FAIRSFAIR

Fostering Fair Data Practices in Europe

Overview of CoreTrustSeal Criteria related to Digital Preservation

November 04, 2021, 1400-1500 CET

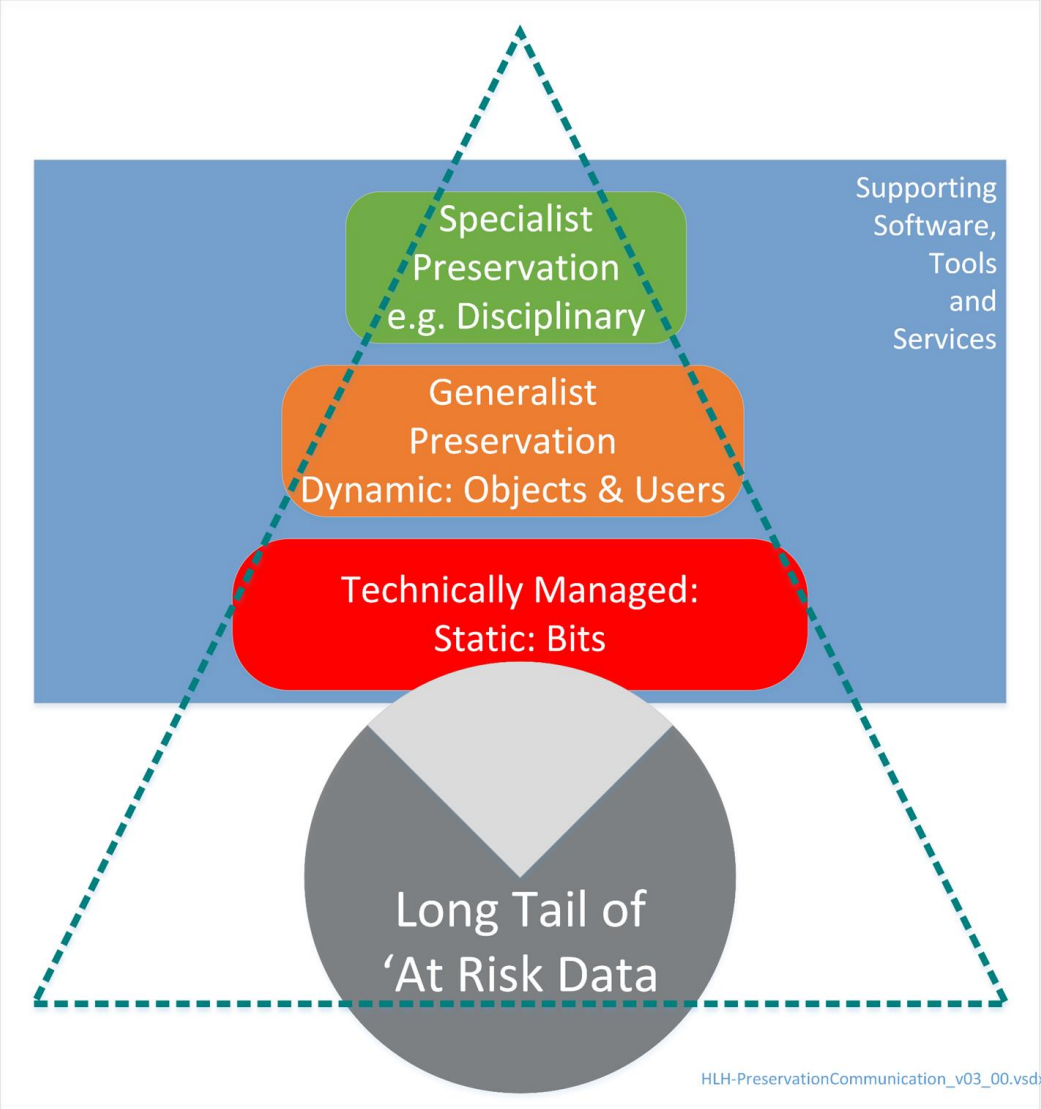
online

Certified Digital Preservation: Practical tips for repositories on aligning with CoreTrustSeal in their Digital Preservation policies

@FAIRsFAIR_EU

FAIRsFAIR "Fostering FAIR Data Practices in Europe" has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant agreement 831558

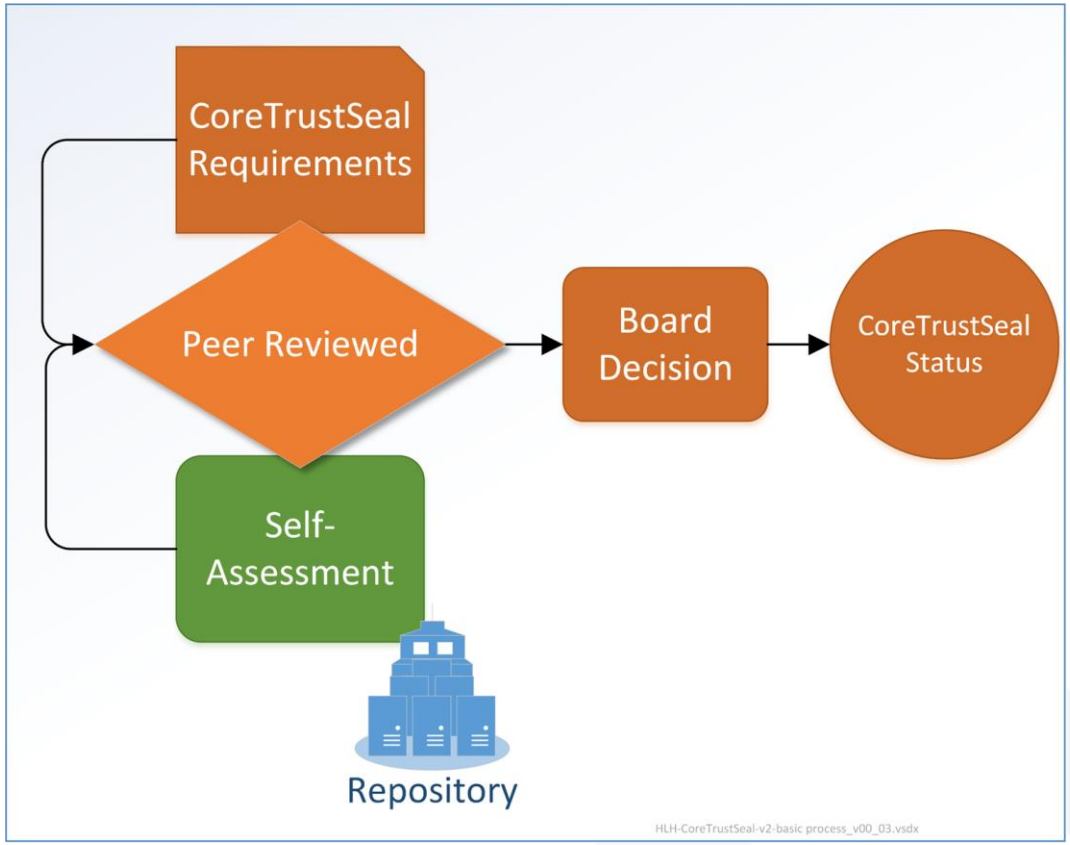
Preservation: Foundations & Layers



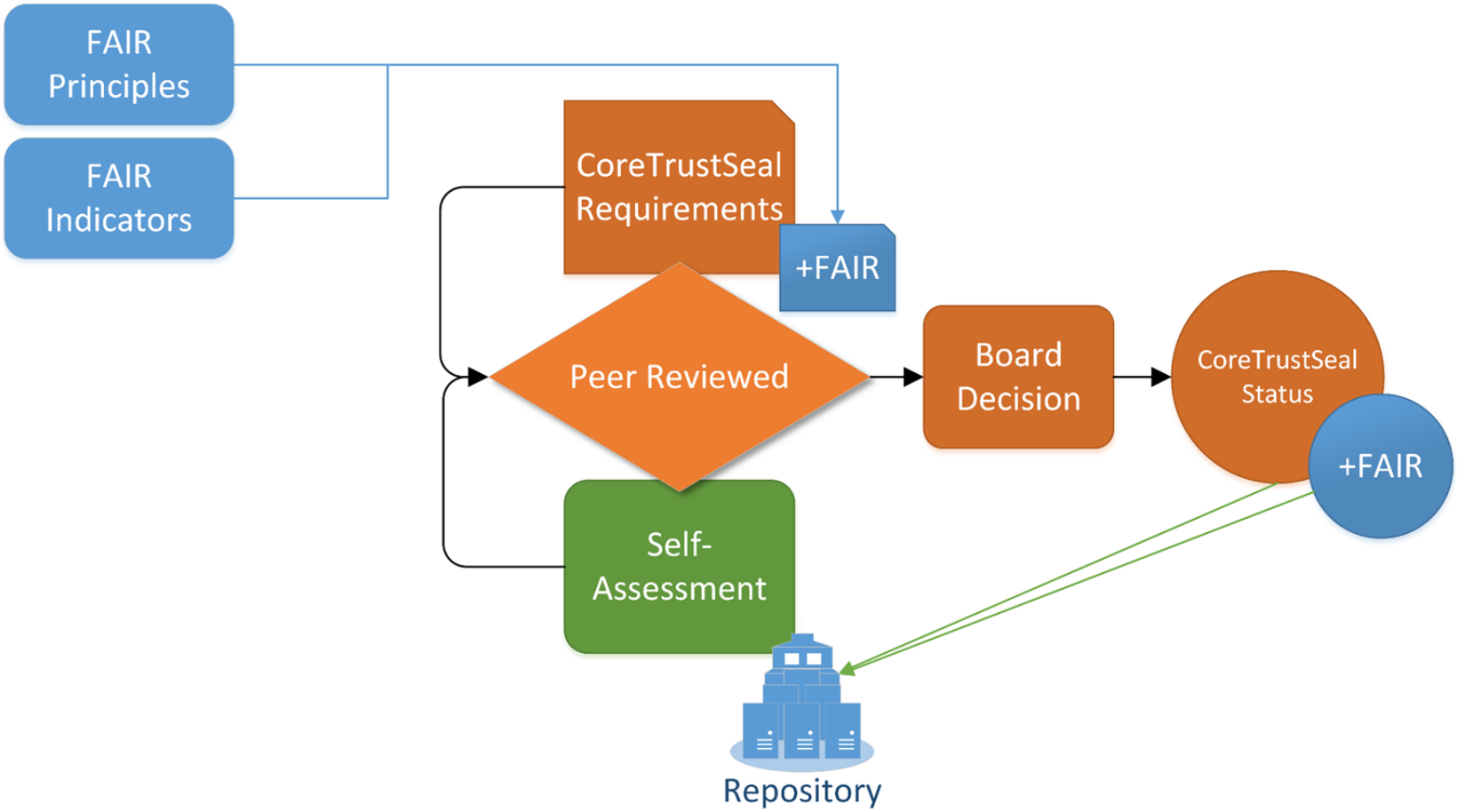
Overview

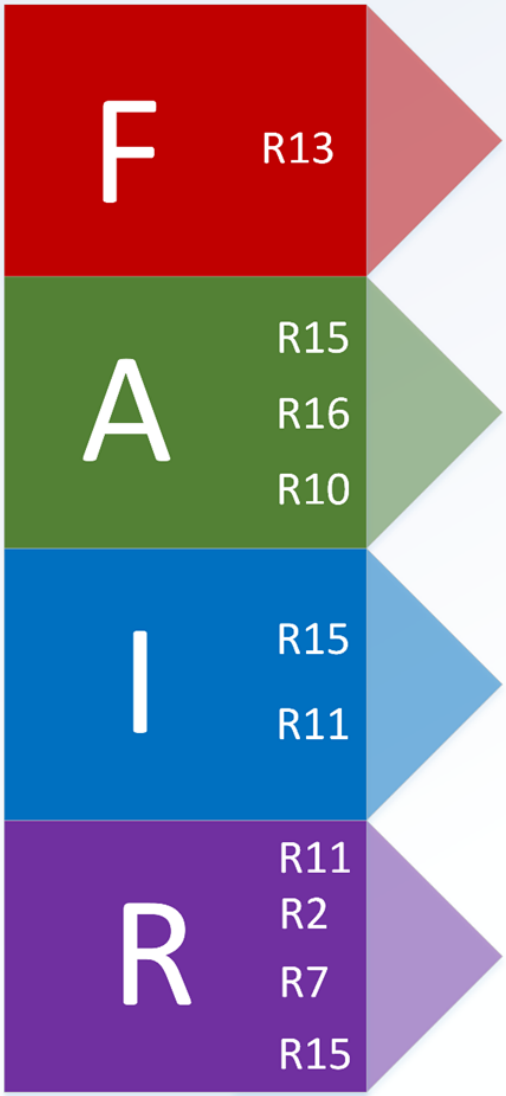
- Tiers of storage, curation and preservation
- CoreTrustSeal Process
- CoreTrustSeal+FAIR, Capability-Maturity (evidence)
- CoreTrustSeal Requirements
  - (Mandatory Responsibilities-OAIS)
  - Mission
  - Designated Community
  - Appraisal
  - ReUse
  - Preservation

CoreTrustSeal Process



CoreTrustSeal+FAIRenabling





F1. (meta)data are assigned a globally unique and eternally persistent identifier.
F2. data are described with rich metadata.
F3. metadata specify the data identifier.
F4. (meta)data are registered or indexed in a searchable resource.
R13. Data discovery and identification

A1 (meta)data are retrievable by their identifier using a standardized communications protocol.
A1.1 the protocol is open, free, and universally implementable (vs context)
R15. Technical infrastructure
A1.2 the protocol allows for an authentication and authorization procedure, where necessary.
R16. Security
A2 metadata are accessible, even when the data are no longer available.
R10. Preservation plan

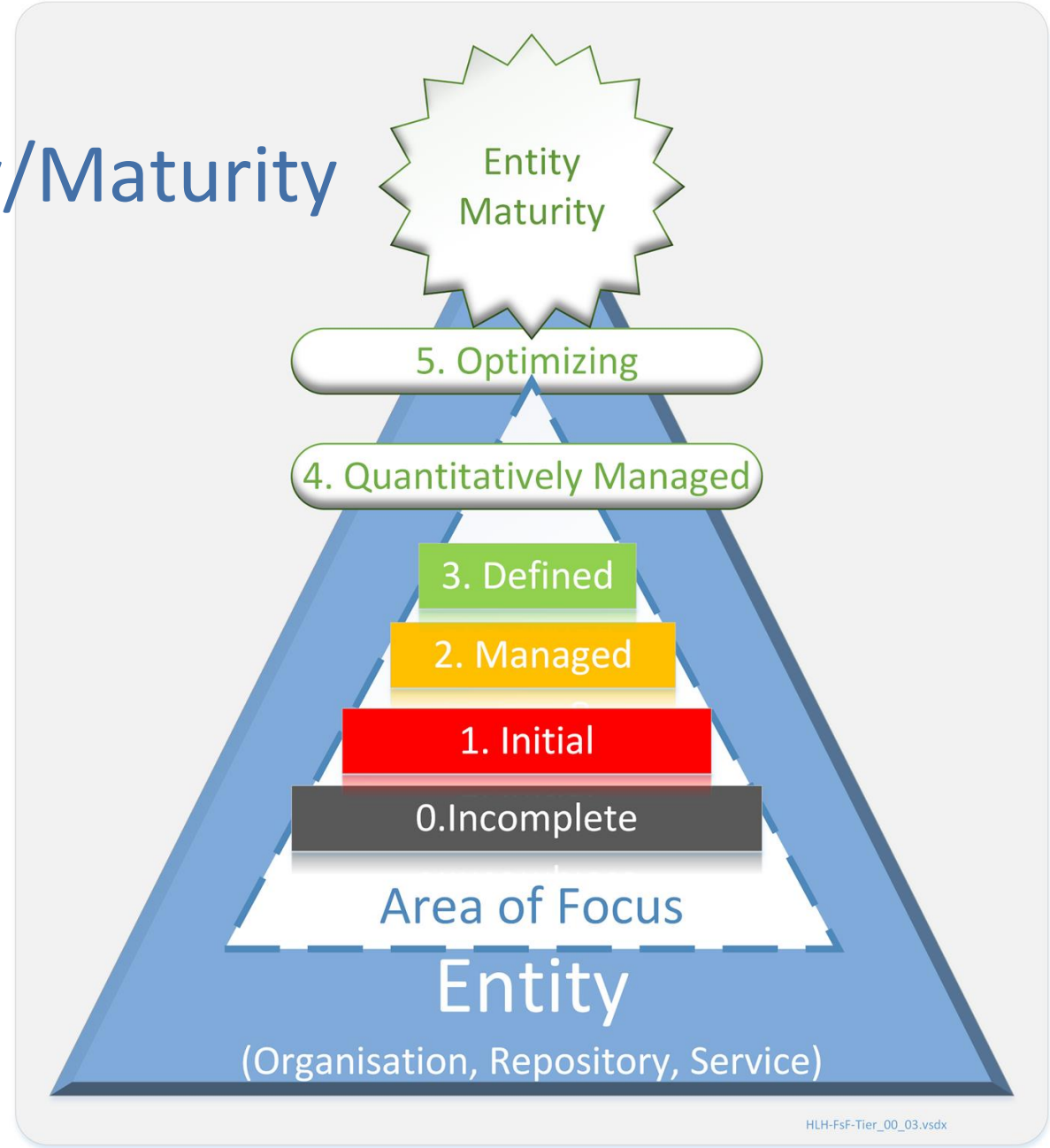
I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
I2. (meta)data use vocabularies that follow FAIR principles (vs context)
R15. Technical infrastructure (Business Information? Object Model?)
I3. (meta)data include qualified references to other (meta)data.
R11. Data quality

R1. meta(data) have a plurality of accurate and relevant attributes.
R11. Data quality
R1.1. (meta)data are released with a clear and accessible data usage license.
R2. Licenses
R1.2. (meta)data are associated with their provenance.
R7. Data integrity and authenticity
R1.3. (meta)data meet domain-relevant community standards (vs Context)
R15. Technical infrastructure

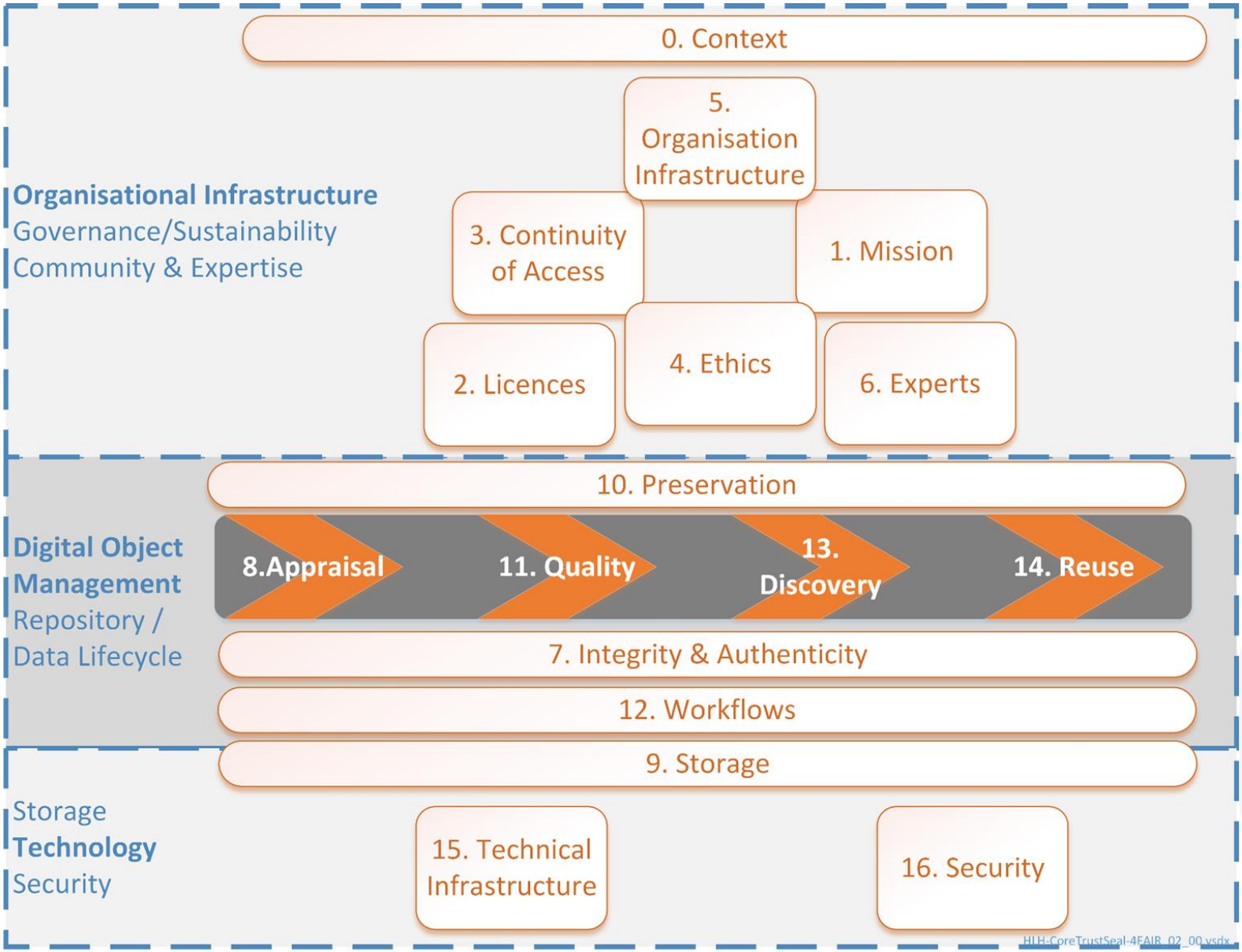
HLH-CoreTrustSeal-FAIR-Map_02_00.vsdx

Capability/Maturity

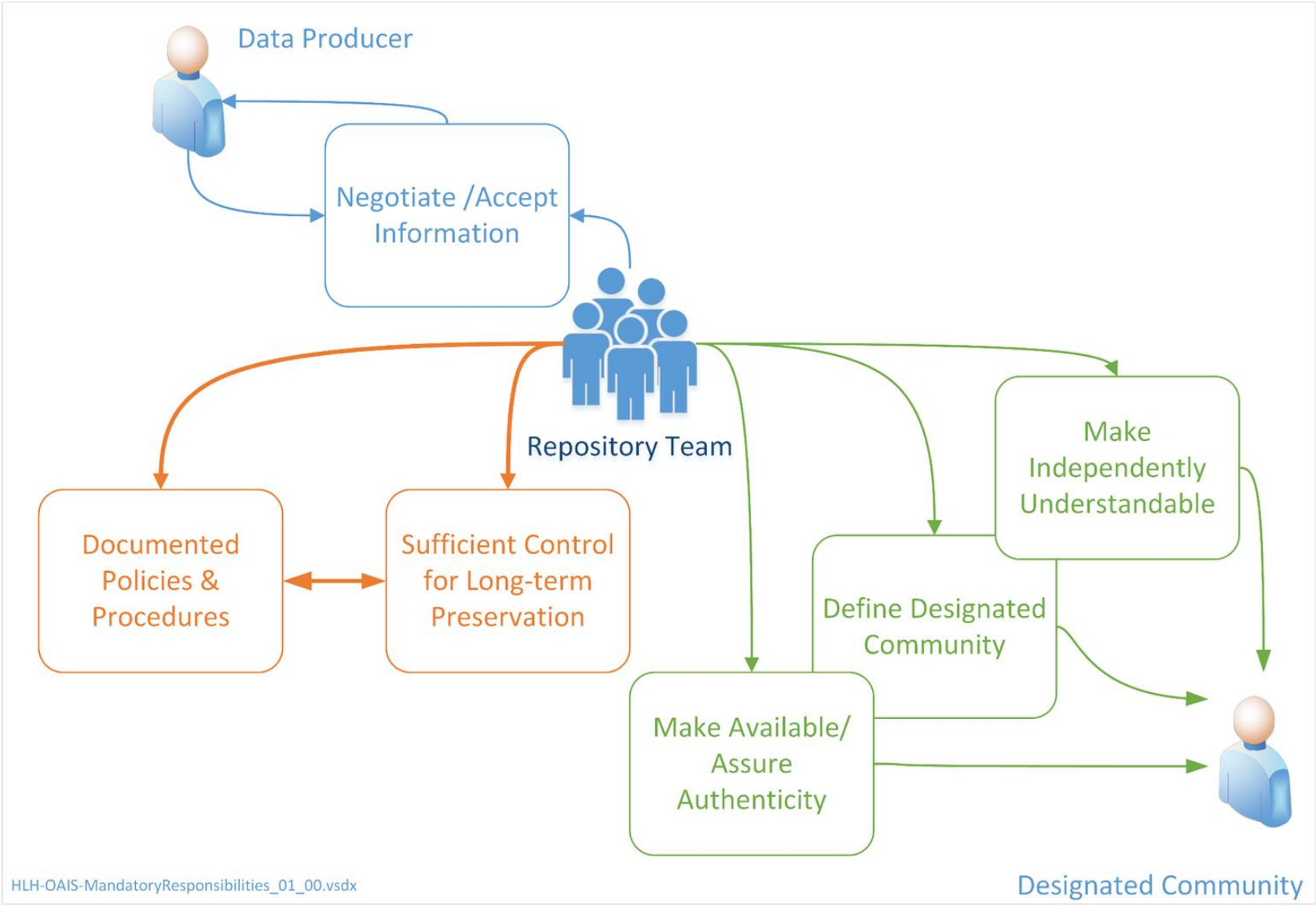
- CoreTrustSeal+FAIR
- Evidence



CoreTrustSeal Requirements



Mandatory Responsibilities

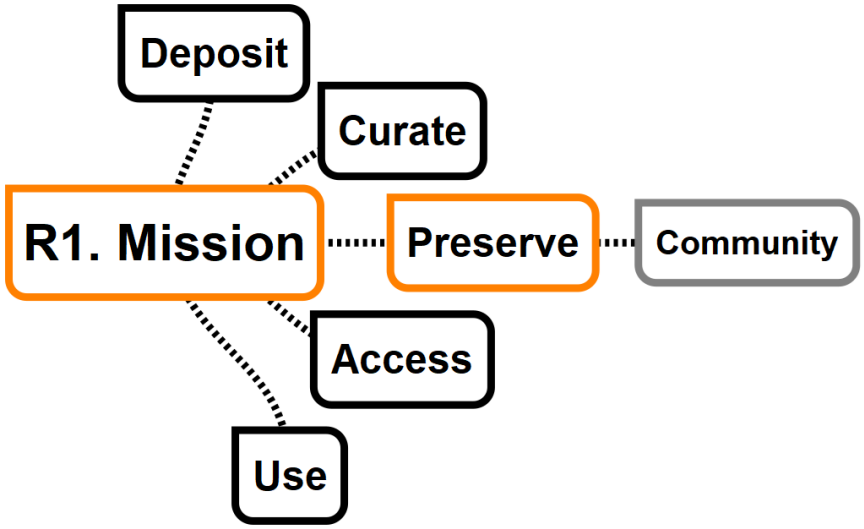


Mission (R1)

- Access is explicitly required
- A TDR goes beyond the bits
- Reference preservation!
- Demonstrate approval & buy in

And, as for all evidence

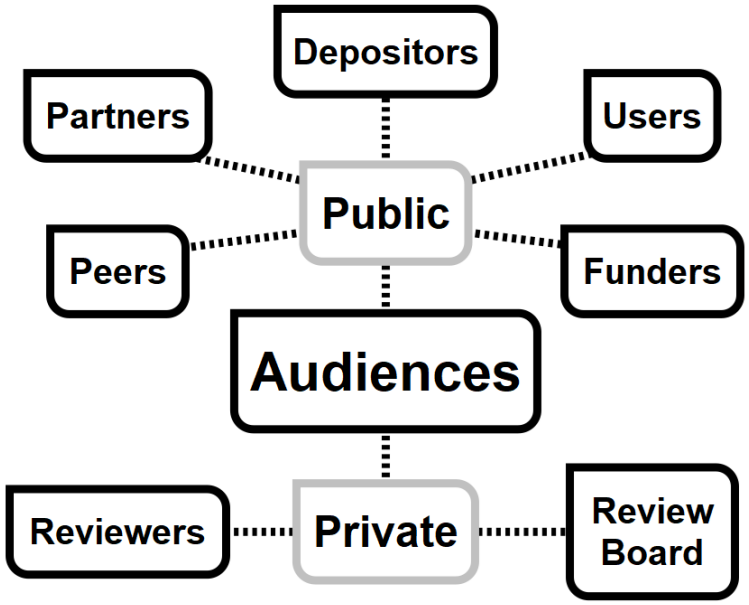
- Public



Designated Community (R0)

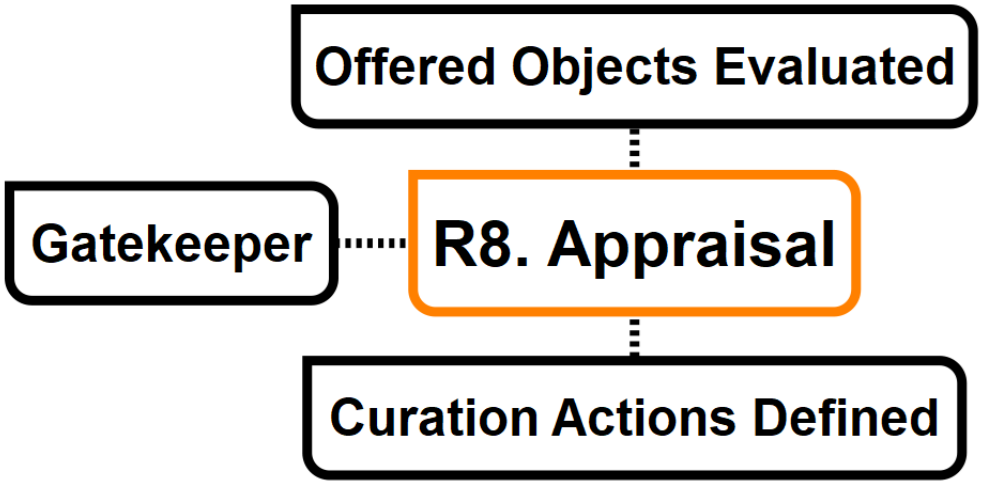
Change in response to the needs of the Designated Community

- Subset of overall users
- Knowledge Base
- Processes & Methods
- Technologies

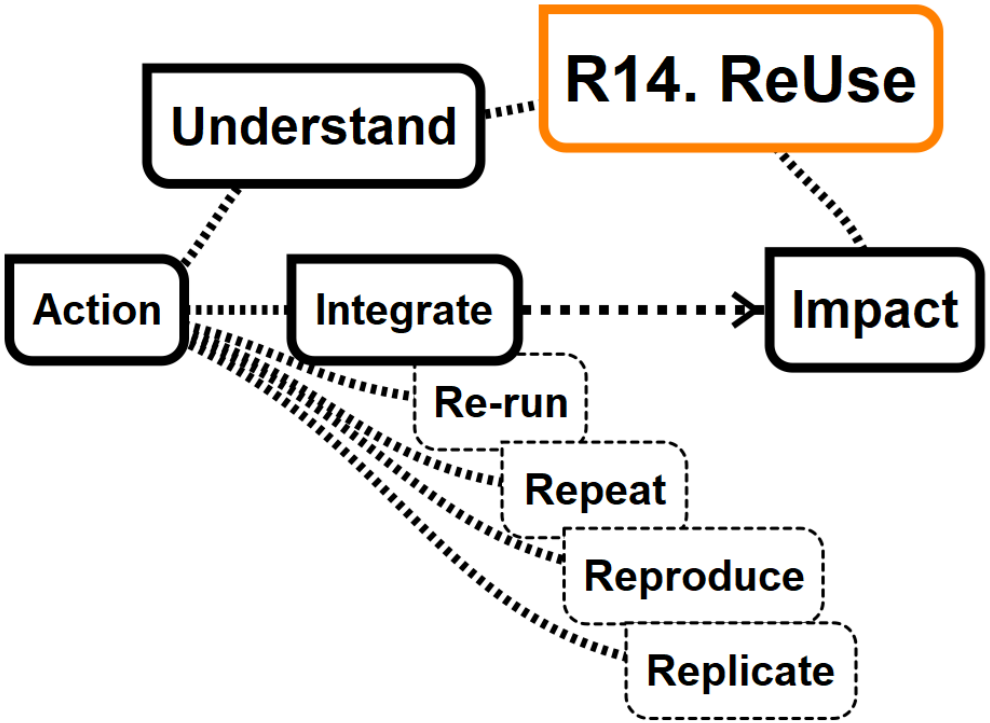


Appraisal (R8)

- The gatekeeper to the repository
- Objects offered for deposit are Evaluated
- Curation & preservation actions are defined

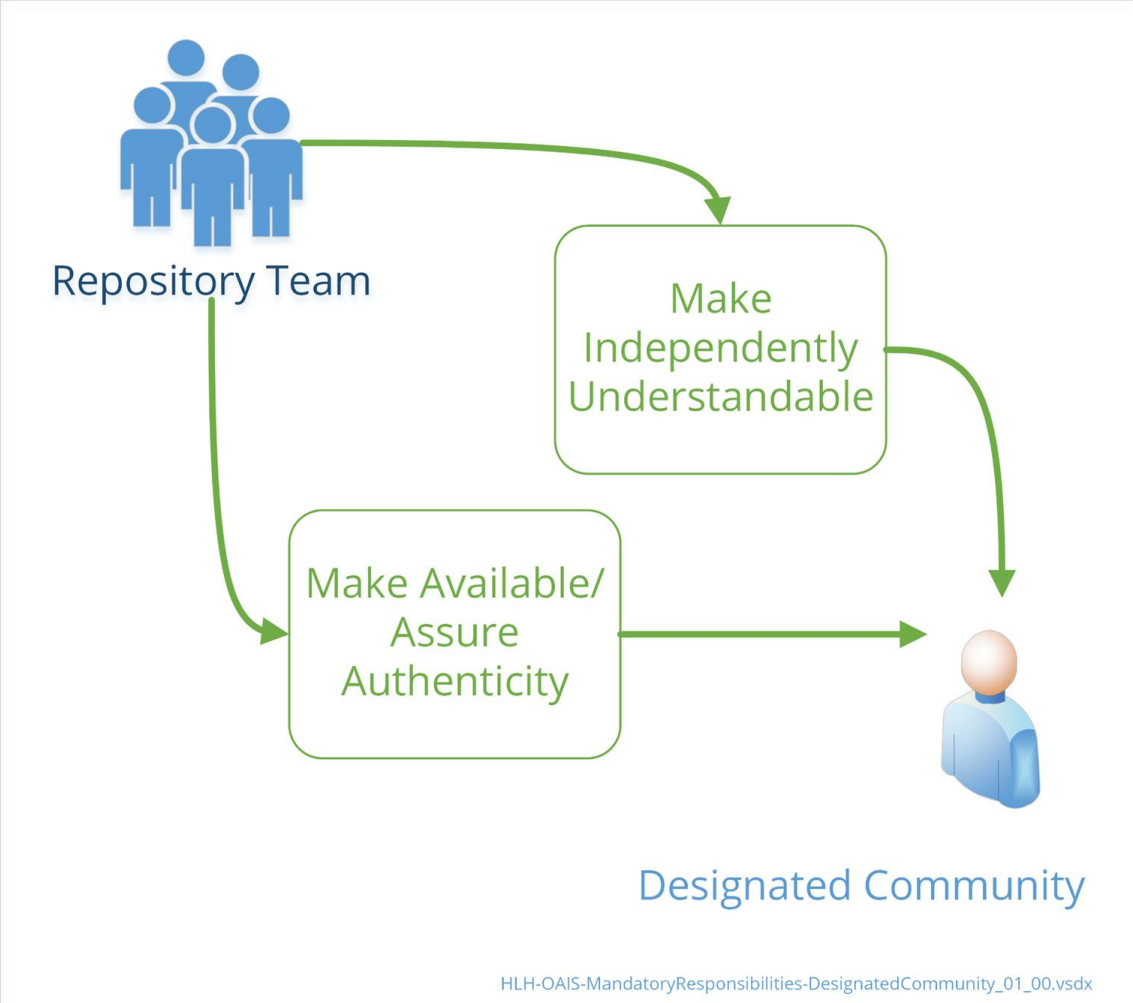


ReUse (R14) is the ultimate outcome

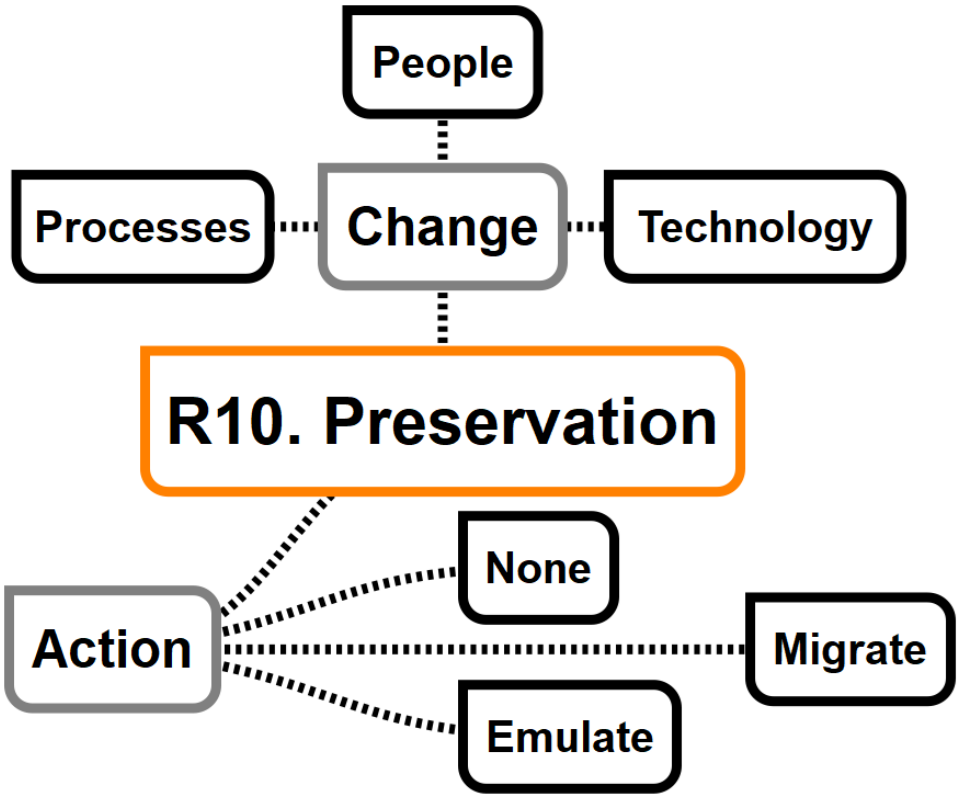


ReUse (R14) is the ultimate outcome (Now)

- Provenance
- Methods
- Technology
  - Tools
  - Formats
- Metadata
  - Descriptive
  - Technical
  - Rights



Preservation (R10) ensures ReUse over Time



R10 Preservation: Understand the need for change

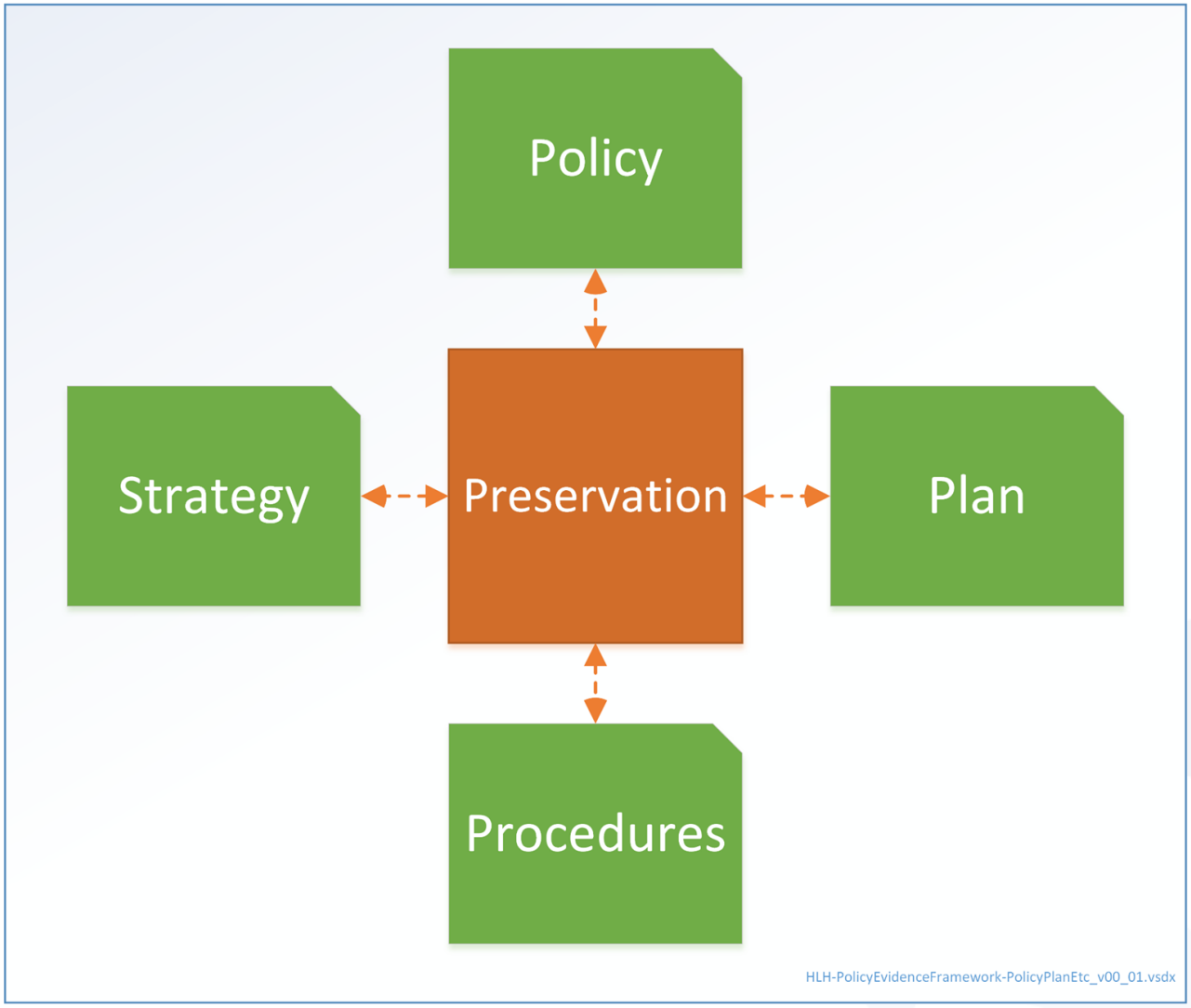
Change in response to the needs of the Designated Community

- **People**: Disciplinary communities have more specific needs
- **Processes**: Research focus and practice changes over time
- **Technology**: general technical environment specific designated community technical environment

“Technical watch” can cover some of the technology aspects, for the rest...

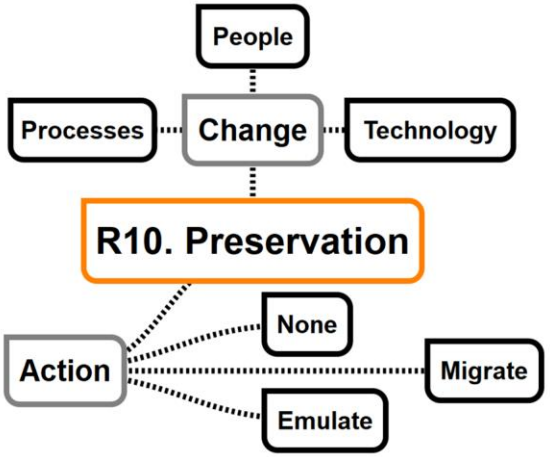
Ask the community, act on what you find!

R10 Preservation: Supporting Evidence



Preservation

- Define, communicate, respond to designated community
- Specify Preferred/Required:
  - Data formats
  - Metadata schemas and content
  - Descriptive information necessary for understanding
- Identify preservation risks
- Plan for preservation actions
- Communicate changes (provenance)



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Thank you

For further questions:

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References:

- **CoreTrustSeal**
  - Extended Guidance https://doi.org/10.5281/zenodo.3632533
  - Glossary https://doi.org/10.5281/zenodo.3632563
  - Conversational CoreTrustSeal https://doi.org/10.5281/zenodo.4033966 (Unofficial)
- **FAIRsFAIR**
  - M4.2 Draft Maturity Model Based on Extensions and-or Additions to CoreTrustSeal Requirements https://doi.org/10.5281/zenodo.4003598
  - FAIR + Time: Preservation for a Designated Community https://doi.org/10.5281/zenodo.4783116