



Trustworthy Data Repositories: CoreTrustSeal Certification

Françoise Genova

CDS, Observatoire Astronomique de Strasbourg



Trust

- Trust is at the very heart of storing and sharing data
 - Users
 - Depositors
 - Funders
- Trust is built on
 - Mission statement
 - Reputation
 - Be transparent and reviewed! >> get certified
- The astronomical community trusts CDS, but we decided nevertheless to undergo certification



Certification

> Why?

- > Criteria established by experts, applicable whatever the discipline
- > Self-evaluation, which allows the data centre to check its processes and find paths for improvement
- > External evaluation by experts
- > An important positive point in Data Management Plans

> Where?

- > 'Core' evaluation – cannot afford ISO 16363 certification!
- > There used to be two frameworks – CDS went through both
 - > World Data System
 - > Data Seal of Approval
- > They merged their criteria and methods thanks to an RDA Work Group
- > Now CoreTrustSeal, with the possibility to become a WDS member when CTS is achieved

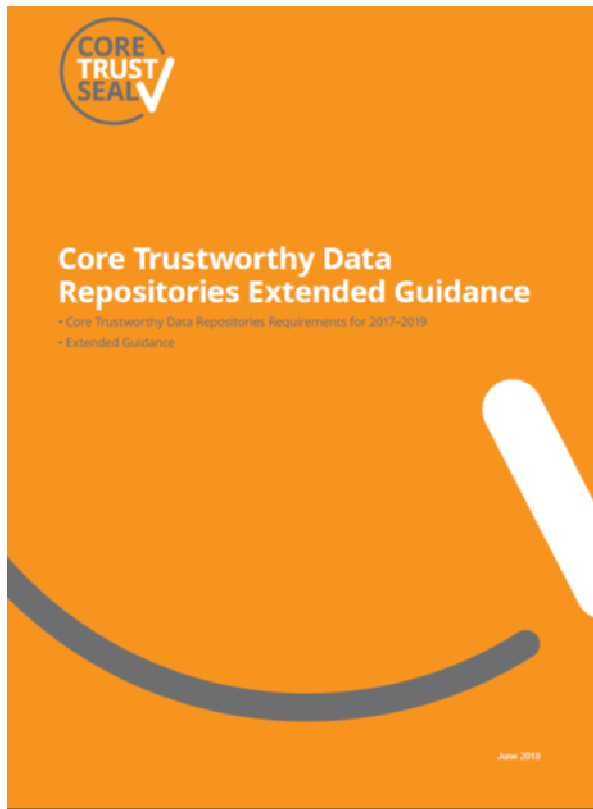
<https://www.coretrustseal.org>



Self-evaluation

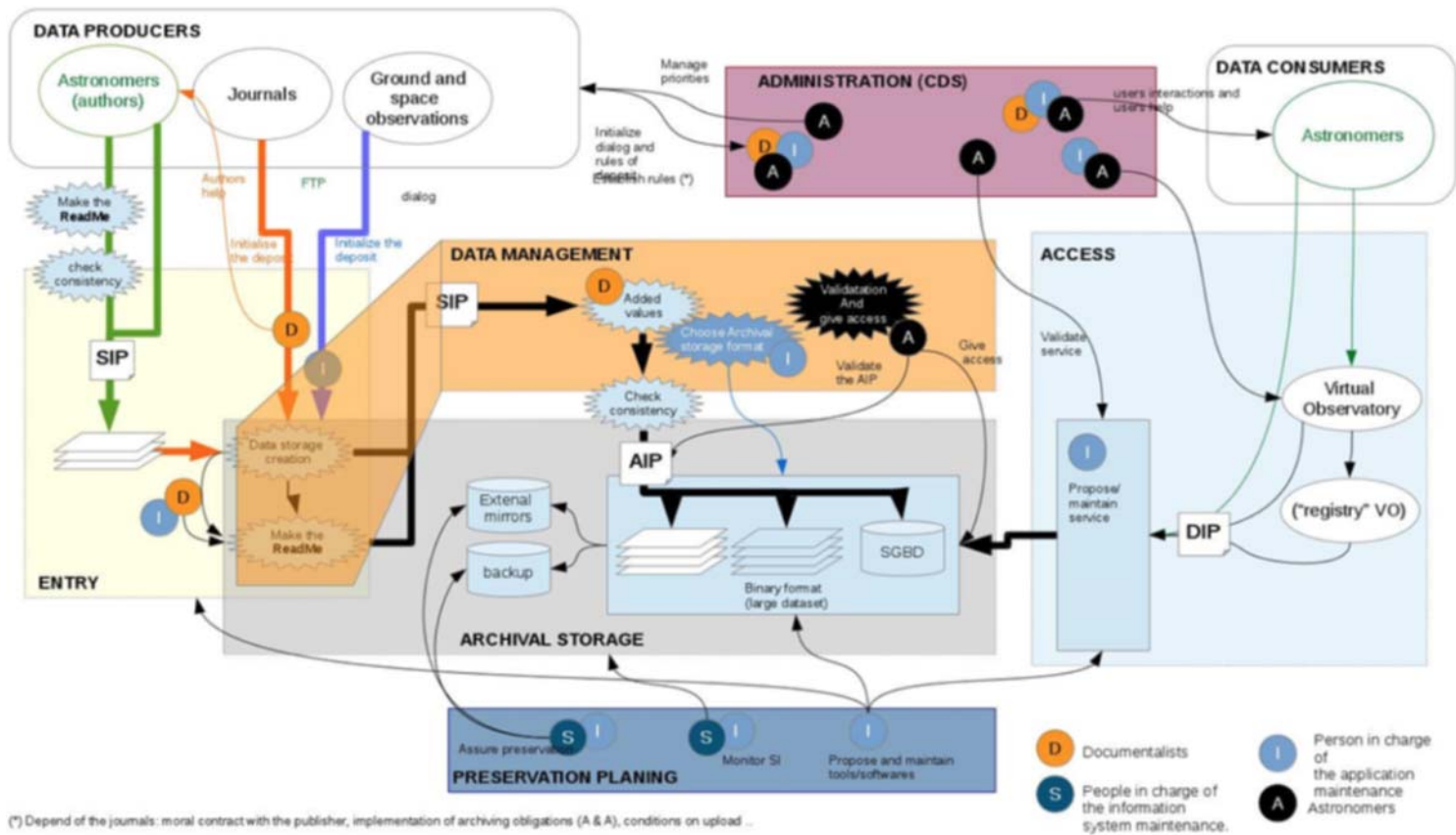
- A form to fill
- Question on context + 16 criteria
 - Organisational infrastructure
 - Digital Object Management
 - Technology
- Team work: requires input from people with different roles
 - Management
 - Content stewardship
 - IT, service and system
- End-to-end description of processes and roles
- Identification of possible improvements

Evaluation



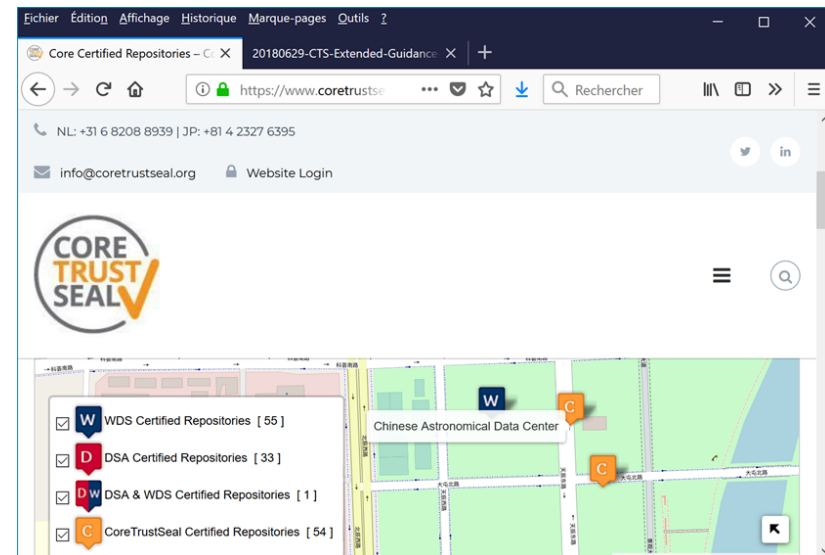
- The form is evaluated by two reviewers following the Extended Guidance
- Decision taken by CTS Board
- In general comes back with comments and suggestions until it is accepted
- The final forms are public and available in the list of certified repositories

CDS data pipeline in the OAIS model



Certified astronomical data centres

- CTS
 - CDS
 - China Astronomical Data Centre
 - **Worth going through!**
- WDS
 - CADAC
 - Italian Centre for Astronomical Archive – IA2
 - Russian Academy Astronomical Data Centre – INASAN
 - BASS2000 (Solar)
- IVOA is WDS Network Member





Requirements

- Background information
- Organisational infrastructure
 - Mission/scope
 - Continuity of access
 - Confidentiality/Ethics
 - Organisational infrastructure
 - Expert Guidance



Requirements

- › Digital Object Management
 - › Data Integrity and Authenticity
 - › Appraisal
 - › Documented storage procedures
 - › Preservation plan
 - › Data Quality
 - › Workflow
 - › Data Discovery and Identification
 - › Data Reuse
- › Technology
 - › Technological infrastructure
 - › Security