

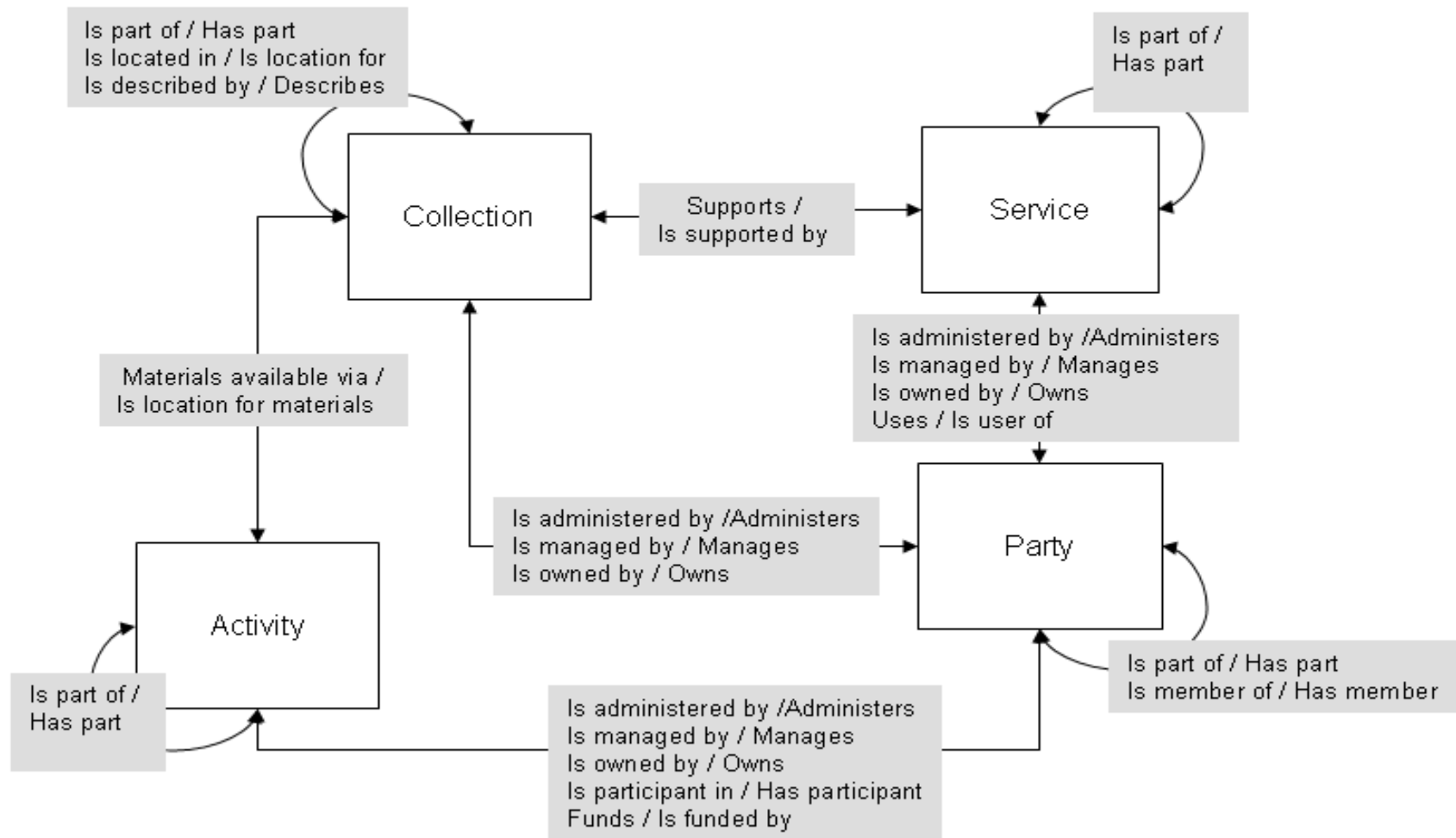
# Sharing metadata with ANDS

# Outline

- ISO 2146 and RIF-CS Schema
- Metadata harvesting and ANDS services
- Metadata elements and vocabularies
- Future developments

## ISO 2146 and RIF-CS interchange schema

- ISO 2146 standard: *Registry services for libraries and related organizations*
- ANDS implementation describes not just collections but also the researchers and research activities that surround and are linked to a research data collection – the ‘mesh’
- RIF-CS is an XML schema for sharing metadata between source repository and ANDS Collections Registry



Research  
Data Australia

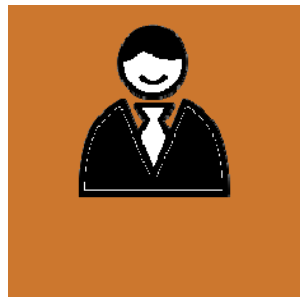


ANDS Collections Registry



Publish  
My Data

*RIF-CS  
format*



Researcher

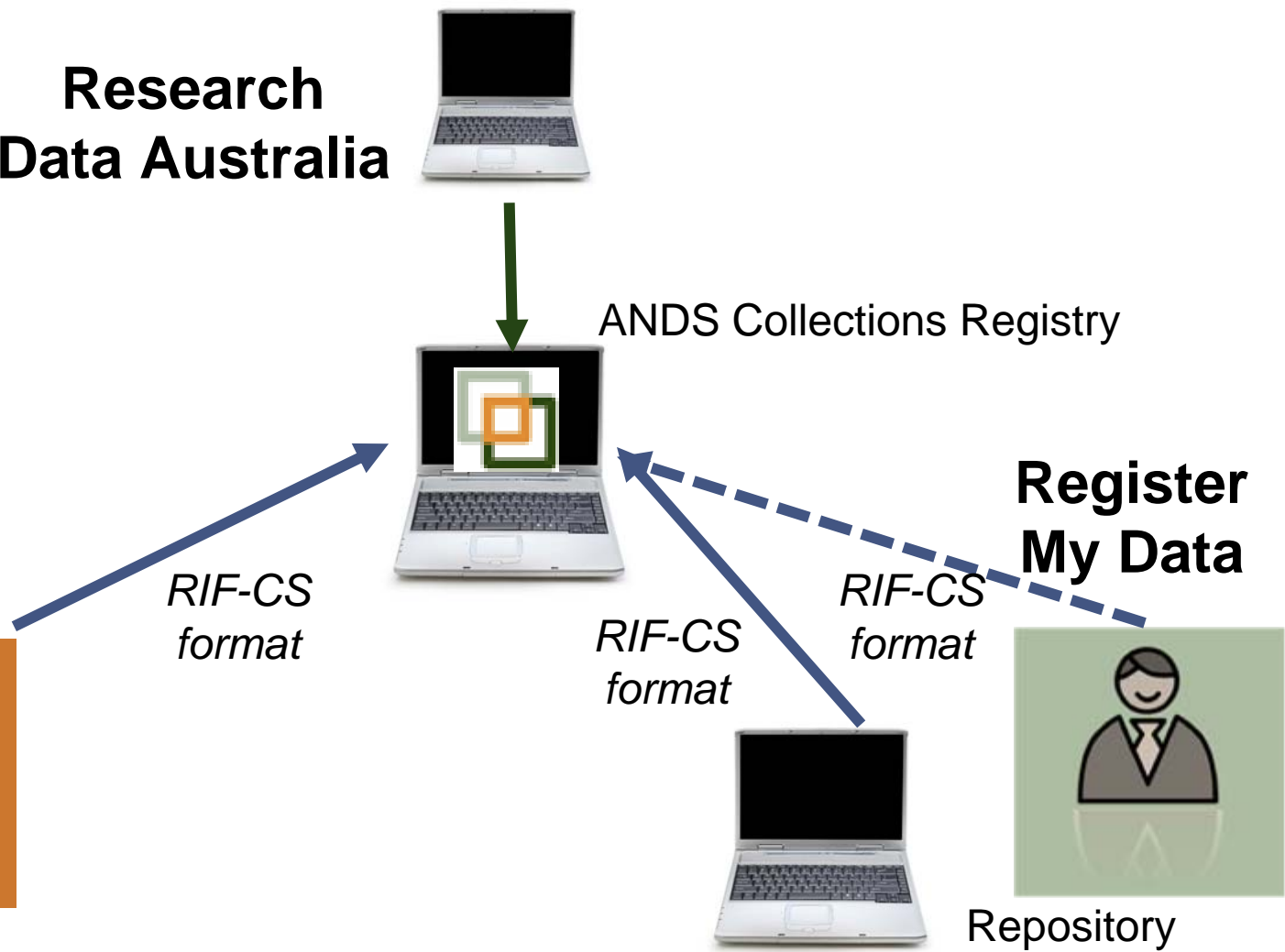
*RIF-CS  
format*

Register  
My Data

*RIF-CS  
format*



Repository



# Benefits of registering data collections

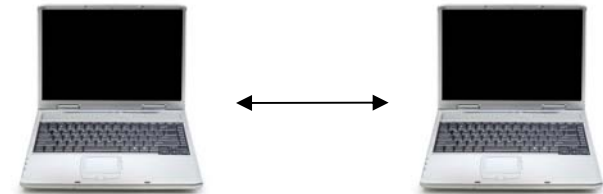
- More citations of research
- Verification of research findings
- Re-use of valuable research materials
  - Open Science
  - Multidisciplinary research
- Helps to meet moral and legal obligations to make research data available

## ANDS Web Services

- Register My Data Service—for exposing descriptions of research data collections in Research Data Australia
- ANDS Persistent Identifier Service—to mint identifiers for metadata records in institutions
- Also have some interim individual services—  
Publish My Data, Self Service Identifiers

# ANDS Persistent Identifier Web Service

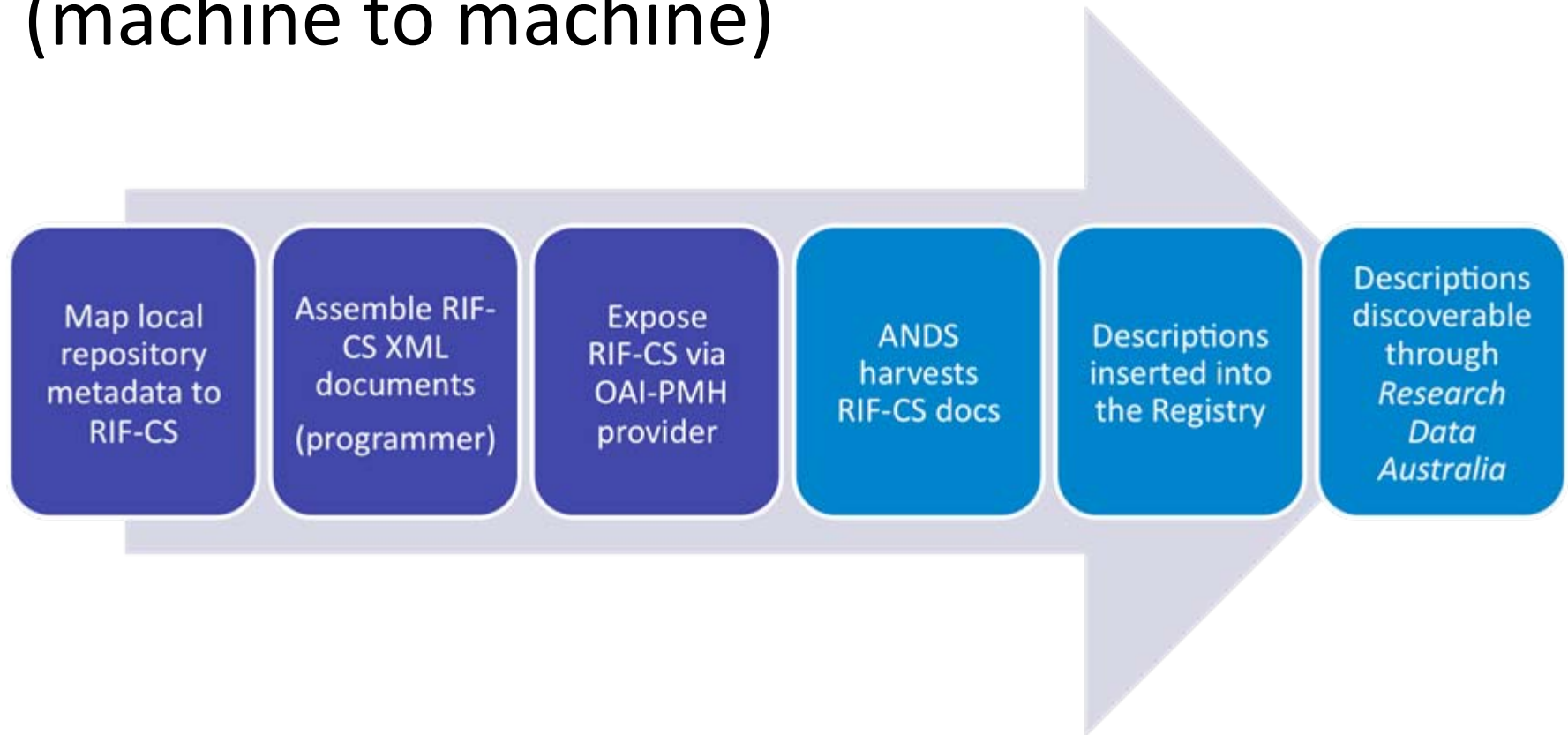
- Web service for integration with other software (machine to machine service)
- Enables minting, updating and resolving of persistent identifiers
- In bulk, by trusted software



## Register My Data Web Service

- Machine to machine web service
- Allows research organisations to register descriptions of research datasets and related entities and objects
- Only stores descriptions, not the data itself
- The data owner therefore retains control over access to their own data

# Register My Data process (machine to machine)



## Register My Data—Interim human interface

- Displays records in XML structure
- Add or edit records one at a time
- Need authorisation
- Not a substitute for providing a feed using web services

- Passphrase
- Collections Registry
  - Search
  - Index
  - Web Services
- Administration
  - Administrative Search
  - List Data Sources
  - Add Data Source
  - Add Registry Object**

### Add Registry Object

**\* Data Source:**

**\* Group:**

**\* Key:**

**\* Class:**

**\* Type:**

**Date Accessed:**  YYYY-MM-DDThh:mm:00Z

**Date Modified:**  YYYY-MM-DDThh:mm:00Z

**Names:**

**Identifiers:**

**Locations:**

**Date From:**  YYYY-MM-DDThh:mm:00Z

**Date To:**  YYYY-MM-DDThh:mm:00Z

**Addresses:** *Electronic:*

**Type:**

**Arguments:**

## RIF-CS structure

- Each RIF-CS XML document contains one or many registry objects (metadata records)
- Each object describes a collection OR a party OR an activity OR a service
- Each object is described by one or more repeatable elements
- Elements have attributes which refine their meaning using vocabularies

## Metadata content types

- Structural metadata
- Information about the metadata itself
- Qualifiers
- Descriptive metadata—describing collections, parties, activities, services, and their relationships

## Descriptive metadata

- Name of collection, party, activity or service
- Address and URL
- Spatial and temporal coverage
- Subjects including ANZSRC classification
- Description
- Relations within Registry
- Related objects outside Registry
- Services—arguments, access policies

Exercise 3:  
Identifying metadata to  
share with  
Research Data Australia



Logged in as: Sally Goodenough (sally.goodenough@anu.edu.au)

Path: [Home](#) > [Australian National University](#) > [Collections](#) >


**Collection:** 

### Families, Social Capital and Citizenship Survey, 2001

**Type:** Dataset

**Full description:** The Families, Social Capital and Citizenship project aims to examine levels of social capital associated with varying family circumstances, assess the importance of social capital in shaping patterns of family engagement with the economy, polity and community, and assess the relative importance of different elements of social capital (including trust, reciprocity and the size and structure of networks) to these outcomes. Variables include: institutional ties; involvement with different community groups; the extensiveness of informal ties with family, friends and neighbours, levels of trust and reciprocity within these networks, the receipt or provision of emotional, practical and financial support within these networks, the use or provision of care for the elderly, the disabled or children; trust and confidence in different institutions; and feelings about ones neighbourhood. Background variables include: age, gender and relationships of persons in the household; respondent country of birth and languages spoken; occupation, education, income and income sources; parent's education; and partners and friends education and occupation.

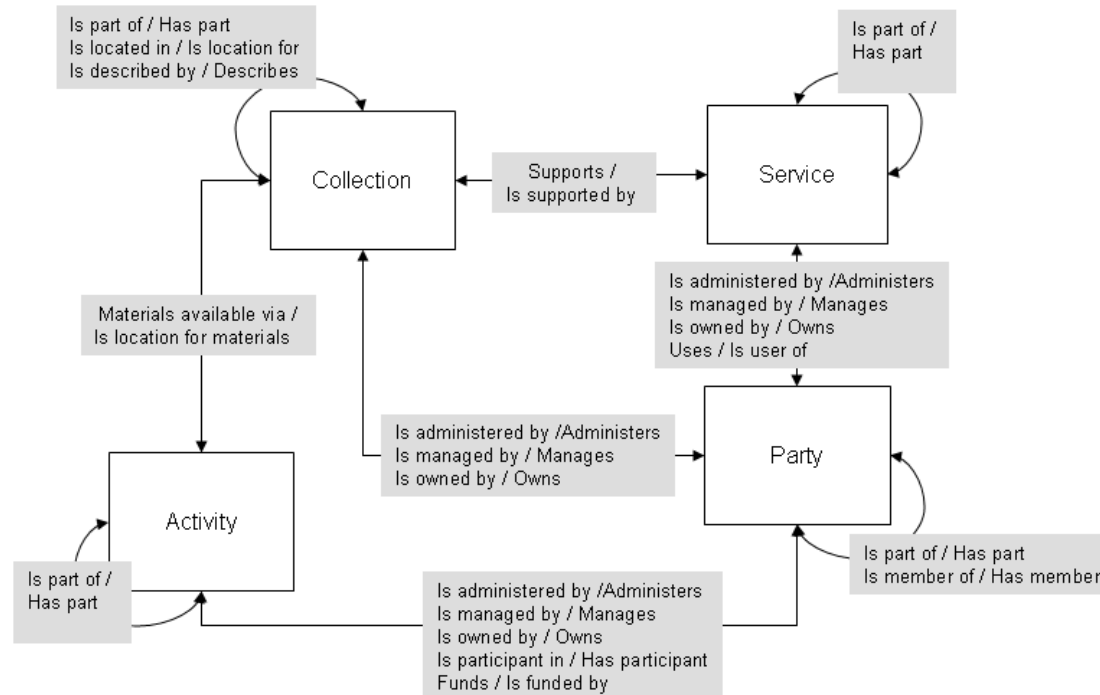
**methodology:** Universe: Australians aged 18 years and over with a telephone number listed in the electronic White Pages.  
Time method: One-time cross-sectional study  
Sampling procedure: One-stage stratified or systematic random sample  
Mode of data collection: Telephone interview

<b>Note:</b>	<p>Special permissions: The depositor has requested that the user apply for permission to access these data. Please complete the Application to Access Restricted Data Form (<a href="http://assda-nesstar.anu.edu.au/webview/ASSDADData/forms/ASSDA.FORM.ACCESSB.pdf">http://assda-nesstar.anu.edu.au/webview/ASSDADData/forms/ASSDA.FORM.ACCESSB.pdf</a>) and return it to ASSDA who will contact the depositor on your behalf.</p> <p>Online Codebook, Codebook, Questionnaire and Report are available from the ASSDA site.</p>
<b>Temporal coverage:</b>	from 2001-01-01 to 2001-04-23
<b>url:</b>	<a href="http://www.assda.edu.au/...">http://www.assda.edu.au/...</a> 
<b>Spatial coverage:</b>	AU
<b>Field of research (ANZSRC):</b>	160301 Family and Household Studies
<b>Subjects:</b>	<ul style="list-style-type: none"> <li>Australian studies</li> <li>Sociology, culture</li> <li>Social attitudes, values and behaviour</li> <li>Community involvement</li> <li>Education</li> <li>Employment</li> <li>Ethnic groups</li> <li>Groups</li> <li>Income</li> <li>Family</li> <li>Volunteer workers</li> </ul>
<b>Owned by:</b>	<p><a href="#">Stone · Wendy</a></p> <p><a href="#">Hughes · Jody</a></p>
<b>Supports:</b>	<a href="http://assda.anu.edu/index.html/service">http://assda.anu.edu/index.html/service</a>

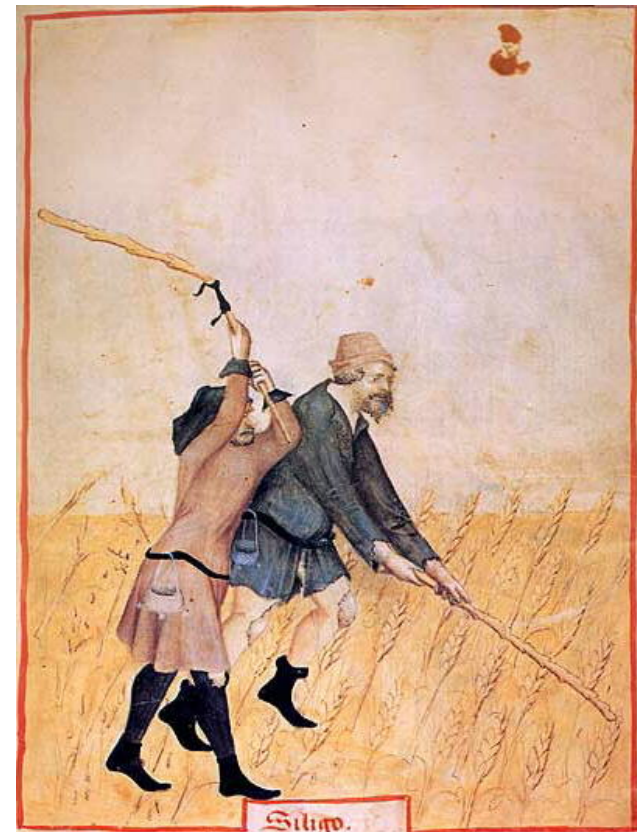
## Vocabularies

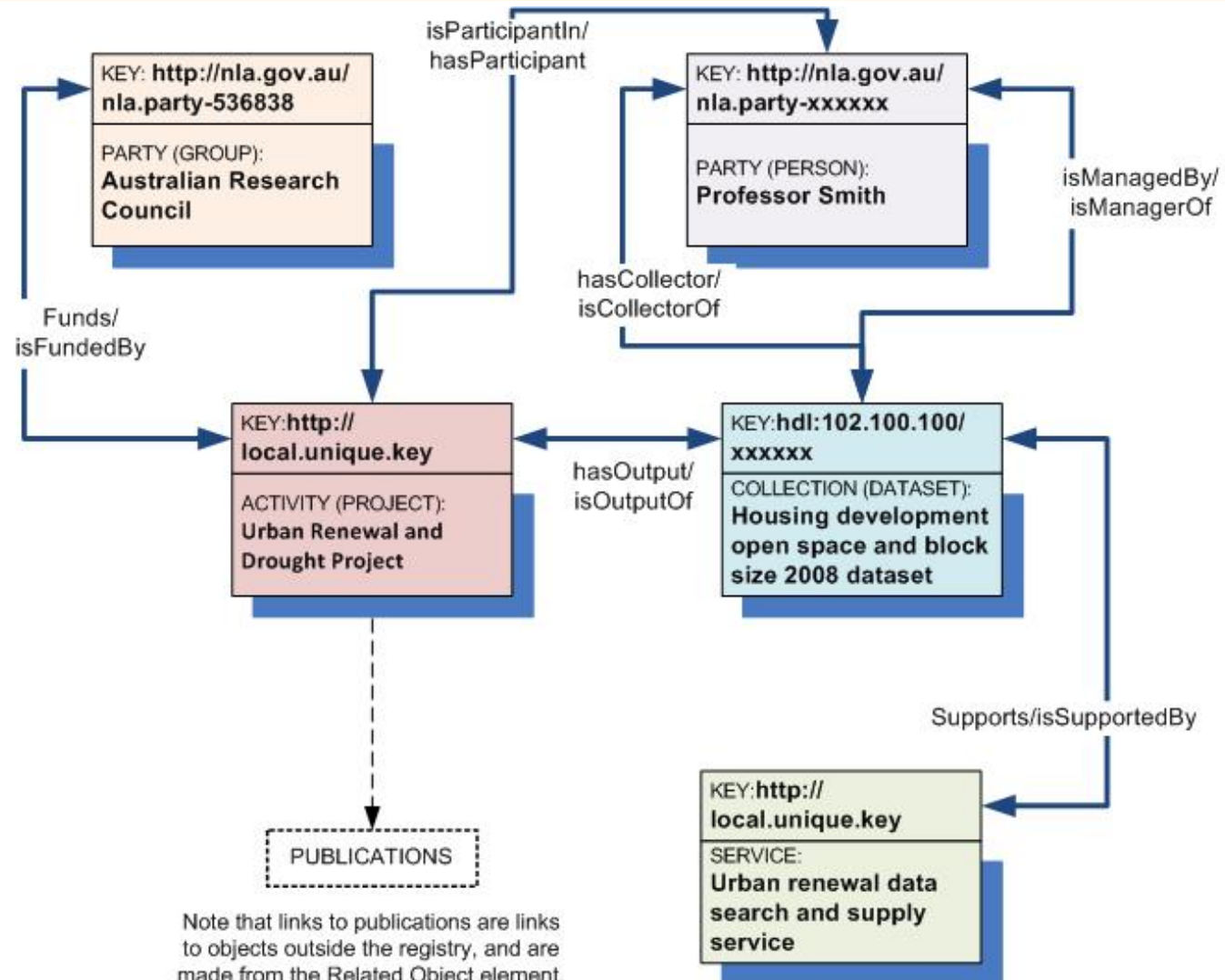
- Vocabularies provide the data values that the RIF-CS document carries
- Controlled vocabularies best for precision searching
- User-defined vocabularies can be used, would like to incorporate those formally for others to share

# Relations—the strength of ISO 2146



Exercise 4:  
Creating relations within the  
ANDS Collections Registry





Note that links to publications are links to objects outside the registry, and are made from the Related Object element, not using the internal registry relations.

## The future—RIF-CS

- RIF-CS is a living schema, needs to respond to needs coming from its user community
- Annual review of RIF-CS planned
- Vocabularies can be added to at any time as they have no structural implications

## The Future—Services Roadmap

- ANDS has conducted a needs analysis to identify and prioritise future service needs
- Roadmap document summarises outcomes
- Most services will be developed in partnership with others
- Digital Object Identifiers initiative

## The future—new services and products

- Classify My Data—a terminology registry to provide human and machine access to sector-specific vocabularies including ANZSRC
- Research Party Infrastructure—for managing party identities

## Links

- ANDS: <http://ands.org.au/>
- ANDS Services: <http://services.ands.org.au/>
- ANDS Services email: [services@ands.org.au](mailto:services@ands.org.au)
- ANDS Guides: <http://ands.org.au/guides/>

Questions?