FAIR & GO FAIR

2018 Netherlands Roundtable Meeting

28 September, 2018
Utrech
https://orcid.org/content/2018-netherlands-roundtable-meeting

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GO FAIR

**"Data and services that are
findable,
accessible,
interoperable,
re-usable
both for machines and for people."**

The FAIR Guiding Principles for scientific data management and stewardship,
Scientific Data (2016), https://www.nature.com/articles/sdata201618

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15 FAIR Principles

Findable:

F1 (meta)data are assigned a globally unique and persistent identifier;

F2 data are described with rich metadata;

F3 metadata clearly and explicitly include the identifier of the data it describes;

F4 (meta)data are registered or indexed in a searchable resource;

Accessible:

A1 (meta)data are retrievable by their identifier using a standardized communications protocol;

   A1.1 the protocol is open, free, and universally implementable;

   A1.2 the protocol allows for an authentication and authorization procedure, where necessary;

A2 metadata are accessible, even when the data are no longer available;

Interoperable:

I1 (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.

I2 (meta)data use vocabularies that follow FAIR principles;

I3 (meta)data include qualified references to other (meta)data;

Reusable:

R1 meta(data) are richly described with a plurality of accurate and relevant attributes;
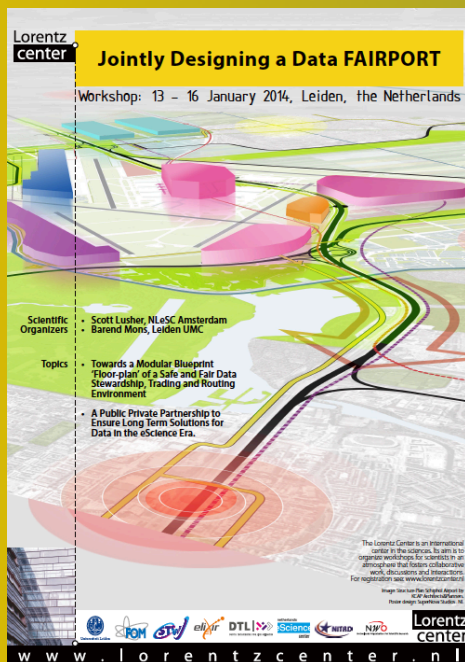
   R1.1 (meta)data are released with a clear and accessible data usage license;

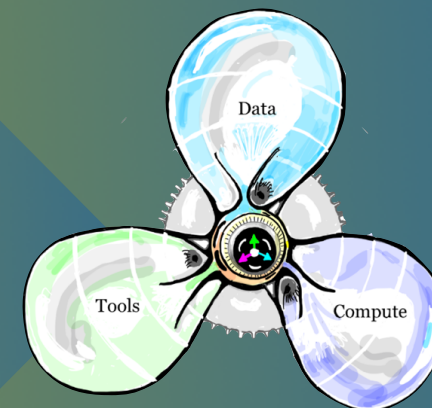   R1.2 (meta)data are associated with detailed provenance;

   R1.3 (meta)data meet domain-relevant community standards;

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Lorentz

EOSC

FAIRdICT

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IFDS

Birth	Infancy		Adolescence		Maturity
2014	2015	2016	2017	2018…	

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Common Patterns in Revolutionary Infrastructures and Data

Peter Wittenburg, Max Planck Computing and Data Facility
George Strawn, US National Academy of Sciences
February 2018
https://www.rd-alliance.org/sites/default/files/Common_Patterns_in_Revolutionising_Infrastructures-final.pdf

- **Minimal standards**
- **Voluntary**
- **Critical Mass**
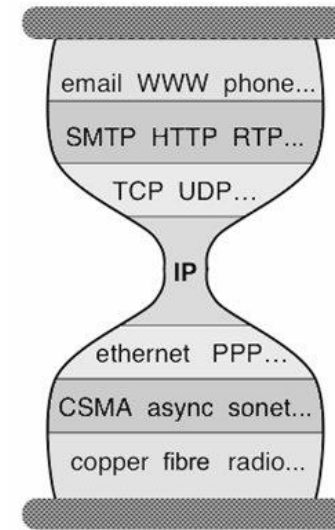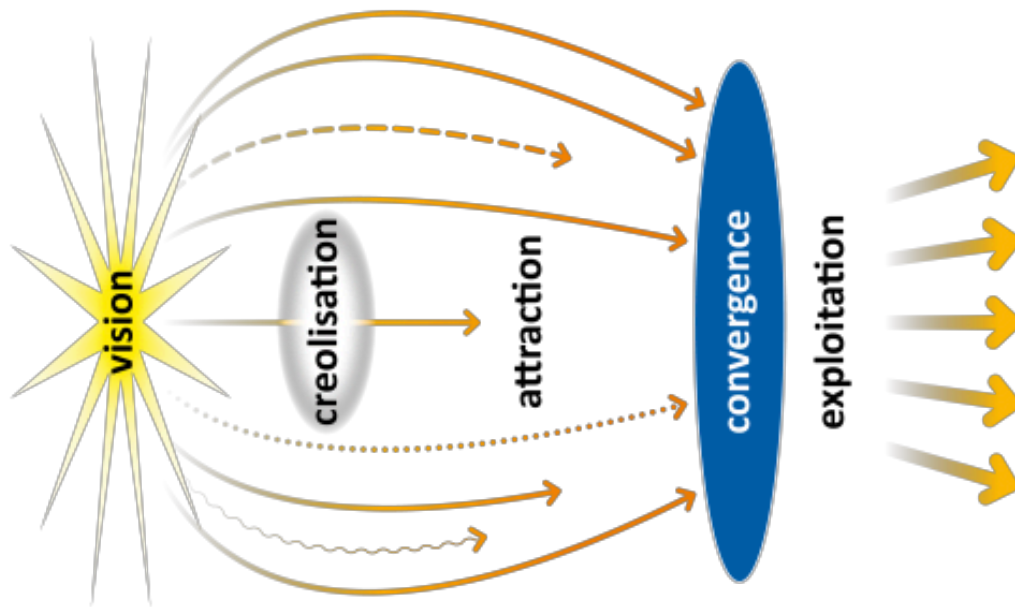
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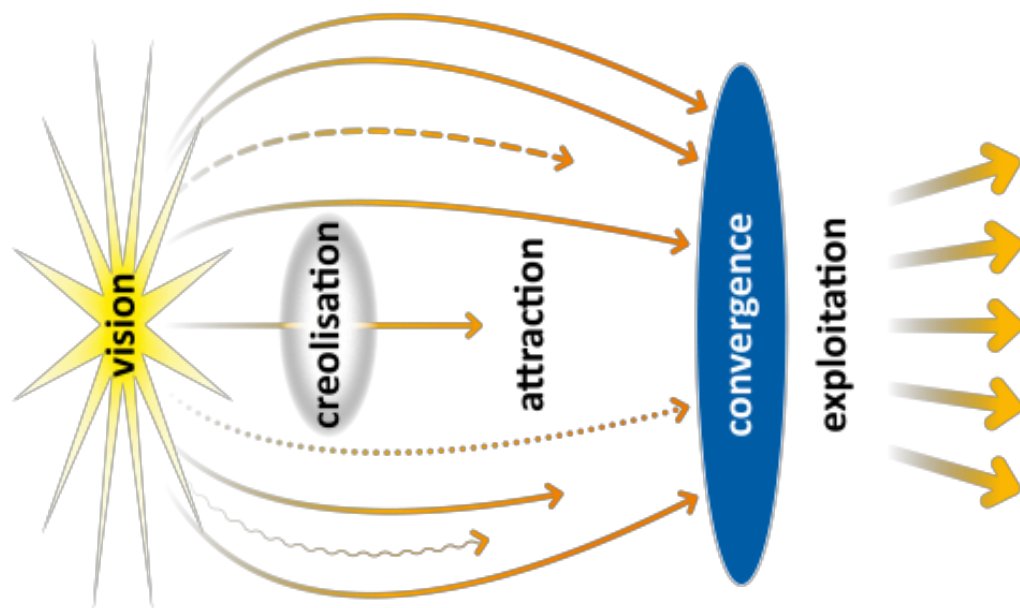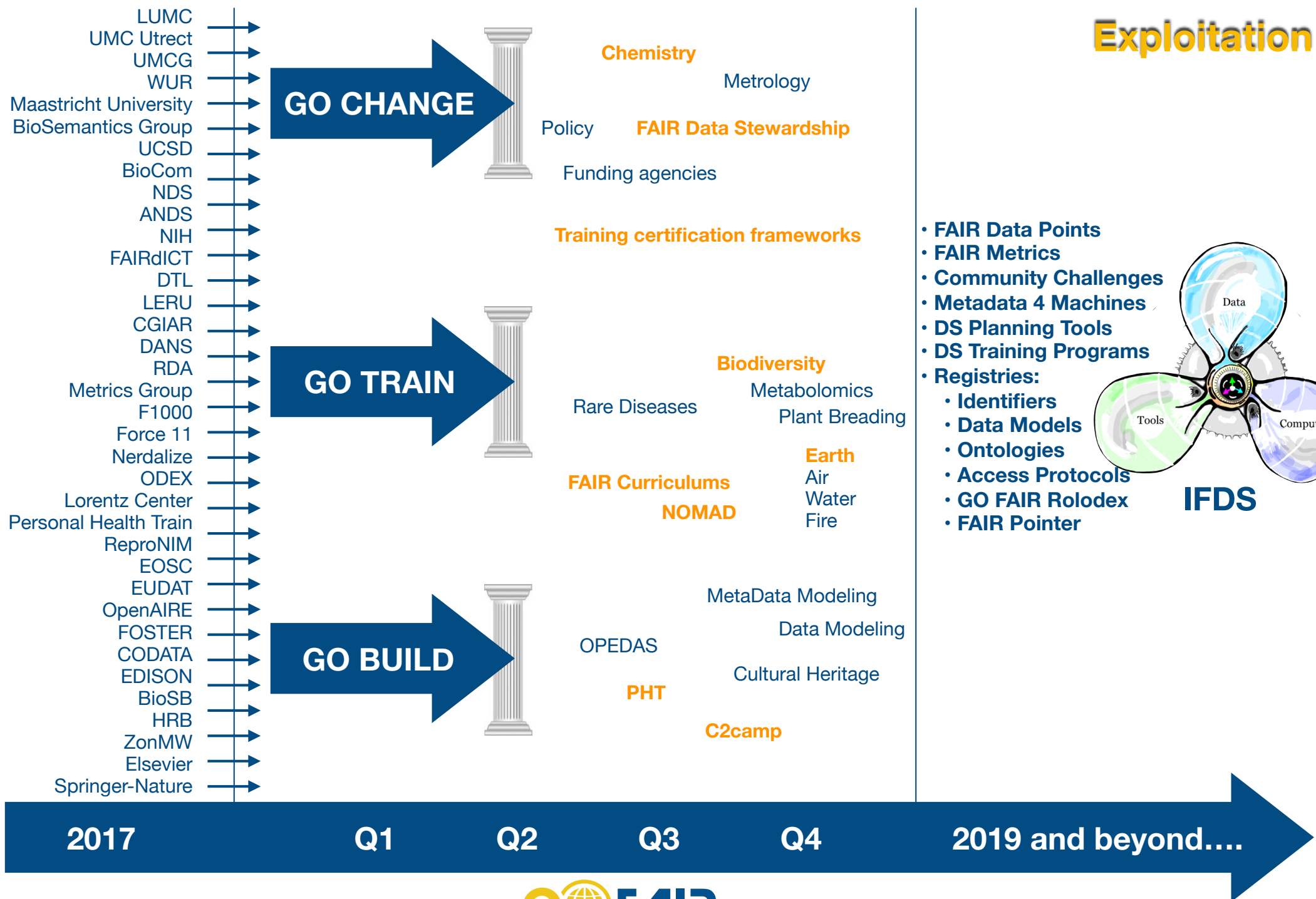
Infrastructures

	Internet	WWW	IFDS
Objects	networks	webpages	data
Identifers	Internet adresses	URLs	PID
Protocols	TCP/IP	HTTP	DOIP

Creolization

LUMC
UMC Utrect
UMCG
WUR
Maastricht University
BioSemantics Group
UCSD
BioCom
NDS
ANDS
NIH
FAIRdICT
DTL
LERU
CGIAR
DANS
RDA
Metrics Group
F1000
Force 11
Nerdalize
ODEX
Lorentz Center
Personal Health Train
ReproNIM
EOSC
EUDAT
OpenAIRE
FOSTER
CODATA
EDISON
BioSB
HRB
ZonMW
Elsevier
Springer-Nature

Attraction

GO CHANGE — *Funders*

Chemistry
Metrology
Policy   FAIR Data Stewardship
Funding agencies

Training certification frameworks

GO TRAIN — *BYOD*

Biodiversity
Metabolomics
Rare Diseases   Plant Breading

FAIR Curriculums   Earth
Air
NOMAD   Water
Fire

GO BUILD — *Reference implementations*

MetaData Modeling
OPEDAS   Data Modeling
Cultural Heritage

C2camp

Convergence

Exploitation

- **FAIR Data Points**
- **FAIR Metrics**
- **Community Challenges**
- **Metadata 4 Machines**
- **DS Planning Tools**
- **DS Training Programs**
- **Registries:**
  - **Identifiers**
  - **Data Models**
  - **Ontologies**
  - **Access Protocols**
  - **GO FAIR Rolodex**
  - **FAIR Pointer**

IFDS

2017   Q1   Q2   Q3   Q4   2019 and beyond….

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