Report on the work of the Bureau of the Working Party

Outcome of the thematic webinars on land administration

Data Interoperability: The benefits for the Land Administration sector

The thirteenth session of the Working Party on Land Administration 4-5 April 2023

The FAIR Principles

The webinar focused on the internationally recognized data principles of findability, accessibility, interoperability and reusability of data (FAIR)



The FAIR Principles

The FAIR principles provide 'steps along a path' toward machine-actionability -

the capacity of computational systems to find, access, interoperate, and reuse data with none or minimal human intervention



The FAIRsFAIR Data Object Assessment Metrics



F	Identifier	Name
	FsF-F1-01D	Data is assigned a globally unique identifier.
	FsF-F1-02D	Data is assigned a persistent identifier.
	<u>FsF-F2-01M</u>	Metadata includes descriptive core elements (creator, title, data identifier, publisher, publication date, summary and keywords) to support data findability.
	FsF-F3-01M	Metadata includes the identifier of the data it describes.
	FsF-F4-01M	Metadata is offered in such a way that it can be retrieved by machines.
Α	<u>FsF-A1-01M</u>	Metadata contains access level and access conditions of the data.
	FsF-A1-02M	Metadata is accessible through a standardized communication protocol
	FsF-A1-03D	Data is accessible through a standardized communication protocol
	FsF-A2-01M	Metadata remains available, even if the data is no longer available.
I	<u>FsF-I1-01M</u>	Metadata is represented using a formal knowledge representation language.
	<u>FsF-I1-02M</u>	Metadata uses semantic resources.
	<u>FsF-I3-01M</u>	Metadata includes links between the data and its related entities.
R	FsF-R1-01MD	Metadata specifies the content of the data.
	<u>FsF-R1.1-01M</u>	Metadata includes license information under which data can be reused.
	<u>FsF-R1.2-01M</u>	Metadata includes provenance information about data creation or generation.
	<u>FsF-R1.3-01M</u>	Metadata follows a standard recommended by the target research community of the data.
	FsF-R1.3-02D	Data is available in a file format recommended by the target research community.

The Public Sector and FAIR Principles

The public sector can apply the FAIR principles to further develop and improve access to location data

This can drive innovation, increase productivity and reduce transaction costs



Digital transformation in land administration

One of the impacts of the pandemic has been an acceleration in the demand for online digital services and improved access to geospatial data

As land administration and management authorities seek to address this demand, the difficulties of following the FAIR Principles have been highlighted



Conclusions

- Geospatial and land information is one of the key data sources in relation to open data
- Providing official data can lead to innovation and new developments which create value in property markets and wider economies
- A comprehensive digital profile for each property is important so that people can make informed decisions and are acting based on the same information

- Using a variety of data sources makes establishing interoperability solutions, with harmonised standards and licensing, very complex
- Many jurisdictions are working on transformation in this area and, although each journey will be unique, there is much we can learn from each other
- FAIR can be ambiguous and there is no one solution which will work for all jurisdictions
- It is important to discuss our different challenges to see how we are all viewing and approaching FAIR and the right to data