



ENGINEERS
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Foreign Interference through Social Media

Submission to the Senate Select Committee

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Foreign Interference Through Social Media: Submission to the Senate Select Committee inquiry

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1. Executive summary

Engineers Australia is the peak body for the engineering profession in Australia. With over 100,000 members across Australia, we represent individuals from a wide range of disciplines and branches of engineering. Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers Australia supports open and secure social media platforms that encourage economic growth, empower communities, and as a place of collaborative innovation. The advent of social media has provided a wealth of opportunity for businesses, educators, and the wider community by providing ease of access to marketplaces and people across the world.

However, it is critical to ensure that Australian communities remain net beneficiaries from these platforms. This requires ongoing attention to social media and examining the possibility of reform in the following areas:

- The nature of the content disseminated on social media.
- The algorithms used by social media companies and the effect on individuals, businesses, and the community more widely.
- Origin of users and content which are active on social media platforms, particularly those which are targeting Australian citizens.
- Adequacy of social media regulation, protections, oversight and governance.
- Any unintended consequences of regulatory reform and oversight on legitimate usage by Australians.

Social media has been particularly valuable during COVID-19 in promoting higher levels of resilience through disseminating timely information, connecting businesses with consumers, and helping loved ones stay up to date. During the current crisis, the impact of social media could not be felt more acutely nor the consequences of its misuse more severe. Ensuring that social media platforms used in Australia are not leveraged by nefarious actors to pursue illegitimate aims requires increased engagement with those who have deep technical expertise. Government engagement with those in cyber security, communication technology and computer engineering generally will be essential to minimising the impact of deliberate misinformation on Australian society.

The scope of misinformation could not be underestimated. Facebook alone removed 7 million posts identified as mischaracterising COVID-19, removed 1.5 billion fake accounts within a three month period and gave warning labels to 98 million posts.¹ TikTok removed 1.75 million accounts in the latter half of 2020 that were 'used for automation during ... the US elections.'² The scale of the challenge to government and the impact of systemic misuse of social media on individuals, communities and businesses is significant.

The issue will only grow unless decisive action is taken by the Commonwealth government to ensure the safety and security of social media. Doing this requires sustained engagement with experts from a wide range of disciplines, including engineers, and a long-term vision for the future of social media in Australia which balance freedom with security.

This submission proposes a number of practical measures which the government can take. Whilst significant attention is given to foreign interference, the issue of misinformation is far wider and can encompass deliberate market manipulation (section 3.1) or promoting conspiracy theories that undermine government efforts to implement good public policy (such as the vaccine rollout).

For social media platforms to benefit our community, government needs more strategic and informed legislative, regulatory and oversight mechanisms. However, whilst recognising the need for additional safeguards and transparency, the risk is that overregulation will harm local businesses, Non-Government Organisations (NGO), and infringe upon the individual's right to freedom of expression. The social media platforms predominantly used in Australia are dominated by a few large actors, encouraging more competition in this space may assist in encouraging the private sector to increase security, transparency and safeguards. Government alone cannot solve this issue and, if it did, it would only lead to excessive regulation detrimental to Australia's economic welfare.

¹ Facebook, 2020. Submission to the Senate Select Committee on Foreign Interference through Social Media, page 3.

² TikTok, 2021. Transparency Report for the period July1 – December 31st 2020. URL: <https://www.tiktok.com/safety/resources/transparency-report-2020-2?lang=en-au>

Countering the effects of misinformation and foreign interference in particular must remain an Australian government priority particularly given how prolific such action is by maleficent actors. Given many of the solutions to issues surrounding foreign interference will be of a highly technical nature, government should ensure ongoing engagement with sufficiently qualified and experienced personnel in the wider community. The rapidity of technological development means government must draw on the expertise of computer and software engineers as a priority profession. This is critical both to ensure that any measures put in place are effective and for the early identification of developing threats.

Engineers Australia hopes that this submission will be the starting point for ongoing engagement by government to draw on this expertise and ensure social media platforms are safe and promoting the best interests of Australians.

1.1 Summary of recommendations

The central recommendations that Engineers Australia proposes are the following:

- (Section 2.1) Mandatory benchmarks for all social media platforms over a certain number of users, nominally 500,000 users however we recommend further industry engagement to identify the optimum number.
- (Section 3.0) In terms of incentive alignment for social media platforms and the interests of the wider community:
 1. Construct a regulatory framework which aligns the financial incentives of social media firms to the greatest extent possible, in part by creating disincentives to promote inaccurate content even if it performs well.
 2. Ensure effective and independent oversight when regulation is ineffective or insufficient to align incentives between platform operators and users.
 3. Promote competition and the emergence of new social media platforms rather than allowing additional regulation or government engagement to reduce innovation in this space.
- (Section 3.2) the creation of an inter-departmental body which is solely responsible for monitoring and regulating social media as well as taking active measures to reduce the impact of foreign interference and misinformation. A critical part of this effort will be ongoing engagement with experts in this field, industry and the wider community.

1.2 Contact information

To discuss the issues raised in this submission, please contact Philip Longley, Senior Policy Advisor, at PLongley@engineersaustralia.org.au.

2. Social media and the role of government

Foreign interference has the capacity to erode the faith Australian citizens have in our democratic process by, amongst other things, undermining our electoral process and systematically spreading false information. Facebook's own Chief Operating Officer remarked in 2018 that "we know we can't cannot stop [foreign] interference by ourselves"³, government has an important role to play to protect against what Google has termed coordinated influence operations (CIO).⁴ These range from seeding false news stories,⁵ supporting and spreading conspiracy theories, manipulating information and the extensive use of fake accounts. Many of these measures are designed to manipulate the algorithms that are used by social media platforms to promote content that is deliberately misleading. Whilst social media platforms do have significant responsibility (section 3.0), Government should not allow self-regulation without oversight, transparency, and a framework which ensures basic security for its users.

Critically, government should have the computer engineering and technical expertise to ensure compliance and oversight alongside clear lines of responsibility.

2.1 Social media algorithms

The source code used by various social media platforms should be accessible to qualified government personnel keeping the proprietary information suitably protected to promote competition. At a minimum, government oversight in this area should focus on the following:

- The means by which harmful content may be unintentionally promoted by the algorithms currently being used.
- How misinformation is identified and counteracted by the platform with a focus on the automated identification processes in place.
- The existence of vulnerabilities in the algorithm which provide opportunities to foreign and malicious actors with the intent to interfere in Australia either electorally or otherwise.
- The lifecycle of misinformation on specific social media platforms including how long it is present on the platform (its lifespan).
- Protection measures specifically in place for vulnerable persons such as minors, minorities⁶ and other groups that may be specifically at-risk or targeted.

Engineers Australia recommends mandatory benchmarks for all social media platforms over a certain number of users. Whilst further engagement will be required to determine what the optimum number is, around 500,000 users provides an incentive for smaller innovative firms to get into the industry who have not reached that benchmark and may be negatively affected by additional compliance. The larger social media companies who have more than 500,000 users and whose platforms are now part of everyday life for many Australians require additional measures of protection.

The focus of this two-tiered system is to reduce the regulatory burden for competing social media platforms which may be smaller whilst increasing the security for the majority of social media users. In consultation with industry, a maximum average should be set as to how long it takes for misinformation to be identified and countered.⁷ To ensure effective oversight and transparency government should ensure they have the technical capacity to understand the source code used by platforms. This means that there is a significant role for engineers and other technical specialists

³ Mason, Max. 2018. Facebook, Twitter can't stop foreign interference on social media on their own. Australian Financial Review. URL: <https://www.afr.com/companies/media-and-marketing/facebook-twitter-cant-stop-foreign-interference-on-social-media-on-their-own-20180905-h14y4q>

⁴ Google, 2020. Google's Submission to the Senate Select Committee on Foreign Interference through Social Media.

⁵ Ibid, page 4.

⁶ It has been reported that specific diasporas have been targeted as part of coordinated efforts by foreign powers to interference in Australian elections. Source: Ni, Adam and Jiang, Yun. 2020. China Policy Centre. Submission to the Select Committee on Foreign Interference through Social Media, page 3.

⁷ The means of misinformation being countered vary but could include anything from the post being deleted through to warning banners being embedded.

in government and the ongoing consultation processes. Government must also ensure they have an independent means of verifying compliance rather than relying on social media platforms to self-regulate.

2.2 Government messaging

Critical to countering the spread of misinformation is the timely provision of accurate information from credible sources. Much like traditional media, social platforms need to be productively engaged with by government particularly as people are increasingly turning to these platforms as sources of news⁸. Equipping social media users with fact-based information before misinformation has a chance to become widespread is a proactive measure government can take to limit foreign interference, increase community resilience during crises and empower Australians with facts.

All government messaging and public service announcements (PSA) need to be broadcast on social media with a similar level of engagement and focus that is taken with traditional media sources such as tv-news or the major newspapers. Conspiracy theories often gain prevalence when there is an information vacuum. Government messaging on social media will need sustained engagement and in-house capabilities to deliver content that is engaging, useful, and can be quickly understood as with other pieces of content on social media. Key principals for government engagement on social media should at a minimum incorporate the following:

- Timeliness – providing relevant information at speed on social media to ensure an informed public.
- Credibility – ensure that government produced content is clearly identifiable with appropriate links to further information for users who are interested in learning more.
- Consistent messaging – providing sustained engagement by government should not be a once-off event but ongoing to build trust and reputability between users and government sources.

Whilst the above three principals will work towards minimising misinformation and foreign interference, there may be instances where it is appropriate to directly engage with and counter misinformation. A wholistic social media engagement strategy by government is critical to ensure the safety and security of these platforms and as an ongoing effort to counter malicious and foreign actors operating in this space.

2.3 Ongoing education

One of the best ways government can counter foreign interference and misinformation is by increasing the digital literacy of the population. Schools, universities and ongoing awareness campaigns by government are critical to ensure that people are not only aware of the issue but capable of protecting themselves. Efforts at education should also target small to medium sized businesses and their owners who may be particularly vulnerable.⁹

Part of any government social media strategy should incorporate an educational component to build awareness and equip social media users. The educational focus on social media should be varied, however could include: ways to identify false or misleading information, how to fact-check claims, “red flags” which can identify fake users or accounts, and what individuals can do to make social media platforms safer.

During crises such as COVID-19, these educational and messaging efforts (as per section 2.2) should increase to assist users seeking accurate and up-to-date information. It is important that government develops these capabilities before fires, floods, and other disasters occur to proactively lead the flow of information to users rather than providing an opportunity for unverified third parties to lead the news story.

2.4 Unintended consequences of regulation and legislation

Government cannot be the end-to-end solution for all the challenges surrounding misinformation prevalent on social media. There is a central role to play for both companies operating the platforms and the individuals using them. Legislation will be unable to solve these issues alone and over-regulation risks harming freedom of speech and legitimate usage domestically. Any regulatory regime and mandatory reporting requirements as suggested in section

⁸ Hughes, Christopher, 2021. News Sources in Australia 2021. Statista. URL: <https://www.statista.com/statistics/588441/australia-news-sources/>

⁹ Australian Signals Directorate, 2020. Cyber Security and Australian Small Businesses. URL: <https://www.cyber.gov.au/sites/default/files/2020-07/ACSC%20Small%20Business%20Survey%20Report.pdf>

2.1 should take into account the effect on small and medium businesses as well as those seeking to innovate in this field. Given the rise in security consciousness from many (but not all) social media users, increased competition may drive solutions from the private sector. As such, additional regulation needs to balance security for users whilst not inhibiting innovation. Measures to protect vulnerable groups, such as minors, needs to be an ongoing focus for government action in this space.

Whilst it is encouraging many social media platforms such as Facebook and TikTok have tightened rules around political advertising care needs to be taken that the burden of compliance is not limiting domestic organisations with legitimate reasons to campaign. Local non-government organisations (NGOs) and smaller political parties constitute an important part of our social landscape and can bring little known issues to light particularly around social justice issues. Overly burdensome compliance for many of these local organisations may severely limit their capacity to operate. When government expects social media companies to self-regulate there is a risk that there will be an overreaction, inadvertently making social media less accessible particularly for smaller NGOs in Australia.

3. Incentive alignment and the private sector

One of the ongoing challenges for social media platforms is a misalignment between the best interests of users and the companies operating these platforms. This is particularly the case when looking at the proliferation of misinformation. The means by which the largest social media companies generate revenue is predominantly through advertising.¹⁰ Keeping users online and active increases the reach and impact of this advertising. The algorithms used to promote non-advertising content to users is therefore designed to keep people on the platform. This can be at the expense of accurate information. Content which is inflammatory, conspiratorial, and extremist may perform better at keeping people on the platform and engaged even if the sources and validity of this content are dubious. This creates an incentive to promote content whether or not it is misleading to users who then stay engaged and drive revenue for the company. By relying on social media platforms to self-regulate, government is expecting many of these social media companies to act against own best interest in terms of generating revenue.

In terms of incentive alignment, Engineers Australia recommends the following:

- Construct a regulatory framework which aligns incentives to the greatest extent possible, in part by creating disincentives to promote inaccurate content even if it performs well.
- Ensure oversight when regulation is ineffective or insufficient to align incentives between platform operators and users.
- Avoid creating a regulatory framework which inhibits innovation or competition.

A high level of technical expertise within government is required to understand the issues and to inform those engaged in the legislative process. Engaging engineers with a focus on software, hardware and communications more broadly will be critical for government to take meaningful action.

The challenges in the social media space evolve rapidly and foreign interference is frequently conducted by well-funded actors that are highly agile.¹¹ It would be a mistake to believe that a static regulatory environment will do anything other than temporarily resolve the issues currently facing Australia through social media. Engineers Australia recommends the government creates an inter-departmental body (section 3.2) which is solely responsible for monitoring and regulating social media, a critical part of which will be ongoing engagement with experts in this field, industry and the wider community.

It would be a false paradigm to assume that social media platforms cannot operate in such a manner which ensures the veracity of content whilst being a profit-making entity. The two are not mutually exclusive however without a technically informed regulatory framework with external oversight the risks posed by platforms self-regulating will remain. Given the prevalence of foreign and malicious actors targeting the Australian population through these social media applications, it is imperative that incentives are aligned to the greatest possible extent.

3.1 Implications for financial markets

It is telling that only recently the Australian Securities and Investments Commission (ASIC) warned of sophisticated actors using social media to execute 'pump and dump' schemes.¹² That is, deliberately manipulating publicly traded stocks by spreading 'false news'¹³ on social media to create interest and "hype".

This illustrates that the issue of systematic misinformation is a wider problem than simply foreign interference. Undermining the integrity of Australia's financial markets creates instability and risks the financial security of

¹⁰ Leetaru, Kalev. 2018. What Does It Mean For Social Media Platforms to "Sell" Our Data? Forbes. URL: <https://www.forbes.com/sites/kalevleetaru/2018/12/15/what-does-it-mean-for-social-media-platforms-to-sell-our-data/?sh=59e19af22d6c>

¹¹ Mason, Max. 2018. Facebook, Twitter can't stop foreign interference on social media on their own. Australian Financial Review. URL: <https://www.afr.com/companies/media-and-marketing/facebook-twitter-cant-stop-foreign-interference-on-social-media-on-their-own-20180905-h14y4q>

¹² ASIC, 2021, Social Media Led 'Pump and Dump' Campaigns, URL: <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2021-releases/21-256mr-asic-warns-of-social-media-led-pump-and-dump-campaigns/>

¹³ Ibid.

Australians. Internationally, Australia is renowned for having a high level of integrity when it comes to our financial markets.¹⁴ If we continue to allow misinformation to proliferate via social media this clearly risks our global standing as a secure financial hub. Once again this illustrates the central role that technical experts and engineers play in securing social media platforms and financial markets.

Any wider solution to this challenge requires a coordinated government approach to social media which is capable of empowering ASIC to execute their mandate to safeguard Australia's financial system. Whilst the terms of reference for this submission focus on foreign interference, the means by which financial crime is conducted on social media is often similar and requires a like response.

3.2 Effective collaboration with the private sector & government responses

Engineers Australia recommends the creation of an interdepartmental body solely focused on making social media platforms less prone to foreign interference or misinformation and protecting Australian users including businesses. Given the nature of the challenges this body should have a deep technical expertise as a necessary prerequisite to understand the issues and create a regulatory framework fit for purpose.

This body should be the nexus not only between different departments' engagement on social media, but also form deep connections with those in the private sector at the forefront of the technical profession. A collaborative approach will be vital in securing stakeholder buy-in for government reforms as well as in working to make social media platforms more secure generally.

From the Department of Health, to ASIC, Defence, Police and many others are all engaged to varying degrees on social media. However, the lines of responsibility and effectiveness of engagement need to be improved and responses more coordinated to make social media a safer space for Australians. As part of any efforts at reform in this area, attention needs to be given to the long-term vision government has for engagement on social media and establishing processes to deliver meaningful results.

¹⁴ The Index of Economic Freedom, 2021. Australia's Global Ranking. The Heritage Foundation. URL: <https://www.heritage.org/index/country/australia>

4. Concluding remarks

Social media platforms are a critical part of our economic and community infrastructure. Vulnerabilities, if exploited, will have wide-reaching effects and should not be treated as of secondary concern. These platforms continue to deliver immense benefits to society and whilst social media remains largely unregulated the significance that these online platforms provide calls for additional safeguards. Whilst this submission has outlined what some of these measures may look like, ongoing engagement with social media platforms and a wholistic government approach is required.

Critically, implementing these safeguards should not reduce or undermine competition or place a high regulatory burden on small businesses. Issues around freedom of expression have been touched on in this submission and must be balanced with fact-based content provided in a timely manner by government. Rather than trying to shut down debate, these platforms should be public spaces where informed conversations can take place.

Protecting Australians against misinformation on social media requires government to draw on the expertise of multiple departments alongside technical experts. Responses to misinformation require an agile response to engage with the rapidly changing social media environment. The deep technical expertise that this requires creates a strong imperative for government to have inhouse capabilities whilst liaising with the forefront of the profession to develop and adapt solutions as outlined in this submission.

Social media frequently becomes more important to communities during times of crisis, it is also during these times that we are more vulnerable to foreign interference and misinformation. Government responses to fires, floods, and the ongoing effects of the pandemic means social media needs to be a priority as part of our national readiness and crisis engagement. Finding the balance between a regulatory framework which protects users whilst promoting innovation, collaboration, and freedom of speech will take time. In part, the difficulty is the breadth of expertise required both technically and legally to make platforms safer. The imperative to act now will not only support more resilient communities but create a better marketplace for businesses and consumers



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