Trustworthy data repositories

TRUST is for data repositories what FAIR is for data

Lin, D., Crabtree, J., Dillo, I. *et al.* **The TRUST Principles for digital repositories**. *Sci Data* **7**, 144 (2020).
https://doi.org/10.1038/s41597-020-0486-7

Transparency

- To be transparent about specific repository services and data holdings that are verifiable by publicly accessible evidence.

Responsibility

- To be responsible for ensuring the authenticity and integrity of data holdings and for the reliability and persistence of its service.

User Focus

- To ensure that the data management norms and expectations of target user communities are met

Sustainability

- To sustain services and preserve data holdings for the long-term

Technology

- To provide infrastructure and capabilities to support secure, persistent ,and reliable services.

LEAPS — League of European Accelerator-based Photon Sources

Data repositories certification – 3 options (at least)

• CoreTrustSeal – self certification of data repositories, recommended by RDA, EOSC, France Open Data Initiative
https://www.coretrustseal.org/

• NestorSeal –self certification according to DIN 31644 norm
https://www.langzeitarchivierung.de/Webs/nestor/EN/Zertifizierung/zertifizierung_node.html

• ISO16363:12 - **Space data and information transfer systems — Audit and certification of trustworthy digital repositories**
https://www.iso.org/standard/56510.html

ESRF Data repository certification

- **February 2020** - FAIRsFAIR proposed support to help
  10 data repositories to apply for CTS certification

https://www.fairsfair.eu/news/journey-coretrustseal-certification-begins-ten-repositories

ESRF Data repository certification

- **March 2021** – ESRF submitted first application written by
  Rudolf Dimper, Andy Götz, Alex de Maria + Marjolaine Bodin

- **July 2021** – CTS reviewers sent written feedback and
  a meeting was organised to discuss feedback with ESRF

- **November 2021** – ESRF submitted new revised application taking
  into account reviewers feedback

- **May 2022** – CTS sent feedback accepting ESRF revised version with one minor
  point to be fixed

- **June 2023** – CTS finally accepted and published the ESRF
  certification

CTS Data repository certification

- **Why?** – (1) improve your data repository (2) commit the facility to providing high quality data and services for data for the long term. In the future it could become a requirement for certain journals, projects, data commons, ...

- **How** – CTS is a self-certification process i.e. the facility evaluates and answers the 16 requirements to the best of their knowledge. Then the CTS reviewers review the answers and provide feedback and eventually ask for more information or changes.

- **Accept**– Once CTS accepts the data repository review it is valid for 3 years.

- **Cost** – Each application (new/renewal) costs 1000 euros

CTS Data repository certification - resources

- **CTS Requirements** – links to requirements + recent webinar which is worth watching: https://www.coretrustseal.org/why-certification/requirements/

- **ESRF submission + review** – ESRF submission + reviewers comments can be viewed online: https://amt.coretrustseal.org/certificates

- **FAIRsFAIR** – template for filling out the CTS Application:

https://www.fairsfair.eu/coretrustseal-fairenabling-capability-maturity-model

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CTS Data repository certification – let's browse !

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- **CTS application management tool** – https://amt.coretrustseal.org/

CTS Data repository certification – Conclusion

1. **CTS encourages / forces you to think about best practices for your data repository**

2. **CTS self-certification is a thorough but still relatively lightweight process**

3. **CTS certification @ ESRF has increased data managers and top management commitment to FAIR data**

4. **ESRF data managers can help LEAPS partners to apply for CTS**

5. **We encourage LEAPS facilities to apply for CTS**