Български национален възел
(RDA 4.0 проект от октомври, 2019)

RDA - Съюз за Изследователските Данни

Стартираща конференция 13.02.2020, Софийски университет-Ректорат, Конферентна зала

Домакин на възела RDA BG Node: https://rda.bg/

Факултет по Математика и Информатика,

Софийски университет "Св. Климент Охридски"

Координатори:

› проф. д-р Мария Нишева (зам.-декан, ФМИ) и

› проф. дфзн Ана Пройкова (председател на Стратегическата група за данни, изчисления и дигитални инфраструктури към Европейския форум за изследователски инфраструктури, ESFRI SWG DIGIT)

RDA Europe 4.0 – project

> H2020 Coordination and Support Action (CSA) Grant number: 777388, (€3.5m) addresses the need for open and interoperable sharing of research data and builds on its community-driven and bottom-up approach, by means also of **an open cascading grant process**

> **Отворен каскаден процес на изразходване на гранта**

Мрежа от национални възли – 22 = 9+3+7+3

> 2019 г. – трето разширение на мрежата на конкурсен принцип: одобрени през октомври България, Румъния, Естония

> **Визия** на съюза – изследователите и иноваторите свободно споделят **данни от научни изследвания** преодолявайки граници и технологии

> **Мисия** на съюза – да изгради социални и технически мостове, които да осигурят процеса на споделяне (**националните възли са инструмент**)

https://www.rd-alliance.org/about-rda

Съюз, създаден през 2013 г., по инициатива на общността, която **генерира, събира, съхранява, пренася и споделя** изследователски данни от всички области на познанието (*природни науки, математика, инженерство, социология, медицина, хуманитаристика*) с подкрепата на *Европейската комисия, Националната научна фондация на САЩ и Австралийския държавен отдел за иновации*

Цел на съюза

- **Да изгради социална и технологична инфраструктура, която да осигури свободно** (не безплатно !) **споделяне на данни и многократната им употреба**: FAIR principle

- FAIR: Findable, Accessible, Interoperable, Reusable

- https://www.go-fair.org/fair-principles/   (2016)

'FAIR Guiding Principles for scientific data management and stewardship' in *Scientific Data*.

Findable

> Metadata and data should be easy to find for both humans and computers. Machine-readable metadata are essential for automatic discovery of datasets and services, so this is an essential component of the **FAIRification process.**

> F1. (Meta)data are assigned a globally unique and persistent identifier

> F2. Data are described with rich metadata (defined by R1 below)

> F3. Metadata clearly and explicitly include the identifier of the data they describe

> F4. (Meta)data are registered or indexed in a searchable resource

Accessible

> Once the user finds the required data, she/he needs to know how can they be accessed, possibly including authentication and authorisation.

> A1. (Meta)data are retrievable by their identifier using a standardised communications protocol

> A2. Metadata are accessible, even when the data are no longer available

Interoperable

The data usually need to be integrated with other data. In addition, the data need to interoperate with applications or workflows for analysis, storage, and processing.

- I1. (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.

- I2. (Meta)data use vocabularies that follow FAIR principles

- I3. (Meta)data include qualified references to other (meta)data

Reusable

The **ultimate goal** of FAIR is to **optimise the reuse of data**. To achieve this, metadata and data should be well-described so that they can be replicated and/or combined in different settings.

R1. Meta(data) are richly described with a plurality of accurate and relevant attributes

> R1.1. (Meta)data are released with a clear and accessible data usage license

R1.2. (Meta)data are associated with detailed provenance

R1.3. (Meta)data meet domain-relevant community standards

RDA integration with other European initiatives

How RDA Europe 4.0 supports the integration of RDA in the broader landscape of related European initiatives, with a focus on projects and activities implementing the European Open Science Cloud (EOSC).

> https://zenodo.org/record/3630265#.XkE6ZiOF7PA

> Daniel Bangert (UGOE), Ilaria Fava(UGOE), Ryan O'Connor (UEDIN), Sarah Jones (UEDIN), Alex Delipalta (UEDIN), Sara Garavelli (TRUST-IT), Timea Biro(RIA)

Draft not yet approved by the European Commission (Jan 27,2020)

EOSC - RDA

> Within the EOSC context, the RDA has been identified as a "key vehicle in implementing the EOSC and coordinating international activity" within the EOSC Work Plan

Example: the EOSC FAIR and Architecture WGs have liaised with the RDA PID Interest 4 Group and will present the draft policy at RDA Plenary 15 in Melbourne to solicit further feedback.

Members of the RDA community are prominent in all three EOSC Governance bodies: the Executive Board, Governance Board, and Stakeholder Forum.

EOSC - RDA

EOSC Executive Board established 5 WGs chaired by a member of the Board:

> Landscape (Jan Hrusak, ESFRI Chair)

> FAIR (chaired by Sara Jones, partner in RDA Europe 4.0)

> Architecture (*)

> Rules of Participation (chaired by **Juan Bicarregui,** the official representative of RDA on the EOSC Executive Board, leads the RDA UK node)

> Sustainability (*)

* https://www.eoscsecretariat.eu/working-groups/

RDA and EOSC share a common vision

> to reduce the barriers to data sharing.

RDA's document on '*The Value of the Research Data Alliance to the European Open Science Cloud (EOSC)*' addresses the action lines of EOSC, specifically how RDA "provides an international forum for discussing and agreeing relevant technical standards for the following pillars: architecture, data, services, access and interfaces"

RDA BG Node – a journey to Open Science implementation

RDA pathway to Open Science in Europe: **workshops**

the impact of RDA solutions and National Nodes: two areas of implementing EOSC at the national level

(1) establishing action plans and

(2) working with research groups and libraries to raise awareness about EOSC.

In particular the workshop must touch on how national action plans can help develop value added support and commitments for **local infrastructure** within the EOSC vision and **serve local research groups.**

RDA, digital infrastructures, open science

> **Digital infrastructures** offer researchers an easy and controlled online access to facilities, resources and collaboration tools, bringing to them the power of ICT for computing, connectivity, data storage and access to virtual research environments.

> Research is more efficient, transparent, accessible and effective by new, digital tools for scientific collaboration through **Open Science**, i.e. new working methods based on the shared use of digital tools and resources across different disciplines and technology domains as well as sharing of results and an open way of working together.

Digital Infrastructures - ESFRI

> Digital Infrastructures are key in future development of research infrastructures, as activities go increasingly online and produce vast amounts of data.

> This support is essential for example to the Ris monitored by the European Strategy Forum on Research Infrastructures (ESFRI).

> Evaluation of the e-needs of the projects applying for the ESFRI Roadmap and their exploitation during the operational phase is performed by the Strategic Working Group (DIGIT) – data, computing, digital infrastructures chaired by me.

Humans design and operate Ris – fundamental science, engineering, impact on society via industry and education
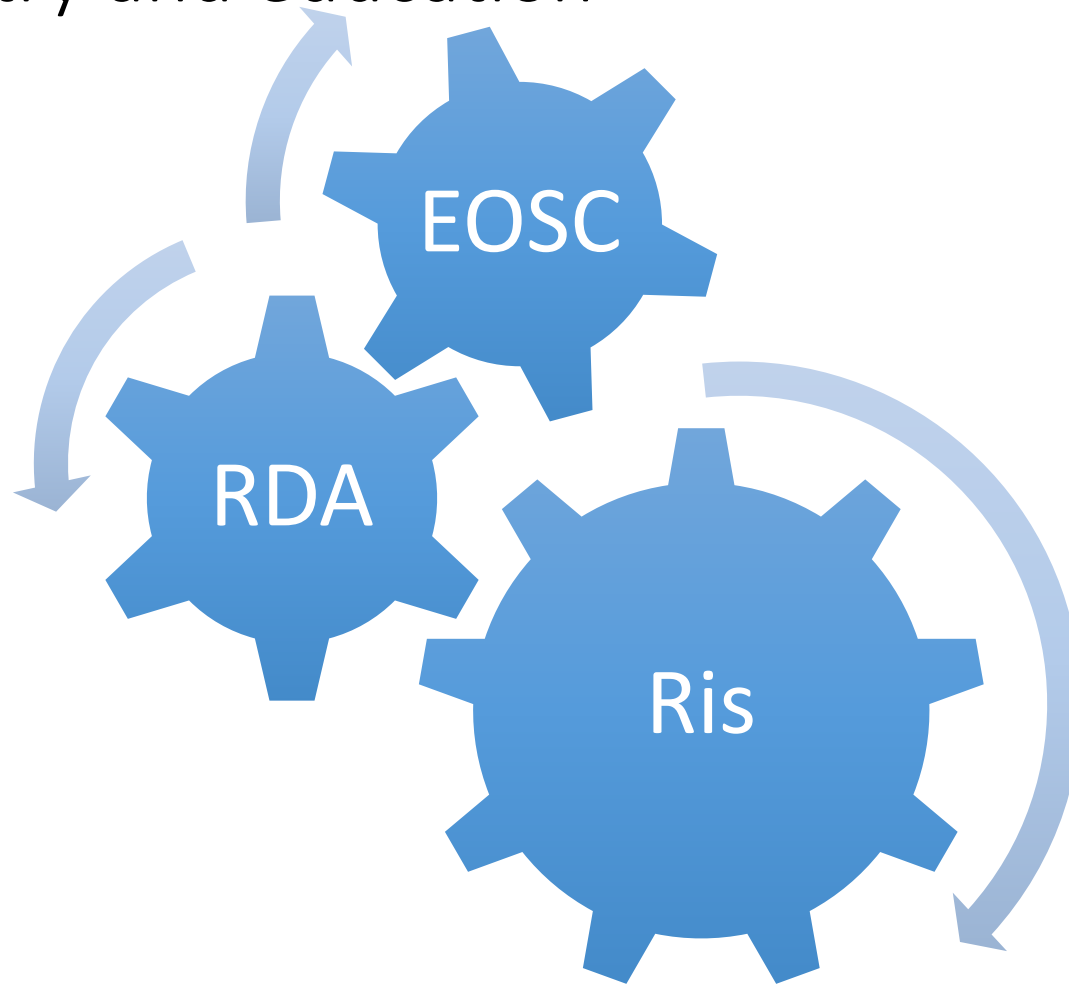
Important Announcement

> https://www.eosc-portal.eu/events/workshop-training-eosc

26 February 2020 to 28 February 2020, The Hague

Workshop on Training in EOSC

With the financial support of the EOSC secretariat, and in cooperation with the organisations EUDAT, EGI and OpenAIRE, a workshop will be organised to collaboratively work on the Rules of Participation for training in EOSC.

questions?

answers:

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