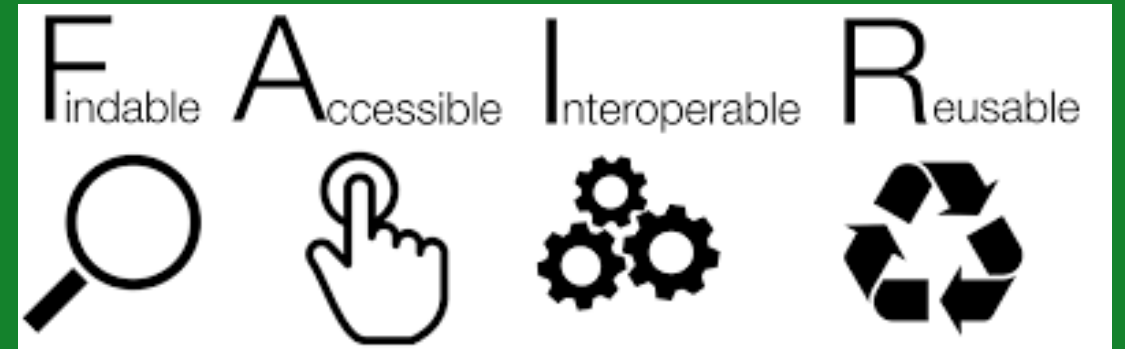




The picture (FAIR) is licensed as CC-BY SA 4.0 by SangyaPundir
(https://commons.wikimedia.org/wiki/File:FAIR_data_principles.jpg)

FAIR already?

Principles of reusability and research output – evaluation at a national level

the Swedish government's direction of travel concerning Open Science:

"The national approach is that **the products of research must meet the FAIR principles as far as possible**, that scientific publications arising from publicly funded research should be **openly accessible immediately** on publication from **2020 at the latest**, and that the cost of scientific publication must be transparent."

From "Swedish National Roadmap for the European Research Area 2019-2020" 2019-04-18

”immediate FAIR and open” - default for all research output*

PUBLICATION

- XML?
- PID?
- License?
- Provenance?

METADATA

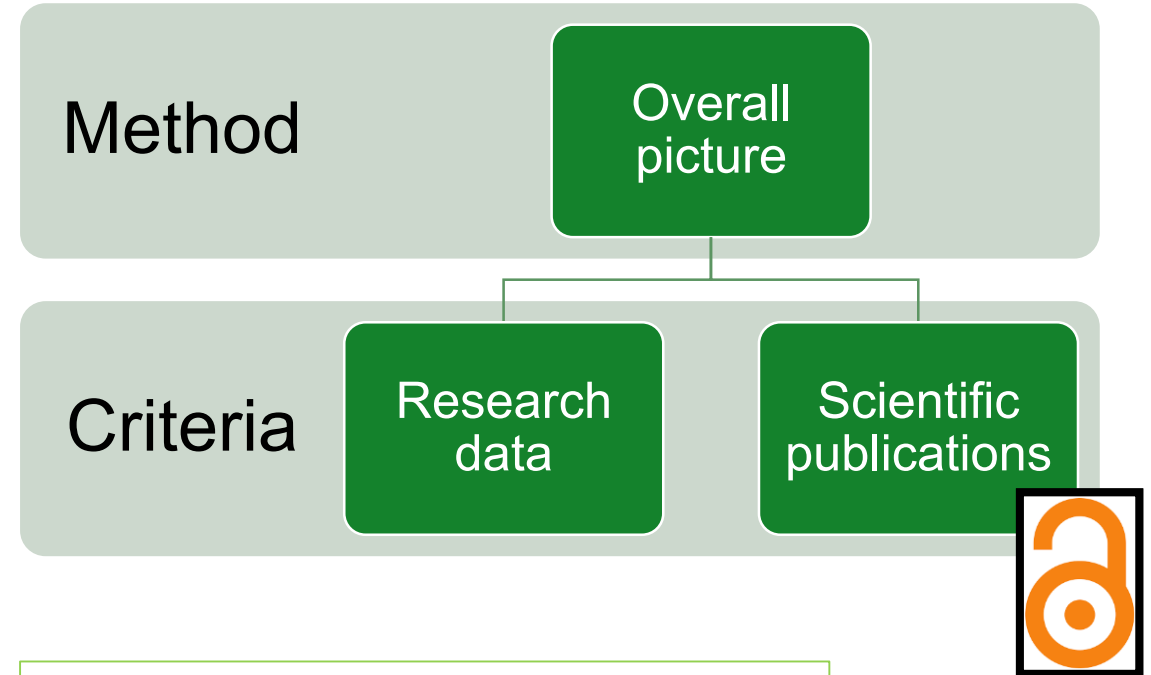
- Rich?

- Open (download, TDM etc)
- Findable (identifiers, rich metadata, indexed)
- Accessible (protocol, authorization)
- Interoperable (Knowledge Representation Language, FAIR Vocabularies, Qualified references)
- Reusable (User License, Provenance, domain-relevant community standards)

*Recommendations by the ERAC Standing Working Group on Open Science and Innovation (SWG OSI) on open science and innovation. ERAC 1216/18

How? The Instruction 2017

- develop criteria for assessing fulfilment of FAIR principles
- Swedish Research Council – research data
- National Library of Sweden - scientific publications
- fully or partially produced using public funds
- Nat Library: publications openly accessible immediately
- Nat Library: method for presenting an overall picture



Publications?

- The ERAC recommendations
- F.A.I.R. Access to Australia's research
- FAIR metrics: digital resource(s)

Work process

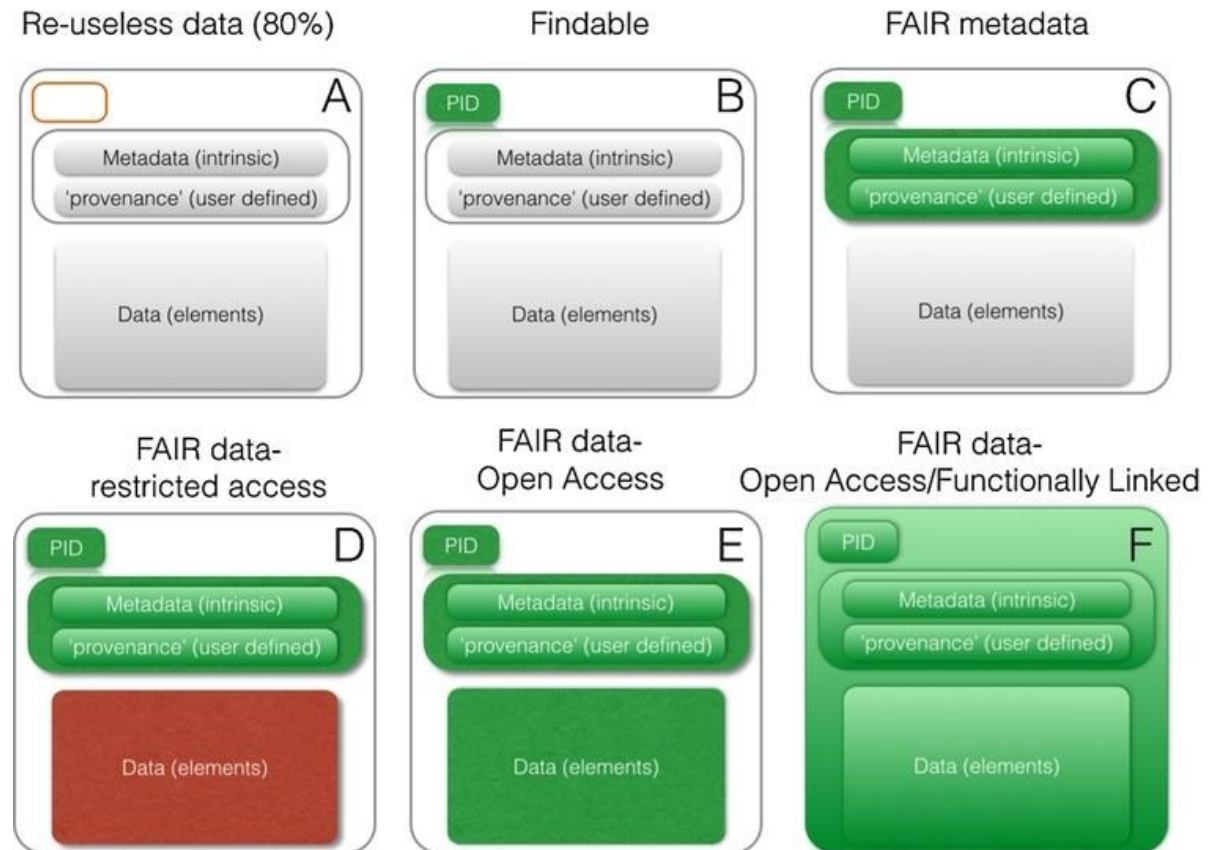
- Collaboration between Swedish Research Council and National Library of Sweden
- Trying to keep up with the development inside and outside of the EU
- Consultation with the Association of Swedish Higher Education Institutions (SUHF)
 - Open Science group and the national working group for research data



FAIRness?

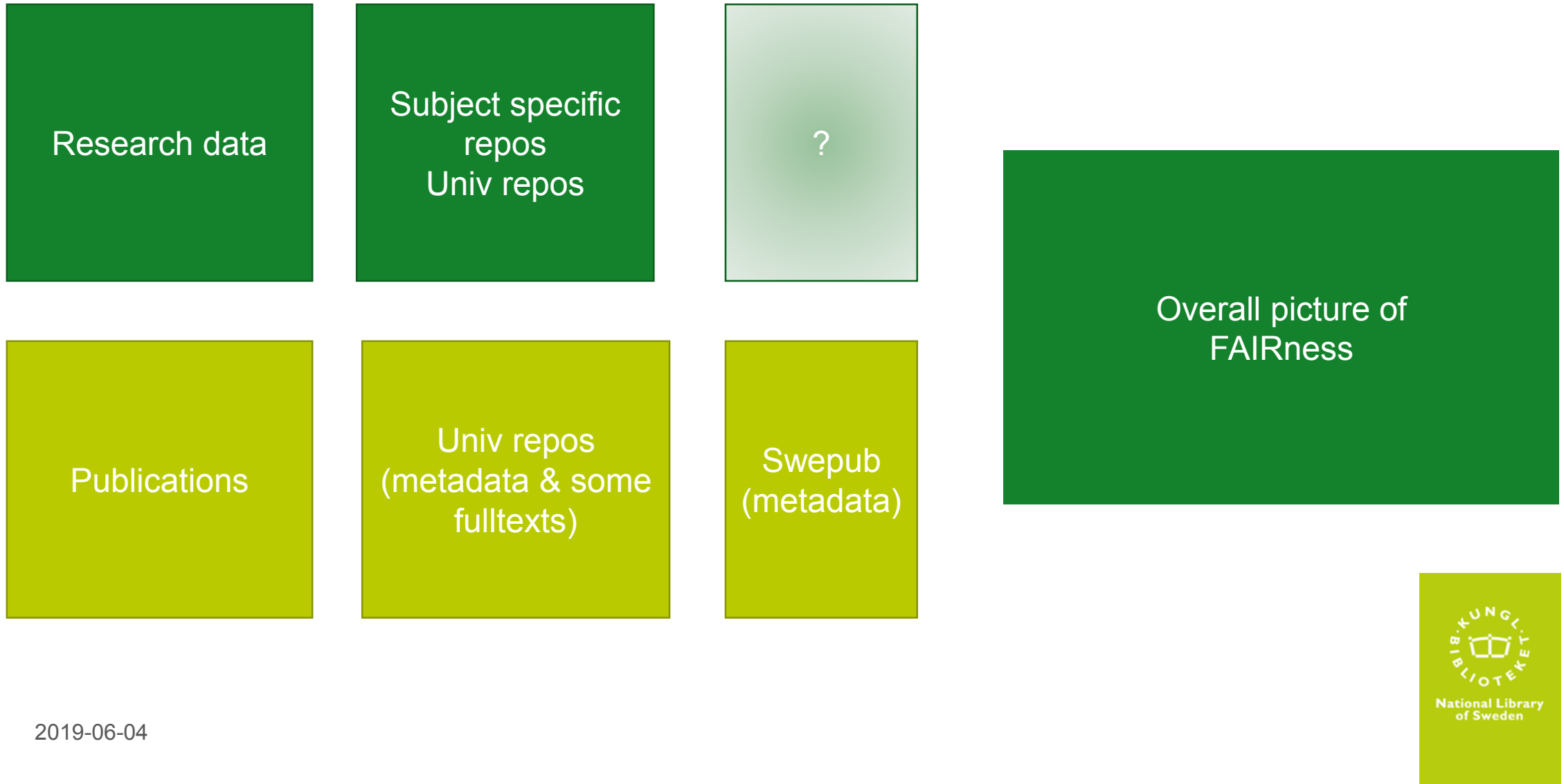
- "The FAIR Metrics Group took-on the challenge of designing a framework for evaluating "FAIRness"." fairmetrics.org
- Binary or FAIRness?
- Difference research data vs publications?

Data as increasingly FAIR Digital Objects



Cloudy, increasingly FAIR; revisiting the FAIR Data guiding principles for the European Open Science Cloud, DOI: 10.3233/ISU-170824

The current situation in Sweden



Developing criteria for

1. publications

"Base criteria"

F: "rich metadata" proposed to be identified as base level of metadata delivery in Swepub.

A: fulltext at publisher, in repo (univ or other) + immediate open access

I: if ORCID exists, then metadata should include it

R: License information in fulltext and metadata.

2. research data

- Guidance in Swedish for the FAIR principles
 - Background
 - Criterium
 - Guidance for implementation
 - Questions to ask
 - Definitions

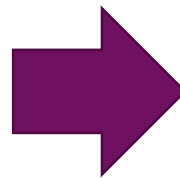
Recommendations for

1. publications

- NLS gets an instruction and resources to work with:
 - the **evaluation for FAIRness** building on international work and the results of this report.
 - continuous evolvement of criteria and **certification of Swepub and delivering repos.**
 - An information campaign directed towards Publishers and Repository services regarding FAIR.

2. research data

- SRC gets an instruction and resources to work with:
 - Creating prerequisites for managing a **national overview** for FAIR research data.
 - Managing the **guidance för FAIR criteria** developed with this instruction.

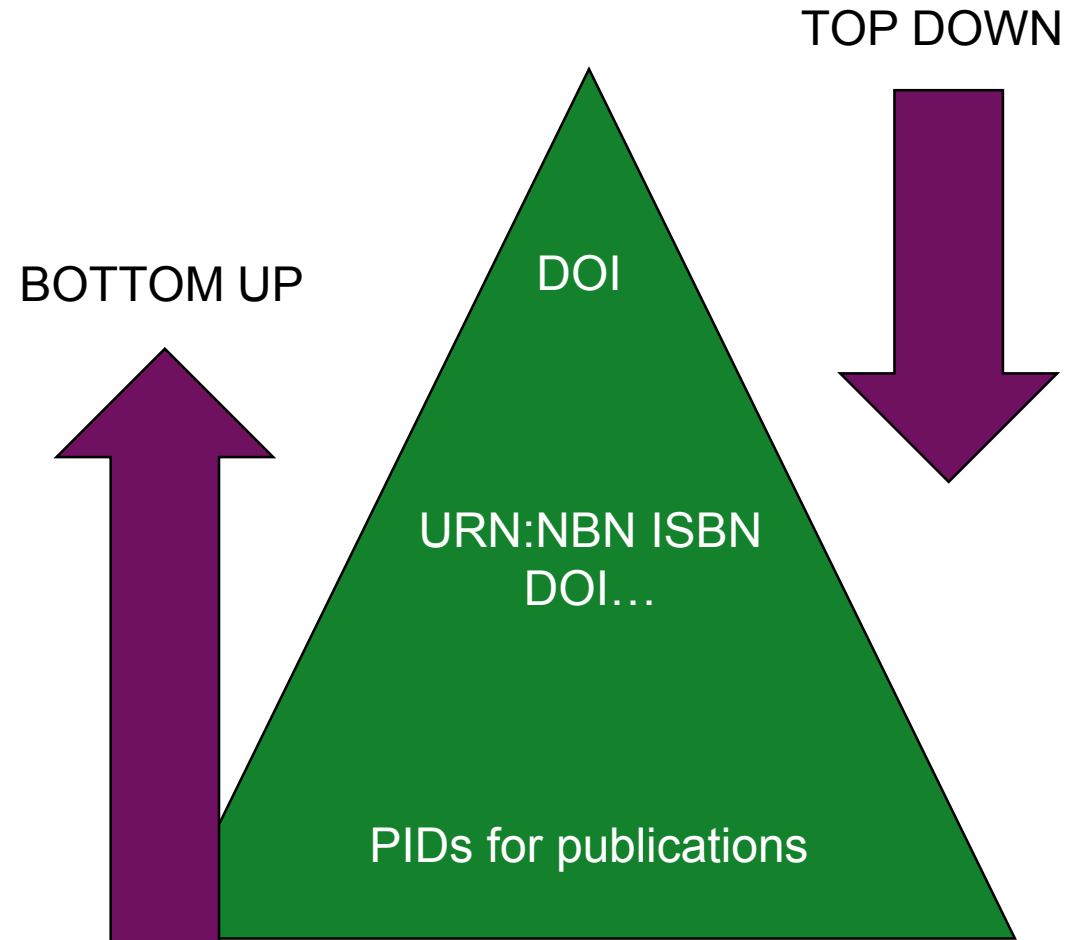


Preparing foundations for giving an overall picture of FAIRness through collected metadata (method)



One challenge

- How to measure FAIRness without pinning down (too much) what is FAIR, and what is not?
- To measure, we need to specify what's to be measured.
- The FAIR principles in practice are often proclaimed as a community-driven initiative (see for example GO FAIR)
- An example for publications: PIDs
 - Where do we find the community?



Not FAIR already... What next?

”the products of research must meet the FAIR principles as far as possible”*

OA and FAIR research
data
Swedish Research
Council

OA and FAIR scientific
publications
National Library of
Sweden

International
work:
GO FAIR
FAIRMetrics
EOSC
...

New Swedish
Research Bill
2020 +
budget

Will the proposed method
presenting an overall picture of
FAIRness be adopted?

* From "Swedish National Roadmap for the European Research Area 2019-2020" 2019-04-18