

# Improving documentation and findability of data services and repositories: A review on (meta)data management approaches

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## Abstract

This scientific review paper aims at changing a common point of view on metadata as a necessary evil and something mandatory to the data creating and dataset publishing process. Metadata are instead presented as a crucial element to ensure the findability of data services and repositories. This paper describes and discusses a way through four levels of metadata management and publication, from default unstructured data, through schema-based metadata with literal values and/or URIs towards the linked open (meta)data providing explicit linkage between reliable data resources. Such research was conducted within the European Union's project PoliVisu. Special attention is given to the following. (1) guidance on publication towards the broad audience of search engines users and (2) publication of geo (meta)data not only via standard technologies, like OGC Catalogue Service for Web and open data portals but also through leading search engines (that are Schema.org-based).

## Author contributions:

Tomáš Řezník conducted the study, wrote the text, prepared figures&tables and revised the text. Lieven Raes conducted the study, wrote the text and revised the text. Andrew Stott conducted the study, wrote the text and revised the text. Bart De Lathouwer wrote and revised the text. Andrea Perego wrote and revised the text. Karel Charvát revised the text. Štěpán Kafka conducted the study.