

Strategy for Open Science at UBB

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1. Preamble

What is Open Science?

Open Science (OS) is a component of science policy that aims to achieve a higher level of integration of scientific results into the development of society through open access to scientific publications and research data obtained through public funding, as well as by facilitating open processes of knowledge production and accumulation through innovation (open innovation), education (open educational resources), and collaborative citizen participation (citizen science).¹

Open Science (OS) involves open access to publications (Open Access) and scientific infrastructures/data/software/methods, educational resources (Open Educational Resources), as well as open evaluation (Open Evaluation) or citizen science participation. Where feasible, OS allows for accelerating scientific research, bringing added inclusivity and accessibility for the scientific community, socio-economic or socio-cultural actors, and citizens.

How does it work?

Any effort to streamline access to scientific results, at any stage (data/procedures/methods generation, placing them in the public domain, accessing and processing them, accessing intermediate and final results – including publication, recruiting the public in data generation efforts, opening communication to as wide an audience as possible, including through open courses and conferences), can be considered part of OS. Each of these components requires complex efforts and resources (including infrastructure).

Making primary scientific research data public requires dedicated platforms. External repositories (databases) can be used, but some institutions also choose to create their own repositories. There are two major challenges: (1) for these repositories to withstand the test of time (especially to survive administrative and funding cycles) and (2) for the data to be in an easily accessible format. In the latter issue, the concept of **FAIR** data (*findable, accessible, interoperable, reusable*; in other words, data should be easily found by interested parties, easily accessed, in a uniform and compatible format (interoperable), and reusable by anyone) has been defined, as well as the concepts of TRUST (Transparency, Responsibility, User focus, Sustainability and Technology) and CARE (Collective benefit, Authority to Control, Responsibility, Ethics). A separate subcategory of this field is represented by databases and software programs for managing bibliographic references, especially those adapted to new data sharing models.

Making software packages public has long been a common practice.

Open publication of results is also well-known, although far from being a uniform practice. Through its journals, UBB has long promoted the so-called *Diamond Open Access* model – where neither access to online articles nor publication is charged. In contrast, a number of other *Open Access* publishing models include fees for authors and/or partially unrestricted access (either for specified periods or with limitations on intellectual property elements). The practice of charging authors or readers is controversial, especially where the quality of publications is at the borderline of pseudoscience or where financial arguments are accused of taking precedence over scientific ones in publishing. More recently, the idea of a **new publishing model is being promoted, following a blog-like model** – where results and their interpretations are made available to the public as they accumulate, without being placed in independent articles in journals. Regardless of whether this model is adopted or not, **the central idea of Open Science (OS) is for the entire process of scientific**

¹ uefiscdi.gov.ro :: Dezvoltarea cadrului strategic pentru Open Science în România;

research to be as transparent as possible – from the primary collection of data to processing, interpretation, and publication.

Open evaluation of results is a challenging concept – where referee comments and even their identity remain public. While in certain fields or publishing models, the anonymity of evaluation provides notable advantages, it is argued that in other contexts, open evaluation can help eliminate practices on the ethical borderline and hold evaluators accountable. Moreover, such a practice could allow for fair recognition of referee work.

Citizen Science is already operational in fields where the collection of large volumes of data from various locations/contexts matters or the pooling of distributed computing resources in different locations. In some areas (e.g., public policy), citizen participation can go beyond data collection to decisions about what to do with that data – including in terms of public policies based on them.

What doesn't it serve?

There are, of course, areas where OS is not applicable. For example, for reasons of security, terrorism prevention, etc. Additionally, there may be situations where the relevance of OS is overestimated with harmful effects on the quality of science and value scales. The risk is often highlighted that the publication of results may become a popularity competition where "fans" and publicity matter more than the scientific substance of contributions. At UBB, these considerations are a constant concern – expressed within and with the support/consensus of the organizations of which UBB is a part, such as The Guild or EUTOPIA.

2. Context

2.1. European context

At the European level, efforts to support the transition to Open Science (OS) have been progressively unfolding in recent years, targeting all aspects of research, from scientific discovery to publication, with the fundamental aspect being access to publications and research data.

The importance and necessity of implementing Open Science are grounded in the benefits it provides to society at large and science in particular: (1) it intensifies scientific collaborations and information sharing, (2) increases the availability of scientific knowledge, making it accessible and reusable for everyone, (3) opens up processes for the creation of scientific knowledge, evaluation, and communication with societal actors beyond the traditional scientific community². More specifically, OS advocates (including various EU institutions – including those funding scientific research) argue that the rapid and efficient dissemination of research results to the academic community, industry, and the general public can make science:

- More reliable, efficient, and effective – by allowing for faster and safer verification of data accuracy and interpretations;
- More efficient – by avoiding redundant efforts in conducting similar research or by making collaboration more accessible to a broader spectrum of researchers;

² [UNESCO Recommendation on Open Science - UNESCO Digital Library](#);

- More responsive to societal demands of citizens, as science can become more transparent and open;
- More quickly transferable from the laboratory to the citizen (through industry/economic means) – especially for applied research;
- More credible – the integrity of research is more effectively seen in an open and transparent environment;
- More representative/inclusive;
- More global, allowing scientists to exchange knowledge and data before publication, enabling science to progress at a faster pace, and innovations to become accessible more rapidly.

By 2030, according to the vision for Europe³, Open Science "has become a reality and offers a whole range of new and unlimited research and discovery opportunities globally. Scientists, citizens, publishers, research institutions, public and private research funders, students, and education professionals, as well as companies worldwide, share an open, virtual environment [...] Free and open science, of high quality [...] focusing on the major societal challenges of our time, shapes the daily lives of a new generation of researchers."

To achieve this vision, European-level policies⁴, recommendations⁵, and a series of initiatives have been launched. Recommendation (EU) 790/2018 on access to and preservation of scientific information mentions that member states should establish and implement clear policies, detailed in annual action plans, to support the transition to Open Science.

The European policy on Open Science focuses on the following eight aspects⁶:

- Open Data - FAIR (findable, accessible, interoperable, reusable);
- Infrastructure for research data - European Open Science Cloud (EOSC);
- New metrics in the process of evaluating the quality and impact of research;
- Future academic communication based on open access to all scientific publications;
- Recognition of Open Science activities in the professional evaluation of researchers;
- Research integrity;
- Scientists having skills to apply Open Science practices;
- Citizen involvement in science.

Several European projects have been launched, such as OpenAIRE⁷, RDA Europe 4.0⁸, NI4OS⁹, FOSTER¹⁰, UNESCO recommendations¹¹, and the EOSC platform¹², with the aim of supporting member states in the transition to Open Science.

³ [Open innovation, open science, open to the world | Shaping Europe's digital future \(europa.eu\)](#);

⁴ [The EU's open science policy | EURAXESS \(europa.eu\)](#); [Policies | openscience](#);

⁵ [COMMISSION RECOMMENDATION \(EU\) 2018/ 790 - of 25 April 2018 - on access to and preservation of scientific information \(europa.eu\)](#); [UNESCO Recommendation on Open Science - UNESCO Digital Library](#);

⁶ [ec_rtd_factsheet-open-science_2019.pdf \(europa.eu\)](#);

⁷ [OpenAIRE](#);

⁸ [RDA | Research Data Sharing without barriers \(rd-alliance.org\)](#);

⁹ [NI4OS- Europe – National Initiatives for Open Science in Europe](#);

¹⁰ <https://www.fosteropenscience.eu/foster-taxonomy/open-science-policies>

¹¹ <https://unesdoc.unesco.org/ark:/48223/pf0000379949>

¹² [EOSC Portal | \(eosc-portal.eu\)](#);

2.2. National context

At the national level, the entity coordinating the transition to Open Science is UEFISCDI. Within the project "Increasing the Capacity of the RDI System to Respond to Global Challenges. Strengthening the Anticipatory Capacity for Evidence-Based Public Policy" - SIPOCA 592 (MySMIS Code 127557), UEFISCDI is responsible for developing the strategic and functional framework for Open Science, taking into account the recommendations of the European Commission and European practices. In December 2022, the White Paper on the Transition to Open Science was published, representing the final form of the Strategic Document on the Development Framework of Open Science in Romania¹³.

Additionally, within UEFISCDI, the Open Science Knowledge Hub Romania¹⁴ (OSKH-RO) was organized to provide support to national research and innovation communities and contribute to the national agenda for the transition to Open Science. Within this hub, a series of documents on Open Science have been compiled and elaborated, accessible to the scientific community and interested individuals in the "Open Science Library" section¹⁵.

Efforts to achieve the transition to Open Science are also supported by the National Strategy for Research, Innovation, and Smart Specialization 2022-2027¹⁶ through established priorities. Under the first overall objective "Development of the research, development, and innovation system," the specific objective is "Ensuring the transition to Open Science and facilitating progress in scientific research and excellence," with the following planned actions:

A1. Transition to an open science system aiming for: (1) accessibility, reuse of scientific research data, and better visibility of scientific production; (2) obtaining higher-quality results by eliminating duplication of results, facilitating the replication of research, and combating fraud in science; (3) supporting the transition to the storage of the knowledge base in digital repositories; (4) increasing transparency in the use of public funds for research; (5) encouraging collaboration in research, accelerating innovation, and enhancing competitiveness; (6) opening and active participation of Romanian researchers in the European Research Area (ERA).

A2. Actions to encourage citizen participation: projects that encourage citizen participation in various stages of the research process, such as data collection, will be supported, and forms of citizen involvement will be piloted.

A3. Continuing and expanding funding for exploratory research projects and complex frontier research projects aiming to support and promote advanced multidisciplinary, interdisciplinary, and transdisciplinary scientific research, substantial progress at the knowledge frontiers, and the encouragement of new methods and techniques, including unconventional approaches and investigations at the interface of already established disciplines.

UEFISCDI is the national representative in the following European initiatives:

- The *OpenAIRE* network – within which the national *OpenAIRE NOAD* Romania¹⁷ office was established with the aim of creating a community of actors interested in open science at the local level, laying the groundwork for the necessary framework for open science practice, acting as a contact point for Open Science.

¹³ uefiscdi.gov.ro :: Dezvoltarea cadrului strategic pentru Open Science în România;

¹⁴ [Despre Open Science Knowledge Hub \(open-science.ro\)](https://open-science.ro);

¹⁵ [Open Science Knowledge Hub | Resurse \(open-science.ro\)](https://open-science.ro);

¹⁶ [strategia-naional-de-cercetare-inovare-i-specializare-inteligent-2022-2027.pdf \(gov.ro\)](https://strategia-naional-de-cercetare-inovare-i-specializare-inteligent-2022-2027.pdf);

¹⁷ uefiscdi.gov.ro :: OpenAIRE NOAD Romania;

- The *RDA Europe 4.0* network (The Research Data Alliance is currently represented in Europe by 22 RDA Nodes) – within which the *RDA Node Romania*¹⁸ was created to (i) support data research at the national/local level, promoting the vision and results of RDA, ensuring the adoption of RDA principles; (ii) create synergies with national, European, and global organizations in concrete actions to facilitate the adoption of RDA recommendations and principles; (iii) act as a central point of contact between national/regional data actors and RDA, interacting with national research funding bodies; (iv) contribute to defining European data policies; (v) contribute to defining the RDA strategy and participate in RDA processes.
- Member of the *Science Europe Association*¹⁹ representing the main public organizations funding or conducting cutting-edge and innovative research in Europe; the association currently brings together 40 organizations from 30 European countries.
- The *National Initiatives for Open Science project - NI4OS* (partnered with the National Institute for Research and Development in Informatics – ICI Bucharest), within which the Open Science Cloud - RO-NOSCI²⁰ was initiated. The development of this national initiative also involved the National Institute for Research and Development for Nuclear Physics and Engineering "Horia Hulubei" – IFIN-HH, a part of the European project "EGI-ACE: Advanced Computing for EOSC." RO-NOSCI is a coalition of organizations²¹ at the national level with the goal of establishing the national cloud for open science, optimizing and coordinating activities regarding the integration of national infrastructures and services into EOSC, facilitating access for the academic and research environment to EOSC resources, promoting and implementing open science policies at the national level. RO-NOSCI is a non-legal personality coalition, and joining it does not imply financial commitments.

2.3. Actions Undertaken at UBB for the Transition to Open Science

Through the Strategic Plan for the period 2020-2024²² and other adopted strategies²³, UBB prioritizes the efficient dissemination of scientific/academic information to relevant communities, whether academic, socio-economic, or the general public. In this regard, the university is implementing a series of actions:

- a. All publications managed by UBB (journals, PUC publishing house) adopt the Diamond Access model (no fees for online publication, no online access fees; payment is maintained for printed publications). The associated infrastructure is supported through voluntary activities, internal grants from the Rectorate based on performance objectives, contributions from research grant funds, external resources attracted for Open Science activities from national and European sources, and sponsorship contracts.
- b. Performance objectives of UBB journals include (1) indicators of intrinsic academic quality (e.g., improving indicators of authorship diversity or maintaining them at parameters compatible with world-class criteria, improving content quality), (2) improving impact indicators in relevant communities and the general public (e.g., increasing the number of databases in which they are indexed with a focus on the top 3 in international rankings - WoS, Scopus, ERIH+ - and those specialized in Open Access but not limited to them,

¹⁸ uefiscdi.gov.ro :: [Research Data Alliance \(RDA\) Node](#);

¹⁹ [Science Europe](#);

²⁰ [RO-NOSCI \(open-science.ro\)](https://open-science.ro);

²¹ https://uefiscdi.gov.ro/resource-862292-anunt-ro-nosci_1-iulie-2021_11-martie-2022.pdf

²² https://www.ubbcluj.ro/ro/despre/prezentare/files/strategii/PS_UBB_2020-2024_FINAL.pdf;

²³ <https://senat.ubbcluj.ro/wp-content/uploads/2021/05/HS-nr.-59-privind-Strategia-Cercet%C4%83rii-Dezvolt%C4%83rii-Inov%C4%83rii-CDI-la-UBB.pdf>;

increasing views, increasing citations, improving professional bibliometric indicators such as impact factor, as well as general impact indicators involving access through social networks, especially those relevant in international university rankings - such as PlumX, included in the Scimago ranking), and (3) improving the relationship with the socio-economic and professional environment, or maintaining it at parameters compatible with world-class criteria (e.g., partnerships with professional societies, sponsorship contracts).

- c. The possibility of publishing in Open Access for UBB community members is guaranteed by: (1) stimulating Diamond Open Access initiatives not only internally but also in all professional forums where UBB has influence/voice, (2) internal grants to support Open Access fees for Q1 and Q2 category journals where Diamond Access alternatives were not evident, (3) partnership agreements, transformative or otherwise, with as many publishers/journals as possible (preferably through the national association ANELIS+) to ensure free or easier access to publication for UBB community members, (4) a general system at the university level to prevent possible diversion of UBB resources by predatory publishers and/or vanity publishing (prohibiting the funding of such publications from any institutional source, prohibiting the promotion of such institutions - all backed with proportional sanctions).
- d. Organizing an efficient system for popularizing scientific results within the UBB community and professional communities, the socio-economic environment, and the general public. This system includes (1) UBB's own infrastructure and network for disseminating publication events, (2) UBB's own infrastructure and network for disseminating results/knowledge in general, (3) active support for the participation of UBB community members in scientific, professional, social events, etc., as presenters with the most prestigious status possible.
- e. The first step towards popularizing UBB's results is towards its own community. UBB community members - academics, students, support staff - are the first target of Open Science communication, becoming, at the same time, vectors of communication for UBB's values and results to the external world. The second step, in the same spirit, is popularizing UBB's results in the consortia and institutional partnerships to which the university belongs. Effective communication at these levels is the most solid premise for efficient communication to the more general or specialized public outside UBB.

Additionally, in the direction of transitioning to Open Science, UBB aims to:

- a. Develop open courses, including those integrated into international online platforms, with attached transferable credits;
- b. Provide support for 100% Open Access publication of its community members' publications, with a priority for Diamond Open Access;
- c. Support the complete publication of research data accompanying scientific publications by registering them in specialized international repositories or journals dedicated to publishing such data.
- d. Avoid the migration to the Open Access system derailing into a migration towards the substitution of professional peer review with the "people's tribunal." In this sense, any internal evaluation criteria at UBB may request the minimal/eliminatory element of Open Access publication - but only where it is demonstrable that resources were/are available. Evaluation criteria will not give additional points to a publication just because it is Open Access. Evaluation criteria will take into account situations where the temporary bibliometric status of a journal (e.g., impact factor) is artificially higher due to a permissive editorial

policy oriented towards quantity at the expense of rigorous peer-review evaluation or the compromise of academic integrity standards in general.

2.4. SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • UBB has committed to efficiently providing scientific/academic information to relevant communities as a priority. • Publications managed by UBB follow the Diamond Access model (fees are maintained only for printed publications). • UBB supports the complete publication of research data accompanying scientific publications by registering them in international repositories/specialized journals. • Through the adopted internal measures, UBB ensures its community members the opportunity to publish in the Open Access system. • Establishment of the Working Group for Open Science 	<ul style="list-style-type: none"> • Lack of a specialized structure to popularize OS and provide guidance/clarifications to the academic community; • Absence of a centralized website for promoting scientific events within UBB to enable access/participation by a larger number of people; • Specific capabilities of OS are not yet developed; • Limited popularization of OS and its tools within the academic community; • Limited interaction with citizens regarding their involvement in scientific projects
Opportunities	Threats
<ul style="list-style-type: none"> • Policies, recommendations, statements, agreements issued at the European level; • Establishment of the European Open Science Cloud (EOSC) to support the transition of states to Open Science; • Involvement of Romania, through UEFISCDI, in various projects at the European level (OpenAIRE, NI4OS, RDA Europe 4.0, etc.); • Creation of specific structures within UEFISCDI that can provide consultancy regarding the approach and transition to Open Science (e.g., Open Science Knowledge Hub Romania); • Models offered by other universities and/or countries regarding the transition to Open Science; • Funding mechanisms for the transition to Open Science available within the EU; • Accelerating digital transformation in Europe; • At the national level, the Strategic Document 	<ul style="list-style-type: none"> • Lack of clear provisions regarding intellectual property rights under conditions of open access to publications; • Researchers' reluctance to publish in Open Access due to ambiguity regarding intellectual property rights; • Risk of compromising scientific integrity standards in general; • Lack of adequate metrics for evaluating the quality of research and its impact;

<p>on the Framework for the Development of Open Science in Romania has been developed;</p> <ul style="list-style-type: none"> • The National Strategy for Research, Innovation, and Smart Specialization 2022-2027 supports the transition to Open Science; • Connecting UBB to partnership structures and international collaborations (The Guild, EUTOPIA); 	
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3. Vision. Mission

3.1. UBB 2030 Vision

A World-Class University through trust, openness, tradition, and excellence, UBB is a model of a culture of free and open scientific research at the highest standards of quality, strengthening the relevance of research in addressing societal challenges and society's trust in science and innovation. It serves as a national benchmark and a globally recognized university.

3.1. Mission

UBB openly provides diverse, multilingual, accessible, and reusable scientific knowledge to the local, regional, national, and international community, for the benefits of science and society. It aims to stimulate communication with social actors beyond the traditional scientific community.

4. Strategic objectives

Strategic Objective 1 – Organization of Administrative Resources

In order to transition to Open Science at the UBB, to centrally coordinate the related/involved actions, and, last but not least, to ensure the university's involvement in various national and international bodies supporting OS implementation, the existence of an Office for Science and Society (OSS) with specialized personnel is necessary. A preliminary step was taken by establishing the Open Science Working Group (GLSD), whose administrative support for OS-related activities is provided by the University Strategy Center (CSU). To ensure the continuity of OS activities until the OSS is organized, existing resources can be utilized, including personnel from UBB central services (e.g., CMTTC, CMCS, CSU); personnel from faculties/institutes/departments; collaborators from BCU or other academic libraries; representatives/volunteers from student organizations.

Another priority within the university is the efficient provision of scientific/academic information to relevant communities—whether academic, socio-economic, or the general public. As

of the drafting of the strategy, a UBB Repository is being planned under the coordination of the Vice Rectorate for Research, and the implementation of the Diamond Open Access principle is underway for all UBB journals, with the majority already operating under this model. The integration of the UBB Repository with a national one (e.g., within ANELIS+) and international repositories such as EUTOPIA is anticipated. Another course of action is the development of infrastructure to mirror the structure and activities of the European Open Science Cloud (EOSC)—including compatibility and integration of resources with EOSC.

For those interested in generating and/or using Open Data, UBB already offers relevant courses and seminars. The intention is to highlight these centrally, alongside a dedicated offering of on-demand courses/instructions and identification of situations where such courses can be obtained externally (with priority from Consortium partners, UEFISCDI, Guild, and EUTOPIA). In a subsequent initiative, the training session package could be designed to be accredited or align with the Bologna credit system.

Regarding citizen involvement in science projects, UBB is already conducting such projects, but they are scattered and little known to the public—meaning that significant resources from the potential participant pool and dissemination of results remain untapped. An online platform is desired where UBB can present its offerings comprehensively and accessibly, citizens can select projects of interest and find simple and effective tools to get involved. Citizens should be able to register their long-term interest, allowing efficient contact whenever new projects of interest arise, and there should be the possibility of direct data collection and processing through the platform.

The Office for Science and Society (OSS) plays an important role in training academic staff, researchers, and other interested individuals in data and scientific results management through organizing training sessions on specific topics. In line with the general management of data and scientific results, UBB is responsible for providing infrastructure and training resources for academic writing and communication—from the basic structuring of investigative discourse to writing in international languages, to public communication—such as supporting scientific presentations or popular science presentations or interacting with the general public on science topics in mass media and social networks.

Specific Objective 1.1: Establishment of an Office for Science and Society (OSS)

Actions: 1.1.1. Set up the Office for Science and Society (OSS)

1.1.2. Recruitment/training/formation of personnel responsible for OS

1.1.3. Allocation of space with necessary facilities

1.1.4. Creation/organization of a multilevel network within UBB to facilitate efficient knowledge dissemination

Specific Objective 1.2: Management of Open Research Data

Actions: 1.2.1. Organization of the UBB Repository; Diamond Open Access system

1.2.2. Integration of the UBB Repository with the national and international ones

1.2.3. Organization of dedicated data storage and processing spaces

1.2.4. Coordination/facilitation/centralization/organization of training

1.2.5. Development of a platform for science with citizen involvement

Specific Objective 1.3: Organization, among the academic community and other interested parties, of awareness, training, and debate events on the various available tools and, respectively, the evaluation of activities in the OS paradigm

Actions: 1.3.1. Organization of sessions for the use of software for managing bibliographic references (e.g., EndNote, Zotero, Mendeley)

1.3.2. Organization of sessions for managing one's account on international scientific reference platforms (e.g., ResearcherID/Publons/WoS, Google Scholar, Scopus, ResearchGate, Academia, SSRN)

1.3.3. Organization of sessions for managing bibliographic databases (e.g., WoS, Scopus, Mendeley, PubMed)

1.3.4. Organization of sessions for managing open, FAIR data

1.3.5. Organization of sessions for using resources for academic writing and communication

1.3.6. Organization of sessions for the use and optimization of UBB management

Strategic Objective 2: Communicating Science Within the UBB Community and Beyond

The results of scientific research conducted at UBB must be communicated both within the community of researchers (communication carried out by an expert to other experts in similar or different scientific fields) and within the broader audience of non-experts. This communication can have several benefits: generate support for scientific research and education, serve as an efficient mediator between different groups, contribute to the foundation of strategic decisions and public policies, create a scientifically educated public, and, last but not least, ensure societal support for scientific research through the transparency of scientific research.

A first step in this direction is the organization of a centralized calendar that marks events in the category found in the UBB Research Newsletter, with the possibility of selection/searching by faculties/institutes/academic schools and by categories of events, as well as keywords from predefined lists, so that it can be disseminated/used directly by faculties. Such a calendar will facilitate both inter-collegial information about events of interest, increase the efficiency of organizing and promoting events by avoiding overlaps and optimizing the use of resources, and communication to a wider audience, making it possible to access these events and other social actors.

BSS can target the organization of specific Open Science events. It can also facilitate/integrate events from other programs run within UBB, such as UBBGoesGreen and, respectively, scientific student circles open to the public. A series of open courses is proposed to be set up ("Colloquium Fundamentale"), for example within the already-running Studium Generale program, with a content detailed to the extent that the courses may be integrated within the (micro)credit system and students can choose these lectures as optional courses.

A separate component should be events aimed at popularizing science to the external environment. The tradition established by public events within Studium Generale must be extended and detailed, including face-to-face events outside UBB. Events such as "open doors" can also be included in this category.

All of the above requires active and responsible interaction with partner organizations. A programmatic guide in this regard is proposed in Annex 1 of this document.

Specific Objective 2.1: Dissemination of scientific events organized by UBB or by other organizations in partnership with UBB

- Actions: 2.1.1. Establishment of a centralized program for disseminating scientific events held at UBB or in partnership with UBB
- 2.1.2. Organization of a calendar containing all scientific events held at UBB or in partnership with UBB
- 2.1.3. Appointment of a responsible person and establishment of the communication flow for scientific events within UBB

Specific Objective 2.2: Launching alternative activities for students to promote scientific activities carried out at UBB

- Actions: 2.2.1. Integration of events from other programs run at UBB into student activities
- 2.2.2. Launching a series called Colloquium Fundamentale with ECTS credits
- 2.2.3. Organization of interactive activities for students, where they can get involved in programs carried out at UBB, including communication of OS to students

Specific Objective 2.3: Popularizing science, respectively, scientific activity within UBB

- Actions: 2.3.1. Organization of series of seminars/conferences open at the UBB level and open to the entire academic community – online/hybrid
- 2.3.2. Organization of various events open to the general public (open doors, museum exhibitions, information sessions, seminars, conferences, etc.)

Objective 3: Tracking the Valorization of Open Science Components in Evaluation Processes

Open Science is not an objective in itself and neither a substitute nor even an indicator of quality. However, where it brings additional elements of impact, clarity, and/or quality to scientific contributions, it must be recognized in the evaluation processes at UBB and/or in which UBB is involved. All dimensions of Open Science must be valued – open data, open software, open access, open evaluation, citizen science, open educational resources. GLSD will engage in a dialogue with CS-UBB and the Vicerectorate responsible for quality to monitor these aspects.

Another important aspect is the scientific evaluation in the context of Open Science. In this regard, sessions are planned to target: informing and debating current international evaluation principles as implemented by CS-UBB; analyzing aspects under scrutiny in the evaluation process (e.g., publications between quality and "publish or perish," qualitative vs. quantitative evaluation, the status of Open Access contributions, predatory publications/editors/conferences, minimum standards vs. optimal standards vs. excellence, using databases to reduce workload for employees in the evaluation processes); principles of professional/career evaluation in the context of Open Science.

Specific Objective 3.1: Establishing a new set of indicators for evaluating professional activity in the context of Open Science

Actions: 3.1.1. Organizing internal debate sessions on this topic

3.1.2. Operationalizing Open Science components and including them among the criteria for evaluating professional activity

3.1.3. Developing mechanisms to implement the criteria for evaluating professional activity in the context of Open Science

Specific Objective 3.2: Involving UBB in establishing new research evaluation metrics at the national level

Actions: 3.2.1. Organizing debate sessions on research evaluation in the context of Open Science

3.2.2. Establishing a set of criteria for evaluating scientific research

3.2.3. Developing mechanisms to implement the proposed evaluation criteria

3.2.4. Proposing criteria for evaluating scientific research in the context of Open Science and mechanisms for national-level implementation

Strategic Objective 4: Developing a Policy on Copyright at UBB in the Context of Open Science

Before the introduction of the term Open Science, i.e., open access to publications, regulations regarding copyright and, in general, intellectual property were very clear; copyright is recognized to the person or individuals who created the work, and they have the exclusive patrimonial right to decide if, how, and when their work will be used, including consenting to the use of the work by others²⁴. However, the rapid development of communication technologies has transformed the distribution and exploitation of creations massively, necessitating a new legal framework for copyright. In the European Commission Recommendation 790/2018 on open access to publications resulting from publicly funded research, it is mentioned that member states must ensure that open access to scientific publications resulting from publicly funded research is granted as soon as possible, preferably at the time of publication, and in any case, within a maximum of six months from the date of publication (up to twelve months in the case of social sciences and humanities). Taking these aspects into account, the EU Directive 2019/790 on copyright and related rights in the Digital Single Market²⁵ was issued in 2019, aiming to "establish rules aimed at further harmonizing Union law on copyright and related rights within the internal market, taking into account in particular digital and cross-border uses of protected content."

At the national level, in 2022, based on European directives, Law no. 179 on open data and the reuse of information from the public sector was approved²⁶, containing provisions regarding data

²⁴ [Law nor. 8/1996 regarding intellectual property \(euroavocatura.ro\)](#); Law no. 69/2022 for modification of Legii nr. 8/1996

²⁵ <https://op.europa.eu/en/publication-detail/-/publication/214471fe-786e-11e9-9f05-01aa75ed71a1/language-ro>;

²⁶ [LEGE 179 09/06/2022 - Portal Legislativ \(just.ro\)](#);

from research, open access to them, and their reuse for commercial and non-commercial purposes "to the extent that they benefit from public funding, and researchers, entities conducting research activities, or entities funding research activities have already made them available to the public through an institutional or thematic database. In this context, account is taken of legitimate commercial interests, knowledge transfer activities, and pre-existing intellectual property rights under the law."

However, there are still ongoing debates about copyright in the conditions of publishing in Open Access. The European Federation of Academies of Sciences and Humanities (ALLEA)²⁷ advises research communities to better leverage the rights and limitations granted to authors and research institutions under national and EU copyright law to enhance the possibilities of immediate publication in Open Access. Universities and other research institutions are encouraged to consider reserving certain rights in publications produced by employees for themselves.

To address these recommendations and harmonize Open Access publishing requirements with copyright considerations, a first step would be to develop a policy on copyright in the context of Open Science, specifically Open Access publishing, by a designated group of specialists. After analyzing European and national regulations and recommendations and examples of best practices provided by other EU member states, the designated group is to identify mechanisms for the use and transfer of copyright that allow the broadest and fastest access to the results of publicly funded scientific research.

Specific Objective 4.1: Establishing a working group responsible for developing a policy on copyright at UBB

- Actions: 4.1.1. Determining the composition of the working group
- 4.1.2. Analyzing national and European regulations, recommendations from various bodies regarding copyright in the context of Open Science
- 4.1.3. Analyzing best practices at the European level

Specific Objective 4.2: Identifying mechanisms for the use and transfer of copyright that allow the broadest and fastest access to the results of publicly funded scientific research

- Actions: 4.2.1. Organizing a debate within the academic community on the use and transfer of copyright in the context of Open Science
- 4.2.2. Identifying new mechanisms for the use/transfer of copyright adapted to the characteristics and requirements of Open Science
- 4.2.3. Adopting, within UBB, the policy on copyright in the context of Open Science

²⁷ <https://allea.org/wp-content/uploads/2022/12/ALLEA-Statement-Big-Deals-and-the-New-Copyright-Rules.pdf>;

5. Monitoring and Evaluation

See Annex 2.

Annex 1

Policy regarding UBB's collaboration with other organizations

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1. Introduction

UBB's ideal is to promote specific cultural components in the local, regional, national and international community. In the current context, these components are: a) the culture of systematic and innovative knowledge-based action; b) culture of lifelong and innovative learning; c) multiculturalism, intercultural and interreligious dialogue, mutual respect, tolerance and inclusion - as defining values of the European traditions from which UBB claims itself, but also of the new global vision of society. d) culture of scientific-technological, organizational and civic competence; e) culture of personal and moral development; f) culture of proactive attitude and participation g) culture of integration in diversity, in conditions of respect for identity and reciprocity. (UBB Charter, art. 5)

To fulfill this ideal, Babeş-Bolyai University of Cluj-Napoca interacts with various organizations at local, regional, national and international level. All these interactions are covered by this document.

The requests from other organizations for collaborations with UBB in order to implement various activities show an increasing trend. This openness on behalf of society shows that UBB enjoys respect and prestige including at local and regional level in the non-academic sphere, for which partnerships with UBB guarantee the high quality of the implemented activities. At the same time, for UBB it is important that the activities to which it is a partner are at the level of the world-class academic objectives to which UBB aspires. This document aims to guide the university's collaboration relations with other social actors, by establishing ethical standards to substantiate these relationships.

2. Principles and values

UBB incorporates and promotes the following core values: a) freedom of thought and expression; b) seeking and promoting truth; c) competence, professionalism, excellence; d) integrity; e) equity; f) social responsibility; g) respect for diversity; h) intercultural cooperation. (Charter, Article 4)

UBB follows the legal principles governing higher education, as well as lifelong learning, as follows: a) the principle of university autonomy, b) the principle of freedom of thought and expression, independence from ideologies and dogmas; c) the principle of equity; d) the principle of quality; e) the principle of relevance; f) the principle of efficiency; g) the principle of decentralization; h) the principle of public accountability; i) principles of multiculturalism and multilingualism; j) the principle of assuming, promoting and preserving national identity; k) the principle of promoting international cooperation in education and research-development-innovation; l) the principle of ensuring equal opportunities; m) the principle of transparency; n) the principle of social inclusion; o) the principle of educational inclusion of persons with disabilities; p) the principle of organizing confessional education according to the specific requirements of each recognized cult; q) the principle of basing decisions on dialogue and consultation; r) the principle of respecting the right to opinion of all direct beneficiaries of the education system; s) the principles of representativeness and proportionality at management level; t) the principle of protection of personal data. (Charter, Article 8)

Both theoretically / conceptually and methodologically, UBB's contribution, as a partner, must have a *refreshing effect* on projects through innovation and world-class expertise existing at the university. In this respect, the collaborations carried out should be a means by which UBB brings a strong innovative contribution and, respectively, to bear the conceptual and procedural world-class identity of

UBB. In its involvement in society, UBB also assumes the role of mentoring and guidance in assuming and implementing the above-mentioned principles.

The collaborations must serve the fulfillment of UBB's mission and, respectively, of the assumed strategic objectives. They are therefore subject to the provisions of the UBB Charter and regulations, including the UBB Code of Ethics and Professional Deontology.

The organizations involved in a collaboration agreement with UBB must comply with the principles mentioned above and prove:

1. honesty (professional fairness, honesty); absence of publicly known disputes/dissensions that would in any credible way cast doubt on professional fairness;
2. proven competence in the field of activity;
3. professionalism: exigency in performing the assumed activities, ethical behavior, seriousness;
4. balanced attitude towards science – and in particular avoiding pseudoscientific practices (see, for example, the UBB manifesto on pseudotherapies, <https://cercetare.ubbcluj.ro/ro/manifest-asupra-pseudo-terapiilor/>);
5. integrity, dignity, incorruptibility;
6. non-discrimination: equidistant attitude towards others, organizations or individuals;
7. responsibility: both towards our own employees and towards customers, partners and society.

3. Forms of collaborations with other organizations

UBB collaborations with other organizations can be grouped according to the objective pursued:

1. teaching: conducting university studies in double degree regime (joint degrees), conducting student practice, Erasmus programs; programmes in European consortia (e.g. EUTOPIA)
2. collaboration in scientific research-development-innovation projects: accessing funding for scientific research; conducting scientific research activities;
3. collaboration in technology transfer projects: innovative services performed in collaboration with third parties, service provision to organizations in the external environment;
4. in the context of science communication: organising scientific events and/or popularising science;
5. publishing with their own publishing houses and magazines;
6. collaboration in vocational projects – art, sports, other cultural activities

7. receiving/granting sponsorships in the form of financial support, services provided or materials: sponsorship of various events (conferences, cultural product launches, open doors, museum night, etc.), scholarships, grants, awards, training activities, consultancy, etc.

From the point of view of the duration of collaborations, one can distinguish:

- A. long-term collaborations (e.g. in European mobility programmes or joint degrees programmes);
- B. medium-term collaborations (for example, collaborations carried out in order to access funding; carrying out internship programs);
- C. short-term collaborations (e.g. cultural/sporting events, provision of services).

From the point of view of the level at which the collaboration is carried out, we can distinguish:

- I. Individual informal collaborations of UBB community members or research groups
- II. Formalized individual collaborations (through contracts managed through administrative services) of UBB community members or research groups
- III. Institutionally formalized collaborations at the level of departments, faculties, institutes, extensions or UBB at central level.

4. How to implement collaboration principles

4.1. Informal individual collaborations

Assuming and carrying out informal collaborations (3.I. in the previous section of this document) in compliance with the principles set out in this document is the responsibility of the initiators. They may request clarifications/opinions from the UBB Ethics Commission or Ombudsman (for ethics issues) or from the UBB Scientific Council (for issues related to professional activity) – the respective forums will ensure prompt answers either directly or by consulting other UBB forums/experts.

4.2. Formalized individual collaborations

The assumption and development of individual collaborations or research groups formalized through contracts managed by the administrative services of UBB (3.II. in the previous section of this document) is done with the endorsement of the UBB management, depending on the type of contract – mostly at the level of Rector and Vice-Rectorates. Two categories can be distinguished here

- a. Collaborations with official and/or recognized institutions (e.g., UEFISCDI, ERC, Guild, EUTOPIA, etc.), whose compatibility with UBB principles is predefined
- b. Occasional collaborations requiring explicit evaluation of the principles described in section 2 of this document. For these, signatories are responsible for verifying the aspects cited. Where they consider it necessary, they may consult the UBB Ethics Commission or Ombudsman (for ethics issues) or the UBB Scientific Council (for professional matters).

4.3. Institutionally formalized collaborations at the level of departments, faculties, institutes, extensions or UBB at central level

The UBB unit that wishes/initiates/has been contacted regarding the collaboration has the responsibility to pursue the explicit evaluation of the principles described in section 2 of this document. Faculties and Institutes may decide, depending on the frequency and complexity of collaborations with the external environment, to adopt their own regulations based on the principles of this document. All these institutional collaborations with the external environment are subject to the opinion of the Rector (after consultation with the Office of the Board of Directors) or, as the case may be, of the UBB Board of Directors – with the specification that at any of the levels, the initiators may be resorted to, if the initiators consider it necessary, to consult the UBB Ethics Commission or Ombudsman (for ethics issues), respectively the UBB Scientific Council (for aspects related to professional activity).

5. Collaborative restrictions

At UBB, academic freedom and social responsibility are both core values. UBB refuses to engage in activities or collaborations with entities that violate the principles and values listed in section 2. These restrictions include the formal commitments of Romania and the UN (<https://www.mae.ro/en/node/2124>) and the EU (<https://www.sanctionsmap.eu/#/main>) regarding international sanctions, but also the National Security Strategies (https://www.presidency.ro/files/userfiles/Documente/Strategia_Nationala_de_Aparare_a_Tarii_2020_2024.pdf, <https://www.enisa.europa.eu/topics/national-cyber-security-strategies/ncss-map/roncss.pdf>).

The above-mentioned lists of international sanctions to which Romania and the EU adhere include various levels and subjects – and do not imply absolute prohibitions on collaboration with entities of those countries. Sanctions against countries are intended to send messages of changing attitudes and trying to reconcile fundamental values. On the other hand, punctual and nominal sanctions against organizations

and individuals are applied by UBB without exception, according to lists https://www.mae.ro/sites/default/files/file/anul_2020/pdf_2020/2020.10.21_ arme_chimice_en.pdf (sanctions related to chemical weapons), https://www.mae.ro/sites/default/files/file/anul_2021/2021_pdf/2021_05_20_fi%C5%9F%C4%83_web_cyber_en.pdf (sanctions related to cybercrime), https://www.mae.ro/sites/default/files/file/anul_2021/2021_pdf/2021_03_23_fisa_drepturile_omului_en.pdf (sanctions related to human rights violations). For any of these countries, UBB recommends to the members of its academic community an increased circumspection in any field beyond those specified by name, namely limiting collaborations in very strict terms, only to those that can be appreciated to be productive in making the changes that sanctions envisage.

Annex 2 - Monitoring and evaluation

No.	Monitoring and Evaluation Indicator	Measuring unit	Base value (2023)	Target value (The values for 2027 and 2030 are cumulated with the values from previous years)		
				2025	2027	2030
OS1: Organization of Administrative Resources						
	Office for Science and Society organized within UBB (Babeş-Bolyai University)	-	-	functional	functional	functional
	Organizations, both national and international, supporting the implementation of OS (Open Science), in which UBB is involved	no.	5 (UEFISCDI, EUTOPIA, The Guild, Citizen Science Association USA, European Citizen Science Association)	6	7	8
OS1.1: Creation of Office for Science and Society (OSS)						
	Specialized personnel responsible for OS.	no.	0	2	4	6
	Space and specific equipment for the operation of OSS	-	-	Functional OSS	Functional OSS	Functional OSS
	Multilayered network within UBB facilitating the efficient dissemination of knowledge	-	-	Functional network on two levels (UBB and faculties/centers)	Functional network on three levels (UBB, faculties/centers, study lines)	Functional network on four levels (UBB, faculties/centers, study lines, departments)
	Individuals trained for the purpose of disseminating information related to OS	no.	5	25	50	90
OS1.2: Management of Open Research Data						
	Platforms for making scientific/academic information accessible within UBB	no.	1 (Citizenscience platform)	3 (UBB repository, Citizenscience platform, BMAA)	4	5
	National partnerships for integrating data in Open Access mode	no.	2 (ANELIS +, msg)	3	4	5
	International partnerships for integrating data in Open Access mode	no.	2 (EUTOPIA, DARIAH)	3 (+Elsevier, EOSC)	4	5

	UBB publications in the <i>Diamond Open Access</i> mode.	%	Journals 60% Books 0%	Journals 75% Books 10%	Journals 90% Books 30%	Journals 100% Books 50%
	Storage and data processing capacity	-	IT equipment and storage space for a repository of UBB journals, books, and open data	IT equipment and specific software for querying repositories/databases	IT equipment and interactive pages enabling community involvement in scientific activities; full compatibility with similar databases of European partners	IT equipment and specific software enabling the execution of all activities related to OS
	CitizenScience platform	-	Development and testing of the platform	Functional	Functional	Functional
	Accesses to the CitizenScience platform	no.	0	30.000	50.000	80.000
	Categories of individuals accessing the CitizenScience platform	-	-	UBB personnel, local community citizens	UBB personnel and personnel from other universities, citizens from the regional and national community	Researchers, teaching staff, and citizens from other countries
	Training sessions organized for the management and use of the CitizenScience platform	no.	2	4	6	10
	Beneficiaries of the training sessions/Trained individuals	no.	2	10	20	30
OS1.3: Organization, within the academic community and among other interested individuals, of awareness, training, and debate events regarding various available tools and the evaluation of activities in the OS paradigm						
	Sessions for using software for managing bibliographic references	no.	2	10	20	30
	Sessions for managing one's own account on international scientific reference platforms	no.	0	10	20	30
	Sessions for managing bibliographic database	no.	0	10	20	30

	Sessions for managing open, FAIR (Findable, Accessible, Interoperable, Reusable) data	no.	1	10	20	30
	Sessions for using resources for academic writing and communication	no.	1	10	20	30
	Sessions for using and optimizing the management of rUBB	no.	3	10	20	30
	Individuals who have benefited from training	no.	100	500	1.000	2.500
OS2: Science Communication within the UBB Community and to the Outside						
	Percentage of the UBB community informed	%	10	50	75	100
	Information sessions attended by individuals from outside the UBB community	no.	2	10	30	50
OS2.1: Dissemination of scientific events organized by UBB or in partnership with UBB by other organizations						
	Centralized calendar with scientific events organized within UBB or where UBB is a partner	no.	Partial (from CMCS)	1	1	1
	Popularized events	no.	400	600	700	900
OS2.2: Launching alternative activities for students to promote scientific activities conducted within UBB						
	Events within UBB attended by students	no.	66 (On average, 3 per faculty)	100	120	150
	Credit-bearing activities organized for students	no.	0	2	3	4
	Students participating in these activities	no.	0	660 (On average, 30 per faculty)	1.200	2.000
	Interactive activities organized for students	no.	0	22	30	50
	Students who disseminate Open Science within their peer group	no.	0	22 (1/faculty)	66 (1/level of study/faculty)	140 (+ / lines of study)
OS2.3: Popularizing science, specifically the scientific activity within UBB						
	Organized events	no.	10	25 (1/faculty, CMTTC, CMCS, UBB foundation)	50	100
	Participants in the science popularization events	no.	1.500	2.500 (100/event)	5.000	10.000
OS3: Tracking the valorization of Open Science components in evaluation processes						
	Standards for evaluating professional activity in the context of OS	-	-	Developed	Tested and adopted	Implemented
	Standards for evaluating scientific research in the context of OS	-	-	Developed	Tested and adopted	Implemented
	National-level scientific research evaluation system	-	-	-	Proposed and discussed	Adopted
OS3.1: Establishing a new set of indicators for evaluating professional activity in the context of Open Science						

	New components for evaluating professional activity in the context of OS		-	Developed	Tested and adopted	Implemented
	Mechanisms for implementing the new components for evaluating professional activity in the context of OS		-	Developed	Tested and adopted	Implemented
OS3.2: UBB's involvement in establishing new metrics for national-level research evaluation						
	New components for evaluating scientific research in the context of OS	-	-	Developed	Tested and adopted	Implemented
	Mechanisms for implementing the new components for evaluating scientific research in the context of OS	-	-	Developed	Tested and adopted	Implemented
OS4: Developing a copyright policy within UBB in the context of OS						
	University-wide policy	-	-	Developed and discussed	Adopted and implemented	
OS4.1: Establishment of a working group responsible for developing the copyright policy within UBB						
	Analysis of current national and European regulations	-	-	Developed	Revised if necessary	
	Analysis of best practices in the field	-	-	Developed	Revised if necessary	
	Recommendations	-	-	Developed and proposed	Discussed in the academic community	
OS4.2: Identifying mechanisms for the use and transfer of copyright that allow for the broad and rapid access to the results of publicly funded scientific research						
	Mechanisms for the use and transfer of copyright	-	-	Developed and proposed	Discussed in the academic community and adopted	
	Implementation procedure	-	-	Developed and proposed	Discussed in the academic community and adopted	