RDA/WDS TRUST Principles Outreach and Adoption Working Group: Case Statement

1. **Working Group Charter**

This working group aims to clarify the complementary relationship between TRUST Principles (TRUST) for digital repositories, certification processes, and metrics of other principal frameworks (e.g., FAIR, CARE, Desirable characteristics, Data Repository Attributes). TRUST is not a criterion for certification. Instead, it is the principles of how repositories can demonstrate their trustworthiness to users. The common framework in TRUST facilitates discussion and implementation of best practices within digital preservation. However, TRUST is not domain specific and requires further refinement to clarify definitions of TRUST concepts to reduce ambiguity and confusion.

The existing certification standards (CoreTrustSeal, ISO 16363, NESTOR) and community-based efforts on defining repository attributes and characteristics offer multiple-facet approaches toward implementing the TRUST Principles. This working group will work with the relevant stakeholders to consider the granularity and differences of the metrics and generate guidance and recommendation to increase the trustworthiness of the repositories at any stage.

Beginning work during the Interest Group included receiving interest and feedback from the community through presentations, discussions, and publications, including:

* Informal gathering of individuals discussing TRUST
* AGU presentation 16 December 2022 TRUST Principles Inspire Digital Repositories to Serve Reusable Data for the Long Term
* RDA P19 Trust Principles update
* RDA VP18 BOF 25 August 2021 BOF The future of "trustworthiness" and reliability of repositories and services: Trust, FAIR, CARE
* RDA VP18 BOF 10 November 2021 IG Session: TRUST Principles and challenges on implementation
* AGU presentation 7 Sept 2021 on TRUST
* Nestor endorsement of TRUST principles 25 September 2020
* Lin, Dawei, et al. "The TRUST Principles for digital repositories." *Scientific Data* 7.1 (2020): 1-5.
* Springer Nature 26K access, 32 cites per WoS, 56 per CrossRef; Altimetric 146 104 cites per Google Scholar

The WG will:

1. Assist adoption of TRUST principles by identifying what and where hesitancy is on adopting principles and exploring if the impediments of TRUST adoption certification are implementation dependent.
2. Collect and analyze case studies that share TRUST repository examples to derive commonalities across certification processes.
3. Map the TRUST principles formally to existing certification processes (CoreTrustSeal, NESTOR, ISO 16363) to include desirable characteristics and attributes of repositories.
4. Develop use cases sharing how data repositories go from TRUST principles to certifications.
5. Prepare a document clarifying the relationship between FAIR, CARE, and TRUST principles and how they are represented in data repository certifications.
6. Create guidelines and/or self-assessment in using TRUST principles for repositories to help implement the TRUST principles.
7. **Value Proposition**

The primary outcome of this WG is to reduce ambiguity and confusion about the relationship between TRUST principles, certification processes, and metrics of other principal frameworks (e.g., FAIR, CARE).

Provide guidance for a repository to adopt best practices to improve their operation.

1. **Engagement with Existing work in the Area**

3.1 Adjacent RDA Groups

The table below lists RDA groups with goals that complement those of the proposed TRUST WG.

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| **RDA Interest/Working Group** | **Description** | **Status** |
| [CURE-FAIR WG](https://www.rd-alliance.org/groups/cure-fair-wg) | The working group's goal is to establish standards-based guidelines for curating reproducible and FAIR data and code ([Wilkinson et al., 2016](http://doi.org/10.1038/sdata.2016.18)). | WG Maintaining deliverables |
| [Data Repository Attributes WG](https://www.rd-alliance.org/groups/data-repository-attributes-wg) | The Data Repository Attributes Working Group seeks to produce a list of common attributes that describe a research data repository and provide examples of the current approaches that different data repositories use to express and expose these attributes.  | Recognized & Endorsed |
| [FAIR Data Maturity Model WG](https://www.rd-alliance.org/groups/fair-data-maturity-model-wg) | The RDA FAIR Data Maturity Model Working Group develops as an RDA Recommendation a standard set of core assessment criteria for FAIRness and a generic and expandable self-assessment model for measuring the maturity level of a dataset. The aim is not to develop yet another FAIR assessment approach but to build on existing initiatives, looking at common elements and allowing the group to identify core elements for the evaluation of FAIRness. That will increase the coherence and interoperability of existing or emerging FAIR assessment frameworks, and it will ensure the combination and compatibility of their results in a meaningful way. | WG Maintaining deliverables  |
| [RDA/WDS Certification of Digital Repositories IG](https://rd-alliance.org/groups/rdawds-certification-digital-repositories-ig.html) | The Interest Group will build on previous work in the area of certification. It will deliver the global overview and the necessary recommendations and requirements that allow the effective implementation of certification of digital repositories on a national, European and even global level. | Recognized & Endorsed |
| [Repository Platforms for Research Data IG](https://www.rd-alliance.org/groups/repository-platforms-research-data.html) | The major goal of the RPRD Interest Group is to improve the usability and technical capabilities of repository platforms. To achieve this, the RPRD IG invites members of the research data community to collect usage experiences, define requirements, evaluate implementations, and identify limitations of current solutions in a cooperation of repository users, managers, providers, and developers. | Recognized & Endorsed |

3.2 Plan for Engagement with Adjacent RDA Groups

To meet the proposed deliverables, feedback from repositories and the three main certifications (CoreTrustSeal, NESTOR, and ISO 16363) is critical in supporting the working group. The proposed membership of this WG includes representatives of these stakeholders. Additionally, the RDA/WDS Certification of Digital Repositories IG, which has numerous members highly interested in repositories, will continue. As the proposed co-chairs support the IG and this proposed WG, a regular feedback mechanism is already in place. Additional calls for support will occur to the adjacent IG/WGs as listed in 3.1.

1. **Work Plan**

4.1 Final Recommendation

The final deliverable for the WG is the creation of guidelines and/or a self-assessment to help repositories implement TRUST principles and to improve the trustworthy operations of repositories.

This final recommendation will draw off the knowledge gained from the collection of case studies and the mapping of the TRUST principles formally to existing certification processes (CoreTrustSeal, NESTOR, ISO 16363) to include desirable characteristics and attributes of repositories.

A session on both the CoreTrustSeal and this TRUST Principle WG has been accepted for P20 and is an opportune time to come together as a community. Once endorsed, the WG will meet online once and month to achieve the goals.

4.2 Milestones and deliverables

Deliverables:

1. Collect and analyze case studies that share TRUST repository examples to derive commonalities across certification processes
2. Prepare a final document outlining how FAIR, CARE, and TRUST come together as principles and how they are represented in data repository certifications, including a mapping of the TRUST principles formally to existing certification processes (CoreTrustSeal, NESTOR, ISO 16363) to include desirable characteristics and attributes of repositories.

From the endorsement of the WG, we will complete the following:

3 months: Survey creation and data collection phase

Milestone 1: Upon TAB endorsement of the RDA/WDS Trust, WG will create a survey to identify what and where hesitancy is on TRUST principles and how to reduce the ambiguity of trust in the landscape. This survey will be used to coordinate complementary IGs and WGs to engage them with these efforts.

Milestone 2: Likewise, collection of case studies illustrating TRUST repository examples to identify commonalities will begin.

6 months: Analysis phase

Milestone 1: During the first six months of this WG, we will analyze the survey results, identifying what and where of principle to standards hesitancy.

Milestone 2: Analysis of collected case studies illustrating TRUST repository examples to identify commonalities will begin.

Milestone 5: Begin work on Wiki to continue to share TRUST further and serve as a resource for repositories.

12 months: Writing and visualization phase

Milestone 3: Prepare a final document outlining how FAIR, CARE, and TRUST come together as principles and how they are represented in data repository certifications, including a mapping of the TRUST principles formally to existing certification processes (CoreTrustSeal, NESTOR, ISO 16363) to include desirable characteristics and attributes of repositories.

Milestone 4: Create guidelines and/or self-assessment using TRUST principles for repositories to help them implement them.

Milestone 5: Launch Wiki to continue to share TRUST further and serve as a resource for repositories.

18 months: Final deliverables and outreach phase

Submit final documents and recommendations for consideration. Present widely.

Milestone 3: Release final document outlining how FAIR, CARE, and TRUST come together as principles and how they are represented in data repository certifications, including a mapping of the TRUST principles formally to existing certification processes (CoreTrustSeal, NESTOR, ISO 16363) to include desirable characteristics and attributes of repositories.

Milestone 4: Release final guidelines and/or self-assessment in using TRUST principles for repositories to help them implement them.

Milestone 5: Continual updates to Wiki to continue to share TRUST further and serve as a resource for repositories. Promote Wiki.

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| **Milestone** | **3 months** | **6 months** | **12 months** | **18 months** |
| 1. Survey on principle to standards hesitancy
 |  |  |  |  |
| 1. Case study analysis
 |  |  |  |  |
| 1. Mapping TRUST to certifications
 |  |  |  |  |
| 1. Guidelines/self-assessment on implementing TRUST
 |  |  |  |  |
| 1. Create and launch TRUST WIki
 |  |  |  |  |

4.3 Working group operations

In addition to meeting in person at plenaries and sharing information via a mailing list, the WG will host monthly working calls via Zoom or Teams with an organizational planning call between co-chairs quarterly. Ad-hoc meetings will take place as needed to continue to meet deliverables.

The World Data System International Program Office (WDS-IPO) has agreed to coordinate meetings, documentation, and the deliverables and reporting for this WG. Documents will be created and publicized through the RDA wiki and file repositories.

4.4 Project Management

The WG co-chairs will share the responsibilities for keeping members on task, updating the group, and engaging the community, including related IG and WGs. The co-chairs will also be responsible for submitting reports as well as submitting RDA plenary sessions. The WDS has assigned a small percentage of staff time to support the organizational and reporting aspects of this WG.

WG meetings will be held online via Zoom once per month over the 18-month work period. When possible, in-person and/or hybrid meetings will be held at RDA plenaries and other sessions in which at least one co-chair and a representative international sample of group members attend.

 4.5 Community Engagement and Participation

Once RDA endorses the WG, the WG co-chairs will reach out to adjacent RDA groups and other communities of practice related to data repositories during the community review stage of the WG case statement review process to be available for feedback and input.

We are also trying to be inclusive of as many certifications as possible and are actively reaching out for inclusion from them for input and leadership in this Working Group.

1. **Adoption Plan**

To aid in the adoption of the recommendation and to increase knowledge on certification for data repositories, the following will occur:

Abstracts will be submitted to the following conferences for the socialization of the recommendation:

* RDA P21 and further
* SciDataCon 2023, Salzburg, Austria, 23-26 October 2023
* SciDataCon 2025, Brisbane, Australia
* AGU 2023 Fall Meeting 11-15 December 2023, San Francisco, CA
* AGU 2024 Fall Meeting, Washington, DC
* iPres 2024 16-20 September 2024, Ghent, Belgium
* Others, as funding is available

Additionally, a scholarly, peer-reviewed article will be submitted to a to be determined journal for consumption by the scientific community.

Finally, the TRUST Wiki will be maintained and updated with references, case studies, and related scholarly citations throughout the process. It will continue to evolve thanks to WDS-IPO and other volunteer maintenance.

1. **Initial Membership**

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| --- | --- | --- | --- | --- |
| **First Name**  | **Last Name**  | **Affiliation**  | **Country**  | **How related to WG** |
| Marisa  | De Giusti  | ISTEC  | Argentina  | Member  |
| Bob  | Downs  | CIESIN  | US  | Member  |
| Francoise  | Genova  | Strasbourg Astronomical Data Center  | France  | Member  |
| Meredith  | Goins  | World Data System International Program Office | US  | Co-chair, WDS representative |
| Anupama  | Gururaj  | NIAID/NIH  | US  | Member  |
| Wim  | Hugo  | DANS  | Netherlands  | Member, CTS representative  |
| Dawei  | Lin  | NIAID/NIH  | US  | Co-chair  |
| Micky  | Lindlar  | TIB Leibniz Information Centre for Science and Technology  | Germany  |  Co-chair, nestor representative (co-author of nestor TRUST endorsement statement), TRUST principle endorsing institution  |
| Barbara  | Sierman  | Consultant  | Netherlands  | Member  |

1. **References**

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>