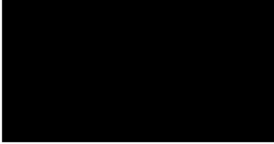




The Australian Industry Group



ABN 76 369 958 788

1 November 2019

Committee Secretariat  
House of Representatives Standing Committee on Communications and the Arts  
Email: [communications.reps@aph.gov.au](mailto:communications.reps@aph.gov.au)

Dear Sir/Madam

## INQUIRY INTO 5G IN AUSTRALIA

The Australian Industry Group (Ai Group) welcomes the opportunity to make a submission to the inquiry into 5G in Australia by the House of Representatives Standing Committee on Communications and the Arts.

Industry is increasingly characterised by the universal use of networked systems and the embedding of digital capabilities and communications in all processes and products, which some label as part of the Fourth Industrial Revolution (or Industry 4.0), and others refer to in part as the Internet of Things (IoT).

Ubiquitous smartphones and connected devices in the workplace and at home mean that doing business in an Industry 4.0 world requires strong digital and communications infrastructure, including 5G which is the focus of this inquiry, as well as a mix of other technologies. The anticipated rollout of 5G mobile networks over the next year is expected to enhance access for advanced industry digital applications through faster speeds and data throughput, lower latency and large-scale deployments of machine-to-machine devices.

To enable this, we note that the Australian Government has recently announced allocating further 5G spectrum to “support a number of important communications policy objectives, including the rapid deployment of 5G technologies, the promotion of competitive market outcomes, and encouraging investment in infrastructure across both metropolitan and regional Australia”.<sup>1</sup>

The progress of 5G in Australia is interwoven with developments in IoT and Industry 4.0.

The Australian Communications and Media Authority (ACMA) considers IoT is now mainstream, with greater cost efficiency likely to drive further IoT adoption.<sup>2</sup> Despite these positive expectations, challenges remain for promoting the business value of IoT. According to Australian Bureau of Statistics (ABS) data, more than 60% of businesses did not see any value in IoT.<sup>3</sup> IoT was more likely to be valued by larger businesses and in industries such as mining, retail trade, transport, postal, warehousing, information media and telecommunications.

It is fair to say that substantial progress has been made by businesses in embracing Industry 4.0, whether under that name or others. In our recent report, *The Fourth Industrial Revolution: Australian businesses in transition*, we highlighted companies that are punching above their weight, doing amazing things with new technology and leading the way for others.<sup>4</sup> But there remains a gap between leaders that have embraced Industry 4.0 and others who are lagging behind.

While this inquiry is focused on 5G, the Government also needs to consider complementary technologies, such as the new Wi-Fi 6 wireless standard (also known as IEEE 802.11ax), that will support and assist the applications enabled by 5G networks. For example, a feature of 5G brought across from 4G is integration with Wi-Fi for features such as Wi-Fi calling. It is also anticipated that 5G

<sup>1</sup> Minister for Communications, Cyber Safety and the Arts, “Opening up more 5G spectrum” (Media release, 25 October 2019).

<sup>2</sup> ACMA, “Communications Report 2017-18” (Report, February 2019), p. 40.

<sup>3</sup> ABS, 8167.0 – Characteristics of Australian Business, 2017-18.

<sup>4</sup> Ai Group, “The Fourth Industrial Revolution: Australian businesses in transition” (Report, August 2019), Link: [https://cdn.aigroup.com.au/Reports/2019/AiGroup\\_Fourth\\_Industrial\\_Revolution\\_Report.pdf](https://cdn.aigroup.com.au/Reports/2019/AiGroup_Fourth_Industrial_Revolution_Report.pdf).



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may feature the ability for mobile users to stay connected as they move between outdoor wireless connections and wireless networks inside buildings without user intervention or the need for users to reauthenticate (i.e. seamless handover between mobile and Wi-Fi access).<sup>5</sup> Using Wi-Fi 6 as an example, it shares traits with 5G, including improved performance, and can be used to support 5G networks and provide better geographical coverage at lower cost.<sup>6</sup> There may be also other technologies that should be considered in the mix that supports Industry 4.0 and IoT.

There are negative perceptions about the perceived health impacts of 5G in some parts of the broader community. While a close eye needs to be kept on any real threats, history and experience has shown that as the public becomes more accustomed to the presence and practicality of emerging technologies, these are accepted and embraced for the positive impacts they bring. Many initial concerns and fears relating to radio, television and earlier generations of mobile technology were resolved or proved groundless through evidence, and regulation focused on specific, genuine and continuing risks.

Therefore, it is important in this regard for governments and industry to work together to close the gap in promoting the real business value of 5G, as well as other technologies, to encourage business uptake of Industry 4.0 and IoT. It is also important to raise broader community awareness about the benefits of 5G and address public concerns about any health risks through evidence. We understand that there is existing public material that can help support this.<sup>7</sup>

In some recent areas of regulation in response to emerging technology, we have been alarmed by disproportionately heavy-handed interventions that seek to eliminate some forms of security risk, for example, rather than manage them, while ignoring the implications and costs to innovation and the economy.<sup>8</sup> Such measures not only add costs to international business, but risk curtailing innovation and limiting the benefits of digitalisation to businesses and their customers.

Regulation does have a role in addressing reasonable public concerns, for instance around security, safety, privacy and the environment. But there are also often alternative approaches to the regulatory “stick”, including consultation and dialogue, codes of practice, transitional support and education. Regulatory barriers should only be introduced where there are clear net community benefits that are supported by substantiated evidence.

Finally, we note that this inquiry’s Terms of Reference specifically excludes national security i.e. “Matters relating to national security are out of scope for this Committee”. While we anticipate the outcome of this inquiry will help alleviate public concerns around safety and support business investment, the Government has publicly expressed concerns relating to national security that may hinder the successful rollout of 5G if left unresolved.<sup>9</sup> It is important that Government and industry work collaboratively together on these concerns to ensure that 5G is rolled out as soon as possible, as well as protecting Australia’s national security interests.

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<sup>5</sup> Cisco, “What is 5G?” (Website), Link: [https://www.cisco.com/c/en\\_au/solutions/what-is-5g.html](https://www.cisco.com/c/en_au/solutions/what-is-5g.html).

<sup>6</sup> Ibid.

<sup>7</sup> For example, see: Deloitte Access Economics, “Mobile Nation 2019: The 5G future” (Report for Australian Mobile Telecommunications Association (AMTA), April 2019); AMTA, “5G and EMF Explained” (Report, March 2018).

<sup>8</sup> For example, the *Telecommunications and other Legislation Amendment (Assistance & Access) Act 2018* (Cth) was rushed through Australian Parliament last year without full consideration of the impact that this could create for a broad range of stakeholders. This has led to unintended consequences, including Australia’s image overseas in relation to trust in Australian products and concern that the legislation could lead to the weakening of existing cyber security of businesses and its customers. See: Joint Submission to the Parliamentary Joint Committee on Intelligence and Security’s *Review of the amendments made by the Telecommunications and Other Legislation Amendment (Assistance and Access) Act 2018* (Submission No. 23, July 2019), Link:

[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Joint/Intelligence\\_and\\_Security/AmendmentsTOLAAct2018/Submissions](https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Intelligence_and_Security/AmendmentsTOLAAct2018/Submissions); Australian Strategic Policy Institute (ASPI), “Perceptions survey: Industry views on the economic implications of the Assistance and Access Bill 2018” (December 2018), p. 3.

<sup>9</sup> For example, see: Australian Signals Directorate (ASD), Director-General ASD speech to ASPI National Security Dinner, 29 October 2018; Minister for Foreign Affairs, The Lowy Institute International Cyber Engagement Q and A, 11 March 2019.



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In summary, 5G will be critical to support Australian businesses in transitioning to and within Industry 4.0, which in turn benefits the broader community. Governments and industry need to work together to promote the real business and community benefits of 5G, as well as alleviate public concerns through proper community engagement.

Should the Standing Committee be interested in discussing our submission further, please contact



Yours sincerely,



**Peter Burn**  
**Head of Influence and Policy**