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OPEN ACCESS

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RESEARCHERS AS READERS









UNIMORE'S SUBSCRIPTIONS



Brought to you by: Università di Modena e Reggio Emilia

2.000.000 EURO



BIG DEALS IN EUROPE

726.000.000 Euro

100% public funds

- 72% from university budgets
- 65% with the five major publishers*

*EUA Big Deals Survey Report, May 2019. Data consider 31 consortia surveyed in 30 European countries and are referred to years 2017-2018.

BIG DEALS CANCELLATIONS

*after cancellation / not renewal, some consortia have then made a new deal on the basis of a new "transformative" agreement





OPEN ACCESS

Open access refers to free and unrestricted online access to research outputs for all, with no access fees.

«By "open access" [to peer-reviewed research 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.»

Budapest OA Initiative, 14/02/2002

THE COLOURS OF OPEN ACCESS

Gold OA

Articles are published in an open access journal, that is a journal in which all articles are open directly on the journal website. The journal may require or not an APC.

Diamond/Platinum OA

Articles are published in a gold open access journal that does not require any APC.

Red (Hybrid) OA

Articles are published in a subscription journal but are immediately free to read under an open licence, in exchange for an article processing charge (APC) paid by authors.

Bronze OA

Articles are published in a subscription journal, but are free to read (after an embargo period) on the publisher page, without a clearly identifiable licence.

Green OA

Articles are published in a toll-access journal, but self-archived in an open access archive*. The archived articles may be either the published versions, or the author's accepted manuscript or the author's original draft. Disponibilità

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repository

*institutional respositories, subject repositories, etc

Black OA Articles shared on illegal pirate sites.

Piwowar et al., The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ 2018, 6:e4375; DOI: <u>10.7717/peerj.4375</u>]

SCI-HUB COVERAGE

papers in Sci-Hub library: more than 84.794.279

https://sci-hub.hkvisa.net/ (01/06/2022)

- ✓ <u>by Subject Area</u>: Chemistry: 93%; Chemical engineering: 92,8%; Material Science: 91,2%; and so on.
- ✓ <u>by Publisher</u>: American Chemical Society 98.8%; Elsevier: 96.9%; Wiley-Blackwell: 94.7%; Taylor & Francis: 92.6%; SAGE 90.9%; Springer Nature: 89.7%; Oxford University Press 88.3%.
- ✓ <u>by Journal</u>: New England Journal of Medicine: 99,9%; The Lancet: 99,8%; Journal of the American Chemical Society: 98,8%; Nature: 96,6%; Science: 91,9%
- ✓ by Journal Impact*: most cited journals (top 10%): 90%; least cited journals (lowest 10%): 40.9%.

*using the 2015 CiteScore

- ✓ by Year: for most years since 1850: 60-80%; 2016: 56.0% (78.8% of toll access articles, 32.7% of open access articles).
- ✓ by Category of Access Status: 49.2% of Gold OA articles and 90.4% of closed articles within the State of OA dataset [PeerJ 2018, 6:e4375; DOI: 10.7717/peerj.4375].
- ✓ Benchmark with Penn Libraries: similar coverage on all articles: 85.2% versus 87.4%; when considering only toll access articles, Sci-Hub's coverage exceeds Penn's: 94.2% versus 80.7%.

Himmelstein, Daniel S., et al. Sci-Hub provides access to nearly all scholarly literature. ELife, 2018, 7: e32822. DOI: <u>10.7554/ELIFE.32822</u>

RESEARCHERS AS AUTHORS





DIRITTO D'AUTORE

«Sono protette le opere dell'ingegno di carattere creativo che appartengono alla letteratura [opere letterarie, drammatiche, scientifiche, didattiche, religiose], alla musica, alle arti figurative, all'architettura, al teatro ed alla cinematografia, qualunque ne sia il modo o la forma di espressione»

Legge a protezione del diritto d'autore e di altri diritti connessi al suo esercizio (Legge 22 aprile 1941, n. 633)

Diritti morali Sono incedibili.

Consistono nel diritto a:

- paternità e integrità dell'opera
- ritirare l'opera dal commercio.

Diritti patrimoniali Indipendenti e cedibili.

Consistono nel diritto a:

- ✓ riprodurre, trascrivere
- ✓ pubblicare, distribuire
- ✓ tradurre, elaborare e modificare l'opera.

THE COPYRIGHT OWNER



http://www.lib.washington.edu/scholpub/images/oadeposit

CREATIVE COMMONS LICENCES

License is a permission given by one person to another to do some act that, without such permission, it would be unlawful for him to do.



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https://creativecommons.org/

Image from: https://commons.wikimedia.org/wiki/File:CC_License_Freedom_Scale_Chart.png

FUNDERS' MANDATORY POLICIES



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Ministero dell'Università e della Ricerca (Italy)

Ciascun responsabile di unità garantisce l'accesso gratuito e on-line (almeno in modalità green access) ai risultati ottenuti e ai contenuti delle ricerche oggetto di pubblicazioni scientifiche "peer reviewed" nell'ambito del progetto, secondo quanto previsto dall'art. 4, commi 2 e 2 bis, del decreto legge 8 agosto 2013, n. 91, convertito con modificazioni dalla legge 7 ottobre 2013, n.112.

Bando Prin 2020

Legge 112/2013, art. 4, comma 2

« I soggetti pubblici preposti all'erogazione o alla gestione dei finanziamenti della ricerca scientifica adottano, nella loro autonomia, le misure necessarie per la promozione dell'accesso aperto ai risultati della ricerca finanziata per una quota pari o superiore al 50 per cento con fondi pubblici

[...]

L'accesso aperto si realizza attraverso la pubblicazione in open access da parte dell'editore [...] o tramite la ripubblicazione senza fini di lucro in archivi elettronici istituzionali o disciplinari» [entro 18 mesi per le aree scientifico-tecnico-mediche e 24 mesi per le aree umanistiche e scienze sociali].

Legge 112/2013

FUNDERS' MANDATORY POLICIES 2 EUROPE



2012: The EC recommends that member states should ensure «open access to publications resulting from publicly funded research»

[2012/417/EU: Commission recommendation of 17/07/2012]

2018: The EC recommends that member states should ensure that «all scientific publications resulting from publicly-funded research are made available in open access as from 2020 at the latest»

[2018/790/EU: Commission recommendation of 25/04/2018]

Member States should set and implement clear policies to get as results that:

- open access to publications is granted as soon as possible, and in any case no later than six months after the date of publication (no later than 12 months for social sciences and humanities);
- researchers retain the necessary intellectual property rights, when entering into contractual agreements with scientific publishers (this concerns in particular selfarchiving and re-use);
- information is published about agreements, in particular the so-called 'big deals', between public institutions and publishers, in order to enhance market transparency and fair competition.

FUNDERS' MANDATORY POLICIES 3 US AND UK



National Institute of Health (US)

The NIH public access policy requires scientists to submit **final peer-reviewed journal manuscripts** accepted for publication after April 7th 2008 that arise from NIH funds to **PubMed Central** immediately upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication, implementing <u>PUBLIC LAW</u> <u>111-8-MAR. 11, 2009</u>.

NIH public access policy



UK Research and Innovation

Journal articles and conference proceedings submitted for publication from April 1st 2013 resulting from UKRI programme project funding and/or outputs submitted for assessment of research excellence via the REF can fulfil policy requirements through either the publisher making articles freely available (the **gold OA** route), or by the author depositing in a freelyaccessible repository (the **green OA** route).

UKRI Open Access Principles and High Level Policy

FUNDERS' MANDATORY POLICIES 3 CHINA AND JAPAN



National Natural Science Foundation of China

The authors of the papers generated from projects fully or partially funded by NSFC, when submitted and published in academic journals, should deposit the **final manuscripts**, which have been peer reviewed and accepted by the journals, to the **NSFC repository** with an embargo period of no more than 12 months. Earlier OA should be provided if the publisher allows.

NSFC Policy Statement on Open Access



Japan Science and Technology Agency

Open Access should be applied to all research publications in principle. In achieving Open Access, it is recommended that making **final accepted peer reviewed manuscripts** [...] publicly available by depositing them in an **institutional repository** [...] Publishing research publications [...] in journals committed to Open Access is allowable, but is not necessarily encouraged.

JST Policy on Open Access to Research Publications and Research Data Management

EMBARGO AND REPOSITORIES

An embargo is a period during which access to the paper is not allowed to users who have not paid for it.



The following journal-specific embargo periods are set to ensure the sustainability of individual journals, and reflect their individual dynamics.

See our sharing guidelines for details about when embargos oply

See our agreements page for details about complying with funding body OA policies

Please note: Elsevier embargo periods are under regular revision and so are subject change.

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ISSN	Journal Name	Embargo Period (months)
1876-2859	Academic Pediatrics	12
1076-6332	Academic Radiology	12
0001-4575	Accident Analysis & Prevention	36
0155-9982	Accounting Forum	24
0361-3682	Accounting, Organizations and Society	24
0094-5765	Acta Astronautica	24
1874-1029	Acta Automatica Sinica	24
1742-7061	Acta Biomaterialia	24
0122-7262	Acta Colombiana de Cuidado Intensivo	12
1872-2032	Acta Ecologica Sinica	24
0001-5814	Acta Haematologica Polonica	12

An institutional repository is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution.



IRIS INSTITUTIONAL RESEARCH INFORMATION SYSTEM ARCHIVIO ISTITUZIONALE DEI PRODOTTI DELLA RICERC







RePEc



COALITION S AND PLAN S

No science should be locked behind paywalls anymore.

Publication paywalls are withholding a substantial amount of research results from a large fraction of the scientific community and from society as a whole. This constitutes an absolute anomaly, which hinders the scientific enterprise in its very foundations and hampers its uptake by society. Monetising the access to new and existing research results is profoundly at odds with the ethos of science (Merton, 1973). There is no longer any justification for this state of affairs to prevail and the subscription-based model of scientific publishing, including its so-called 'hybrid' variants, should therefore be terminated. In the 21st century, science publishers should provide a service to help researchers disseminate their results. They may be paid fair value for the services they are providing, but **no science should be locked behind paywalls!**

"With effect from 2021^{*}, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on <u>Open Access Platforms</u>, or made immediately available through Open Access Repositories without embargo."

[Preamble to: cOAlition S for the Realisation of Full and Immediate Open Access]

cOAlition S

Making Open Access a reality by 2020

A DECLARATION OF COMMITMENT BY PUBLIC RESEARCH FUNDERS

PLAN S PRINCIPLES

Authors or their institutions retain copyright to their publications. All publications must be published under an open licence, preferably the Creative Commons Attribution licence (CC BY), in order to fulfil the requirements defined by the <u>Berlin</u> <u>Declaration</u>:

O2 The Funders will develop robust criteria and requirements for the services that high-quality Open Access journals. Open Access platforms, and Open Access repositories must provide:

03 In cases where high-quality Open Access journals or platforms do not yet exist, the Funders will, in a coordinated way, provide incentives to establish and support them when appropriate; support will also be provided for Open Access infrastructures where necessary;

04 Where applicable, Open Access publication fees are covered by the Funders or research institutions, not by individual researchers; it is acknowledged that all researchers should be able to publish their work Open Access;

05 The Funders support the diversity of business models for Open Access journals and platforms. When Open Access publication fees are applied, they must be commensurate with the publication services delivered and the structure of such fees must be transparent to inform the market and funders potential standardisation and capping of payments of fees;

06 The Funders encourage governments, universities, research organisations, libraries, academies, and learned societies to align their strategies, policies, and practices, notably to ensure transparency.

O7 The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for monographs and book chapters will be longer and requires a separate and due process:

08 The Funders do not support the 'hybrid' model of publishing. However, as a transitional pathway towards full Open Access within a clearly defined timeframe, and only as part of transformative arrangements, Funders may contribute to financially supporting such arrangements;

09 The Funders will monitor compliance and sanction noncompliant beneficiaries/grantees;

10 The Funders commit that when assessing research outputs during funding decisions they will value the intrinsic merit of the work and not consider the publication channel, its impact factor (or other journal metrics), or the publisher.

HYBRID MODEL AND TRANSFORMATIVE AGREEMENTS

A hybrid openaccess journal is a subscription journal in which some of the articles are open access. In transformative agreements former subscription expenditures are repurposed to support open access publishing.

ARTICLE PROCESSING CHARGE (APC)

An article processing charge is a fee paid for open access.

HYBRID JOURNALS APCs:

Nature: \$ 11,520 / € 9.500 Cell: \$ 9,900 / € 8.500 Embo Reports: \$ 5,200 / € 4.700

APCs lists: ACS Elsevier

Springer Nature Wiley

GOLD OPEN ACCESS JOURNALS APCs

Cell Reports:\$ 5,200 / € 4.500Nature Communications:\$ 5,890 / € 4.890Advanced Science:\$ 5,200 / € 4.350PlosOne:\$ 1,380 / € 1.290





Sistema Bibliotecario di Ateneo Servizio OA & RDM

GRAZIE

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Sistema Bibliotecario di Ateneo Servizio OA & RDM

RESEARCH DATA MANAGEMENT

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WHAT IS RESEARCH DATA?

Research data is any data that is created during the project.

RAW/PRIMARY DATA:

the original data that has been collected from a source and not yet processed or analysed.

PROCESSED/ANALYSED DATA:

data derived from primary data for subsequent analysis or interpretation, or derived from existing sources where the rights may be held by others.

UNDERLYING DATA:

research data needed to validate the results presented in scientific publications.

- Numerical data: instrument measurements, survey responses.
- Documentation: publications, experimental methods, field notes, analytical methods, technical reports, dataset descriptions.
- Digital images: photographs, diagrams, graphs.
- Digital audio: audio data, interviews, wildlife recordings, language recordings.
- Digital video: high-speed recordings, interviews.
- Configuration data: configuration and optimization settings for simulation and insilico experimentation.

DATA LIFE-CYCLE



Image from https://www.reading.ac.uk/researchservices/research-data-management/about-researchdata-management/the-research-data-lifecycle

BENEFITS OF GOOD DATA MANAGEMENT

- Efficiency of research
- Protection of data
- Quality of data
- Exposure of research outcomes
- Citation of data
- Easy validation and verification of results

FAIR DATA



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Image from: https://book.fosteropenscience.eu/

FAIR PRINCIPLES IN DEPHT

To be Findable:

- F1. (meta)data are assigned a globally unique and persistent identifier
- F2. data are described with rich metadata (defined by R1 below)
- F3. metadata clearly and explicitly include the identifier of the data it describes
- F4. (meta)data are registered or indexed in a searchable resource

To be Interoperable:

- I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2. (meta)data use vocabularies that follow FAIR principles
- I3. (meta)data include qualified references to other (meta)data

To be Accessible<mark>:</mark>

- A1. (meta)data are retrievable by their identifier using a standardized communications protocol
- A1.1 the protocol is open, free, and universally implementable
- A1.2 the protocol allows for an authentication and authorization procedure, where necessary
- A2. metadata are accessible, even when the data are no longer available

To be Reusable<mark>:</mark>

- R1. meta(data) are richly described with a plurality of accurate and relevant attributes
- R1.1. (meta)data are released with a clear and accessible data usage license
- R1.2. (meta)data are associated with detailed provenance
- R1.3. (meta)data meet domain-relevant community standards

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https://www.force11.org/group/fairgroup/fairprinciples

METADATA POWER

Metadata are data about data. They support findability, citation and reuse.

- Title
- Creator
- Date
- Publisher

- Identifiers
- Description
- Subjects
- Relation

- Rights
- Type
- Coverage
- Format

- Contributor
- Source
- Language

Dublin Core[™]Metadata Initiative





FAIR IS NOT (NECESSARILY) OPEN

"as open as possible, as closed as necessary"



- Privacy
- National security
- Legitimate commercial interests
- Trade secret
- Intellectual property rights of third parties



DATA MANAGEMENT PLAN

A DMP describes the data management life cycle for the data to be collected, processed and/or generated by a project.

It should include information on:

- the handling of research data during & after the end of the project
- what data will be collected, processed and generated
- which methodology and standards will be applied
- whether data will be shared/made open access
- how data will be curated and preserved

DATA MANAGEMENT ACROSS THE RESEARCH LIFE-CYCLE



Image from https://www.reading.ac.uk/researchservices/research-data-management/about-researchdata-management/the-research-data-lifecycle





























INTELLECTUAL PROPERTY

Data as such is not protected by copyright.

Facts | Principles | Methods | Mathematical concepts |







A 'database' is "a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means."





if the selection or arrangement of the contents are the author's own intellectual creation.

if there has been a substantial investment in obtaining, verifying or presenting the contents.





License is a permission given by one person to another to do some act that, without such permission, it would be unlawful for him to do.

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No Copyright



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https://www.fosteropenscience.eu/themes/fosterstrap/images/taxonomies/os_taxonomy.png





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