

*Submission to The Senate Standing Committee on Trade and Investment Growth:
Inquiry into the Trade System and the Digital Economy*

In response to the Committee's letter of invitation, please accept this submission to the inquiry.

1. Background:

My name is Ric Gros. I am the Chief Executive Officer of METS Ignited, an industry growth centre which aims to build connections between government and Mining Equipment, Technology and Services (METS) firms to grow export opportunities.

Australia's METS sector is globally connected and financially robust. Contributing \$86 billion to the Australian economy and supporting half a million jobs, the METS sector plays a significant role in the nation's prosperity.

Over 55 percent of Australian METS companies are exporters and many are world leaders in their markets. It is the role of METS Ignited to work closely with industry to increase collaboration, implement initiatives that will accelerate the commercialisation of innovation, and leverage industry initiatives to grow exports.

In collaboration with governments and industry METS Ignited has established an industry competitiveness plan to shape the future of the METS sector, with regulation reform being a key component of the plan.

METS Ignited aims to champion regulation reform, working closely with governments and industry to develop the optimal environment for industry growth.

2. The responsiveness of Australia's trade architecture and regulatory system to the contemporary need of the digital economy and disruptive technology:

METS Ignited has observed that a number of Australian governments have been slow to adopt digital platforms to engage businesses, particularly in the resources sector. While there have been significant advances in the past five years in resource-based jurisdictions such as Queensland, Western Australia and South Australia, there is still a lot of work to be done to enable the METS sector to reduce regulatory compliance costs. Further digitisation of regulatory processes in all Australian jurisdictions would enable METS firms to increase their efficiency, and to respond to market needs more effectively.

On an international level, METS companies report that particular trading partners have low levels of digital competence, which reduces the efficiency of their activities. The problems are particularly significant in Russia, Mongolia, Kazakhstan, India and Ghana. In these countries, METS companies cannot take advantage of digitised systems, and are forced to revert to manual, handwritten processes, using predominately faxes and despatch systems. Further development of the digital competency of these countries would enable increased export opportunities for the sector.

3. Measures to improve the cyber-resilience of Australia's trade-focused business sector:

The METS sector is driving productivity in the resources sector through increased automation and remote service operations. Such activities generate significant data transmissions, some of which go to the core of Australia's major mining operations. Any deliberate disruption to this information stands to have significant business impacts on large mining operations, with flow-on effects to supply-chain businesses and rural and regional communities as a whole.

New services are emerging in the METS sector to stream operational data from mining and mineral processing operations in remote locations around the globe to data centres where experts can review the operational performance and suggest or directly make changes to improve that performance. Increasing export dollars are generated via this technique but if these data streams are disrupted or tampered in any way it will compromise the control of the operation, compromise the safety of workers on the sites and also compromise the export revenue from such services.

As an example, drone technology presents a number of opportunities for METS firms, particularly in the areas of geospatial and geo-technological services. Drone technology and digital services, particularly in remote and regional areas, is vitally important to unlocking the future potential resources. The regulation of drone technology needs to balance speed and efficiency, with the requirement for safe operation and data security.

In other areas, such as entering live sampling results through cloud storage platforms and the theft of data stored on in-house hardware systems of large mining companies are other examples of potential points of vulnerability.

Overall, there has been no evidence of systems being compromised in the sector through cyber-criminal activity, though the potential is strong. A recent report by data security experts, Kaspersky, shows that approximately one-third of all intercepted attacks on computers were experienced by manufacturing firms. Most METS companies would fall into this organisational category (see <https://ics-cert.kaspersky.com/reports/2017/09/28/threat-landscape-for-industrial-automation-systems-in-h1-2017/>).

METS Ignited notes the recent commentary from an Australian academic specialising in the field of cyber-security, highlighting the strong potential for cyber-criminals to attack the mining industry (see comments made by Professor Craig Valli, from Edith Cowan University - <http://www.abc.net.au/news/2017-07-19/wa-not-immune-from-cyber-attacks-mining-companies-vulnerable/8722618>).

4. Summary:

The key points made in the submission from METS Ignited were:

- Australia's METS industry is a significant contributor to the Australian economy, with many of the domestic operators currently exporting technology and services;
- Australian-based METS firms exporting technology and services are frustrated by the slow pace of digital transformation in a number of trading partner-nations; and
- While there have been no reported incidents of cyber-related crime in the METS Industry, the potential for incidents to occur is a real and present threat to the industry.