment of 5G services.

Industry supports market-based allocation methods for the efficient allocation of spectrum that ensures spectrum moves to its highest value use. The pending auction of 26 GHz spectrum will further supply the additional spectrum that 5G networks require to deliver ultra-high-speed capacity.

We also support increased focus on the timely reallocation of low band spectrum to enable the deployment of national 5G networks, especially in regional areas. We note the potential for use of spectrum in the 600 MHz band in the medium term as outlined in the Government's Media Reform Green Paper.²

Just as spectrum is key to the delivery of 5G and Industry 4.0, so too it is critical that mobile network operators are able to deploy network infrastructure efficiently to ensure the carriers' very significant investments in spectrum allocations are fully realised to the benefit of all Australians.

Industry believes that the current framework of powers and immunities has fundamentally enabled the ability of mobile carriers to deploy networks across Australia for several generations of mobile technology. Without this underlying regulatory framework, we would not have the current healthy and competitive mobile market that exists now.

Industry notes and supports the Government's ongoing work in relation to the low impact facilities framework for network infrastructure deployment in terms of ensuring that it is fit-for-purpose for 5G and beyond. We note that this reform work is still in the process of being completed and we are keen to see this expedited. Ensuring that the low impact regulatory framework is adequately flexible for 5G will require the Government's reform process already underway to continue in a timely manner as deployment continues to ramp up throughout 2021 and beyond. For example, changes to the volumetric restrictions on co-location facilities, existing structure height increases, and the ability to install smart poles will be important for enabling the efficient roll out of current 5G augmentations and future 26 GHz small cells.

Responding to community concerns about mobile technology and 5G

In handing down its findings from the Government's 5G inquiry in *The Next Gen Future Report*, the committee welcomed the Australian Government's decision to establish a new community information campaign on 5G, and recommended that the Government work closely with the ACMA to develop an integrated and comprehensive campaign that can respond to concerns raised about the new network (and in particular 5G and health concerns).

AMTA strongly supports this recommendation and notes we are already assisting the Department in its preliminary work to meet the need for better public information and education regarding 5G. Recent incidents and some public reactions to the deployment of 5G, and fallacious links to the COVID-19 pandemic propagated on social media, illustrate the need for

² Media Reform Green Paper, Department of Infrastructure, Transport, Regional Development and Communications

³ The Next Gen Future, Report March 2020, Commonwealth of Australia

stronger engagement by both industry members and Government to dispel myths and misinformation and build community awareness of the benefits of 5G. AMTA therefore urges the Government to continue its efforts to provide clear and unambiguous information through all available channels to maintain public confidence in the safety of mobile technology and infrastructure.

Bushfire response and the Emergency Cell Broadcast proposal

AMTA supports the proposal presented by Communications Alliance to the Minister for Communications, Cyber Safety and the Arts, the Hon Paul Fletcher MP, and Minister for Regional Health, Regional Communications and Local Government, the Hon Mark Coulton MP, regarding Emergency Cell Broadcast (ECB). We believe that ECB should be implemented to augment and integrate with the current Emergency Alert system. The proposal would mean that Australians would benefit from receiving an emergency alert wherever there is network coverage from a mobile carrier network, regardless of their connectivity status with a mobile carrier network so long as they are in the coverage of any mobile carrier's network. Enabling a fully integrated and complementary solution with Emergency Alert would provide an effective and comprehensive capability to the Commonwealth, States and Territories in the delivery of public safety and Emergency Alerts to mobile phones outside the coverage from their 'home' mobile network, in the most practical and efficient way.

Communications Alliance and our mobile carrier members have recently held discussions with the Department about our proposal, to provide additional information on the benefits, types of network implementation and management of ECB. We understand the Department is intending to submit a proposal for ECB development and implementation funding to be included in the budget and we support the intention as we understand it.

Background:

Demand for 5G continues to grow

The demand for mobile technologies continued to be strong and ever increasing throughout 2020, despite the disruption of the global pandemic. In fact, Ericsson reported that mobile traffic increased during lockdowns due to COVID-19, with mobile traffic patterns reflecting the shift away from working in urban centres to working from home in suburban areas.⁴ Consumer behaviour also shifted remarkably during the pandemic with the sudden and widespread uptake up of video calls with nearly 85% of consumers using video calling to stay in touch with family and colleagues.⁵

AMTA also notes that despite the continuing impact of the pandemic on economic certainty; Australia's mobile network operators continued to deploy 4G and increasingly 5G in 2020 and this pace of deployment is expected to continue in 2021.⁶

This aligns with Ericsson's most recent global Mobility Report⁷ 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.

⁴ Ericsson Mobility Report, June 2020, page 5

⁵ Ibid

⁶ ChannelNews, Telstra 5G rollout undeterred by coronavirus, 26 May 2020

⁷ Ericsson Mobility Report, Nov 2020

Ericsson reported that at the end of 2020:

- over 1 billion people, or 15 percent of the world's population, lived in a 5G coverage area.
- there were 220 million global 5G subscriptions with China accounting for 175 million of those or almost 80 percent.
- more than 100 operators had announced commercial 5G service launches and the first 5G standalone networks were launched.
- 200 service providers had launched FWA services, with an estimated 60 million FWA connections and FWA data traffic representing an estimated 15 percent of global mobile network data traffic.⁸

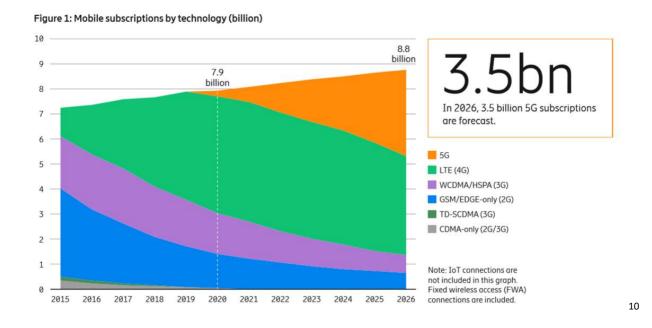
By 2026, Ericsson forecast that:

- 5G networks will carry more than half of the world's mobile data traffic. In South East Asia and Oceania, 5G subscriptions will surpass 380 million, accounting for more than 30 percent of all mobile subscriptions.
- 5G subscriptions will reach 3.5 billion, estimated to account for more than 40 percent of all mobile subscriptions and 50 percent of mobile data traffic at that time.
- 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.)
- FWA data traffic is projected to grow 7 times to reach 67EB, accounting for around 25 percent of total mobile network data traffic globally.
- Mobile network data traffic grew 50 percent between Q3 2019 and Q3 2020.
- 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 2026.⁹

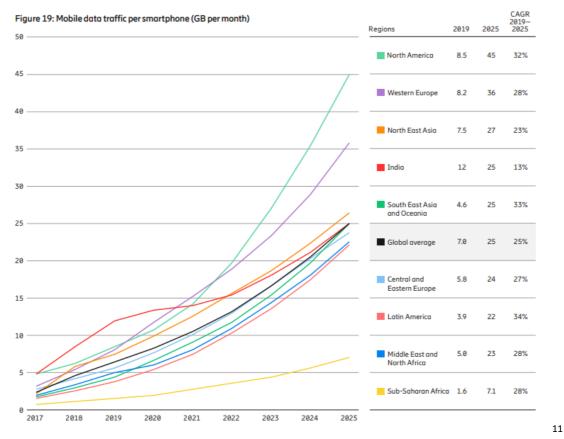
⁹ Ibid

⁸ Ibid

The chart below illustrates actual and forecast mobile subscriptions by technology:



It is also notable that Ericsson also forecast a 33% CAGR in mobile data traffic per smartphone for Australia and our region:



 $^{^{10}}$ Ibid

¹¹ Ericsson Mobility Report, June 2020, page 21

Australia is a mobile nation

The Mobile Nation 2019 – The 5G Future¹² report by Deloitte Access Economics found that the mobile industry continues to make a significant contribution to Australia's economy. Deloitte Access Economics estimates that the mobile industry contributed \$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.

Beyond the value added to GDP and the employment contribution of mobile telecommunications, mobile technologies, including 5G, continue to drive productivity throughout the Australian economy. While productivity has generally declined over the last decade, mobile technologies have boosted both labour and capital productivity. 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.

We believe that 5G will drive the current technological revolution – Industry 4.0 – as businesses move to increase automation and become ever increasingly reliant on data. Australian businesses will rely on mobile to drive innovation, develop new revenue streams, and streamline operations. A survey of 550 Australian businesses in 2018 by Deloitte Access Economics found that 80% reported that they have already implemented at least one emerging technology, or that they expect to implement one in the next 3 years.¹³

Mobile technology also provides significant social benefits with 60% of Australians reporting that their smartphone has replaced 3 or more other devices or items and 94% of mobile users do not leave the house without taking their smartphone with them. Mobiles are now a multi-purpose utility tool that enable us to remain connected both at work and socially.¹⁴

Yours sincerely,

Althous

Chris Althaus

AMTA CEO

¹² Deloitte Access Economics, <u>Mobile Nation 2019- The 5G Future</u>, commissioned by AMTA 2019.

¹³ Ibid p24.

¹⁴ Ibid chapter 5