

# Open Science Poster Series





## 2. FAIRness in Open Data

### What are the FAIR Principles?

In 2016, a consortium of scientists and organizations defined a set of guidelines designed to ensure that research data is shared in a way that allows others to easily find, access, integrate, and reuse it: the **FAIR principles**. A key focus of these FAIR principles is enabling machine-actionability, as humans rely more and more on computational support to process data.

When sharing your research data with the public, please ensure that it is compliant with the FAIR principles.

### How do the FAIR Principles work?

Principles	Explanation	Approach
<div>Findability</div> <div></div>	Data should be easy to find for both humans and computers.	<ul style="list-style-type: none"><li>• Assigning a globally unique and persistent identifier (e.g. DOI)</li><li>• Indexing metadata in searchable resources</li><li>• Providing rich metadata</li></ul>
<div>Accessibility</div> <div></div>	Data should be retrievable using standardized protocols.	<ul style="list-style-type: none"><li>• Using open and universally implementable protocols (e.g. HTTP, FTP)</li><li>• Making the metadata accessible even if the data is no longer available</li></ul>
<div>Interoperability</div> <div></div>	Data should be compatible with other datasets, programs and tools.	<ul style="list-style-type: none"><li>• Using standardized vocabularies and formats</li><li>• Including references to other related (meta)data</li></ul>
<div>Reusability</div> <div></div>	Data should be usable by others in the future.	<ul style="list-style-type: none"><li>• Providing clear usage licenses</li><li>• Including detailed provenance (e.g. where the data came from)</li><li>• Ensuring (meta)data meets community standards</li></ul>

