	"FAIR" data principles	Application to all research outputs	Potential use cases	How can outputs be made F.A.I.R.?
Findable **F**	**F1** (Meta)data are assigned a globally unique and eternally persistent identifier **F2** Data are descibed by rich metadata **F3** (Meta)data are registered or indexed in a searchable resource **F4** Metadata specify the identifier	Outputs can be readily found by academic and non-academic search engines and other web discovery services. Outputs are tagged with specific identifiers that allow users to determine what it is, who wrote it, who funded it, and which version they are accessing.	**Non academic use:** Article text can be crawled by generic web search engines using simple searches. **Academic use:** Outputs can be crawled by academic web search engines and specialist tools such as those that are used to populate systematic reviews.	The metadata for the outputs are complete and open. Metadata include stable identifiers - i.e. DOIs and appropriate keywords with linkage to other relevant metadata and persistent identifiers such as ORCID ID, Fundref ID, CrossMark, etc.).
Accessible **A**	**A1** (meta)data are retrievable by their identifier using a standardized communications protocol **A2** the protocol is open, free, and universally implementable. **A3** the protocol allows for an authentication and authorization procedure, where necessary **A4** metadata are accessible, even when the data are no longer available	Outputs are available to be read and to be downloaded by anyone. Outputs are securely stored in a place that anyone can access.	**Non-academic and academic use:** Anyone can access and download the research outputs for free, from any location - i.e. not just from within an academic institution.	The metadata that describes the outputs are rich and open. Non-exclusive, Creative Commons, licenses are applied that allow free access. Secure, curated, publicly accessible repositories are available (e.g. institutional repositories).
Interoperable **I**	**I1** (meta)data use a formal, accessible,shared,and broadly applicable language **I2** (meta)data use vocabularies that follow FAIR principles **I3** (meta)data include qualified references to other (meta)data	Outputs are formatted such that they can be re-used as needed. Outputs are tagged in such a way that they can be reliably referenced in other research outputs.	**Academic use:** Outputs can be cited precisely and linked to from other works. Outputs can be analysed and incorporated into databases and secondary work, including systematic reviews and meta-analyses.	There are agreed minimum standards for formatting of outputs, even text (e.q. not just PDF format). International standards are applied to how outputs are referenced and linked (e.g. CrossRef).
Reusable **R**	**R1** meta(data) have a plurality of accurate and relevant attributes **R2** (meta)data are released with a clear and accessible data usage license **R3** (meta)data are associated with their provenance **R4** (meta)data meet domain-relevant community standards	Outputs are are tagged to indicate how exactly the work can be used and reused. Outputs are in a format that allows their incorporation into new work.	**Non-academic and academic use:** Outputs can be used in a different format from their original purpose e.g. figures can be incorporated into policy documents, school teaching materials , creative work or into other academic work.	Authors/creators obtain and retain all necessary rights to enable reuse of the outputs. Outputs are licensed in a way that allow for reuse and appropriate attribution for authors (e.g. Creative Commons).

Reference: https://www.force11.org/group/fairgroup/fairprinciples

https://www.fair-access.net.au