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BELSPO Open Access policy - Draft

Policy foundations

In compliance with the Budapest Open Access Initiative¹;

in compliance with the Berlin Declaration, signed by Flanders, the Wallonia-Brussels Federation and the Federal Administration on January 18, 2008²;

in compliance with the European Commission's Recommendation of July 17, 2012 on access to and preservation of scientific information³;

in compliance with the Brussels Declaration on Open Access to Belgian publicly funded research, signed by the respective Science Policy Ministers of Flanders, the Wallonia-Brussels Federation and the Federal Administration on October 22, 2012⁴;

in compliance with the 2016 European Research Area (ERA) Roadmap⁵;

in compliance with the Government Agreement of October 11, 2014, which encourages digital diffusion and consultation;

in compliance with the Secretary of State for Science Policy's general policy document of November 12, 2014⁶;

in compliance with the Secretary of State for Science Policy's 2015 policy document of December 8, 2014⁷;

in compliance with 2016-2019 BELSPO Administrative Agreement, which emphasises the execution of the Government Agreement⁸;

in compliance with the mission statement of the Federal Open Access Strategy Consultation Group, the purpose of which is to provide the Federal Administration with a clear policy for Open Access to publicly financed research;

and in consultation with the Interfederal Consultation Group CIS-CFS Open Access⁹;

... the Federal Science Policy Office institutes the following general Open Access (OA) policy and mandate for all of its organisations :

Policy rationale

BELSPO is determined to make research results democratically available. As a public authority, it is committed to making society benefit from taxpayer funded activity. But BELSPO is equally determined to support the sustainability and the development of scientific research as is stated by the International Council for Science.¹⁰ It is convinced that pursuing Fair Gold OA on one hand and requiring Green OA on the other hand is beneficial to achieving these goals.

Green OA is not just about archiving research results. It is a complement to Gold OA when Gold OA does not rise to its purpose, either by not being available or by being too expensive. Compelling researchers to deposit their research publications in institutional repositories has proven effective and practical for both institutions and researchers as has been shown in several universities in Belgium and abroad. OA now not only boasts higher citation levels than traditional publication, but Green OA seems to be having a higher citation level than Gold OA.¹¹ Moreover, ratings based on individual article citations are more valuable than journal based ratings. Green OA provides both researchers and institutions with visibility and excellent referencing with popular search engines such as Google Scholar. Indexing with Scopus, the reference citation and abstract portal, is guaranteed. Institutions moreover have a responsibility with regard to long term heritage conservation. State of the art sorting tools and the prospect of being able to produce up to date bibliographic lists at any time as well as the ability to publish post prints on line long before the publisher version is made available are considerable advantages. Increasingly, researchers and research institutions oppose overpriced journal subscriptions. Shifting business models to equally excessive Article Processing Charges (APC)¹² for Gold OA is not the answer. Through the following mandate BELSPO therefore commits to achieving Green OA. See annexes for additional recommendations and BELSPO initiatives.

Open Access Mandate

Publications which emanate from research wholly or partially financed by BELSPO research programs or from research performed by the scientific staff as part of its assignment in organisations under BELSPO tutelage will be made available in compliance with OA principles. The deposit of a copy of printed or on line publications in a (Green) institutional OA repository is compulsory (access to the content is optional). Journal provided (Gold) OA is strongly recommended if available, subject to the following conditions :

GOLD OPEN ACCESS

BELSPO will contribute to researcher APC requirements for publication in OA journals. These APC can be paid out of BELSPO research grants under the following conditions :

- Journals have to be listed in recognised online directories¹³ that index high quality Open Access peer-reviewed journals.¹⁴
- In the case of books, collected volumes, proceedings and other academic publishing venues, basic technical information and peer review procedures have to be transparent on the website of the publishing venue.
- Journals must meet the Principles of Transparency and Best Practice in Scholarly Publishing adopted jointly by the Committee on Publication Ethics, the Directory of Open Access Journals, the Open Access Scholarly Publishers Association, and the World Association of Medical Editors on December 19, 2013.¹⁵
- The publisher must divulge the average APC paid for a specific journal to the funder.
- Maximum grant funds retrievable per article for full OA journals amount to 1300 € + 20% of the outstanding sum.¹⁶ These amounts can be adjusted per decision of the BELSPO Institutional Open Access Repository (Orfeo) Steering Committee.

- Maximum grant funds retrievable for full OA monographs amount to 6000 € + 20% of the outstanding sum. This amount can be adjusted per decision of the Orfeo Steering Committee.
- No funds may be retrieved for hybrid journals¹⁷ unless the author can submit proof that 'double dipping' does not occur with any library under BELSPO tutelage.¹⁸ BELSPO will however support hybrid publishing of monographs.¹⁹
- No funds may be retrieved for bundled APC deals at a fixed sum per timeframe.²⁰
- Journals/publishers that have differential charges for Creative Commons (CC) licenses will not be eligible.²¹
- In case a publication is co-funded with other research funders, fair sharing of publishing funding must be pursued where applicable. Details on how to handle this co-funding process are provided in the Annexes.

GREEN OPEN ACCESS

PUBLICATIONS

Publications, or edited research results which are destined for dissemination, comprising articles (pre-prints, post-prints or publisher versions), books, book chapters, catalogues, conference proceedings, reports, bachelor, master and doctoral theses, reviews, working papers and lectures will be deposited in an OA repository on an ID/OA (immediate deposit – optional access) basis. (Green OA)²² : the deposit of the publication's reference, metadata²³ and full text is compulsory, even if true Open Access is not possible due to exceptional protection or embargoes as detailed below. Exceptional protection may be required for quality, strategic, security, commercial (patent-related) or privacy reasons approved by the BELSPO OA Administration Commission, appointed by the Orfeo Steering Committee. This will not prevent said deposits from being available in full text to the Orfeo administration staff at both BELSPO and implicated research institutions through intranet (with login and password) under the legal exception of public communication for teaching and scientific research.

If no protection or embargo applies, deposited publications will freely and irrevocably be made accessible to the public to be read, downloaded and printed, but also to be copied, distributed, searched, linked, crawled and mined and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship.

It is required that all said publications be deposited, either in BELSPO's central Orfeo institutional OA repository²⁴, in the author's research organization's own institutional OA repository, or in the institutional OA repository of a co-funding research partner providing its content can be linked to Orfeo or harvested by Orfeo through the OAI-PMH protocol.

BELSPO final project reports will be deposited in Orfeo by BELSPO if no exceptional protection provisions apply. Such reports will have to consist of an introduction describing the scientific issue. The report's corpus will describe the methodology and sources, develop arguments and disclose evidence to substantiate the researchers hypothesis. The conclusion will provide a straight answer to the scientific issue put forward in the introduction.

In case of doctoral theses the dissertation director (promoter) will be an ad hoc default member of the BELSPO OA Administration Commission.

PEER REVIEWED ARTICLES AND MONOGRAPHS

Scientific articles will be deposited together with their metadata within 3 months after acceptance for publication.²⁵ In order to make the full content of scientific articles publicly accessible, the depositing researcher will inquire whether the journal accepts OA

to the article's publisher version, pre-print or post-print.²⁶ The researcher or organizations mandated to represent researchers will inform the journal that copyrights held by the Belgian State cannot be ceded completely and the Belgian State's rights to make the researcher's scientific article available in OA will be retained notwithstanding the higher mentioned protection provisions adopted and the embargo stipulations mentioned hereunder. All publications shall be published under the open license Creative Commons-Attribution CC BY or equivalent. The journal may however be granted an embargo period of 6 months for scientific, technical and medical fields (STM) or of 12 months for humanities, arts and social sciences (HASS). Monographs may be published under the CC BY-NC-SA license.²⁷ A monograph embargo duration will be negotiated with the publisher. As soon as embargoes are expired, the researcher will complete the metadata in the repository without delay.

Digital versions of published scientific articles will be made available in full text if they were published before 1993 and no contract renegotiation took place, if no valid cession or exclusive license has been granted, if a valid cession or exclusive license has been granted for paper publication only, or if a valid cession or exclusive license has been granted but the journal's policy nevertheless allows for Green OA.²⁸

FURTHERING COMPLIANCE

If bibliographies are required in support of researchers' evaluations, career advancement or applications for BELSPO research project funding, they will be retrieved from the applicants' research organisation's institutional OA repository or from Orfeo. No other bibliography will be used. The date of deposit will be considered in assessing compliance with BELSPO OA policy. All referenced deposits are taken into account, with or without full text accessibility, but proven applicant efforts to provide full text accessibility to grey literature will benefit her/his candidacy.

Similarly, in cases of noncompliance with the BELSPO APC, embargo, protection, licence and copyright policies, concerned publications will not be taken into account. Exceptions may be granted by the BELSPO OA Administration Commission.

On the other hand, Orfeo will gradually provide the depositing researcher with state of the art indicators and ranking instruments, with increased visibility and referencing with popular browsers and with a professional, internationally recommended set of metadata describing his deposit.

Annexes

Out of mandate recommendations

1. FAIR GOLD OPEN ACCESS

If commercial actors can contribute to the fulfilment of both aforementioned BELSPO goals : make research results democratically available and support the sustainability and the development of scientific research, there is no reason why their services should not be taken into consideration. BELSPO therefore considers three Gold Road business models to be recommended for OA : Platinum OA the costs of which are fully covered by voluntary work, donations, subsidies, grants, etc.; non-APC (Freemium) and APC based OA, where the payer is charged in proportion to the provided services (administration, peer review, extra paper prints, handling...).²⁹ These three business models are considered Fair Gold OA and are the only ones recommended by BELSPO.

2. CHOICE OF INFRASTRUCTURE

The most economical and practical solution for achieving OA to BELSPO research is direct incremental import by all researchers into a central repository, i.e. Orfeo. Second best is the creation of fully compatible OA repositories at the institutional level from where data can be harvested by Orfeo. As a third choice BELSPO strongly recommends that organisations under BELSPO tutelage make their existing or planned Integrated Library Systems (ILS) compatible with the OAI-PMH protocol and Dublin Core metadata. BELSPO project reports will be uploaded by the BELSPO central administration.

3. IMPORT PROCEDURE

Individual import by the researcher is encouraged as it benefits the immediate incremental update of the repository's content. Moreover researcher control over the assigned metadata guaranties quality. The Orfeo Website and Helpdesk will provide assistance with the deposit procedures.

If no institutional repository is available and incremental updating is not feasible, institutional batch imports to Orfeo will have to be considered and the researcher's institution OA contact person will organise an update every 6 months. The Orfeo Helpdesk will assist if necessary. Training will be provided.

4. IMPORTANCE OF GREY LITERATURE

BELSPO recommends that Green OA Repositories be put to good use to make grey literature³⁰ available. Grey literature surpasses journal publications in scope. Nowadays, published articles lose in scientific relevance and gain in importance for career credits and establishing primacy. Hence the growing relevance of pre-prints, post-prints, book chapters, catalogues, conferences, reports, bachelor, master and doctoral theses, reviews, working papers and lectures which have evolved into the main channels for scholarly exchange.

5. NEGOTIATING WITH PUBLISHERS

As the BELSPO OA mandate states, the copyright holder need not cede his rights to the publisher entirely for regular publication exploitation. But in the event that he has, in order to retrieve rights that have already been ceded to the publisher, a licence or a simple authorisation per rider from the publisher, allowing for integration in a repository

and on line publishing, involving certain lay out changes for instance is sufficient. A standard rider will be provided by the Orfeo Helpdesk.

Green OA archiving, preferably immediately but usually after a 6 or 12 month embargo, is accepted by journals in most cases, certainly when it involves pre- or post prints. If difficulties occur while negotiating with the journal, authors should call on the OA contact person within their institution or on the Orfeo Helpdesk.³¹

6. FULL TEXT ACCESS

OA is not illegal and an internationally recognised set of standard licences, known as Creative Commons (CC), have been developed to enable the sharing and use of knowledge through free legal tools without losing attribution. They are a simplification of existing copyright rules, adapted to the individual country's legislation. Before accessing the full text if available, the user has to accept the CC-BY usage licence (or CC BY-NC-SA licence for monographs) through the so-called 'click-wrap' which implicates an explicit intention of the user to subscribe to the proposed licence.

Orfeo will feature the OA Button. In cases of embargo, the OA Button will search the web for a version of the paper that can be accessed immediately. If that doesn't work, the Button will email the author with a request for a reprint and look for more information about the paper.

7. INTERNAL SUPPORT

Every institution involved with Orfeo will name an Open Access contact person for internal project follow up and for communication with the federal OA Project Administrator and the Orfeo Helpdesk. On top of this however, a resolute and rigorous devotion of the institutional hierarchy is instrumental to the successful implementation of the OA mandate. For instance, it is imperative that evaluation panels and scientific counsels refuse bibliographies provided by candidates or evaluated researchers and resort to bibliographies produced by the institutional OA Repository or Orfeo only, lest the mandate would lose all credibility. It is also paramount for research institutions directors and accountants to enforce the mandate's APC provisions, which cannot be monitored at BELSPO level.

Federal Open Access Project Framework

1. FUTURE DEVELOPMENTS FOR THE ORFEO REPOSITORY

1. ORFEO BIBLIOMETRIC, CONVERSION, REPORTING AND MANAGEMENT TOOLS

The following software instruments are planned :

Content and Usage Analysis - This module allows content and usage monitoring. It records data about the addition of items, the number of page views and the number of file downloads. The module adds two tools to the repository user interface that allow an administrator to view the recorded data in the form of tables and graphs. Those visualizations can also be added to public pages.

Information Conversion - File format obsolescence is a major challenge for anybody wanting to preserve digital files. The information conversion module performs a large variety of file conversions, supporting migration strategies and enhancing accessibility of stored information. Yet, the depositor is encouraged to submit publisher versions in PDF/A

format. Additional formats that allow better use of text and data mining techniques are strongly encouraged such as XML or HTML.

Listings & Reports Module - This module automates the creation of reports based on information, such as metadata stored in the repository.

Metadata Quality Module - Metadata quality, management and curation tools allowing batch metadata editing and duplicate checking among others.

Orfeo will also provide links to recognised reference abstract and citation databases of peer-reviewed literature featuring tools to track, analyse and visualise research.³²

2. *ORFEO AND SOCIAL MEDIA*

Research citations might be correlated with the number of times the article was discussed in certain social media. It remains to be seen if the OA community is moving towards a consensus on best practices in this field. BELSPO will look into ways to establish links with funder, institutional or author related media such as relevant webpages, blogs and social networks (e.g. Twitter and facebook, Research Gate, Academia,...) allowing for 'personal branding', tracking related research; creation and maintenance of networks of collaborators and peer experts; support of research impact and career advancement and funding. E-mail notification to authors and 'followers' might be considered.

BELSPO strongly discourages substituting (but not complementing) OA with non OA-compliant solutions such as Academia and ResearchGate. Neither their sustainability nor their quality can be guaranteed. Moreover, recognized OA Repository citations are taken into account with IFs.

3. *THE ROYAL LIBRARY AND ORFEO ADMINISTRATION*

Orfeo management will eventually be transferred from the Scientific and Technical Information Service (STIS) to the Royal Library. Both are BELSPO organisations. Moreover, Orfeo might merge with the Royal Library's e-depot which is the digital extension of the Belgian Legal Depot in which all Belgian publications have to be deposited by law. If the e-depot is rendered OA compatible and the merger takes place the BELSPO OA mandate will be adapted accordingly.

4. *EXTENDING ORFEO TO FEDERAL PUBLIC SERVICES OTHER THAN BELSPO*

The Orfeo Steering Committee has stated that the Orfeo Pilot Project (2014) and extension to 11 additional BELSPO organisations (2015) is to be followed by an invitation to federal research organisations which are not under BELSPO tutelage to join the project as well.

5. *ADVOCACY AND COACHING OF RESEARCHERS AND SUPPORTING STAFF*

BELSPO will organise a yearly workshop to train and inform Institutional contact persons and other involved staff on latest developments and best practices in the fields of OA to publications, OA to Data and Open Science.

The BELSPO OA Project Administrator will constitute a helpdesk to assist Orfeo users, institutional contact persons and all supporting staff with technical as well as administrative or general policy issues.

The BELSPO OA Project Administrator will promote the OA Project and look after the project's interests at international, national and federal levels.

6. *EXTENSION TO OPEN DATA AND OPEN SCIENCE*

Once Orfeo is well on track and made sustainable, BELSPO will consider opening up the project to OA to Open Research Data and Open Science. This will be done in consultation with other federal departments and the federated entities.

2. THE BELSPO OPEN ACCESS PROJECT

2.1. *OA CONSULTATION*

The BELSPO OA project Administrator conducts widespread consultations to ensure alignment on policy matters, technical compatibility and repository interconnectability at the international, national and federal level but also performs a technology watch for OA, Open Research Data and Open Science. He/she will share information with and submit suggestions to the Orfeo Steering Committee.

2.2. *INTERNATIONAL REPORTING ON OA*

With the help of his peers in the federated entities, the BELSPO OA Project Administrator reports on the evolution of OA in Belgium to international organisations such as the European Community, ERAC and the OECD. Contributions from institutional OA contact persons will occasionally be required.

- ¹ The Budapest OA Initiative (BOAI) is a public statement of principles relating to OA to research literature. It arose from a conference convened in Budapest by the Open Society Institute on December 1-2, 2001 to promote OA and is recognised as one of the major historical, and defining events of the OA movement where it was stated that literature which scholars give to the world without expectation of payment, should be freely accessible online. "Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By OA to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."
- ² The Berlin Declaration on OA to Knowledge in the Sciences and Humanities is a major international statement on OA/access to knowledge. It emerged in 2003 from a conference on OA hosted in Berlin by the Max Planck Society. Organizations that commit to implementing this definition of OA can sign on to the declaration. Signatories pledge to make OA progress by

 - encouraging researchers/grant recipients to publish their work according to the principles of the OA paradigm.
 - encouraging holders of cultural heritage to support OA by providing their resources on the Internet.
 - developing means and ways to evaluate OA contributions and online journals in order to maintain the standards of quality assurance and good scientific practice.
 - advocating that OA publication be recognized in promotion and tenure evaluation.
 - advocating the intrinsic merit of contributions to an OA infrastructure by software tool development, content provision, metadata creation, or the publication of individual articles.
- ³ The European Commission's Recommendation of July 17, 2012 on access to and preservation of scientific information requests member states to develop:

 - Clear dissemination policies at government, funding and research institution levels
 - OA to research data
 - Preservation and re-use of scientific information
 - E-infrastructures
 - Multi-stakeholder dialogue at national, European and international level
 - Structured coordination of Member States at EU level and follow-up to the Recommendation
- ⁴ By signing the Brussels Declaration, signatories declare OA to be the default infrastructure for dissemination of Belgian scientific research results and express their determination to support it.
- ⁵ In June, 2016, the European Research Area (ERA) Committee, which answers to the European Council, will be submitting a Roadmap consisting of 6 priorities among which the promotion Open Access to scientific publications. The focus is expected to be among others on the negotiation of reasonable subscription fees and APC with scientific publishers, facilitating the development of institutional Open Access repositories and including appropriate incentives in the rules and standards, including in grant agreement.
- ⁶ "The OA Pilot project will be extended to all Federal Scientific Institutions. This will foster valorisation of the institutions' publications and access to scientific data. Ways to extend this initiative to other federal institutions will next be examined in coordination with other Belgian authorities."
- ⁷ "The OA system puts scientific publications on line for increased consultation. Providing positive evaluation, the pilot will be extended to other institutions in 2015 so their publications can be valorised as well and research results can be targeted more efficiently."
- ⁸ The Administrative Agreement calls for the implementation of a Institutional Open Access Repository for Scientific Institutions of all federal departments, for its transfer to the Royal Library where it will be merged with the Legal Depot. It furthermore calls for the drafting of a federal Open Access policy in consultation with internal, federal, interfederal and international stakeholders.
- ⁹ The Interfederal Consultation Group CIS-CFS OA consists of representatives of the Belgian Federal level, of the federated entities and of the Belgian advocacy group 'Open Access Belgium' (Specialists of the University libraries of UGent and ULg, Creative Commons, Electronic Information for Libraries and the EC's OA repository helpdesk).

- 10 "Business models for scientific publishing should be built for the benefit of the scientific enterprise" - Open access to scientific data and literature and the assessment of research by metrics (<http://www.icsu.org/general-assembly/news/ICSU%20Report%20on%20Open%20Access.pdf>)
- 11 Éric Archambault, Didier Amyot, Philippe Deschamps, Aurore Nicol, Françoise Provencher, Lise Rebout & Guillaume Roberge. Proportion of Open Access Papers Published in Peer-Reviewed Journals at the European and World Levels—1996-2013. European Commission, 2014.
- 12 Article Processing Charges (APC): 'Author pays' is the publishing model whereby the author, the author's institute, or the research-funding agency, pays a fee to the publisher to place the publication in immediate and complete OA. This is opposed to the 'user pays' model, which is applied in traditional scientific publishing.
- 13 In 2015 these are : Directory of OAJournals/DOAJ (<http://doaj.org/>), Web of Science (<http://ip-science.thomsonreuters.com/mjl/>), Scopus or PubMed (<http://www.ncbi.nlm.nih.gov/nlmcatalog/journals>)
- 14 In the case of an OA venue that has been founded very recently (in the last 12 months) and is therefore not yet registered in the DOAJ, it has to be clear from the journal's website that the DOAJ criteria are fulfilled.
- 15 <https://doaj.org/bestpractice>
- 16 With regard to APC, see : Bo-Christer Björk and David Solomon, Developing an Effective Market for Open Access Article Processing Charges. Espoo, Finland and Haslett, Michigan, USA, 2014.
- 17 A hybrid OA journal is a subscription journal in which some of the articles are OA.
- 18 Publishers practice 'double dipping' if they receive money twice: through subscriptions paid by libraries and APC paid by authors. Double dipping is too laborious to track.
- 19 With regard to Open Access to monographs, see : A project exploring Open Access monograph publishing in the Netherlands : Final Report. OAPEN Foundation, The Hague, 2013.
- 20 This kind of APC 'subscription', brings down prices but it also binds earmarked APC funds to those deals, much to the detriment of smaller and innovative publishers. BELSPO will not support such deals.
- 21 e.g. APCs for CC-BY licenses are higher than those for CC-BY-NC licenses.
- 22 Should students be made to participate in BELSPO funded research projects by their dissertation director (promoter), their scientific publications should be deposited.
- 23 Metadata will be Dublin Core compatible, consistent with the metadata description provided by the Orfeo manual.
- 24 The 'Open Repository for Federal Organisations' (Orfeo) is BELSPO's institutional OA infrastructure serving 14 research and administration institutions. Eventually, it will serve institutions from other federal departments as well, hence the heading.
- 25 This will enable internet browsers to index the metadata and make the existence of the article known.
- 26 The SHERPA-RoMEO website provides information about journal tolerance towards Green OA. This is the case two times out of three.
- 27 Creative Commons Attribution-NonCommercial-ShareAlike. This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms.
- 28 Options to add not yet electronic publications will be explored in order to make Orfeo comprehensive.

- ²⁹ “Openness means access on equal terms for the international research community at the lowest possible cost, preferably at no more than the marginal cost of dissemination.” - OECD Principles and Guidelines for Access to Research Data from Public Funding (<http://www.oecd.org/science/sci-tech/38500813.pdf>).
- ³⁰ Grey literature is generally defined as academic literature that is not formally published. It is an expanding field in library and information science that deals with the supply and demand side of publications not controlled by commercial publishing. Examples of grey literature include patents, technical reports from government agencies or scientific research groups, working papers from research groups or committees, white papers, and preprints.
- ³¹ See : 7. Internal Support
- ³² In 2016 : <http://www.elsevier.com/solutions/scopus>