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Australian Academy of Science

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# Australian Academy of Science submission on the Exposure Draft of the Data Availability and Transparency Code 2022

The Australian Academy of Science welcomes the opportunity to comment on the Exposure Draft of the *Data Availability and Transparency Code 2022* (the Code).

### The Academy:

- Notes international developments supporting open science and urges proactive positioning to match this momentum
- Is concerned the Code may create unreasonable barriers and delays to science and scientists
- Stresses that effective data sharing can support research integrity.

There is growing momentum internationally for open science. The Academy notes the recent policy guidance issued from the White House Office of Science and Technology Policy and welcomes its support for open science. Australia should similarly be striving for open access to research outputs—including data. Legislative instruments such as the Code are key.

#### Unreasonable delays can impede data access

Data sharing agreement requirements in the Code should be designed to avoid unreasonable delays to data sharing due to security concerns. Similarly, they should not act as an impermeable barrier to collaboration, either internationally or with industry.

The Academy is also concerned that security provisions can act unreasonably as a barrier to Higher Degree by Research students—particularly international students—accessing data.

Section 6 of the Code is concerningly ambiguous in its stipulations defining projects 'reasonably expected to serve the public interest'. Research projects supported by public funding can be reasonably expected to serve the public interest, since they have most likely already satisfied this requirement through funding application processes. The Academy is concerned that the ambiguity in this section may result in unreasonably impeded access to data.

#### Firm data sharing principles enable sound research

The Academy emphasises the importance of the FAIR (Findable, Accessible, Interoperable and Reusable)
Principles for research data management.<sup>1</sup> The FAIR Principles balance open access with effective regulation of data.

Sharing of data must reflect sound operational principles. For instance, metadata must be clear and consistent, data should be minimally processed, sharing should utilise non-proprietary formats, and data should be machine-readable. The current Exposure Draft could be better aligned to these principles.

## Data sharing should be governed to support research integrity

An effective data sharing regime must also enable scrutiny of evidence to support research integrity. There must be provision for the availability of data for a number of reasons, including supporting reproducibility and replicability in science, to the spectrum spanning research malpractice and serious misconduct.<sup>2</sup>

To be effective, data sharing must be consistent between state and federal jurisdictions to enable coordination and avoid duplication.

The Academy also wishes to draw to ONDC's attention its previous publications relevant to this matter, including <u>Position Statement on Open Science</u>, <u>Advancing Data Intensive Research in Australia</u> and <u>Australia's data-enabled research future: Science</u>.

To discuss or clarify any aspect of this submission, please contact Mr Chris Anderson, Director Science Policy at <a href="mailto:Chris.Anderson@science.org.au">Chris.Anderson@science.org.au</a>.

<sup>&</sup>lt;sup>1</sup> FAIR principles. GO FAIR <u>https://www.go-fair.org/fair-principles/</u>

<sup>&</sup>lt;sup>2</sup> Michael Barber, 'Strengthening Research Integrity: The Role and Responsibilities of Publishing', International Science Council Occasional Paper (November 2021), <a href="https://council.science/wp-content/uploads/2020/06/2021-11-Research-integrity.pdf">https://council.science/wp-content/uploads/2020/06/2021-11-Research-integrity.pdf</a>