

RDA TIGER

Cascade Grant Application Form

Section A. General Information

1 Your details

Fields marked with an asterisk (*) are mandatory

*Applicant name	Francis P. Crawley
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*Country	Belgium
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***Brief history of your involvement in RDA (maximum 3000 characters)**

I joined RDA in 2020 and participated in the RDA Covid-19 Legal-Ethical Working Group, contributing to a number of its publications with a focus on data sharing and the development of the radical collaboration methodology. My work with RDA continued with the founding of and co-chairing the 'EOSC-Future/RDA Artificial Intelligence & Data Visitation Working Group (AIDV-WG)' and more recently co-chairing the 'RDA/CODATA Data Systems, Tools, and Services for Crisis Situations WG' and 'RDA-OfR Mapping the Digital Research Data Working Group'. I have also been the EOSC-Future/RDA Ambassador for Ethics & Law. Additionally, during my time with RDA I have contributed to other RDA working groups, to the deve I joined the Research Data Alliance (RDA) in 2020, bringing extensive experience in ethics, data governance, and global collaboration. My initial contributions were through the RDA COVID-19 Legal-Ethical Working Group, where I focused on data sharing and developing the radical collaboration methodology, fostering cooperation for rapid and responsible data sharing during crises. Since then, I have taken on key leadership roles within RDA. I co-founded and co-chaired the EOSC-Future/RDA Artificial Intelligence & Data Visitation Working Group (AIDV-WG), addressing ethical, legal, and technical challenges of integrating AI and data visitation into Open Science frameworks. These efforts advanced innovative data-sharing practices while ensuring ethical compliance and legal rigor, particularly within the European Open Science Cloud (EOSC). I also co-chaired the RDA/CODATA Data Systems, Tools, and Services for Crisis Situations WG, contributing to strategies that leverage data systems for resilience in emergencies. Additionally, I was deeply involved in the RDA-OfR Mapping the Digital Research Data Working Group, shaping the future of digital research ecosystems. My work extends across several RDA working and interest groups. Through the Ethics and Social Aspects of Data IG, I emphasized embedding ethical considerations into data policies. My contributions to the GORC International Model



WG and Global Open Research Commons IG focused on interoperable and effective governance structures for global data commons. In the Health Data Commons GORC Profile WG and Health Data Interest Group, I have addressed sensitive health data management. I have actively participated in the Multi-Omics Metadata Standards Integration (MOMSI) WG, advancing metadata standards for life sciences research, and the FAIRification of Genomic Annotations WG, improving data quality and FAIR compliance. My work with the Evaluation of Research IG reflects my commitment to responsible metrics for assessing research outputs, particularly digital data. As the EOSC-Future/RDA Ambassador for Ethics & Law, I have aligned RDA's goals with global ethical standards and fostered equitable data-sharing practices. I have developed initiatives to engage researchers from LMICs, ensuring their participation in global Open Science efforts. Through mentorship programs for early-career researchers and LMIC engagement, I have helped strengthen RDA's global impact. I have contributed to plenary sessions, webinars, and blogs, fostering dialogue among stakeholders. I also built bridges between RDA and academic, professional, and industry organizations, advancing Open Science and aligning RDA's work with the UN's 2030 Agenda and the Pact for the Future. Through leadership and active engagement, I strive to enhance RDA's capacity to tackle challenges in data sharing, ethical governance, and global collaboration, reflecting my commitment to RDA's mission and a more robust data-sharing community. I have contributed to plenary sessions, to RDA webinars and blogs. My contributions to RDA have included developing mentorship programmes for early career researchers, supporting the involvement of LMIC researchers and programmes globally, and creating links to academic, professional, and industry organizations in the furtherance of data sharing, open science, and the UN 2030 agenda and 'Pact for the Future'.

2. Abstract

***Summary:** Briefly describe (2000 characters):

- The purpose of the proposed activity
- The planned outputs

Title: Developing an advanced and secure environment for data visitation across the RDA

Abstract

The EOSC-Future/RDA AIDV-WG and [Lifetime Omics](#) and its [FAIRLYZ](#) technology platform project unites experts in data visitation policy (AIDV) and technology (LO) to pilot the implementation, adoption, and refinement of the AIDV’s global guidances on secure contracts, informed consent, ethics review, and AI rights. This project is directed toward collaboration with RDA working and interest groups engaged with health data, omics, open science and data sharing governance, and research assessment/incentives for data sharing. The focus is on implementing ethics and legal policy frameworks that facilitate data sharing through data visitation on robust platforms. Outreach has been conducted with EOSC infrastructures, including EGI, OpenAIRE, and the Research Hub of the EOSC EU Node. Additional outreach has been made to GOSC, AOSP, and the Center for Open Science while further engagement of other Open Science platforms is foreseen. Outreach will be made to the CODATA & RDA WorldFAIR & IDPC projects as well as to relevant CoARA and FORCE11 working groups on research incentives for data sharing / data visitation. The FAIRLYZ data visitation platform features advanced quality control (QC) and data curation tools, creating a secure and innovative environment for data visitation.

Key anticipated outcomes:

1. **AI-driven quality control and user reports:** Comprehensive QC and data curation reports for three case studies, supplemented by user feedback from third parties engaging the datasets via data visitation.
2. **White paper:** An RDA community-driven white paper on data visitation.
3. **Strategic proposal:** A roadmap for advancing data visitation practices within the RDA community.

The principal objective is to transition AIDV-WG’s ethical and policy outputs into practical applications using a digitally advanced cloud-based platform with optional data QC and curation integration.

3. Open Science, RDA and EOSC Connectivity

***Describe how the project will create outputs which are connected to one or more of these categories (3000 characters each)**

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| <p>A. Open Science principles: for example the FAIR principles, or connecting via some other demonstrable pathway to the wider Open Science landscape¹.</p> | <p>The AIDV-WG contributes significantly to advancing Open Science by developing ethical, legal, social, and governance frameworks that support responsible and sustainable data sharing</p> |
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¹ https://www.unesco.org/en/open-science/about?TSPD_101_R0=080713870fab200067905a438ba150db21640e426d5bfe0d0b9bda233a1f6067878f4ee83c8f27bd082f81b331143000b8d5de5263b27146170345dc4878b7d6f115c01b4922992b390ec678c0b65cb4855882aeddcf0c34739964f427891800#:~:text=Open%20science%20is%20a%20set,and%20society%20as%20a%20whole

and reuse. With a vision to unite expertise across disciplines and regions, the AIDV-WG fosters the ethical use of AI and data visitation (DV) in addressing grand societal challenges. Its mission focuses on building bridges for open and equitable data sharing, aligned with UNESCO's Open Science principles of inclusivity, collaboration, and transparency.

One key output of the AIDV-WG's current TIGER-facilitation initiative (since November 2023) is the delivery of foundational ethical and legal guidance essential for enabling seamless and responsible access to large research datasets. This guidance supports the realization of global priorities, such as the UN's SDGs and the *Pact for the Future*. The AIDV-WG's frameworks ensure that AI and DV applications, particularly within the European Open Science Cloud (EOSC) and similar platforms, adhere to ethical and legal standards, fostering trust and collaboration in scientific communities.

Building on these achievements, this project transitions from ethical policy development to practical implementation by leveraging the **FAIRLYZ Quality Control (QC) platform**. This platform serves as a critical technological solution, providing a secure environment for data assessment and curation. Its compliance with the FAIR Principles ensures that datasets are data more reliable and expedient for querying, more easily shared. Features such as AI-driven pre-population, gamification of curation, and preparation for AI/ML applications further enhance its ability to operationalize the AIDV-WG's frameworks.

Key outputs and their connections to open science

1. **Ethical data sharing frameworks:** Building on the AIDV-WG's earlier outputs, this project will refine and implement global ethical and legal guidance AI and DV. These frameworks will ensure the core tenets of Open Science.
2. **Practical tools for FAIR compliance:** The FAIRLYZ platform will produce actionable outputs, such as QC reports and curated datasets, demonstrating how ethical and

	<p>legal frameworks can be integrated into advanced digital environments.</p> <p>3. Collaborative engagement outputs: The project will invite RDA WGs & IGs to participate through dataset submissions, fostering inclusivity and collaboration. Outputs will include pilot-tested datasets and use-case evaluations, which will be shared as models for global adoption.</p> <p>4. Community-driven white paper: A white paper will integrate insights from pilot projects, providing recommendations for integrating ethical AI and DV practices into Open Science.</p> <p>By bridging policy and practice, this project aligns with UNESCO’s vision of Open Science as a public good, advancing responsible, equitable, and innovative scientific progress that benefits researchers and society alike.</p>
<p>B. Supporting RDA, especially its strategic goals outlined in the RDA’s current strategic plan; Please refer here to the ‘Strategic Directions’ on p9 (“Globalise, Sustain, Empower and Innovate”).</p>	<p>This project supports the RDA’s strategic goals for 2024–2028 under the themes of Globalise, Sustain, Empower, and Innovate.</p> <p>Globalise The AIDV-WG, with 110+ members spanning all continents, exemplifies RDA’s commitment to global inclusivity. Using a radical collaborative methodology, the AIDV-WG fosters ground-up participation, producing ethical and policy frameworks addressing AI and DV practices worldwide. These outputs integrate seamlessly with the FAIRLYZ platform, including its QC tool and public registry, designed for global accessibility. This integration scales technical tools to support groundbreaking research, transcending resource limitations and geographic isolation. By fostering collaboration between researchers in LMICs and HICs, the project enables international data sharing, creating a platform for diverse datasets to generate globally relevant scientific insights. This initiative bridges disparities in data-sharing capacity, advancing RDA’s vision of a truly global and interconnected research ecosystem.</p> <p>Sustain The integration of AIDV-WG’s frameworks with FAIRLYZ ensures RDA outputs remain relevant</p>

	<p>and scalable. This project directly supports the sustainability of RDA’s mission by advancing practical solutions for ethical AI and data visitation, reinforcing RDA’s role as a global leader in data ecosystems while transitioning WGs/IGs and aligned partners to secure data sharing. Doing so, it will showcase the value of RDA outputs to diverse stakeholders, incentives encouraging ongoing investment from public and private sectors to foster organizational and financial sustainability.</p> <p>Empower</p> <p>This project drives leadership development from the ground up by providing tools, frameworks, and mentorship opportunities, enabling researchers to lead change in data management. Workshops, a community-driven white paper, and pilot studies raise awareness of best practices in ethical AI, DV, and FAIR compliance, empowering researchers (particularly from underrepresented regions) to shape and lead Open Science initiatives.</p> <p>Innovate</p> <p>The project embodies RDA’s innovative spirit by addressing emerging data management themes like AI and high-performance computing (HPC). Operationalizing AIDV-WG guidelines through FAIRLYZ, it leverages advanced technologies such as AI-driven pre-population, gamification, and AI/ML readiness. These innovative tools maximize the impact of RDA recommendations across various WGs/IGs and pave the way for future advancements in Open Science.</p> <p>Impact</p> <p>Aligned with RDA’s strategic goals, the project fosters global collaboration, sustainable growth, and transformative innovation. Its outputs (quality-controlled datasets, ethical frameworks, and scalable technologies) address societal challenges while solidifying RDA’s role as a leader in global data sharing. This ensures the continued expansion of RDA’s mission to build social and technical bridges that enable Open Science.</p>
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<p>C. The European Open Science Cloud (EOSC): Each supported WG should have output(s) with a clear connection to EOSC , such as an internationalisation or standardisation action based on an existing EOSC output and/or responding to an EOSC priority (e.g., in the EOSC Strategic Research and Innovation Agenda SRIA² and its updates)</p>	<p>This project supports the European Open Science Cloud (EOSC) by advancing its strategic objectives of enabling FAIR research outputs, fostering global collaboration, and addressing EOSC priorities outlined in its SRIA.</p> <p>Connection to EOSC outputs</p> <p>By integrating the AIDV-WG’s ethical and legal frameworks with the FAIRLYZ platform, the project aligns with EOSC’s focus on interoperability and federation. The FAIRLYZ platform, featuring its Quality Control (QC) tool and public registry, addresses EOSC challenges, including FAIR metrics, metadata standardization, and interoperability frameworks. These outputs operationalize EOSC’s recommendations on embedding FAIR principles into research workflows, supporting the SRIA priority of creating machine-actionable and scalable data environments.</p> <p>The project engages researchers globally, supporting EOSC’s aim to make Open Science practices the norm. By including international researchers and datasets, it aligns with EOSC’s goal of widening the ecosystem to a global community, reinforcing Europe’s leadership in building the Global Open Research Commons. Outputs such as curated datasets, pilot methodologies, and a white paper on data visitation contribute to populating the EOSC ecosystem with interoperable, high-value research data.</p> <p>Support for EOSC priorities</p> <p>This project aligns with key EOSC priorities:</p> <ol style="list-style-type: none"> 1. Federation of infrastructures: FAIRLYZ’s scalable QC and data visitation framework enhances EOSC infrastructure, enabling seamless integration of diverse datasets and fostering multidisciplinary collaboration. 2. Skills and training: Workshops and engagement activities build capacity for using FAIRLYZ, addressing EOSC’s need for skills in FAIR data management and Open Science
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² <https://www.eosc.eu/sria-mar>

	<p>practices. Researchers and institutions are empowered to contribute to and benefit from EOSC. Research assessment and incentivization will be included for data sharing / data visitation.</p> <p>3. Global collaboration: The AIDV-WG’s global membership and focus on inclusivity support EOSC’s international dimension. An open call for datasets facilitates cross-border data sharing, enabling LMICs to collaborate fully with HICs.</p> <p>Internationalization and standardization</p> <p>The project builds on EOSC’s existing outputs, such as the FAIR Metrics and Certification framework, extending their applicability across disciplines and regions. By developing a globally applicable strategy for QC and data curation, it aligns with EOSC’s goals for standardization and enhances global interoperability of datasets.</p> <p>Impact on EOSC goals</p> <p>The project strengthens trust in scientific data, improves reproducibility, and accelerates discovery by ensuring research outputs are interoperable and accessible at scale. It addresses global challenges such as health, omics data, and data security, while embedding ethical AI and DV practices within the EOSC ecosystem. This advances EOSC’s vision of an open, trusted, and digitally enabled research environment.</p>
4. Impact	
<p>*Describe the grant output(s) represent a significant advancement in one or more of the following areas. Select all that apply from the list below (A-E). Describe the most pertinent one in detail (choose only one to detail), with a maximum of 1500 characters per item.</p>	
<p>A. <input checked="" type="checkbox"/> Mechanisms and tools for creation, sharing, management and re-use of research outputs (e.g. data, software, publications, workflows, protocols, and methodologies);</p>	<p>This AIDV-WG project will deliver outputs that significantly advance the creation, sharing, management, and re-use of research outputs by integrating the AIDV-WG’s ethical and policy frameworks with the FAIRLYZ platform. Key outputs include Quality Control (QC) tools, curated datasets, and pilot-tested workflows that operationalize FAIR principles. The FAIRLYZ platform will feature mechanisms for AI-driven data pre-population, gamification of curation, and readiness for AI/ML applications, ensuring data is</p>

	<p>findable, accessible, interoperable, and reusable. Workshops, white papers, and community-driven protocols will enable global researchers to adopt and customize workflows and methodologies for their contexts. The project's open registry will facilitate sharing and management of research outputs, while alignment with EOSC and international standards ensures interoperability and the development or research assessment/incentivization for data sharing through data visitation will empower researchers with scalable, ethical tools to collaborate across disciplines and regions, fostering a robust, inclusive, and sustainable ecosystem for Open Science.</p>
<p>B. <input type="checkbox"/> Facilitating scientific multidisciplinary cooperation;</p>	<p>The project fosters scientific multidisciplinary cooperation by integrating the AIDV-WG's ethical frameworks with the FAIRLYZ platform to create tools and workflows that enable seamless collaboration across disciplines. FAIRLYZ supports interdisciplinary data sharing by ensuring research outputs are FAIR while also following the CARE and Trust principles, enhancing usability across diverse fields such as health, AI, and health-related sciences. The project's open calls for datasets and pilot studies encourage cross-sector engagement, allowing researchers from various disciplines to test methodologies and share best practices. Workshops and white papers further support knowledge exchange, promoting shared protocols and workflows, and examining data sharing assessment and incentivization procedures. The project ensures interoperability and fosters a collaborative environment where diverse scientific communities can work together to address complex societal challenges with innovative, ethical, and data-driven solutions.</p>
<p>C. <input type="checkbox"/> Efficient handling or providing seamless access to large volumes of research outputs;</p>	<p>The project advances the efficient handling and seamless access to large volumes of research outputs by integrating the AIDV-WG's ethical and policy frameworks with the FAIRLYZ platform. FAIRLYZ provides a scalable and secure Quality Control (QC) system that ensures research data meets FAIR standards. Its advanced features, including AI-driven data pre-population, gamification of curation, and tools for AI/ML readiness, streamline data preparation and accessibility. The platform's public registry and federated architecture enable seamless integration and sharing of diverse datasets across</p>

	<p>disciplines and regions. By fostering interoperability and aligning with UNESCO, EOSC, and other global standards, the project facilitates rapid discovery, access, and reuse of research outputs, empowering researchers and institutions to manage large datasets efficiently while ensuring ethical and legally compliant data sharing through advanced data visitation technologies.</p>
<p>D. <input type="checkbox"/> Increasing FAIRness, openness and quality of scientific research in Europe and globally;</p>	<p>The project increases the FAIRness, openness, and quality of scientific research by emphasizing ethical frameworks and inclusive participation. It leverages the AIDV-WG’s global membership to ensure that outputs (such as policy guidelines, workflows, and curated datasets) are applicable across diverse scientific contexts and regions. FAIRLYZ’s tools integrate Quality Control processes that enhance the precision and reliability of data, ensuring compliance with FAIR principles while reducing barriers to data sharing globally. By including underrepresented researchers and institutions, particularly from low- and middle-income countries, the project fosters equitable participation in Open Science. Furthermore, workshops, community-driven white papers, and pilot studies provide actionable strategies for adopting FAIR practices. These mechanisms enhance the reproducibility, transparency, and societal impact of scientific research, advancing Europe’s leadership in Open Science while aligning with global collaborative standards.</p>
<p>E. <input type="checkbox"/> Creating meaningful monitoring and research evaluation mechanisms, enabling better reproducibility, validation and re-use of research outputs, or improving pathways for communication of science to the public.</p>	<p>The project will create meaningful monitoring and research evaluation mechanisms by embedding tools and workflows within the FAIRLYZ platform that provides real-time insights into data quality and compliance with FAIR principles. The platform’s QC features will generate detailed, AI-assisted reports to track data integrity and curation processes, ensuring reproducibility and validation of research outputs. Additionally, the project’s pilot studies will evaluate datasets across disciplines, offering standardized metrics for assessing the usability and interoperability of data. The project also emphasizes transparent communication of</p>

	<p>science through white papers, public registries, and workshops that make methodologies and findings accessible to both researchers and the broader public. Research assessment and incentivization mechanisms for data visitation will strengthen engagement. These mechanisms improve trust, reproducibility, and accessibility, while fostering a culture of accountability and openness in scientific research and its communication to society.</p>
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5. Workplan

*List of milestones and deliverables with expected delivery dates

Integrated Workplan for the Project

Timeline: 20 January 2025 – 31 October 2025

Milestones and Deliverables

Phase 1: Project launch and initial setup (January to February 2025)

1. Project kickoff meeting

- Deliverable: Kickoff report with finalized workplan and assigned responsibilities
- Expected Delivery Date: 31 January 2025

2. Integration of AIDV-WG frameworks with FAIRLYZ platform

- Deliverable: Technical documentation on integration and framework alignment
- Expected Delivery Date: 15 February 2025

3. Open call announcement for dataset submissions

- Deliverable: Open call guidelines and submission portal launch
- Expected delivery date: 28 February 2025

Phase 2: Data Collection and Platform Enhancement (March–May 2025)

4. Selection of pilot datasets

- Deliverable: Dataset selection report with detailed evaluation criteria
- Expected delivery date: 15 March 2025

5. Commencement of RDA community writing of the White Paper

- Deliverable: Initial draft outline and community feedback loop initiated
- Expected delivery date: 31 March 2025

6. Implementation of FAIRLYZ Quality Control (QC) enhancements

- Deliverable: Updated QC tool with AI-driven and gamified features
- Expected delivery date: 31 March 2025

7. Workshop 1 – FAIR principles and data curation practices

- Deliverable: Workshop materials and recorded sessions for participants
- Expected delivery date: 15 April 2025

8. Data curation and quality control of pilot datasets

- Deliverable: QC reports for curated pilot datasets
- Expected Delivery Date: 31 May 2025

9. Data visitation for the selected datasets

- Deliverable: Report on data visitation outcomes, including usability, accessibility, and feedback from pilot users
- Expected delivery date: 31 May 2025

Phase 3: Evaluation and Community Engagement (June–August 2025)

10. Mid-project review

- Deliverable: Interim project report with progress updates and stakeholder feedback
- Expected delivery date: 15 June 2025

11. Pilot testing of datasets with external user groups

- Deliverable: User feedback and evaluation report
- Expected delivery date: 31 July 2025

12. Workshop 2 – Ethical AI and data visitation best practices

- Deliverable: Workshop materials and participant feedback report
- Expected delivery date: 15 August 2025

Phase 4: Finalization and Dissemination (September–October 2025)

13. White Paper delivery for discussion at RDA Plenary 25 (International Data Week, Brisbane, 13–16 October 2025)

- Deliverable: Final draft of the White Paper submitted with proposed discussion points for the session
- Expected delivery date: 30 September 2025

14. Final project workshop – Outcomes and future strategies

- Deliverable: Final workshop report and recommendations
- Expected delivery date: 13-16 October 2025, Brisbane, RDA Plenary 25, IDW

15. Strategic roadmap for scaling ethical and legal data-sharing solutions

- Deliverable: Comprehensive roadmap document with recommendations for global scaling of data visitation practices
- Expected delivery date: 31 October 2025

16. Final project report and dissemination

- Deliverable: Comprehensive final report and public communication materials
- Expected delivery date: 31 October 2025

This workplan is designed to meet the project’s objectives while ensuring a seamless flow of activities across the project’s goals.

Full Budget Breakdown for the Project

Total Budget Requested: €40,000

Budget Breakdown

1. Personnel Costs (€30,000)

- **Allocation:** 75% of total budget
- **Details:**
 - **Staff salaries for project management and RDA coordination activities:** €3,000
 - **Subcontracting to Lifetime Omics and use of FAIRLYZ Technologies:** €27,000

2. Travel Costs (€7,000)

- **Allocation:** 17.5% of total budget

- **Details:**
 - Transportation and accommodation for participants attending two conference engagements focused on ethical-legal Open Science data visitation practices.
 - Participation in RDA Plenary 25 (International Data Week in Brisbane, 13–16 October 2025), including registration fees and travel.

3. Other Costs (€3,000)

- **Allocation:** 7.5% of total budget
- **Details:**
 - **Open access publication fees:** €2,200 (to ensure wide dissemination of the AIDV-WG’s outputs and the White Paper).
 - **Miscellaneous expenses:** €800 (e.g., outreach, promotional materials, and bank charges).

Summary

- **Personnel Costs:** €30,000 (75%)
- **Travel Costs:** €7,000 (17.5%)
- **Other Costs:** €3,000 (7.5%)

This budget allocation ensures that the majority of resources are dedicated to personnel and subcontracting, reflecting the critical importance of project management and the technical contributions of FAIRLYZ. Travel and dissemination costs are proportionally allocated to maximize engagement and the visibility of project outputs across the RDA and more widely.

6. Budget Outline

*The total budget requested and the breakdown of the expenditure between personnel, travel, and other costs (travel, conference, open access, external expert fees). As a guideline, with the exception of small travel/conference participation grants, the “other” cost category should not exceed one third of the total budget requested.

Total budget (€)	40000
Personnel costs (€)	30000
Travel costs (€)	7000
Other costs (€)	3000