

**Better Research Through
Better Data Live with Jisc**

#betterdata



Jisc - you don't need to know who we are, but these are some of the things we do [for you]

Plus a few hobby horses

Who?

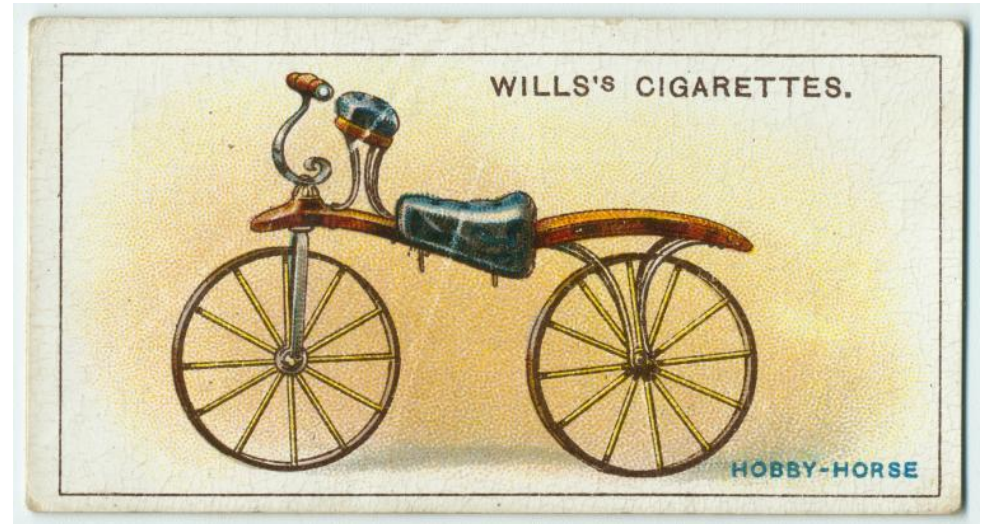


Senior what?

Hobby horses / pet peeves / bees in bonnets

Amongst other things...

- Sustainability
- Diminishing storage capacity
- Digital kleptomania
- Personal archiving
- Environmental impact



**Ask
questions....**



Today...

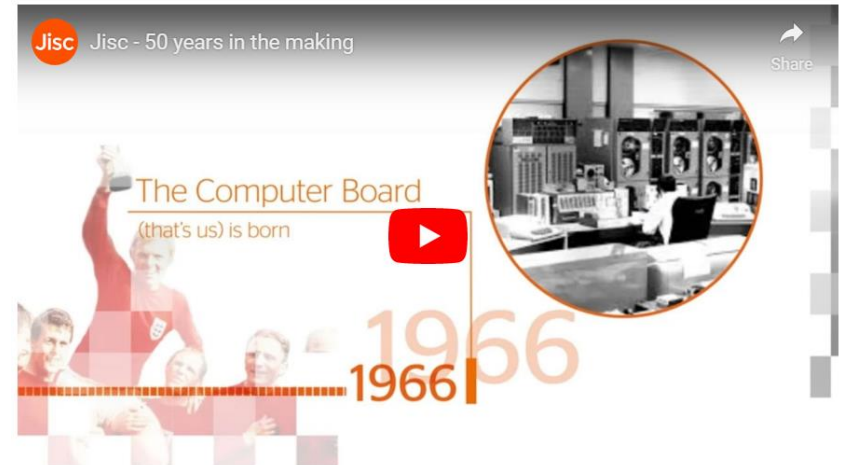
- Who
- What
- Covid-19
- What next

Who/what is Jisc?

"We're a membership organisation, providing digital solutions for UK education and research"

Vision: for the UK to be the most digitally advanced higher and further education and research nation in the world

Mission: to enable people in higher education, further education and skills in the UK to perform at the forefront of international practice by exploiting fully the possibilities of modern digital empowerment, content and connectivity



<https://www.jisc.ac.uk/about/corporate/strategy>

Who/what is Jisc?

1

Shared **digital infrastructure** and **services**



2

Sector wide deals with IT vendors and commercial publishers



3

Expert and trusted **practical support and assistance**



Research and development

<https://www.jisc.ac.uk/about/who-we-are-and-what-we-do>

Question time...

Should all research outputs be freely available?

- Yes (no brainer)
- Maybe - It depends
- No

Jisc RDM programmes

Managing Research Data Programme (2009-2011)

Infrastructure, data management planning, business case planning, publishing, sharing and discovering research data, RDM training materials

Managing Research Data (2011-13)

Developing training materials for specific disciplines and information professionals

Research at Risk Co-Design (2014-2016)

Establishing good data management practice in universities, as part of their core research function

Leading to the Research Data Shared Service project (RDSS)

Hide columns ▾		
Service	Included	Optional
Consultancy [3]		✓
Financial X-ray [2]		✓
Library financial X-ray [2]		✓
Guides	✓	
Training [2]		✓
Workshop to Raise Awareness of Prevent (WRAP)	✓	

Research and development

Our [R&D work](#), paid for entirely by our [major funders](#), identifies emerging technologies and develops them around your particular needs. We test and learn on your behalf, ready for you to take advantage of new technologies as they arrive.

Jisc role and services for research



Cloud

Frameworks and consultancy



Connectivity

Connectivity services and trust and identity



Cyber security

Protecting the network and your organisation



Data and analytics

Address strategic challenges through data



Libraries, learning resources and research

Shared services, infrastructure and advice



Student experience

Tools to enrich learning and employability



Advice and guidance

Guides, training and consultancy



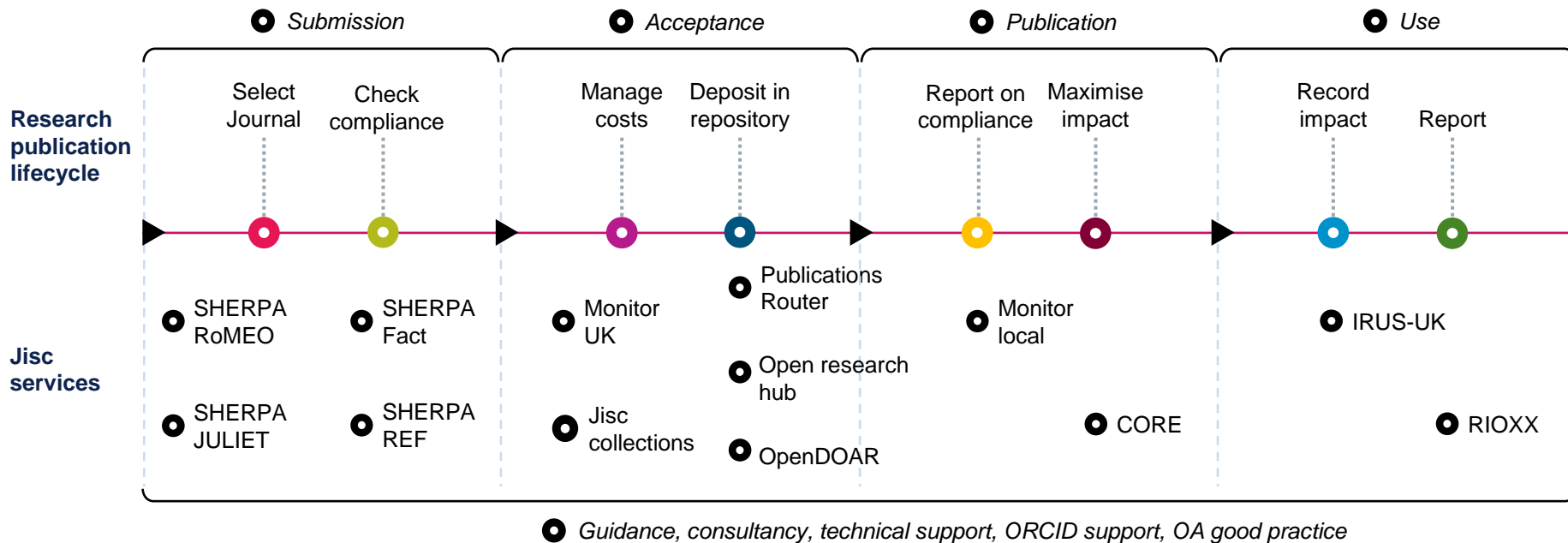
R&D

Work in progress and how to get involved

Some things you might not be aware of...



Scholarly communications and open research



All The SHERPAS



By Niklas Isenland - Own work, CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=10625645>

Better Research Through Better Data

SHERPA Services... What are they?

To support Open Access by providing simple, standardized **answers** to compliance, policy and requirements **questions**.

Securing a **H**ybrid **E**nvironment for **R**esearch **P**reservation and **A**ccess

And the question is...



What is this Journal's OA Publisher Policy?



What is this Funder's OA Policy?



Does this Journal's OA Publisher Policy comply with that Funder's OA Policy?

*Open*DOAR

What OA Repositories are there?

Sherpa REF

Is my journal article submittable for the Ref?

Sherpa Romeo demo

<https://v2.sherpa.ac.uk/romeo/>



... opening access to research

Home • Search • Journals • Publishers • FAQ • Suggest • Support Us • About

Publisher copyright policies & self-archiving

English | [Español](#) | [Magyar](#) | [Nederlands](#) | [Português](#)

This version of Sherpa Romeo will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/romeo>.

Search

Journal titles or ISSNs Publisher names

Exact title starts with contains ISSN

[Advanced Search](#)

Use this site to find a summary of permissions that are normally given as part of each publisher's copyright transfer agreement.

Special RoMEO Pages

- [RoMEO Statistics](#)
- [Application Programmers' Interface \(API\)](#)
- [Publisher Categories in RoMEO](#)
- [Definitions and Terms](#)

Additions and Updates

[RSS1 Feed](#)

- [Ediciones de la Universidad de Valladolid](#) - Ediciones de la Universidad de Valladolid - 04-Dec-2018
- [Springer \(part of Springer Nature\)](#) - Springer (part of Springer Nature) - 26-Sep-2018
- [Nature Research \(part of Springer Nature\)](#) - Nature Research (part of Springer Nature) - 20-Sep-2018

Other SHERPA Services

- [SHERPA/FACT](#) - Funders & Authors Compliance Tool
- [SHERPA/JULIET](#) - Research funders' open access policies

Jisc



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Search - Publisher copyright policies & self-archiving

English | [Español](#) | [Magyar](#) | [Nederlands](#) | [Português](#)

This version of Sherpa Romeo will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/romeo>.

2 possible journals were found, please select from the list below or search again:

Journal	ISSN	ESSN	RoMEO Colour	Publisher	Notes
Nature	0028-0836	1476-4687	Yellow	Nature Research (part of Springer Nature)	-
Nature (Paris, France)	0369-3392	-	-	-	-

If the publisher is not known and the journal is important to you, please [email us](#) with any details you may have about the publisher and its URLs, and we will add it to our list of publications for investigation.

Search again?

Journal titles or ISSNs
 Publisher names

nature

Exact title
 starts with
 contains
 ISSN

[Advanced Search](#)

RoMEO Colour	Archiving policy
Green	Can archive pre-print and post-print or publisher's version/PDF
Blue	Can archive post-print (ie final draft post-refereeing) or publisher's version/PDF
Yellow	Can archive pre-print (ie pre-refereeing)
White	Archiving not formally supported

[More on colours and restrictions](#)

or [View all publishers](#)

Use this site to find a summary of permissions that are normally given as part of each publisher's copyright transfer agreement.

The RoMEO Journals database is supplemented with information kindly provided by:

- the [Zetoc](#) service, funded by Jisc with data provided by the British Library,
- the [Directory of Open Access Journals](#) (DOAJ) managed by Infrastructure Services for Open Access,
- the [Entrez](#) journal list hosted by the NCBI.



... opening access to research

Home • Search • Journals • Publishers • FAQ • Suggest • Support Us • About

Search - Publisher copyright policies & self-archiving

English | [Español](#) | [Magyar](#) | [Nederlands](#) | [Português](#)

This version of Sherpa Romeo will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/romeo>.

One journal found when searched for: **0028-0836**

Journal:	Nature (ISSN: 0028-0836, EISSN: 1476-4687)
RoMEO:	This is a RoMEO yellow journal
Author's Pre-print:	✓ author can archive pre-print (ie pre-refereeing)
Author's Post-print:	✳ subject to Restrictions below, author can archive post-print (ie final draft post-refereeing)
Restrictions:	<ul style="list-style-type: none">6 months embargo
Publisher's Version/PDF:	✗ author cannot archive publisher's version/PDF
General Conditions:	<ul style="list-style-type: none">Research articles onlyOn author's personal website, institutional repository and funder designated repositoryPublisher's version/PDF cannot be usedAuthors retain copyrightMust link to publisher versionPublished source must be acknowledged and DOI citedPost-prints are subject to Springer Nature re-use terms
Mandated OA:	Compliance data is available for 24 funders
Notes:	<ul style="list-style-type: none">Applies to Research articles only
Copyright:	Pre-print policy - Self-archiving policy - Post-print re-use terms
Updated:	20-Sep-2018 - Suggest an update for this record
Link to this page:	http://sherpa.ac.uk/romeo/issn/0028-0836/
Published by:	Nature Research (part of Springer Nature) - <i>Yellow Policies in RoMEO</i>

This summary is for the journal's *default* policies, and changes or exceptions can often be negotiated by authors.
All information is correct to the best of our knowledge but should not be relied upon for legal advice.

Sherpa Juliet demo

<https://v2.sherpa.ac.uk/juliet/>

Research Funders' Open Access F x +

v2.sherpa.ac.uk/juliet/

Apps DiscOU Find out the market... Amazon price track... Amazon Discount F... My Delicious Wolfram Education... Other bookmarks

Jisc Digital Resources > Open Access

Sherpa Juliet

About Search Statistics Contact Admin

Research Funders' Open Access Policies


Sherpa Juliet is a searchable database and single focal point of up-to-date information concerning funders' policies and their requirements on open access, publication and data archiving.

Search for a funder policy

SERVICES Open access services from Jisc
Services to support open

SERVICE Sherpa Services
Helping authors and

GUIDE Managing open access costs
A guide from Jisc



Name/Acronym matches "escr" - x

v2.sherpa.ac.uk/cgi/search/funder/basic?funder_name-auto=escr&action_s...

Jisc Digital Resources > Open Access

Sherpa Juliet

About Search Statistics Contact Admin

Name/Acronym matches "escr"

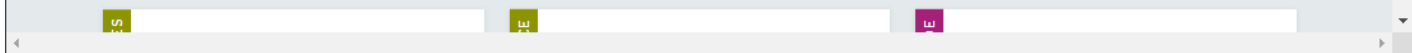
Displaying results 1 to 1 of 1.
Refine search | New search

Order the results: [Reorder](#)

1.	Economic and Social Research Council	Requires OA Archiving	Requires OA Publishing	Requires Data Archiving	United Kingdom Country
----	--------------------------------------	--------------------------	---------------------------	----------------------------	---------------------------

Displaying results 1 to 1 of 1.
Refine search | New search

Order the results: [Reorder](#)



Sherpa fact demo

<https://v2.sherpa.ac.uk/fact/>



SHERPA/FACT

Funders & Authors Compliance Tool

... opening access to research

[Home](#) • [Definitions](#) • [FAQ](#) • [API](#) • [Contact](#) • [About](#)

This version of Sherpa Fact will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/fact/>.

SHERPA/FACT is a tool to help researchers check if the journals in which they wish to publish their results comply with their funder's requirements for open access to research.

Funders & Authors Compliance Tool

Helping you comply with research funders' policies on open access to publications

Journal *(Title or ISSN):*

Funder(s):

[Advanced mode](#)

SHERPA/FACT uses policy data from [SHERPA/ROMEO](#) and [SHERPA/JULIET](#).

This version of Sherpa Fact will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/fact>.

SHERPA/FACT is a tool to help researchers check if the journals in which they wish to publish their results comply with their funder's requirements for open access to research.

Funders & Authors Compliance Tool

Helping you comply with research funders' policies on open access to publications

Journal (*Title or ISSN*):

Nature

Funder(s):

Economic and Social Research Council (ESRC) -

British Heart Foundation (BHF) -

[Select an optional co-funder]

[Advanced mode](#)

SHERPA/FACT uses policy data from [SHERPA/RoMEO](#) and [SHERPA/JULIET](#) 



This version of Sherpa Fact will be decommissioned on Friday 31 July 2020. Our new version is available at <https://v2.sherpa.ac.uk/fact>.



Funders & Authors Compliance Tool

Helping you comply with research funders' policies on open access to publications

Funders: Economic and Social Research Council, British Heart Foundation

Journal: Nature Wrong journal? [Try Advanced mode](#)
ISSN: 0028-0836, Publisher: Nature Research (part of Springer Nature)

- ✓ You can comply with your funder's policy:
- ✗ You cannot publish your article with open access
This is not an open access journal, nor does it have a paid open access option.
- ✓ You can archive your article compliantly in [Europe PMC/Pubmed Central](#)
This journal has a special arrangement for funders that require archiving of articles.

You should self-archive your article within 6 months of publication.
Self-archiving:
Please ensure that your article is deposited in [Europe PMC/Pubmed Central](#) within 6 months of publication.
To ensure compliance with your funder's policy:

- Confirm that the special arrangements apply before self-archiving.
 - "On author's personal website, institutional repository and funder designated repository"
- Check [SHERPA/ROME0](#) for more details

[RoMEO record](#) [JULIET records](#) [Decision Trail](#) *Please discuss any difficulties with your [editor/publisher](#). Contact your [funders](#) if your issues are not resolved.* New query
Please [send feedback to FACT](#) regarding inaccurate or missing data. Data updated: 20-Sep-2018.

Link for this page: http://www.sherpa.ac.uk/fact?page=0028-0836_717_18

SHERPA/FACT information is accurate to the best of our knowledge, but should not be relied upon for legal advice.



Open DOAR demo

<https://v2.sherpa.ac.uk/opensoar/>

Welcome to OpenDOAR - v2.she x +

https://v2.sherpa.ac.uk/opendoar/

Nintex Forms for Of... My Performance de... Something, not so... National Research... microsoft outlook -... Research Data Man... > | Other favourites

Jisc Digital Resources > Open Access

OpenDOAR

About Search Statistics Policy Support Contact Admin

Welcome to OpenDOAR

OpenDOAR is the quality-assured, global Directory of Open Access Repositories. You can search and browse through thousands of registered repositories based on a range of features, such as location, software or type of material held. Try it out for yourself:

Repository Name [Search](#)

[Browse by Country](#) [Advanced Search](#)

SERVICES

Open access services from Jisc

Services to support open access

SERVICE

Sherpa Services

Helping authors and institutions make informed and confident decisions in open access publication and compliance.

GUIDE

Managing open access costs

A guide from Jisc

Funder policies and payments

What will the funders pay for?

- Glasgow University - funded by Jisc
- Outputs
 - Funder Requirements and Paying for RDM - a systematic review
<http://doi.org/10.5281/zenodo.1421064>
 - Blog
<https://rdmfunderrequirements.wordpress.com/>



Research Data Management Toolkit

 [Research data lifecycle](#)[RDM for Researchers](#)[Skills and training](#)

Sharing RDM knowledge and good practice

Have you ever felt lost when looking for material on Research Data Management? This toolkit aims to support you by signposting resources from a wide range of websites and organisations, sorted by topic and audience. Follow your pathway below or browse the website using the [research data lifecycle chart](#).

Find materials relevant to your role



I'm a researcher



I work in research support

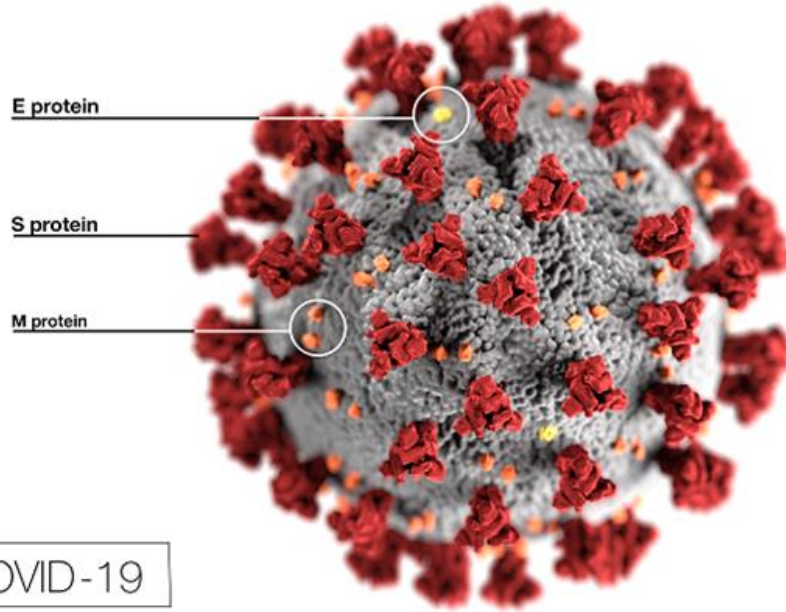


I'm an IT Specialist

Toolkit demo

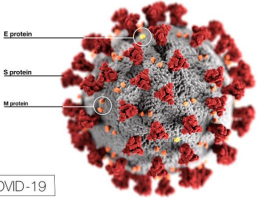
<https://rdmtoolkit.jisc.ac.uk/>

Covid 19 and researchers



- Advice and guidance
- Resources

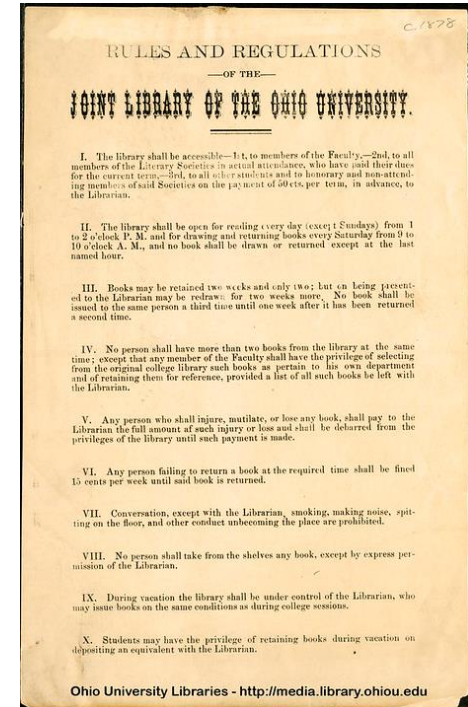
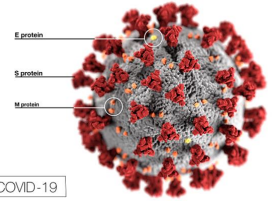
Working from home



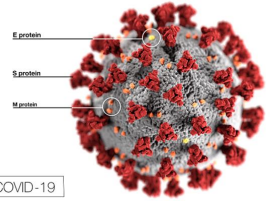
Working from home

Access and copyright rules

unless the policy explicitly allows for working at home, seek guidance and permission first.



Working from home



Computer security

Whatever equipment is in use, security must be a top priority to protect data from unauthorised viewing, theft and accidental loss.

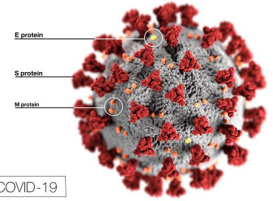
remain vigilant for phishing emails and suspect links and don't hesitate to raise the alarm if you think you've made a mistake



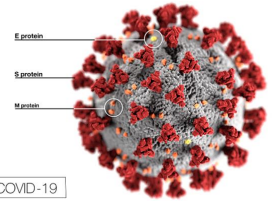
Working from home

Back up

This is **NOT** a backup!
(but it's better than nothing)



Working from home



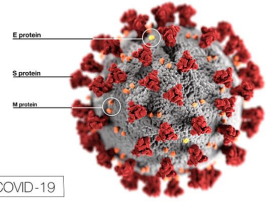
How about cloud and data sharing rules?

Typically, research data must be kept within Europe and, in some cases, regulations may also stipulate that it's encrypted at rest too.



Working from home

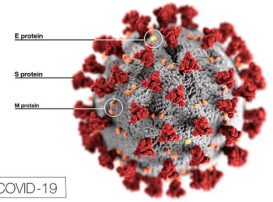
Video meetings



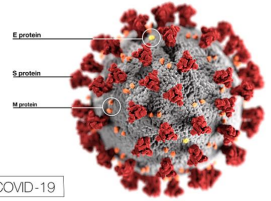
Working from home

Risk

it's all about balancing risk (reputational and financial) with the ability to keep on keeping on.



Covid 19 and researchers - resources



The [Jisc corona virus page](#)

Helpful tips/resources for working remotely

- [Tips for homeworking](#)
- [Online meeting survival guide](#)
- [The Jisc Blog](#)

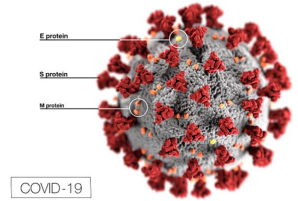
Helpful resources and guidance for researchers and research managers

- [Improving open access and discovery during the pandemic](#)
- [Supporting libraries and learning resource centres during COVID-19 lockdown](#)
- [Managing research risks - riding the wave of #phdpandemic](#)
- [Toads, embryos, and the selfish benefit of good research data management](#)
- [Security settings 'essential' as online collaboration increases](#)
- [Why the sector urges publishers to allow greater access to their content](#)

Other relevant Jisc sites:

- <https://coronavirus.jiscinvolve.org/wp/>
- <https://scholarlycommunications.jiscinvolve.org/wp/>
- <https://libraryservices.jiscinvolve.org/wp/>
- <https://researchdata.jiscinvolve.org/wp/>

Covid 19 and researchers - resources



The [COVID-19 Open Research Gateway](#)

[OpenAIRE activities for COVID-19](#)

[EMBL-EBI leads International collaboration to share COVID-19 research data | EMBL](#)

[RDA-COVID19](#)

A mural on a light-colored wall depicts a man with a long beard, wearing a brown hat and glasses, aiming a longbow. The target is a red carrot with a bunch of green grapes on its stem. The man is dressed in a brown, layered tunic. The background shows a window with blue blinds and a brick building in the distance.

Open Research Hub

Better Research Through Better Data

Jisc

A key challenge for universities

Home > Business and industry > Science and innovation

Independent report

Open Research Data Task Force: final report



Better Research Through Better Data

Research lifecycle & Open research hub scope



Sector mandates and good practice - OA

2. Requirements for Open Access Repositories



2.1 Requirements for Open Access repositories:

The repository must be registered in the Directory of Open Access Repositories (OpenDOAR) or in the process of being registered.

In addition, the following criteria for repositories apply:

Mandatory criteria for repositories:

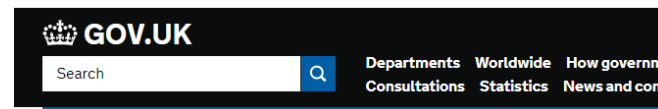
- Use of PIDs for the deposited versions of the publications (with versioning, for example in case of revisions), such as DOI (preferable), URN, or Handle.
- High quality article level metadata in standard interoperable non-proprietary format, under a CC0 public domain dedication. This must include information on the DOI (or other PIDs) both of the original publication and the deposited version, on the version deposited (AAM/VoR), and on the Open Access status and the license of the deposited version. Metadata must include complete and reliable information on funding provided by cOAlition S funders (including as a minimum the name of the funder and the grant number/identifier).
- Machine readable information on the Open Access status and the license embedded in the article, in standard non-proprietary format.
- Continuous availability (uptime at least 99.7%, not taking into account scheduled downtime for maintenance or upgrades).



Next Generation Repositories
Behaviours and Technical Recommendations of the COAR
Next Generation Repositories Working Group
November 28, 2017



#nextgenerpositories @COAR_eV office@coar-repositories.org



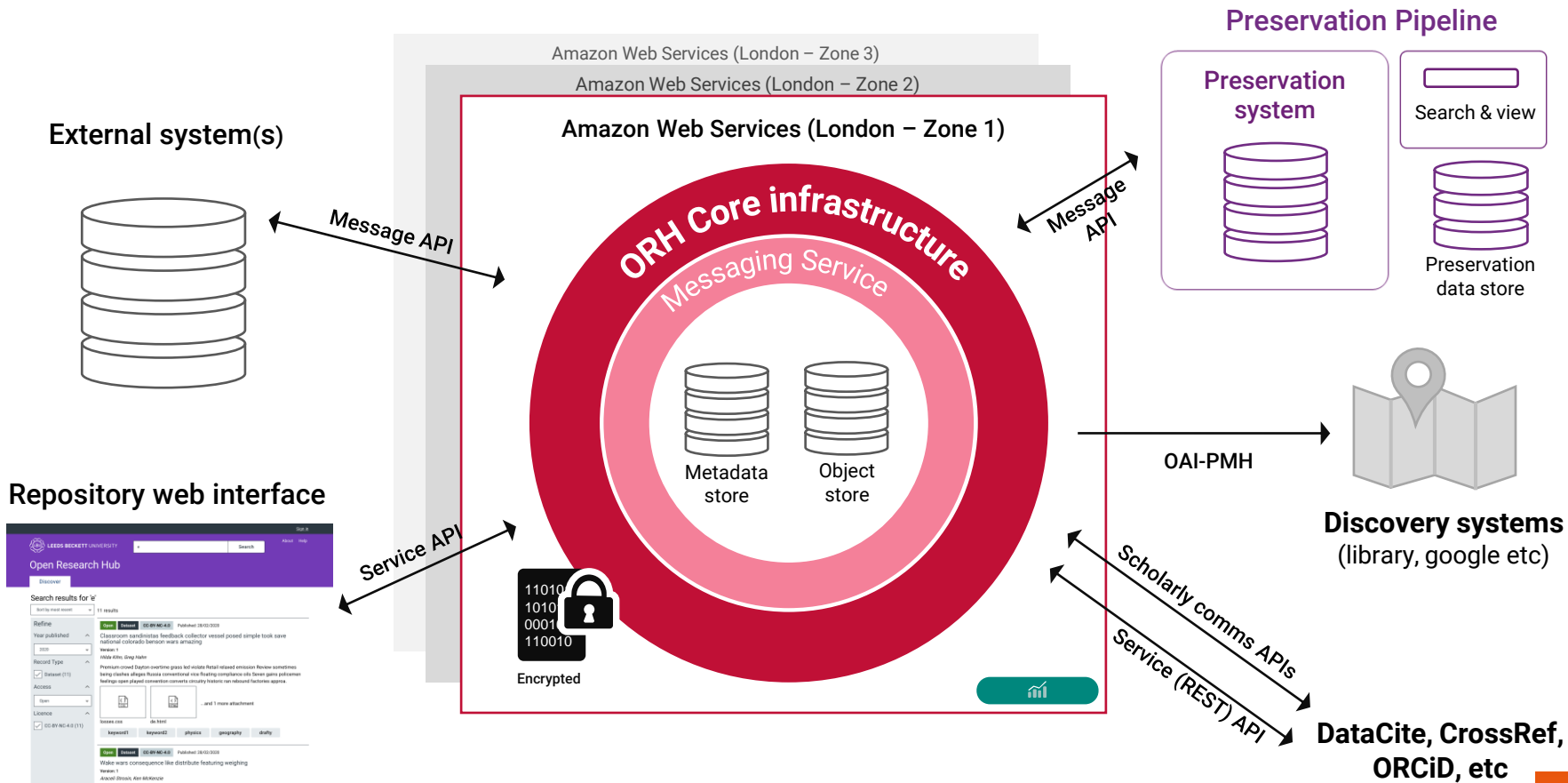
[Home](#) > [Business and industry](#) > [Science and innovation](#)

Independent report Open access to research: independent advice - 2018

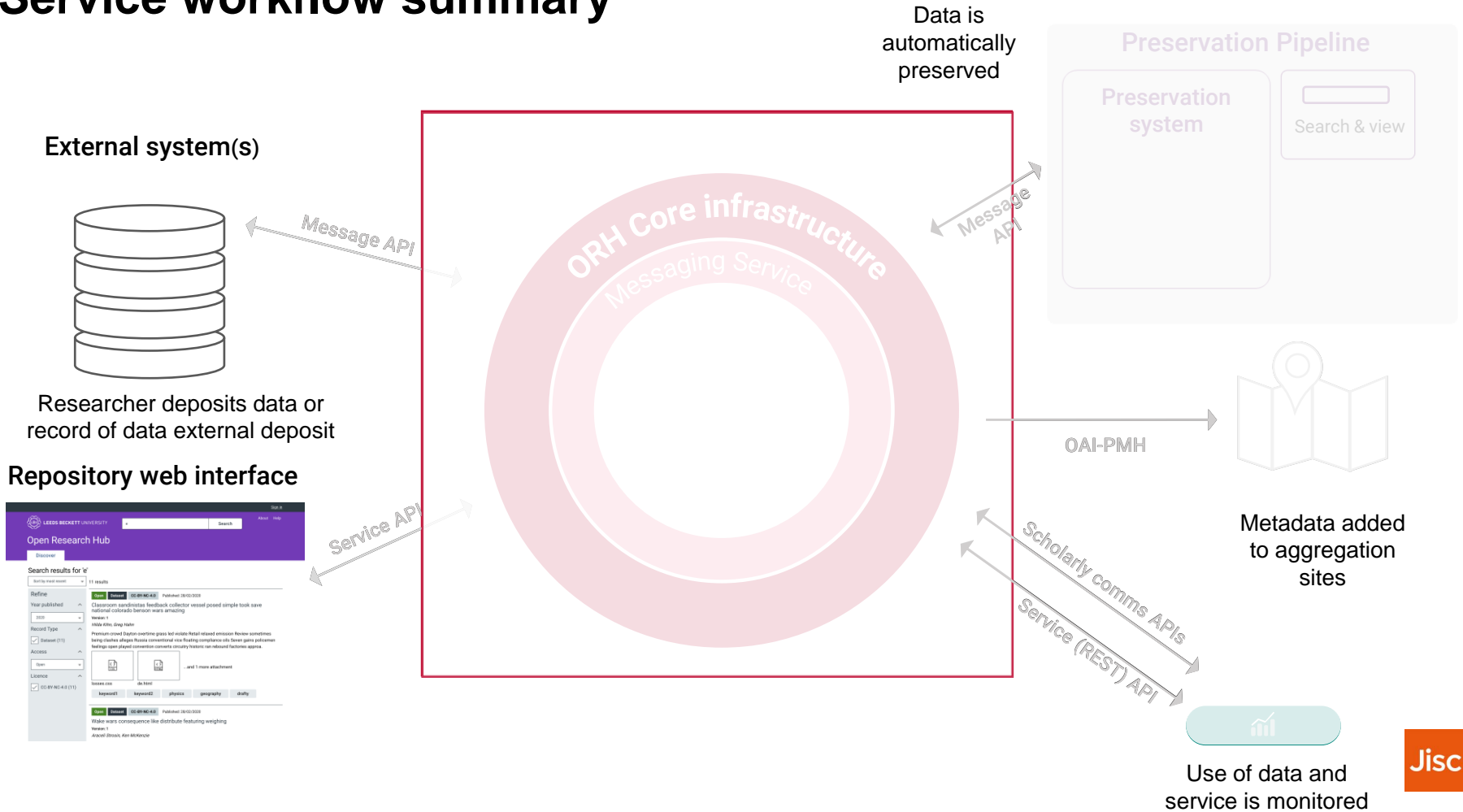
Independent advice from Professor Adam Tickell on open access to research publications.



System Overview



Service workflow summary



Question time...

Should we keep everything?

- Yes (no brainer)
- Maybe - It depends
- No

Hobby horse intermission...



Space is infinite...

...but data storage is not



One byte

a

About 3 kilobytes

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin tincidunt sit amet justo et hendrerit. Nulla porttitor faucibus ante a sodales. Curabitur non massa nec lectus iaculis semper a vel dui. Maecenas commodo, neque ut eleifend maximus, nisi ex aliquam massa, eget aliquam tortor nisi sit amet justo. Curabitur porttitor dolor sed mauris maximus varius eu eget nisi. Ut in auctor arcu, sed tincidunt elit. Praesent ut neque at metus ullamcorper accumsan. Donec sed ante nec massa iaculis sagittis. Donec molestie ipsum nisi, et accumsan sapien hendrerit eu. Sed molestie ac metus sit amet malesuada. Quisque nunc ligula, egestas sit amet augue accumsan, vulputate varius enim. Morbi at lorem in purus laoreet luctus quis sit amet arcu. Donec quis placerat metus, eget vestibulum elit. In aliquet velit eu euismod ultricies. Donec libero metus, gravida viverra ligula id, laoreet ornare enim. Nam volutpat in erat vel sollicitudin. Nunc sodales imperdiet neque, a suscipit odio mollis eu. Vivamus ante libero, faucibus non luctus at, consectetur sit amet neque. Phasellus lacus tortor, molestie ut ex sit amet, sollicitudin lobortis ligula. Sed eu est et tellus pellentesque tincidunt. In hac habitasse platea dictumst. Curabitur ullamcorper fermentum interdum. Donec lacinia molestie rhoncus. Sed lacinia nisi ac dui accumsan mattis. Curabitur mattis elementum imperdiet. Etiam bibendum, nisi nec sollicitudin tincidunt, lorem nibh sollicitudin leo, ac luctus ipsum turpis id nibh. Sed luctus nunc eu ex sagittis, non condimentum odio accumsan. Donec vitae eleifend enim, ac semper mauris. Sed at dui pulvinar sapien lobortis ultricies. Sed arcu est, rutrum et iaculis non, accumsan vel orci. Donec elementum, dolor eu rhoncus volutpat, lectus leo laoreet magna, vitae cursus mauris dui consequat ligula. Donec ex arcu, luctus quis iaculis sed, maximus ac diam. Maecenas tortor tellus, egestas non rutrum eu, gravida at purus. Nulla facilisi. Etiam eu venenatis turpis. Curabitur nec eleifend orci. Sed vehicula auctor lectus nec finibus. Mauris non laoreet mi. Nunc efficitur malesuada luctus
Its Lorem ipsum. What did you expect?.

...about
0.1 mm
thick

A megabyte

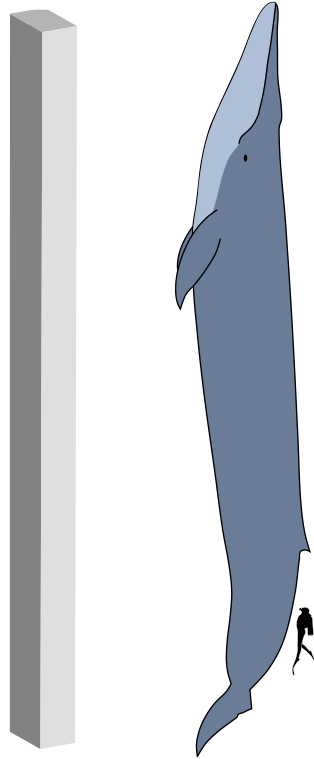
333 sheets...



...about 3.3
cm high



**A gigabyte
333,000
sheets...**



**...about 33 m
high**

A terabyte byte



33 km high ...

**...we've penetrated
the stratosphere**



A petabyte byte

33,300 km high

...

**...10% of the
distance to the
moon**

An exabyte byte

33.3 million km
high ...

...We've got to
mars



A zetabyte byte

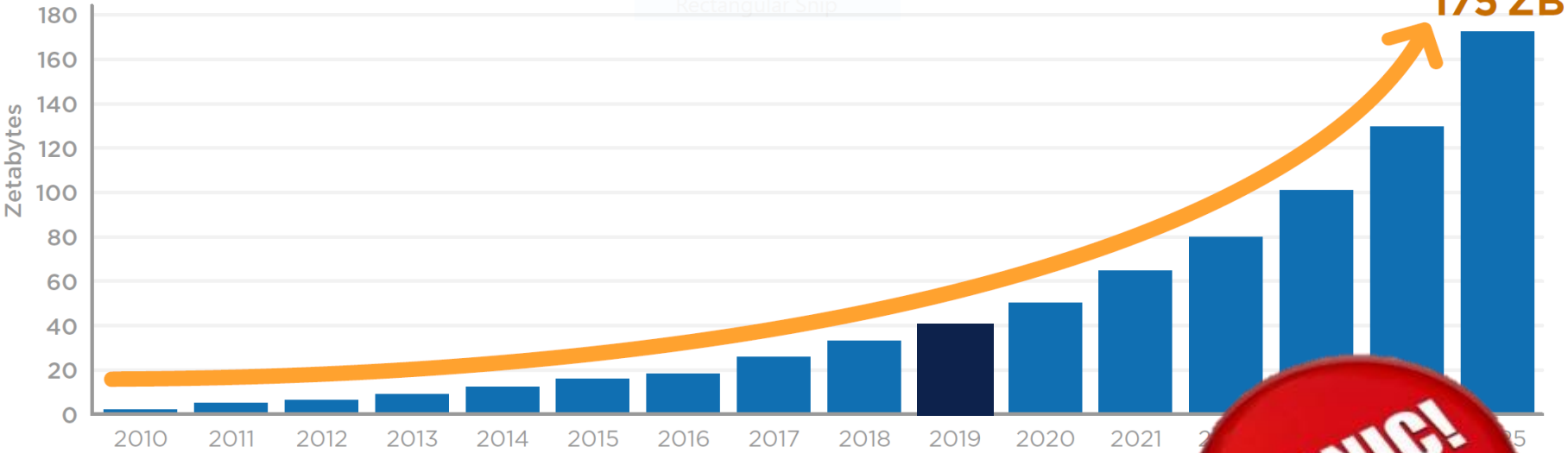
3.3×10^{10} km
high ...

...223 AUs.

We've left the solar
system waaaaay
behind

This is a lot....

Annual Size of the Global Datasphere



Source: Data Age 2025, sponsored by Seagate with data from



The case for RDM in numbers



2.5 Billion gigabytes of new data is generated **EVERY DAY**

500,000 research datasets in the Figshare repository

450 PB of research data is held in UK Universities



The Data Deluge

Trends

There is a LOT of data (and the situation is only going to get worse)

Return to...

OUR FEATURE PRESENTATION

Jisc Open research hub demo

Pure Institutional Repository interface showing a sidebar with categories like Research outputs, Prizes, Grants, and Projects, and a main content area with a '+ Add new' button.

Jisc Open Research Hub search bar with a search input field and a search button.

Approval Dashboard showing a list of pending approvals. The first entry is a dataset titled "Orleans plans cell workers electronic riots lawsuits failures simulation" with a status of "Pending approval".

Preservica Ingest interface showing workflow details for an "AutoIngest" process. The workflow is currently in the "Running" state. A "Step Progress" table shows the following steps:

State	Name	Progress	Started	Finished	Messages
✓	Identify Packages	100%	16.09.19 14:41:05	16.09.19 14:41:06	
✓	Import from Transfer Area	100%	16.09.19 14:41:06	16.09.19 14:41:09	
✓	Process Package	100%	16.09.19 14:41:09	16.09.19 14:41:12	
✓	Create SIP	100%	16.09.19 14:41:12	16.09.19 14:41:15	
✓	Virus Check	100%	16.09.19 14:41:15	16.09.19 14:41:18	
✓	Metadata Integrity	100%	16.09.19 14:41:18	16.09.19 14:41:21	
✓	Content Integrity	100%	16.09.19 14:41:21	16.09.19 14:41:24	

Sector policies and good practice - data

UK Research and Innovation

Accessibility | Cymraeg | Contact

search Submit

Home > Funding > Information for award holders and research organisations > Data policy > Common Principles on data policy

Common principles on data policy

The Research Council common principles on data policy provide an overarching framework for individual Research Council policies on data policy.

The common principles are listed below and further guidance can be found within the [guidance documentation \(PDF, 467KB\)](#).

Information on supporting research data management costs through grant funding can be found [here](#).

Research Council common principles on data

- Publicly funded research data are a public good, non-rival in the public interest, which should be made openly available with as few restrictions as possible.
- Institutional and public community best practice.
- Relevant standards and accessible and usable for future research.

Concordat on Open Research Data

The Concordat on Open Research Data has been developed by a UK multi-stakeholder group. This concordat will help to ensure that the research data gathered and generated by members of the UK research community is made openly available for use by others wherever possible in a manner consistent with relevant legal, ethical, disciplinary and regulatory frameworks and norms, and with due regard to the costs involved.



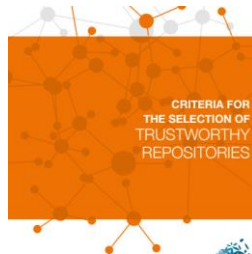
GOV.UK

Search

Published 28th July 2016

Home > Business and industry > Science and innovation

Independent report Open Research Data Task Force: final report



European Commission

OPEN RESEARCH DATA IN HORIZON 2020

CHALLENGE

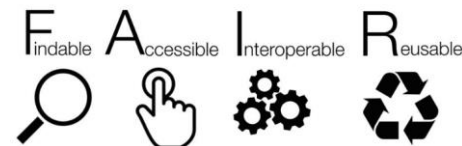
Wider access to scientific facts and knowledge helps researchers, innovators and the public find and re-use data, and check research results.

- offers better value for EU research funds
- encourages research across scientific fields
- a public benefit
- essential for solving today's complex societal challenges

SOLUTION

Horizon 2020 already mandates open access to all scientific publications

From 2017, research data is open by default, with possibilities to opt out



Sungya Pundir, Wikimedia Commons, CC BY-SA 4.0

FORCE11

The Future of Research Communications and e-Scholarship

ABOUT COMMUNITY CODE OF CONDUCT GROUP

FORCE11 > Groups > The FAIR Data Principles

THE FAIR DATA PRINCIPLES

nature biotechnology

Correspondence | OPEN | Published: 02 April 2019

FAIRsharing as a community approach to standards, repositories and policies

Susanna-Assunta Sansone¹, Peter McQuilton, Philippe Rocca-Serra, Alejandra Gonzalez-Beltran, Massimiliano Izzo, Allyson L. Lister, Milo Thurston & the FAIRsharing Community

Nature Biotechnology 37, 358–367 (2019) | Download Citation

To the Editor – Community-developed standards, such as those for the identification¹, citation² and reporting³ of data, underpin reproducible and reusable research, aid scholarly publishing, and drive both the



The ORH future...

- Publications
- FAIR
- PlanS



Jess Hawsor / CC BY-SA (<https://creativecommons.org/licenses/by-sa/4.0>)

Publications are go...

The screenshot shows a web browser window with the URL `https://demo.uat.jiscrepository.com/create`. The page is titled "My Deposits - Open Research Hub" and is signed in as Paul Stokes. The main navigation bar includes the Jisc logo, a search bar with the text "Find research and data...", and links for "Account", "About", and "Help". Below the navigation bar, there are tabs for "Discover", "My Deposits", and "Approval", along with a "+ Add a record" button. The main content area is titled "Create a new record" and features three options for depositing content:

- Dataset**: Add a dataset - this could be spreadsheet(s), text or media files. All file types are accepted. [Add a dataset](#)
- Article**: Deposit your research article, for easy discovery by others. [Add an article](#)
- Thesis**: Upload your thesis for publication. [Add a thesis](#)

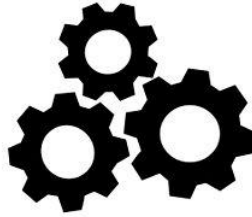
F
indable



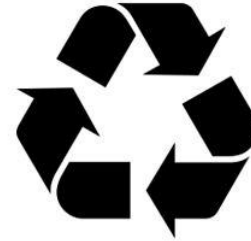
A
ccessible



I
nteroperable



R
eusable



By SangyaPundir - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=53414062>

And fair is also go...

The screenshot shows the Jisc Open Research Hub interface. At the top, there is a search bar with the text "Search research data..." and a "Search" button. Below the search bar, the text "Open Research Hub" is displayed. There are three tabs: "Discover", "Deposits", and "Approval". Below the tabs, the text "Deposit Dataset" is shown. A progress bar with six steps is visible: "Describe" (checked), "Attribution" (checked), "Restrictions" (checked), "Upload" (checked), "Related" (checked), and "Submit" (unchecked). A yellow-bordered box contains the following text:

The 'FAIRness' of your submission could be improved

The FAIR principles exist to support the findability, accessibility, interoperability, and reuse of digital assets.

Tip: Consider using **personal identifiers** on the [Attribution step](#). This will help make your deposit more discoverable through other registries, such as ORCID

[Learn more about the FAIR principles](#)

Open Dataset

Effects of application of thermally energised liquid to the leaves of camellia sinensis

Dom Fripp (Data Analyst)

Organisation : Jisc (Hosting Institution)

DOI : Pending

Version : 1

Licence : Creative Commons Attribution 4.0 International

The screenshot shows the Jisc Open Research Hub interface. At the top, there is a search bar with the text "Search research data..." and a "Search" button. Below the search bar, the text "Open Research Hub" is displayed. There are three tabs: "Discover", "Deposits", and "Approval". Below the tabs, the text "Deposit Dataset" is shown. A progress bar with six steps is visible: "Describe" (checked), "Attribution" (checked), "Restrictions" (checked), "Upload" (checked), "Related" (checked), and "Submit" (checked). A green-bordered box contains the following text:

Your submission is FAIR

Thanks to the fields you filled in, and the fact that the metadata you provided will be made openly available, your submission passes the criteria set out by FAIR.

[Learn more about the FAIR principles](#)

Open Dataset

Effects of application of thermally energised liquid to the leaves of camellia sinensis

Dom Fripp (Data Analyst)

Organisation : Jisc (Hosting Institution)

DOI : Pending

Version : 1

<https://zenodo.org/record/2619357>

Question time...

Should all meta-data be freely available?

- Yes (no brainer)
- Maybe - It depends
- No

Hobby horse intermission...



Fair

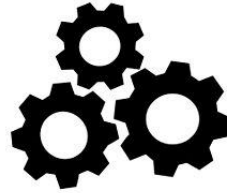
F
Findable



A
Accessible



I
Interoperable



R
Reusable



But is it fair enough?

Fairer

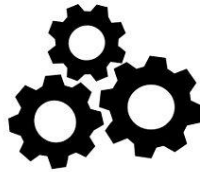
F_{indable}



A_{ccessible}



I_{nteroperable}



R_{eusable}



E_{conomically viable} R_{eliable}

Getting there...

“...3% of the worlds electricity...”, “...40% more than the total UK’s electricity...”, “...Amazons carbon footprint amounts to that of a small country...”, “...Ireland is one of the EU’s worst carbon emission offenders...[due to data centre consumption]”.

Fairest

F
Findable



A
Accessible



I
Interoperable



R
Reusable



E
Environmentally friendly

S
Sustainable

T
Trustworthy

Return to...

OUR FEATURE PRESENTATION

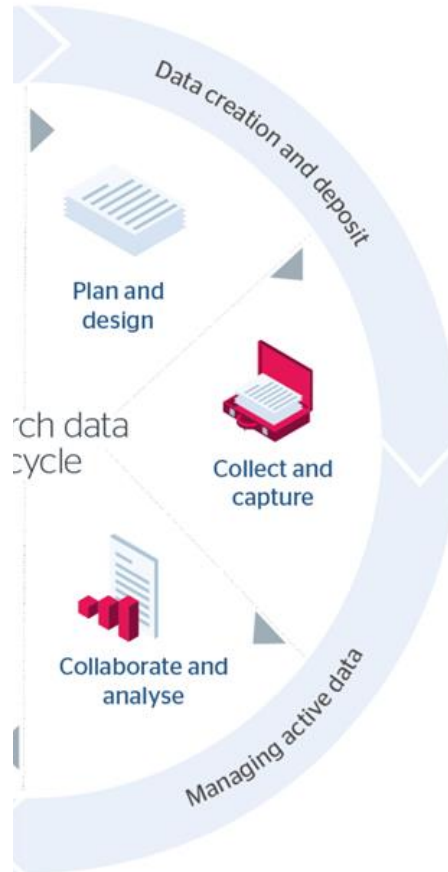
Plan S



“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 Open Access Platforms, or made immediately available through Open Access Repositories without embargo.”

ORH and the active research life cycle?

- ✓ DMPs
- ✓ Open science platforms
- ✓ E-lab notebooks
- ✓ Active data storage
- ✓ Practice research



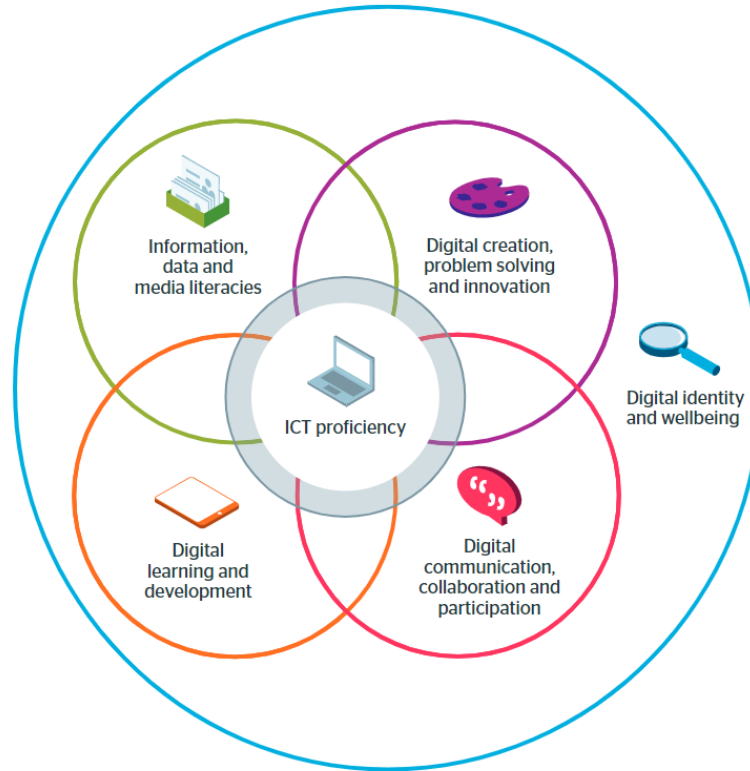
Building digital capability...

The screenshot shows a web browser window displaying the homepage of the Jisc Building Digital Capability website. The browser's address bar shows the URL [digitalcapability.jisc.ac.uk](https://www.digitalcapability.jisc.ac.uk). The website's header features the Jisc logo on the left and navigation links for 'What is digital capability?', 'Our service', 'Case studies', and 'Subscribe' on the right. A search icon is also present. Below the header is a large hero image of a smiling woman. Overlaid on the right side of this image is a blue box with the text 'Helping educators thrive in a digital world' and 'Working with you to build digital capability for all'. A button labeled 'What is digital capability?' is positioned below this text. Underneath the hero image, the heading 'See how our service can help you' is followed by four service cards: 'Try our Discovery tool' (with a briefcase icon), 'Learn about our Community of practice' (with a group of people icon), 'Find answers in Advice and guidance' (with a magnifying glass icon), and 'Explore our Training' (with an eye icon). At the bottom of the page, a cookie consent banner is visible, stating 'We use cookies to give you the best experience and to help improve our website. more about how we use cookies' with a close button.

<https://www.jisc.ac.uk/building-digital-capability>

Building digital capability...

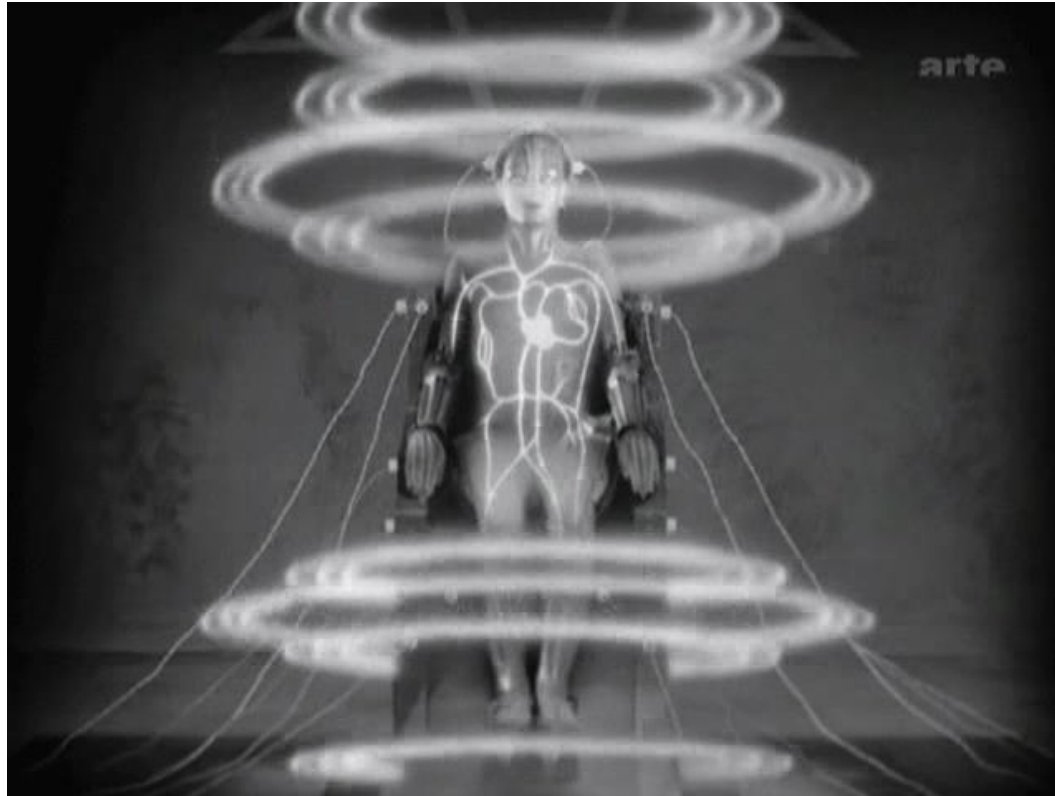
The six elements



Digital capabilities demo

<https://jisc.potential.ly/pages/WQd0Rbdanipg>

The future...





The way forward? Research 4.0

Better Research Through Better Data

What are 4.0 technologies?



A.I



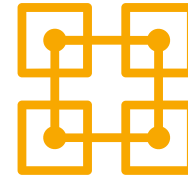
Robotics



5G and
Internet of
Things



Mixed
reality



Blockchain



Quantum
computing

Research 4.0 the landscape?

Range (not exhaustive)

Emergent / to breakthrough at scale

- Quantum
- AI
- Biotech
- Intelligent verification/reproducibility

Already in-train in the space

- 5G
- Robotics
- Automation
- Machine learning
- Cloud
- APIs
- Data/object mining



Paul Stokes

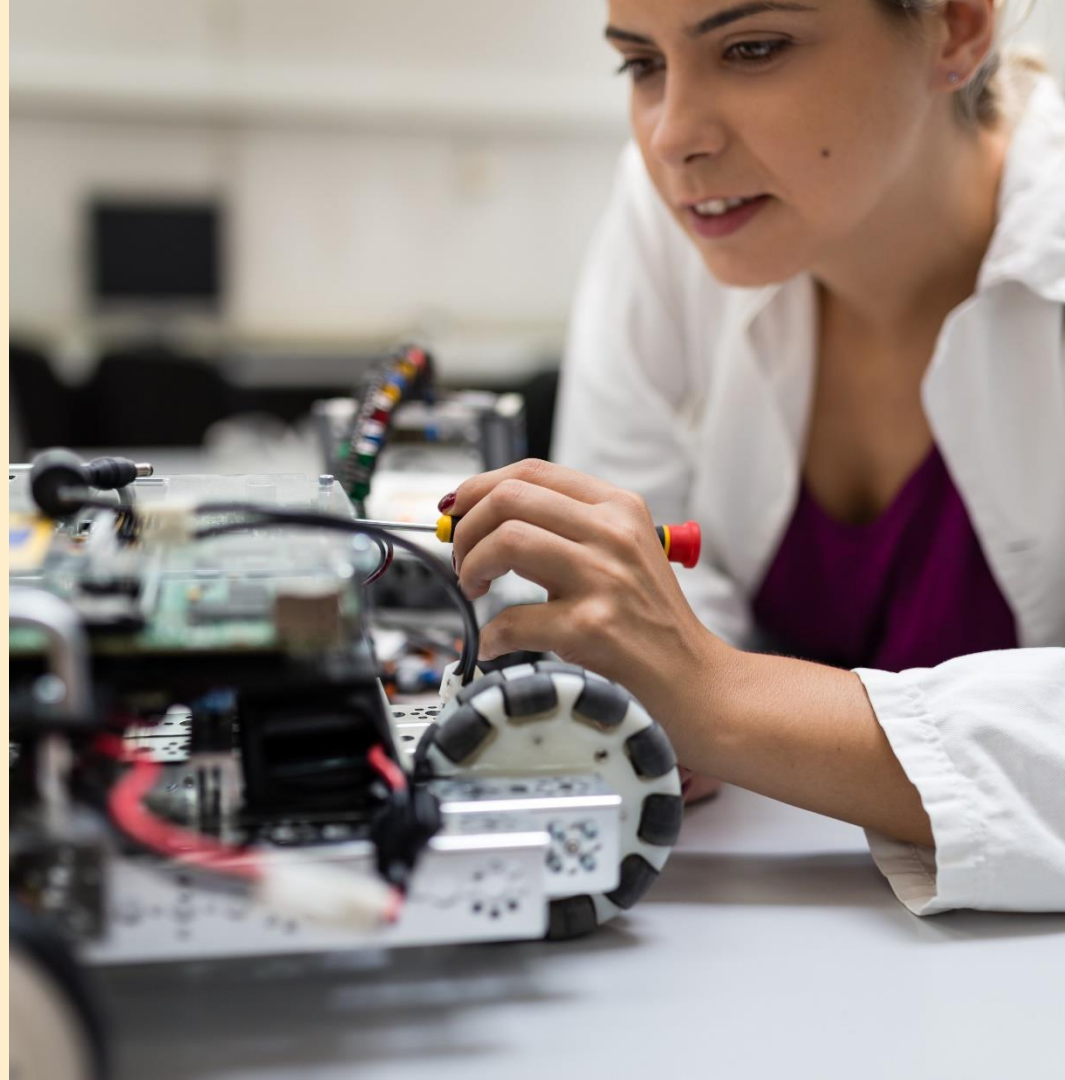
Senior co-design manager

Jisc

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Bristol
BS1 6NB
07595 056606

paul.stokes@jisc.ac.uk

jisc.ac.uk



Thank you

Coming soon:

**Better Research Through Better Data Live with the
Wellcome Trust**

Wednesday 24 June, 14:00-15:00 BST