What is the problem?

1. Many disconnected sources (publishers, data centers, repositories, infrastructure providers, …)
2. Heterogeneity of practices, for example:
   - Different PID systems (DOI, accession numbers)
   - Different ways of referencing data (formal citations, in-text references, …)
   - Different moments of citing data (at publication, post publication, …)
A schema for standardizing the exchange of scholarly link information between scholarly infrastructure providers.
- Information Model for scholarly links representation
- Recommendation and provision of exchange formats and protocols

See also http://www.scholix.org/guidelines
Recap Scholix: connecting the dots

**Past:** disconnected sources using heterogeneity of practices

**Future:** standard set of guidelines for exposing and consuming links, supported by hubs
Scholix benefits
see: www.Scholix.org

For data repositories and journal publishers
• increase their visibility and usage
• improve the user experience
• More scalable and robust

For research institutes, bibliographic service providers, and funding bodies
• Make data count
• track datasets and publications within common and comprehensive framework

For researchers:
• Easier finding and accessing
• track long-term impact of their data
• additional incentives to share data.
Scholix Timeline

2014  2015  2016  2017  2018

RDA-WDS Data Publishing Services WG  RDA-WDS Scholix WG

Version 1.0 Scholix Interoperability Framework

Version 2.0 Draft Schema

Version 3.0 of the Scholix schema; in production
http://doi.org/10.5281/zenodo.1120265
### Information model: properties

**Link Information Package**

- Link Publication Date (1)
- Link Provider (1..N)
- Relationship Type (1)
- License URL (0..1)

<table>
<thead>
<tr>
<th>Source Object</th>
<th>Target Object</th>
</tr>
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<tbody>
<tr>
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<tr>
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<td>Object Publication Date (0..1)</td>
<td>Object Publication Date (0..1)</td>
</tr>
</tbody>
</table>

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*research data sharing without barriers rd-alliance.org*
Scholix in practice: the Hubs

- DataCite: https://www.datacite.org/eventdata.html
- Crossref: https://www.crossref.org/services/event-data
- OpenAIRE: http://scholexplorer.openaire.eu/
- Europe PubMed Central: https://europepmc.org/
Use-cases & examples

ScienceDirect
Scopus®
zenodo
EarthChem
EPSCR

API: link search/resolution
WebUI: link discovery/navigation

Harvesting of links

SCHOLIIS API

Other sources

20 Million Accesses since November 2017
Next steps

- Scholix schema is now operational; seeking endorsements & improvements to the Scholix schema
- Further adoption & input (publishers)
- Coordination between hubs
- Schema ‘home’
- Scaling the support organization