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### **Definition**

A list of decisions made by a community to FAIRify their data

The FIP is a collection of FAIR implementation choices made by a community of practice for each of the FAIR Principles.

FIC

A group of people who are using/publishing data on the same topics

FER

A resource that enables the implementation of FAIR behaviors

**Their relations** 

A FIC used a FER A FIC is using a FER A FIC will use a FER

## A MINI HISTORY OF FIP

#### 2020

Barbara Magagna:
ENVRI-FAIR
14 research
infrastructures

#### 2021

FIPs by 25 communities and tools

#### 2019

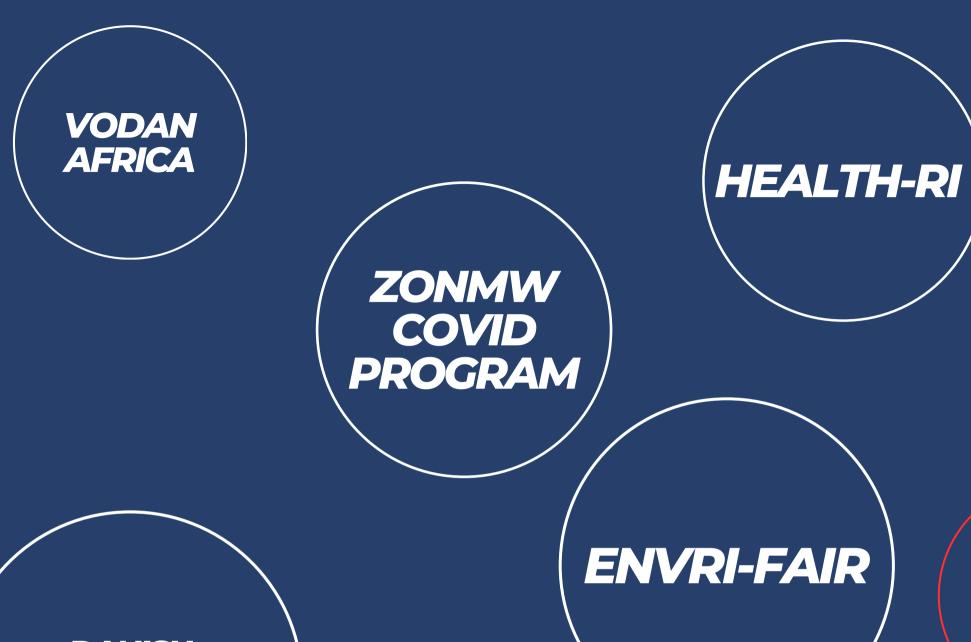
Kristina Hettne @ Leiden University Library + GO FAIR Foundation

## **2020 (Covid)**

Many institute and organisations were interested in FAIR Covid data

#### 2022

FAIR Expertise Hub for Social Science



**EOSC** 

**NORDIC** 

**DUTCH CANCER FOUNDATION** 

**DANISH** E-INFRASTRUCTURE **CORPORATION** 

WORLD **FAIR** 

> NIAID / NIH **OFFICE OF** DATA **SCIENCE STRATEGY**

NASEM ROUNDTABLE ON OPEN SCIENCE / **ORFG** 

# FIPS FOR SOCIAL SCIENCE

- Two FIPs in WorldFAIR
- One FIP from past attempts
- Data in social science can be very different
- Qualitative data
- Different data management behaviors
- Less FAIR



## COMMUNITIES

#### **ESS**

European Social Survey (ESS)

#### SEH

SSHOC-NL Socio-Economic History

#### **AUSSI-ESS**

Australian Social Survey International – European Social Survey

#### **MCAL**

Media Content Analysis Lab scholars

#### **GESIS SSSR**

GESIS Social Science Survey Research

### **LGBTQVoc**

LGBTQ+ Linked Open Vocabulary

# o o o o Meetings

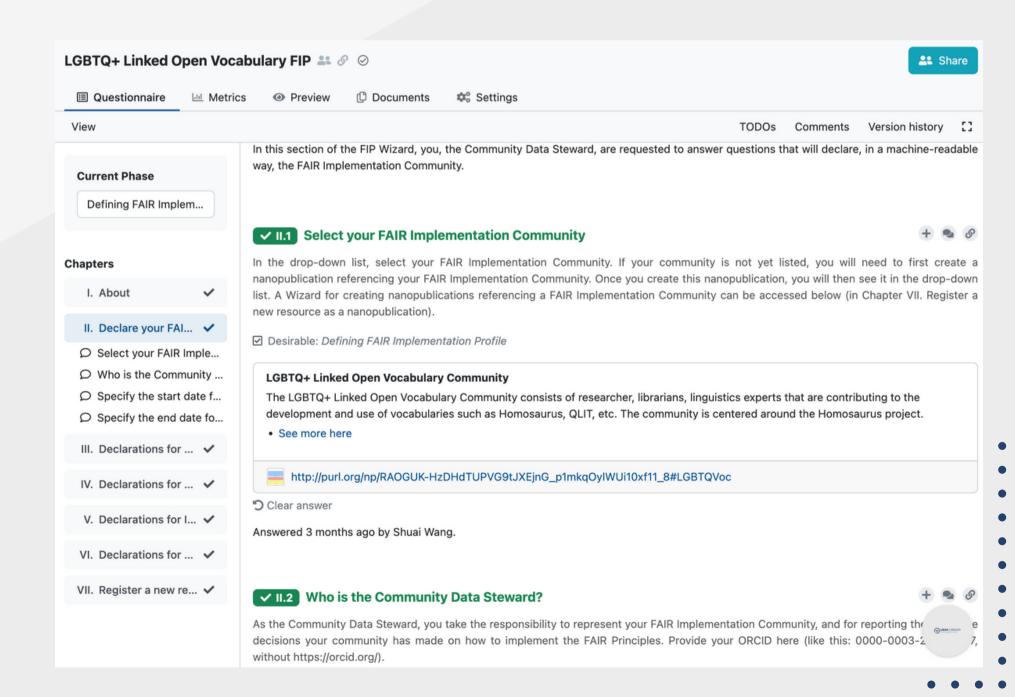
## Processing

## Review

## Publish

# CREATING FIPS

- Meetings/emails with members of the communities.
- All FIPs were created on the FIP Wizard
- Download in PDF and \*.trig



# ANALYSIS

FAIR principles

FAIR Prin- ciple	SEH	MCAL	LGBTQVoc	SSSR	ESS	AUSSI- ESS
F4 Data	Dataverse, DANS SSH data station (future use)	tion, Data-	!	GESIS Search	ESS Data Portal, EOSC Portal	ADA Dataverse FER
A1.1 Meta- data	OAI-PMH, HTTPS, REST API	HTTPS, REST API	HTTPS, REST API	OAI-PMH	HTTPS, GraphQL API	HTTPS, REST API
I1 Data	OWL, RDF, RDFS, XMLS, HTML		JSON-LD, RDF, RDFS, N-Triples, Turtle, SKOS		Apache Parquet	SPSS, Stata, SAS, R, CSV
I2 Data	HISCO, AMCO, H- ICD, IDS	·	Homosaurus, QLIT, LCSH, CDGT, RVM	: !	ISO3166-1, ISO639- 2, NACE Rev. 2, ISCO-08, NUTS 3, DDI Controlled vocabularies, CESSDA Vocabu- lary, ELSST	
R1.1 Data	CC-BY-SA, CC-BY-NC	-	CC-BY-NC- ND 4.0	GESIS Usage Regulations 2018	CC-BY-NC-SA 4.0	-

Table 1. A comparison of decisions on the practice of the FAIR principle

# ANALYSIS

FAIR Enabling
Resources and
Convergence
Analysis

FAIR Principle	FER	SEH	MCAI	LGBTQVoc	SSSR	ESS	AUSSSI- ESS
F1 Metadata	DOI	1	1	1	1	0	0
A1.1 Metadata	OAI-PMH	1	0	0	1	0	0
A1.1 Metadata	REST API	1	1	1	0	0	1
F2 & R1.2 Data	DDI-Codebook	1	0	0	1	1	1
I1 Metadata/Data	RDF	1	0	1	0	0	0

Table 2. Selected rows in the FAIR Convergence Matrix (1 indicates in use, 0 not)

# ANALYSIS

FIP Similarity analysis

SEH	MCAL	$\mathbf{LGBTQVoc}$	SSSR	ESS
4,2,0,0 (6)	-	-	-	-
2,2,4,0 (8)	1,2,0,0 (3)	-	-	-
1,2,0,0 (3)	1,0,0,1 (2)	1,0,0,0 (1)	-	-
0,1,0,0 (1)	1,1,0,0 (2)	1,1,0,0 (2)	1,0,0,0 (1)	-
0,3,0,0 (3)	1,3,0,1 (5)	0,2,0,0 (2)	1,1,1,1 (4)	0,1,0,1 (2)
	4,2,0,0 (6) 2,2,4,0 (8) 1,2,0,0 (3) 0,1,0,0 (1)	4,2,0,0 (6) - 2,2,4,0 (8) 1,2,0,0 (3) 1,2,0,0 (3) 1,0,0,1 (2) 0,1,0,0 (1) 1,1,0,0 (2)	4,2,0,0 (6)	4,2,0,0 (6)

**Table 3.** Comparison of FERs across FICs (in each cell is the number of overlapping FERs between the FIPs for each aspect of F, A, I, R as well as their sum in parentheses; the color corresponds to the sum)



## DISCUSSION

- The approach for the creation of the FIP for LGBTQVoc is not generalisable
- The FIP Wizard has limits in use: some FERs are not available
- FIP can evolve and the templates can also be changed Thus, some cost of maintainence.
- Giving advice based on the assessment results.

## FUTURE WORK

- How FIPs in social science differ from other communities.
- How can we use FIP as suggestions for questions In DMPs.
- How FIPs can be automatically filled.
- What can FIP do to legacy datasets (datasets not in use).



#### CONTACT



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www.fairexpertisehub.org

(under construction)











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## References

- Erik Schultes et al. "Reusable FAIR Implementation Profiles as Accelerators of FAIR Convergence".
- Mark D Wilkinson et al. "The FAIR Guiding Principles for scientific data management and stewardship". In: Scientific data 3.1 (2016), pp. 1–9
- Barbara Magagna et al. "FIPs and Practice". In: Research Ideas and Outcomes 8 (2022). doi: 10.3897/rio.8.e94451.
- Hana Pergl Sustkova et al. "FAIR Convergence Matrix: Optimizing the Reuse of Existing FAIR-Related Resources". In: Data Intelligence 2.1-2 (Jan. 2020), pp. 158–170. issn: 2641-435X
  - Kristina Hettne et al. "FIP2DMP: Linking data management plans with FAIR implementation profiles".

## References (useful links)

FAIR Implementation Profile: 3-part video series: https://www.go-fair.org/2021/08/02/fair-implementation-profile-3-part-video-series/

WorldFAIR: https://docs.google.com/presentation/d/1vDgMCWW-RM806RnDuI5ataGh4md5VX49u5NjcolVMU8/edit?usp=sharing

FIP questionnaire and FER types: <a href="https://bit.ly/WF-FIPs-Questions">https://bit.ly/WF-FIPs-Questions</a>

The FIP Wizard: https://fip-wizard.ds-wizard.org/