

Submission to the 2030 Strategic Plan Issues Paper

The Australian Academy of Science National Committee for Data in Science (NCDiS) aims to: foster the discipline of data science in Australia; link the Academy to relevant Australian scientists, practitioners and societies; and serve as a link between Australian and overseas scientists, primarily through establishing links with international unions in the field of data science. The overarching purpose of this committee is to enable Australian scientists to more effectively exploit the emerging data-rich research environment in order to conduct data-intensive science. This submission aligns with these goals.

The NCDiS broadly supports the challenges, vision and issues outlined in the 2030 Strategic Plan Issues paper.

However, we believe that there are a number of important aspects that are currently under-represented in the 2030 Strategic Plan Issues paper, but could potentially play a critical role in overcoming the challenges and issues identified in the paper:

- Challenge 3 (Education and Skills Development).

Australia needs to invest more in education, training and skills enhancement in the field of *data science*. This expertise will be critical to make Australia more competitive and efficient across a broad range of sectors (from agri-business to logistics, environmental management, healthcare and urban planning). Expanding undergraduate and post-graduate training in *data management, analytics and modelling* across a range of disciplines, will be critical to underpin the adoption of smart business, smart government and e-research practices, and to realize a highly innovative Australia;

- Challenge 4 (Maximising engagement between research and users) and Challenge 5 (Maximising advantage from knowledge).

Encouraging and supporting *open access to government, research and industry data* (through incentives and investment in shared infrastructure capable of capturing, managing and sharing “big data”), will be critical to facilitate collaboration and share knowledge between research, business and government communities;

- Challenge 6 (Bold high impact initiatives)

A bold high impact initiative that would galvanise collaboration between industry, research, government and the community is the *Australian Research Data Cloud* (ARDC)¹. The ARDC would provide an integrated national infrastructure capable of meeting the needs of data-intensive, cross-disciplinary, cross-sector and global collaborative research, and generate maximum impact and return on investment.

¹ 2016 National Research Infrastructure Roadmap

<https://www.education.gov.au/2016-national-research-infrastructure-roadmap>