



Horizon 2020

SUPPLYING ACCURATE NUCLEAR DATA FOR ENERGY AND NON-ENERGY APPLICATIONS

SANDA

Kick-off meeting

Formal obligations and financial reporting

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Scheme of the presentation

- Formal obligations and rules of operation (Open Access)
- Financial issues from the GA
- Ethics and Security
- Division of Beneficiaries' Roles And Responsibilities

H2020 mandates on Dissemination and Open Access

- **ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING**
- 29.1 Obligation to disseminate results: Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).
 - Respecting 45 days advance notice and confidentiality obligations .
- 29.2 Open access to scientific publications: Each beneficiary must ensure open access (free of charge, online access for any user) to all peer-reviewed scientific publications relating to its results. Deposit a machine-readable electronic copy and ensure open access to it and to the bibliographic metadata.
- 29.3 Open access to research data: *OPTION 1a for actions participating in the open Research Data Pilot*: Deposit in a research data repository and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user: the data, including associated metadata, needed to validate the results presented in scientific publications as soon as possible and provide information — via the repository — about tools and instruments to access, mine and validate the data.
- 29.4 Information on EU funding — Obligation and right to use the EU emblem and include the following text: “*This project has received funding from the [European Union’s Horizon 2020 research and innovation programme][Euratom research and training programme 2014-2018] under grant agreement No [Number]*”.
- 29.5 Disclaimer excluding [Commission][Agency] responsibility

Open access to scientific publications

- 29.2 Open access to scientific publications:

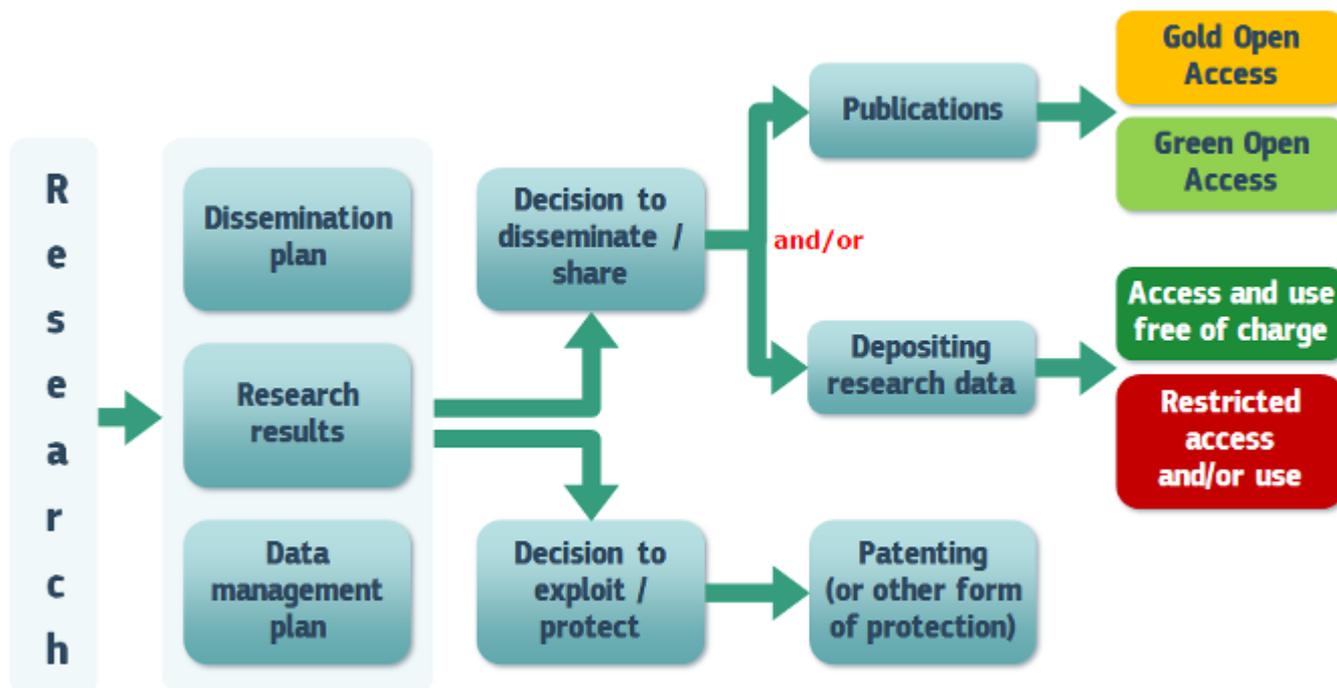
- Each beneficiary must ensure open access (free of charge, online access for any user) to all peer-reviewed scientific publications relating to its results.
- In particular, it must:
 - (a) as soon as possible and at the latest on publication, **deposit a machine-readable electronic copy** of the published version or final peer-reviewed manuscript accepted for publication **in a repository for scientific publications**;
Moreover, the beneficiary must aim to **deposit at the same time the research data needed to validate the results** presented in the deposited scientific publications.
 - (b) **ensure open access to the deposited publication** — via the repository — at the latest:
 - (i) on publication, if an electronic version is available for free via the publisher, or
 - (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.
 - (c) ensure open access — via the repository — to the **bibliographic metadata** that identify the deposited publication.

The bibliographic metadata must be in a standard format and must include all of the following:

- the terms ["European Union (EU)" and "Horizon 2020"] ["Euratom" and Euratom research and training programme 2014-2018'];
- the name of the action, acronym and grant number;
- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

Open access to scientific publications

- Open access requirements do not imply an obligation to publish results. The decision to publish is entirely up to the grant beneficiaries. Open access becomes an issue only if publication is chosen as a means of dissemination.
- Moreover, open access does not affect the decision to exploit research results commercially, e.g. through patenting. The decision on whether to publish through open access must come after the more general decision on whether to publish directly or to first seek protection.



Open access to scientific publications

Step 1 - Depositing publications in repositories

This step applies **even where open access publishing ('gold' open access) is chosen**

'Machine-readable electronic copy' - publications must be in a format that can be used and understood by a computer.

The latest acceptable time to deposit a publication is the date of publication.

'Repository' for scientific publications is an online archive. Institutional, subject-based and centralised repositories are all acceptable choices. Repositories that claim rights over deposited publications and preclude access are not.

Possible repositories: arXiv, RePEc, OpenAIRE, National or Laboratory OA repositories

- *The Open Access Infrastructure for Research in Europe* ([OpenAIRE](#))
- *Registry of Open Access Repositories* ([ROAR](#))
- *Directory of Open Access Repositories* ([OpenDOAR](#))

Open access to scientific publications

Step 2 - Providing open access to publications

- 1. Self-archiving / 'green' OA:** beneficiaries can deposit the final peer-reviewed manuscript in a [repository](#) of their choice. They must ensure open access to the publication within at most 6 months.
[Publishers may impose embargo periods.](#)
It may be necessary to sign special agreements with the publisher (EC provides model).
- 2. Open access publishing / 'gold' OA:** researchers can also publish in open access journals, or in hybrid journals that both sell subscriptions and offer the option of making individual articles openly accessible.
['Article processing charges' are eligible](#) for reimbursement during the duration of the project (as other costs defined in article 6.2.D.3 of the Model Grant Agreement). As stated, the article must also be made accessible through a repository upon publication.
The costs of 'gold' open access publications incurred [once a project is completed cannot be refunded](#) from that project's budget.

Beneficiaries must also provide open access, through the repository, to the [bibliographic metadata](#) that identify the deposited publication. These must be in a standard format and must include Terms EURATOM, name of the action, acronym & grant number, publication date, the length of the embargo period (if applicable) and a persistent identifier.

Commission encourages authors to retain their [copyright and grant adequate licences](#) to publishers. [Creative Commons](#) offers useful licensing solutions.

EC recommends to use identifiers which are persistent, non-proprietary, open and interoperable such as ORCID for contributor identifiers and DataCite for data identifiers.

Open access to Research Data

The Commission has enabled access to and reuse of research data generated by Horizon 2020 projects through the Open Research Data Pilot (ORD Pilot).

Opting out – partially or entirely

- By extending the pilot, open access becomes the default setting for research data generated in Horizon 2020. However, not all data can be open. Projects can therefore opt out at any stage (either before or after signing the grant) and so free themselves retroactively from the obligations associated with the conditions – if:
 - participation is incompatible with the obligation to protect results that can reasonably be expected to be commercially or industrially exploited
 - participation is incompatible with the need for confidentiality in connection with security issues
 - participation is incompatible with rules on protecting personal data
 - participation would mean that the project's main aim might not be achieved
 - the project will not generate / collect any research data or
 - there are other legitimate reasons (you can enter these in a free-text box at the proposal stage).

Types of data covered by the Open Research Data Pilot

1. **'underlying data'** (the data needed to validate the results presented in scientific publications), including the associated metadata (i.e. metadata describing the research data deposited), as soon as possible
2. **any other data** (for instance curated data not directly attributable to a publication, or raw data), including the associated metadata, as specified and within the deadlines laid down in the Data Management Plan, DMP, that is, according to the individual judgement by each project/grantee.

Open access to Research Data

Step 1 - Depositing data in repositories

Deposit the research data described above, preferably in a research data repository. These are online research data archives, which may be subject-based/thematic, institutional or centralised.

Useful listings of repositories include the [Registry of Research Data Repositories](#) and [Databib](#).

[IAEA-NDS](#) (Nuclear Data Services), [EXFOR](#), [ENDF](#), [NRDC](#) (International Network of Nuclear Reaction Data Centres), [NEA-DataBank](#), [JEFF](#), [KADoNIS](#), [CERN Open Data](#), [AMBDAS](#), ... are all included in the Registry.

The Open Access Infrastructure for Research in Europe (OpenAIRE) provides additional information and support on linking publications to underlying research data.

Some repositories like [Zenodo](#) (an OpenAIRE and CERN collaboration), allows researchers to deposit both publications and data, while providing tools to link them. Zenodo and some other repositories as well as many academic publishers also facilitate linking publications and underlying data through persistent identifiers and data citations.

Step 2 – Enable access

As far as possible, projects must then take measures to enable third parties to access, mine, exploit, reproduce and disseminate (free of charge for any user) this research data.

One straightforward and effective way of doing this is to attach Creative Commons Licences (CC BY or CC0) to the data deposited.

Projects should provide information via the chosen repository about the tools available to validate the results, e.g. specialised software or software code, algorithms and analysis protocols. Where possible, they should provide these instruments themselves.

Open access to Research Data

SANDA proposed to provide open access to research data

A detailed proposal will be prepared within WP6 by month M6 in the DMP.

In the proposal and the grant agreement we indicated that: For the nuclear data produced by the project, either experimental or evaluated, the main dissemination path is the well-established [international libraries and international nuclear data centers coordinated by IAEA](https://www-nds.iaea.org/), <https://www-nds.iaea.org/>, and by the [NEA Data bank](https://www.oecd-nea.org/databank/), <https://www.oecd-nea.org/databank/>.

These organizations maintain on their own resources an infrastructure that receives, tests, archives, stores and distribute both experimental nuclear data in the EXFOR format and evaluated nuclear data libraries in the standard formats of ENDF and ENSDF.

The project will communicate all experimental data to the [EXFOR](#) nuclear database of the IAEA. For most evaluated data (cross sections, decay data, fission yields,...) the project will liaise with the [JEFF project](#) (NEA/OECD) to make sure that the results (transmitted in the form of ENDF-formatted evaluated files) received priority consideration for inclusion in the JEFF-4 library. There will then be available from the NEA data Bank and from the IAEA ENDF area <https://www-nds.iaea.org/exfor/endl.htm>.

Finally, for the evaluated nuclear structure data the project will update [ENSDF](#) files and update them to the IAEA data repository and distribution <http://www.nndc.bnl.gov/ensdf/>.

All data from IAEA nuclear data databases (EXFOR, ENDF, ENSDF,...) are openly available and both [NEA and IAEA provide software and tools to access, validate and mine these databases](#).

In addition, we will evaluate the options of Zenodo, Open AIRE and others within the WP6.

Financial issues from the GA

- Eligible costs: Direct personnel costs, direct costs for subcontracting, internal or external goods and services, indirect costs (25% except subcontracting and in-kind).
- Attention to rules for eligible cost of different types: actual costs, unit costs, flat-rate costs.
- Respecting to the limit to the maximum grant amount per beneficiary
- Attention to receipts: no-profit rule.
- Rules for purchasing goods, works or services: Subcontracting.
- Transfers between beneficiaries do not need amendment if action implemented as described in Annex 1.

Financial issues

Eligible other direct costs:

- Travel costs and related subsistence allowances,
- The depreciation costs of equipment, infrastructure or other assets,
- The costs of renting or leasing equipment, infrastructure or other assets,
- Costs of other goods and services (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary),
- Capitalised and operating costs of 'large research infrastructure',
- Costs of internally invoiced goods and services directly used for the action

Ineligible other direct costs:

- Many different concepts related with costs related to return on capital; debt and debt service charges; provisions for future losses or debts; interest owed; doubtful debts and others
- currency exchange losses
- deductible VAT

Financial issues

Reporting periods

- The action is divided into the following 'reporting periods':
 - RP1: from month 1 to month 18
 - RP2: from month 19 to month 36
 - RP3: from month 37 to month 48
- A periodic report within 60 days following the end of each reporting period:
 - periodic technical report
 - periodic financial report
- Final report
- Continuous reporting

Ethics and Security

Ethics issues

- Some of the measurements and research activities proposed in the WP1, WP2 and WP5 of SANDA involve the use of **small quantities of radioactive isotopes and sources of radiation**.
- The concerned activities and all preparatory operations with those radioactive materials and sources of radiation will be performed at specific facilities, **radioactive installations, that have been designed for minimizing down to below the regulatory limits the impact of the experiments to workers, general public and environment**.
- The facility designs, operation conditions and operation protocols have been validated and **the facilities have been authorized to operate with radioactive materials up to well identified limits and to perform a well-defined type of operations, by the corresponding national nuclear regulatory bodies**. The proposed **experiments within SANDA are in all cases included in the inventories and scope of operations authorized for the concerned facilities**.
- Furthermore, all the actions in these facilities are **supervised by specially trained and authorized persons**, normally from the staff of the radioactive installation and/or staff of the internal radiation protection offices of the respective participants. **Radioactive installations and radiation protection offices are controlled by the national nuclear regulatory bodies** and must ensure that the experiments are carried out according to national law which ultimately stems from IAEA guidelines.
- **All partners operating one radioactive installation for the SANDA activities must provide the coordinator with a copy of their national authorization to operate.**

Division of Beneficiaries' Roles And Responsibilities

- The beneficiaries are jointly and severally liable for the technical implementation of the action
- Each **beneficiary** must:
 - keep information stored in the Participant Portal Beneficiary Register up to date (see Article 17);
 - inform the coordinator immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 17);
 - submit to the coordinator in good time:
 - **individual financial statements** for itself and its linked third parties and, if required, certificates on the financial statements (see Article 20);
 - the data needed to draw up the **technical reports** (see Article 20);
 - ethics committee opinions and notifications or authorisations for activities raising **ethical issues** (see Article 34);
 - any other **documents or information required by the Commission** under the Agreement, unless the Agreement requires the beneficiary to submit this information directly to the Commission.

Division of Beneficiaries' Roles And Responsibilities

- The **coordinator** must:
 - **monitor that the action** is implemented properly (see Article 7);
 - act as the **intermediary for all communications** between the beneficiaries and the Commission (in particular, providing the Commission with the information described in Article 17), unless the Agreement specifies otherwise;
 - **request and review any documents** or information required by the Commission and verify their completeness and correctness before passing them on to the Commission;
 - **submit the deliverables and reports to the Commission** (see Articles 19 and 20);
 - ensure that all **payments are made to the other beneficiaries** without unjustified delay (see Article 21);
 - **inform the Commission of the amounts paid to each beneficiary**, when required under the Agreement (see Articles 44 and 50) or requested by the Commission.
- **Consortium agreement**