OPEN ACCESS E OPEN SCIENCE
4-POLITICHE EUROPEE E VQR

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Scuola di dottorato Economia UniTo - Gennaio 2021

Impareremo in questo modulo

1. Horizon 2020, Horizon Europe e le politiche europee
2. EOSC, European Open Science Cloud
3. due parole sulla VQR

Messaggi chiave:

1. l'Europa supporta l'Open Science più di quanto crediamo/sappiamo
2. EOSC è il futuro della ricerca: non possiamo rimanere fuori

«make science fit for the 21th century»

RISCHI A ESSERE I PRIMI, RISCHI MAGGIORI A ESSERE GLI ULTIMI

Transition to open science is a multidimensional and multistage process. There is value and risk of being a first mover, but there is higher risk of being a follower. The European Commission has taken

Open science will make science more efficient, reliable, and responsive to societal challenges. The European Commission

E ARTICLE Provisionally accepted The full-text will be published soon Notify me
Front. Big Data | doi: 10.3389/fdata.2019.00043

Open science, open data and open scholarship: European policies to make science fit for the 21st century

Jean-Claude Burgelman[1*], Corina Pascu[1*], Katarzyna Szkuta[1], Rene Von Schomberg[1], Athanasios Karalopoulos[1], Konstantinos Repanas[1] and Michel Schouppe[1]

Open science (or in fact, open scholarship) has shifted the prime focus of researchers away from publishing toward knowledge sharing.

SINTESI DELLE POLITICHE DI APERTURA DEGLI ULTIMI 15 ANNI

and access will be maximized. In Horizon Europe, research data will be open by default while taking into account the need to balance openness and protection of scientific information, commercialization and Intellectual Property Rights, privacy concerns and security, following the principle "as open as possible, as closed as necessary." Data management plans (DMP) will become mandatory, even if not making research data open. The requirement for responsible data management will be separated from the requirement for providing open access to research data. Emphasis will be placed on supporting as much as possible the proliferation of data that are findable, accessible, interoperable, and re-usable (FAIR). Finally, the use of trusted or certified repositories and infrastructures like the European Open Science Cloud (EOSC) will be required for research data in some Horizon Europe work programs.

Changing the reward and incentive system for researchers is a key open science challenge and a broader issue for which primarily the responsibility lies in the scientific community (universities and funders). This includes making open science practices rewardable and fundable as well as the employment of specific indicators for researchers' engagement with open science. A change of the reward and incentive system can only be stakeholders-driven, and it has to be bottom-up. This change also includes changing mind-sets of researchers to open up and share data and "seduction" to make open science easy, useful, and affordable[3].

The European Open Science agenda contain the ambition to make FAIR data sharing the default for scientific research by 2020. To

… as Open as pos

Carlos Moedas ✓
@Moedas

Segui

2/4 "Open as possible, as closed as necessary" is the new principle for all #data from publicly
ccess

Iryna Kuchma @irynakuchma · 18 nov 2015
#Openscience is about making sure that science serves innovation & growth – Günther Oettinger & Carlos Moedas

HORIZON 2020

TESTI E DATI OPEN BY DEFAULT (GUIDA)

HORIZON2020: AS OPEN AS POSSIBLE
HORIZON EUROPE: ANCORA MAGGIORE APERTURA + UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Open Science across the programme

Open Science — Better dissemination and exploitation of R&I results and support to active engagement of society

Mandatory Open Access to publications: beneficiaries shall ensure that they or the authors retain sufficient intellectual property rights to comply with open access requirements

Open Access to research data ensured: in line with the principle "as open as possible, as closed as necessary"; Mandatory Data Management Plan for FAIR (Findable, Accessible, Interoperable, Re-usable) and Open Research Data

- Support to researcher skills and reward systems for open science
- Use of European Open Science Cloud

May 2019 | Version 25

European Commission

Horizon Europe

THE NEXT EU RESEARCH & INNOVATION INVESTMENT PROGRAMME (2021 – 2027)

2019

Our vision

A sustainable, fair and **prosperous** future for **people** and **planet** based on European values.

- Tackling **climate change** (35 % budgetary target)
- Helping to achieve **Sustainable Development Goals**
- Boosting the Union's **competitiveness and growth**

May 2019 | Version 25

European Commission

Horizon Europe

TESTI E DATI APERTI
MISSIONS INTERDISCIPLINARI

Support breakthrough innovation > European Innovation Council: One-stop shop to bring the most promising ideas from lab to real world application and support the most innovative SMEs, including start-ups, to scale up their ideas.

Deliver targeted solutions to societal challenges together with citizens > EU missions: Ambitious, bold goals to tackle issues that affect our daily lives, ranging from fighting cancer to adapting to climate change, living in greener cities, ensuring soil health for food, nature, people and climate, and protecting our waters and ocean.

Rationalise the funding landscape > Streamlined approach to European Partnerships: Streamlined number of partnerships while encouraging wide participation of partners from public and private sectors.

Strengthen international cooperation > extended association possibilities: Extended openness to association for non-EU countries (third countries) with good capacity in science, technology and innovation.

Reinforce openness > Open Science policy: Mandatory open access to publications, open access to research data ensured. Use of European Open Science Cloud as appropriate.

Horizon Europe

What are EU missions?

EU missions are commitments to solve some of the greatest challenges facing our world like fighting cancer, adapting to climate change, protecting our oceans, living in greener cities and ensuring soil health and food.

They are an integral part of the Horizon Europe framework programme beginning in 2021.

EU missions will

- be bold, inspirational and widely relevant to society
- be clearly framed: targeted, measurable and time-bound
- establish impact-driven but realistic goals
- mobilise resources on EU, national and local levels
- link activities across different disciplines and different types of research and innovation
- make it easier for citizens to understand the value of investments in research and innovation

Areas where there will be missions

- cancer
- adaptation to climate change including societal transformation
- healthy oceans, seas coastal and inland waters
- climate-neutral and smart cities
- soil health and food

Missions

1.2. Provisions on Research Data Management (RDM)

Horizon Europe	Horizon 2020
The governing principle will be to manage data responsibly, in line with FAIR and under the principle "as open as possible, as closed as necessary" (which means that data can remain closed provided there are good reasons for this, such as IP protection, security, etc.). In Horizon Europe the emphasis shifts from open research data to research data management.	The same governing principles are applying in H2020.
Projects generating research data cannot opt out from RDM.[1]	In H2020, it is possible to opt out (partially or entirely) from the Open Research Data pilot at any stage before or after signing the grant agreement.
All projects collecting or using data will have to update regularly the data management plan (DMP).	This is also strongly recommended in H2020, but not mandatory.
Beneficiaries will have to deposit data in a trusted repository. Valid repositories will be those that provide persistent identifiers for the data, and ensure rich metadata in line with FAIR. For some actions, there will be an obligation to deposit in a repository that is federated under the European Open Science Cloud (EOSC).	The specification of the characteristi repositories is not present in H2020, was no reference to EOSC.
Beneficiaries will have to deposit and to ensure OA to data as soon as possible (as per DMP) and under CC-BY or CC0 or equivalent, unless exceptions apply that are duly justified in the DMP.	In H2020 these licenses are only rec
Information should be provided via the repository about any other research output or tool or instrument needed to re-use or validate the data, unless justified legitimate concerns/interests need to be safeguarded.	This was also requested under the H2020 Open Research Data pilot.
Costs for RDM will be eligible, but only during the duration of the project.	The same applies in H2020.

- NO OPT OUT
- DMP
- FAIR DATA IN UN REPOSITORY
- CC0 O CC BY

10.5281/zenodo.4326568

…Open Access by default in 2020…

12. AGREES to further promote the mainstreaming of open access to scientific publications by continuing to support a transition to immediate open access as the default by 2020, using the various models possible and in a cost-effective way, without embargoes or with as short as possible embargoes, and without financial and legal barriers, taking into account the diversity in research systems and disciplines, and that open access to scientific publications should be the principle that no researcher should be prevented from ission, Member States and relevant stakeholders, including o catalyse this transition; and STRESSES the importance of reements.¶

Council of the European Union

Brussels, 27 May 2016
(OR. en)

9526/16

RECH 208
TELECOM 100

OUTCOME OF PROCEEDINGS

From:	General Secretariat of the Council
To:	Delegations
No. prev. doc.:	8791/16 RECH 133 TELECOM 74
Subject:	The transition towards an Open Science system - Council conclusions (adopted on 27/05/2016)

European Council
Council of the European Union

The European Council | The Council of the EU | Topics | Policies | Meetings | Documents & Publications

Home > Meetings > Competitiveness Council, 26-27/05/2016

Competitiveness Council, 26-27/05/2016

> Indicative programme - Competitiveness Council of 26-27/05/2016
> Background brief

Research and Innovation

Following a debate on **open science**, the Council adopted conclusions on the transition towards an open science system.

> *"Open Science is a topic which is very dear to our hearts. During the Netherlands presidency, we have aimed at bringing Europe to the forefront of global change and at leading the transition to a new way of doing research and science based on openness, big data and cloud computing."*
>
> *Sander Dekker, State Secretary of Education, Culture and Science of the Netherlands*

It also adopted conclusions on the lessons learnt from the **7th research framework programme and the future outlook** and on the creation of a friendly regulatory **environment for research and innovation**.

Chairing the Council, Sander Dekker, State Secretary of Education, Culture and Science of the Netherlands, made the following statement: "Open Science is a topic which is very dear to our hearts. During the Netherlands presidency, we have aimed at bringing Europe to the forefront of global change and at leading the transition to a new way of doing research and science based on openness, big data and cloud computing. Open Science breaks down the barriers around universities and ensures that society benefits as much as possible from all scientific insights. In that way we maximize the input of researchers, universities and knowledge institutions".

Highlights of the Competitiveness Council, taking place on 27 May in Brussels.

Today, building on work done during recent months, particularly at the April conference when we approved the "Amsterdam Call for Action on Open Science", I can say that we have made a major step forward".

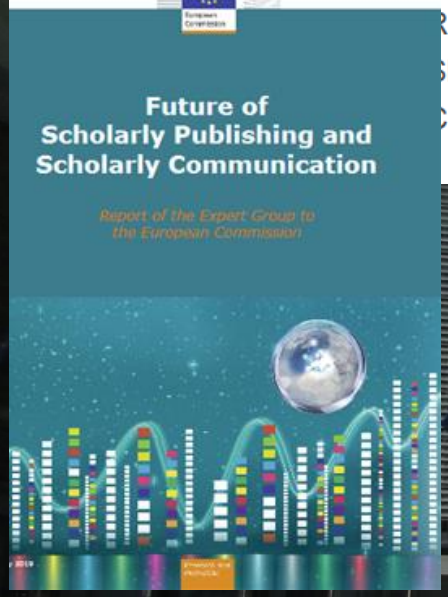
...sulla ...cience

- Rewards and Incentives
- Research Indicators and Next-Generation Metrics
- Future of Scholarly Communication
- European Open Science Cloud
- FAIR Data
- Research Integrity
- Skills and Education
- Citizen Science

Integrated advice of the Open Science Policy Platform on 8 prioritised Open Science ambitions

2018

2019



Amsterdam Call for Action on Open Science

2016

2017

Apr. 25, 2018

Report on OS and careers, July 2017

…sulla via della Open science

Open Science for its own sake has never been the goal. While a focus on Open Science as a mechanism must be emphasised in any transition, Open Science must ultimately be embedded as part of a larger more systemic effort to foster all practices and processes that enable the creation, contribution, discovery and reuse of research knowledge more reliably, effectively and equitably. Research cannot be 'excellent' without such attributes at its core.

to help co-create, develop and maintain a 'Research System based on shared knowledge' by 2030. As a start, we commit to working together to implement a system with the five attributes outlined below.

1. An academic career structure that fosters outputs, practices and behaviours to maximise contributions to a shared research knowledge system. To this

2. A research system that is reliable, transparent and trustworthy. To achieve this, Member States should

3. A research system that enables innovation. Five key elements were identified as necessary to facilitate such a research system:

4. A research culture that facilitates diversity and equity of opportunity. To enable such a culture to

5. A research system that is built on evidence- based policy and practice. To enable this, we recommend

Raccomandazione 790/2018


EUROPEAN COMMISSION

790/2018

Brussels, 25.4.2018
C(2018) 2375 final

COMMISSION RECOMMENDATION

of 25.4.2018

on access to and preservation of scientific information

(12) The move towards open access is a worldwide endeavour. Member States have been part of this endeavour and should be supported in enhancing an open, collaborative research environment based on reciprocity at a global level. Open science is a key feature of Member States' policies for responsible research and for open innovation. As new digital technologies become available, research and funding policies should adapt to this new environment.

Management of research data, including open access

3. Member States should set and implement clear policies (as detailed in national action plans) for the management of research data resulting from publicly funded research, including open access. Those policies and action plans should provide for:

- research data that results from publicly funded research becomes and stays findable, accessible, interoperable and re-usable ("FAIR principles") within a secure and trusted environment, through digital infrastructures (including those federated within the European Open Science Cloud (EOSC), where relevant), unless this is not possible or is incompatible with the further exploitation of the research results ("as open as possible, as closed as necessary"). This could be for reasons, in particular, of privacy, trade secrets, national security, legitimate commercial interests and to intellectual property rights of third parties. Any data, know-how and/or information whatever its form or nature which is held by private parties in a joint public/private partnership prior to the research action should not be affected by these policies or national action plans;

4. Member States should ensure that research funding institutions responsible for managing public research funding and academic institutions receiving public funding implement the policies and national action plans referred to in point 3 at national level in a coordinated way by:

- providing guidance to researchers on how to comply with research data management policies, and supporting them to do so, especially regarding the development of sound data management planning skills and digital infrastructures that support access to and preservation of research data;

DATA POLICY
(A LIVELLO NAZIONALE)

DATI FAIR PER EOSC

DATA POLICY
(LIVELLO ISTITUZIONALE)

COMPETENZE
INFRASTRUTTURE

Raccomandazione 790/2018

Open access to scientific publications

1. Member States should set and implement clear policies (as detailed in national action plans) for the dissemination of and open access to scientific publications resulting from publicly funded research. Those policies and action plans should provide for:

- researchers, when entering into contractual agreements with scientific publishers, retain the necessary intellectual property rights, inter alia, to comply with the open access policy requirements. This concerns in particular self-archiving and re-use (notably through text and data mining);

2. Member States should ensure that research funding institutions responsible for managing public research funding and academic institutions receiving public funding implement the policies and national action plans referred to in point 1 at national level in a coordinated way by:

- setting institutional policies for the dissemination of and open access to scientific publications, and establishing implementation plans;

- including requirements for open access as a condition to give out grant agreements or to provide other financial support for research, together with mechanisms for monitoring compliance with these requirements and follow up actions to correct cases of non-compliance;

- making the necessary funding available for dissemination (including open access and re-use) in a transparent and non-discriminatory manner allowing for different channels, including digital infrastructures where appropriate, as well as new and experimental methods of scholarly communication;

- providing guidance to researchers on how to comply with open access policies, and supporting them to do so, especially regarding the management of their intellectual property rights to ensure open access to their publications;

- conducting joint negotiations with publishers to obtain transparent and the best possible terms for access to publications, including use and re-use;

OPEN ACCESS POLICY NAZIONALE

MANTENERE I DIRITTI

OPEN ACCESS POLICY PER ATENEO

- LEGATE ALLA VALUTAZIONE
- DISSEMINAZIONE IN CANALI DIVERSI
- FORMAZIONE E SUPPORTO

Copyright Directive 790/2019

17.5.2019 IT Gazzetta ufficiale dell'Unione europea L 1

790/2019

DIRETTIVA (UE) 2019/790 DEL PARLAMENTO EUROPEO E DEL CONSIGLIO

del 17 aprile 2019

sul diritto d'autore e sui diritti connessi nel mercato unico digitale e che modifica le direttive 96/9/CE e 2001/29/CE

February 6, 2020 Journal article Open Access

2020

Il conflitto tra diritto d'autore e ricerca scientifica nella disciplina del text and data mining della direttiva sul mercato unico digitale

Caso, Roberto

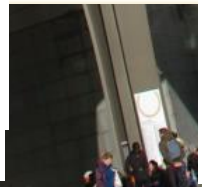
La legge sul diritto d'autore collide frontalmente con il progresso scientifico. Mentre l'evoluzione della scienza si basa sul dialogo pubblico tra uomini, la legge sul diritto d'autore restringe sempre di più gli spazi di li paradossalmente nel momento in cui l'umanità dispone della più potente tecnologia (il Web la comunicazione tra esseri pensanti. La politica legislativa europea sul diritto d'autore è ser interessi commerciali e sempre meno incline a propiziare il progresso della conoscenza. La d'autore nel mercato unico digitale aggiunge un altro tassello al puzzle della legislazione ch scienza. Ciò non dovrebbe preoccupare solo gli scienziati ma tutti i cittadini e anche le impr all'innovazione tecnologica. Senza una scienza autonoma, libera e pubblica, senza una scie democrazia, né progresso culturale, né innovazione tecnologica. Da questa prospettiva la di limitazioni (al diritto di esclusiva) concernenti la ricerca scientifica che adopera tecniche di t il conflitto tra ppare sempre più contr la proprietà ir ere) la scienza aperta.

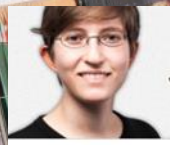
Roberto Caso – Frammenti di un discorso pubblico

"è solo il mio modo di vedere le cose..."

Bibliografia

Direttiva copyright: bibliografia





JULIA REDA 2019

My Vision for Europe: Borderless EU copyright reform Projects

EU copyright reform/expansion

WHAT'S BEING DEBATED

Article 11: Extra copyright for news sites
Will all use of journalistic content online, even when just describing a link, require a license from the publisher? Read more

Article 13: Upload filters
Will internet platforms where users can upload content be forced to monitor user behavior to identify and prevent copyright infringement? Read more

Article 3: Text and Data Mining exception limited in scope
Will a new EU-wide permission to conduct research using text and data mining be limited to research institutions only? Read more

Bruxelles non sta mai f

26.6.2019 IT Gazzetta ufficiale dell'Unione europea Open data directive L 172/56

DIRETTIVA (UE) 2019/1024 DEL PARLAMENTO EUROPEO E DEL CONSIGLIO

del 20 giugno 2019

relativa all'apertura dei dati e al riutilizzo dell'informazione del settore pubblico

I DATI DELLA RICERCA
ORA RIENTRANO
NELLA DIRETTIVA DATI SETTORE PUBBLICO

- Stimulate the publishing of dynamic data and the uptake of Application Programme Interfaces (APIs).
- Limit the exceptions which currently allow public bodies to charge more than the marginal costs of dissemination for the re-use of their data.
- Enlarge the scope of the Directive to:
  - data held by public undertakings, under a specific set of rules. In principle, the Directive will only apply to data which the undertakings make available for re-use. Charges for the re-use of such data can be above marginal costs for dissemination;
  - research data resulting from public funding – Member States will be asked to develop policies for open access to publicly funded research data. New rules will also facilitate the re-usability of research data that is already contained in open repositories.
- Strengthen the transparency requirements for public–private agreements involving public sector information, avoiding exclusive arrangements.

EUROPEAN COMMISSION

Brussels, 19.2.2020
COM(2020) 66 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A European strategy for data

In order to release Europe's potential we have to find our European way, balancing the flow and wide use of data, while preserving high privacy, security, safety and ethical standards.

I DATI SONO POSSONO ESSERE RIUSATI
SENZA PERDERE VALORE.

3. The vision

The Commission's vision stems from European values and fundamental rights and the conviction that the human being is and should remain at the centre. The Commission is convinced that businesses and the public sector in the EU can be empowered through the use of data to make better decisions. It is all the more compelling to seize the opportunity presented by data for social and economic good, as data – unlike most economic resources – can be replicated at close to zero cost and its use by one person or organisation does not prevent the simultaneous use by another person or organisation. That potential should be put to work to address the needs of individuals and thus create value for the economy and society. To release this potential, there is a need to ensure better access to data and its responsible usage.

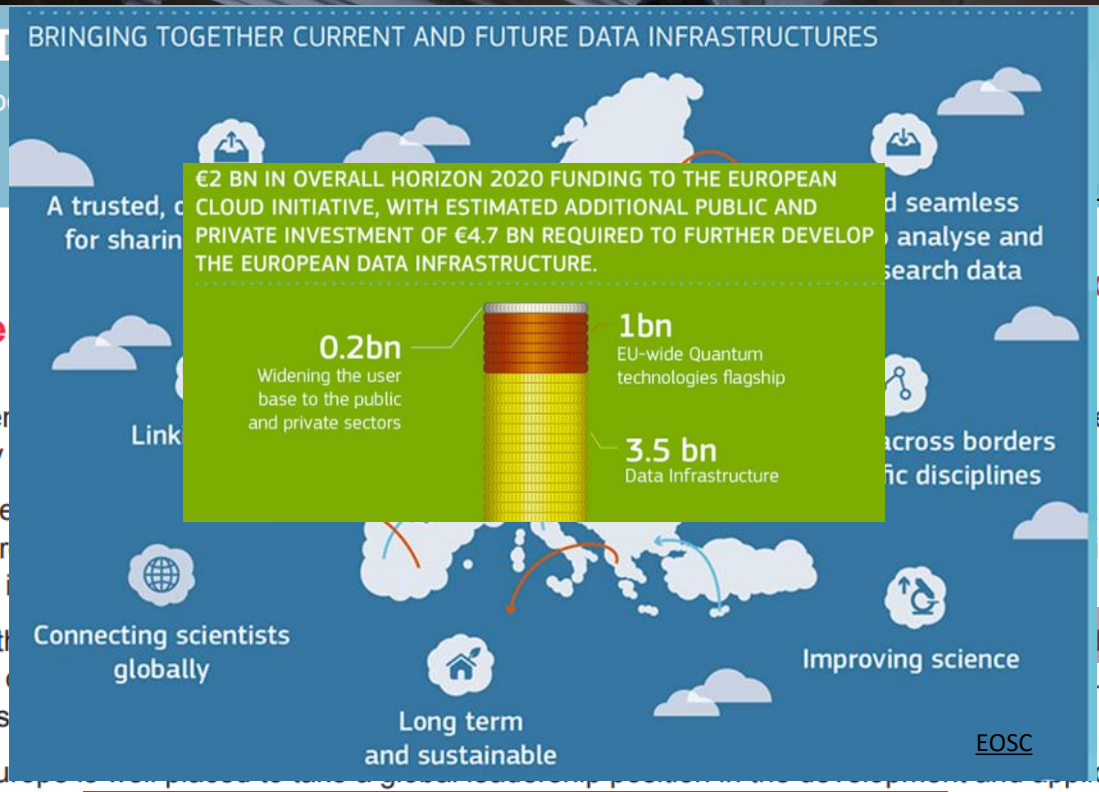
The EU should create an attractive policy environment so that, by 2030, the EU's share of the data economy – data stored, processed and put to valuable use in Europe - at least corresponds to its economic weight, not by *fiat* but by choice. The aim is to create a single European data space – a genuine single market for data, open to data from across the world – where personal as well as non-personal data, including sensitive business data, are secure and businesses also

EOSC! 23 novembre 2018

The Vienna D

Vienna, 23 Novemb

na, Nov.23, 2018



We, Ministers, European Ope

1. Recall the challe Brussels on 10 July

2. Reaffirm the pote the vision of the Eur States, sustainable

3. Recognise that t iterative and based consensus among s

4. Highlight that Eu services for Science. Rea reaching out over time to

5. Recall that the Council

SEAMLESS ACCESS TO OPEN BY DEFAULT
FAIR DATA

9. Call for the European Open Science Cloud to provide all researchers in Europe with seamless access to an open-by-default, efficient and cross-disciplinary environment for storing, accessing, reusing and processing research data supported by FAIR data principles.

Science Cloud a reality, hinting at the need to further strengthen the ongoing dialogue across institutions and with stake-holders, for a new governance framework to be launched in Vienna, on 23 November 2018.

[EOSC – cosa?]

UN AMBIENTE CHE SOSTIENE LA OPEN SCIENCE E NON UN «OPEN CLOUD» PER LA SCIENZA

THE EUROPEAN OPEN SCIENCE CLOUD? SOME NUANCES AND DEFINITIONS

Imagine a federated, globally accessible environment where researchers, innovators, companies and citizens can publish, find and re-use each other's data and tools for research, innovation and educational purposes. Imagine that this all operates under well-defined and trusted conditions, supported by a sustainable and just value for money model. This is the environment that must be fostered in Europe and beyond to ensure that European research and innovation contributes in full to knowledge creation, meet global challenges and fuel economic prosperity in Europe. This we believe encapsulates the concept of the European Open Science Cloud (EOSC), and indeed such a federated European endeavour might be expressed as the European contribution to an Internet of FAIR Data and services.

The European Open Science Cloud is a supporting environment for Open Science and not an 'open Cloud' for science.

The EOSC aims to accelerate the transition to more effective Open Science and Open Innovation in a Digital Single Market by removing the technical, legislative and human barriers to the re-use of research data and tools, and by supporting access to services, systems and the flow of data across disciplinary, social and geographical borders. The term European Open Science Cloud requires some reflection to dispel incorrect associations and clarify boundaries; in fact the term 'cloud' is a metaphor to help convey the idea of seamlessness and a commons.

EOSC Declaration

- necessario cambiamento culturale e formazione
- NESSUNA DISCIPLINA, NESSUNA ISTITUZIONE E NESSUN PAESE DEVE ESSERE LASCIATO INDIETRO

Data culture and FAIR data

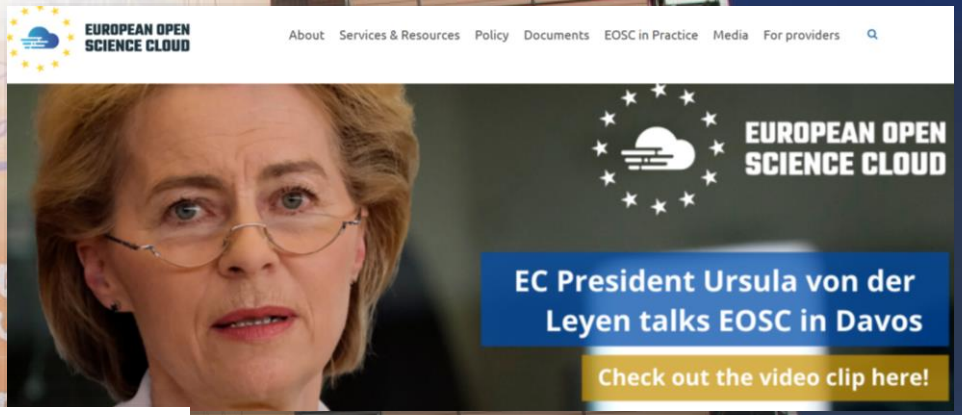
- [**Data culture**] European science must be grounded in a common culture of data stewardship, so that research data is recognised as a significant output of research and is appropriately curated throughout and after the period conducting the research. Only a considerable cultural change will enable long-term reuse for science and for innovation of data created by research activities: no disciplines, institutions or countries must be left behind.

- [**Open access by-default**] All researchers in Europe must enjoy access to an open-by-default, efficient and cross-disciplinary research data environment supported by FAIR data principles. Open access must be the default setting for all results of publicly funded research in Europe, allowing for proportionate limitations only in duly justified cases of personal data protection, confidentiality, IPR concerns, national security or similar (e.g. 'as open as possible and as closed as necessary').

- [**Skills**] The necessary skills and education in research data management, data stewardship and data science should be provided throughout the EU as part of higher education, the training system and on-the-job best practice in the industry. University associations, research organisations, research libraries and other educational brokers play an important role but they need substantial support from the European Commission and the Member States.

Oct. 2017

EOSC



sustainable and a data economy. Data is a renewable resource as much as sun and wind. Every 18 months we double the amount of data we produce. Industrial and commercial data, 85% of which is never used.

This is not sustainable. Within those data, there are hidden treasures and untapped opportunities for business and society. Europe is going to co-create a framework to allow the use of these data. It should consist of a trusted pool of non-personal data that governments, businesses and other stakeholders can contribute to. This pool will be a resource f open innovation, and bring new solutions to the market. And our scientists are already beginning to do this.

We are creating a European Open Science Cloud now. It is a trusted space for researchers to store their data and to access data from researchers from all other disciplines. We will create a pool of interlinked information, a 'web of research data'. Every researcher will be able to better use not only their own data, but also those of others. They will thus come to new insights, new findings and new solutions.

85% DEI DATI PRODOTTI NON VIENE USATO. INSOSTENIBILE

This is what we call the European Open Science Cloud and we are the first in the world to do that. It is being developed in Europe for Europe and for European researchers. The idea is that once we have the rules of the game ready, then we will open this up to the broader public sector and to business as well. So that companies can come in, store the data and use the data. And the idea is that it will also open up to international players.

A QUESTO SERVE EOSC.
LA STIAMO CREANDO **ADESSO**

EOSC

EC proposal for FAIR building blocks

Slide courtesy of Jean Claude Burgelman

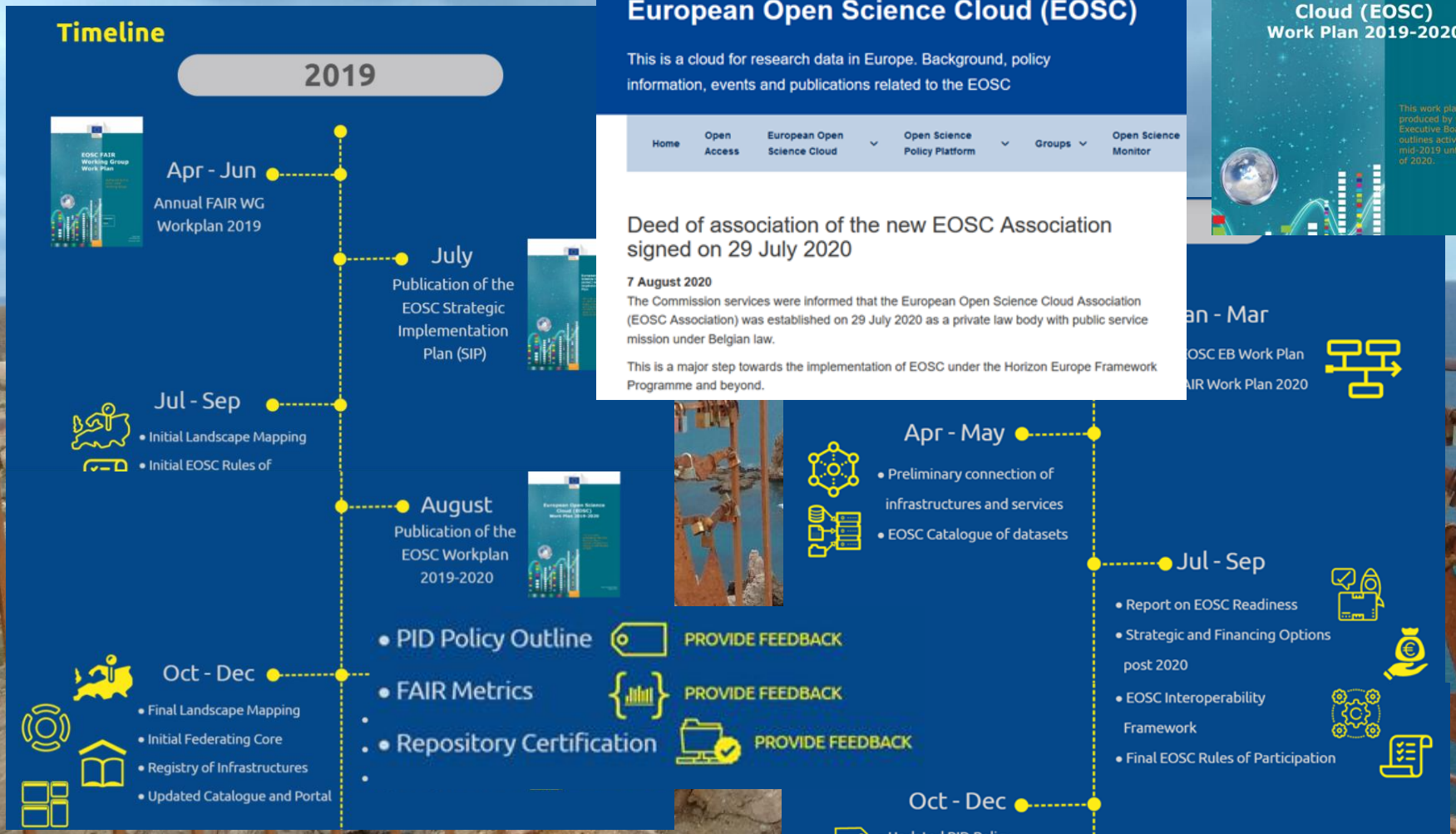
Europe's decision to develop the European Open Science Cloud reflects the willingness to embrace change, but also to empower 1.7 million European researchers and 70 million professionals in science and technology. The ultimate goal is to achieve a fundamental transformation of the whole research lifecycle and to make it more credible with increased integrity, more efficient, collaborative and more responsive to societal challenges.

I am convinced that the Cloud will allow a new generation of scholars to find, combine and analyse data and discoveries in a way that supersedes anything we have ever seen before. It will accelerate the transition to Open Science and Open Innovation and bring science and research closer to societal needs.

Carlos Moedas,

Commissioner for Research, Science and Innovation.

EOSC timeline



EOSC

EOSC Association Timeline

EOSC Association: Advancing Open Science to accelerate the creation of new knowledge, inspire education, spur innovation and promote accessibility and transparency

The **European Open Science Cloud** (EOSC) initiative will offer researchers a virtual environment with

open and seamless services for storage, management, analysis and re-use of research data

, across borders and scientific disciplines by federating existing data infrastructures.

EOSC is being co-created in a series of funded projects and initiatives from Member States

https://www.eosc.eu/

27 nov — All legal materials for first GA ready

17 dec — First General Assembly of the EOSC Association

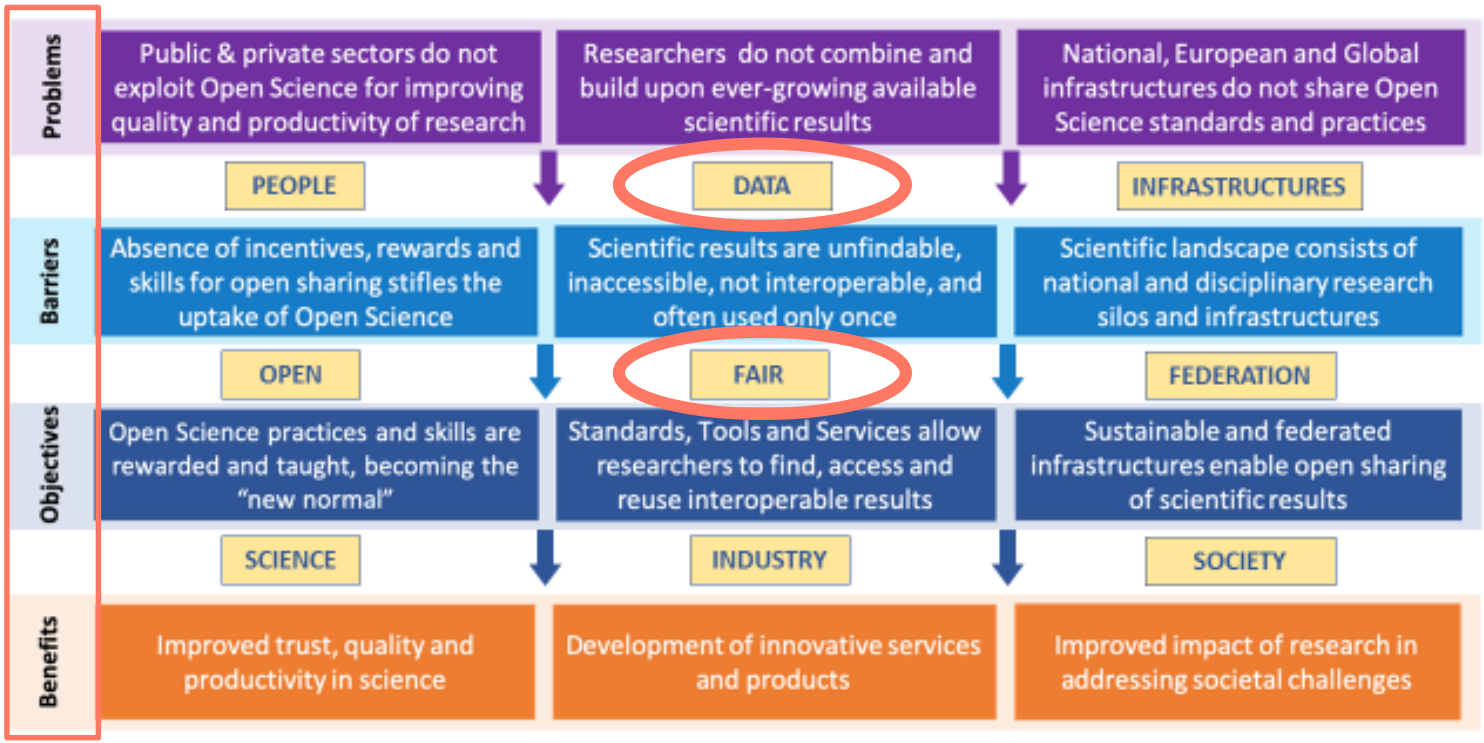
EUROPEAN OPEN SCIENCE CLOUD

NATA 17 DICEMBRE
ICDI FONDATORE
MEMBRI ITALIANI

EOSC, albero degli obiettivi

EOSC Hub week May 18 2020, C. Stover

The EOSC Objective Tree



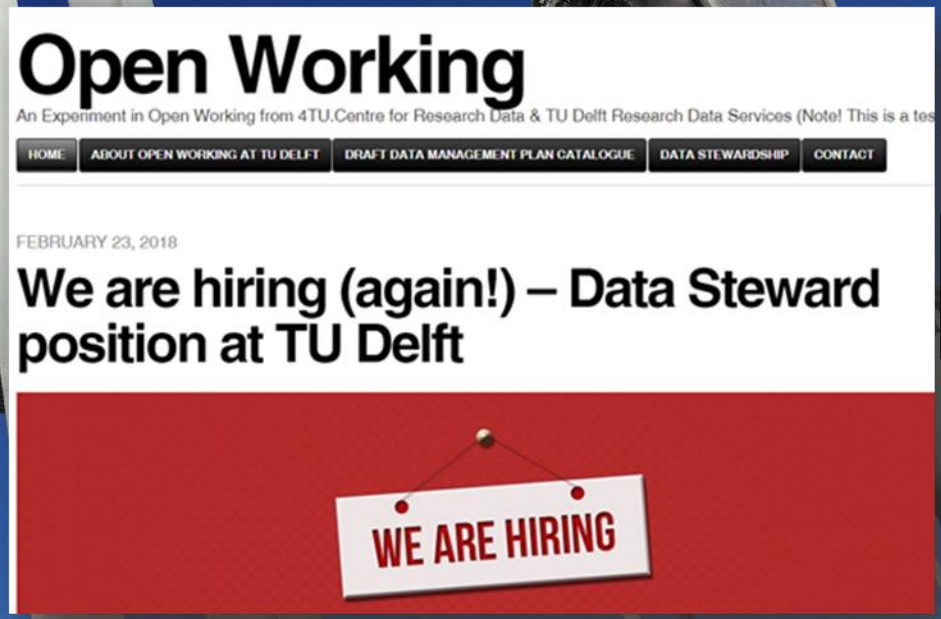
EUROPEAN OPEN SCIENCE CLOUD

[EOSC e I data stewards]

Report, 2016

The number of people with these skills needed to effectively operate the EOSC is, we estimate, likely exceeding half a million within a decade. As we further argue below, we believe that the implementation of the EOSC needs to include instruments to help train, retain and recognise this expertise, in order to support the 1.7 million scientists and over 70 million people working in innovation[9]. The success of the EOSC depends upon it.

≠ DATA SCIENTIST



≠ DATA ANALYST

Data steward - comp

KØBENHAVNS UNIVERSITET 06/04/202 0

Education core content

This 1-year degree should build upon students' educational/job background through domain specific data knowledge and leverage with theoretical and practical competences.
The education can be viewed as a Data Steward specialisation within the domain of their previous degree/jobs. The education contains **60 ECTS** and is expected to finish with a 15 ECTS project.

Preliminary Content

The 60 ECTS should be distributed among the following main areas:

- 22,5-30 ECTS: IT competences – including computational thinking, data modelling, data management, data harvesting, cleaning, and storing, infra-structure (storage & compute). An introduction to data science, machine learning, and their derived data needs.
- 7,5-15 ECTS: Legal and ethical competences – including GDPR, FAIR, data security, and data & AI ethics.
- 7,5-15 ECTS: Domain specific data competences – including knowledge about data, infrastructure, and practice within the students primary domain, e.g., health, life-science, finance/fintech, or the public sector.
- 15 ECTS: Graduate project (possibly in collaboration with academia, industry, or the public sector)

Competences such as project management, communication skills, and change management should be incorporated as well

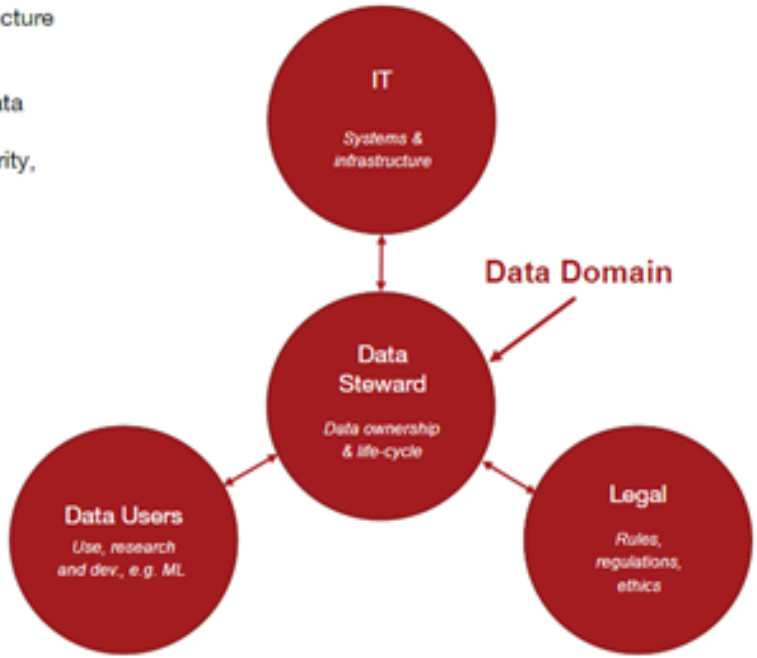
Competence Profile

A data steward is a data specialist with strong domain-specific knowledge who understands and appreciates the relevance of data, data sources, data infrastructure and constraints within a scientific or other application domain.

The future Data Steward must assume ownership and responsibility for data, data quality, and the data life-cycle as their primary function. They should ensure collaboration and coherence between IT competences, quality assurance, security, rules & regulations, and facilitate the application and use of data internally and externally in the organisation.

Competence profile examples

- Domain-specific data understanding
- Ability to ensure that structured and unstructured data and meta data is modelled, harvested, stored, and maintained in a documented, and regulated fashion with focus and findability, accessibility, interoperability, and reusability.
- Competences to facilitate HPC (High Performance Computing) during development and research through handling of large-scale data in public and private enterprises.
- Understanding of and competences within legal, ethical and security aspects of data handling, data sharing, e.g., integrity and GDPR.



Copenhagen Univ. June 17 2020

Il dovere…

ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING

ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING

29.1 Obligation to disseminate results

Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — '**disseminate**' its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).

29.2 Open access to scientific publications

Each beneficiary must ensure open access (free of charge, online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

(a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications;

Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.

(b) ensure open access to the deposited publication — via the repository — at the latest:

(i) on publication, if an electronic version is available for free via the publisher, or

(ii) within six months of publication (twelve months for publications in the social sciences and

29.3 Open access to research data

***[OPTION 1 for actions participating in the open Research Data Pilot**: Regarding the digital research data generated in the action ('**data**'), the beneficiaries must:*

(a) deposit in a research data repository and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user — the following:

(i) the data, including associated metadata, needed to validate the results presented in scientific publications as soon as possible;

*(ii) other data, including associated metadata, as specified and within the deadlines laid down in the '**data management plan**' (see Annex 1);*

GRANT AGREEMENT
ART. 29
(pag. 234)

Open Access – H2020 - testi

GRANT AGREEMENT
ARTICOLO 29.2

Ig

2. Open access to scientific publications

What?

Beneficiaries must ensure **open, free-of-charge access** to the end-user to **peer-reviewed scientific publications** relating to their results.

'Peer-reviewed publications' means publications that have been evaluated by other scholars *(e.g. articles in scientific journals)*.

⚠ Other types of scientific publications, *such as non-peer-reviewed articles as well as monographs, books, conference proceedings and 'grey literature'* (i.e. informally published material not having gone through a standard publishing process, *e.g. reports*), are not covered by the open access obligation.

Best practice: However, to ensure fuller and wider access, beneficiaries are encouraged to provide open access also to these other types of scientific publications (where possible).

Best practice: The Open Access Infrastructure for Research in Europe (OpenAIRE) links existing repositories. It is not obligatory for projects to deposit in OpenAIRE itself, but it is the recommended entry point for researchers deciding on a repository. OpenAIRE also offers support services for researchers, such as the National Open Access Desks. Other useful listings are the Registry of Open Access Repositories (ROAR), the Directory of Open Access Repositories (OpenDOAR) and OAPEN (for monographs). Beneficiaries should not choose a repository with rules which could conflict with open access.

Costi per la disseminazione

Annotated Model Grant Agreement 6.2.D3 (pag. 89)

D.3 **Costs of other goods and services** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible, if they are:

(a) purchased specifically for the action and in accordance with Article 10.1.1 or

1. Costs of other goods and services (D.3): Types of costs — Form — Eligibility conditions — Calculation

The budget category applies to all RIA, IA and CSA grants under the General MGA.

The additional c
Article 16 and o
research infrastr

Open access — Costs related to open access to peer-reviewed scientific publications and research data are eligible, if the eligibility conditions are fulfilled. With explicit agreement by the Commission/Agency, it can also include fees levied for a membership scheme (if this is a requirement for publishing in open access or if membership is a pre-condition for significantly lower article processing charges).

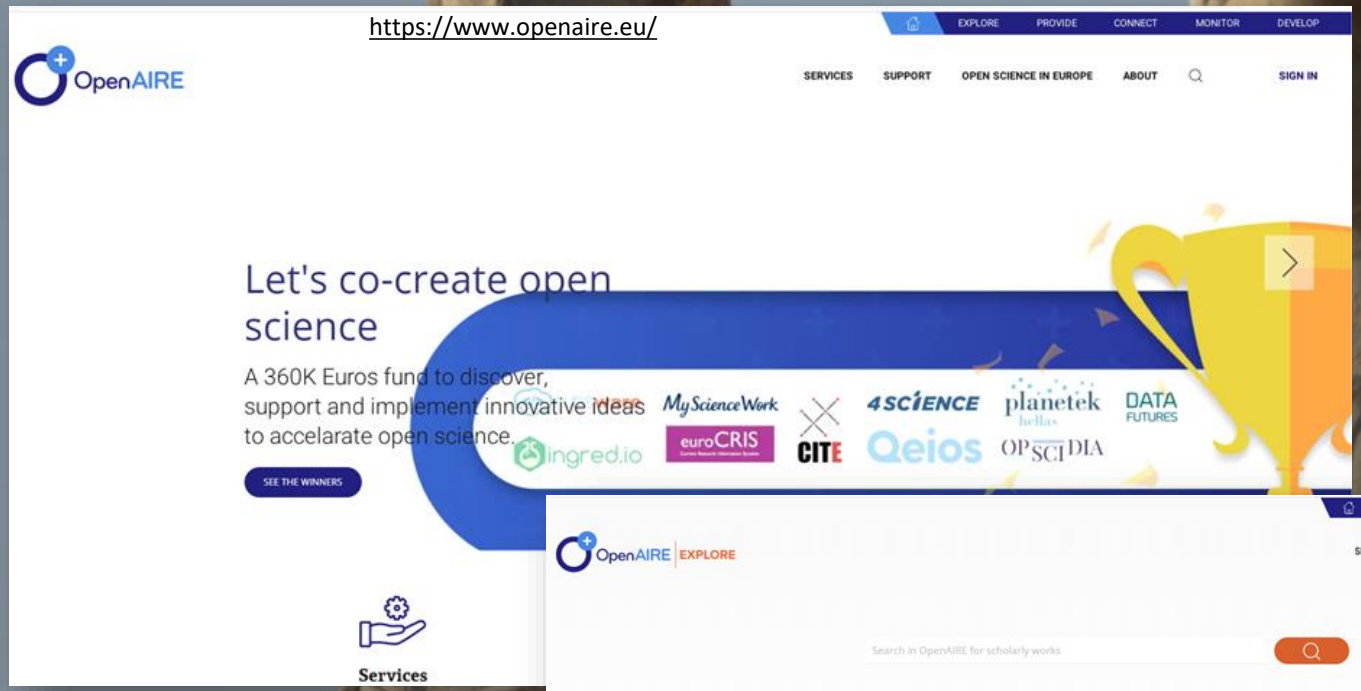
1.1 What? This
the action (or contributed in-kind against payment), including:

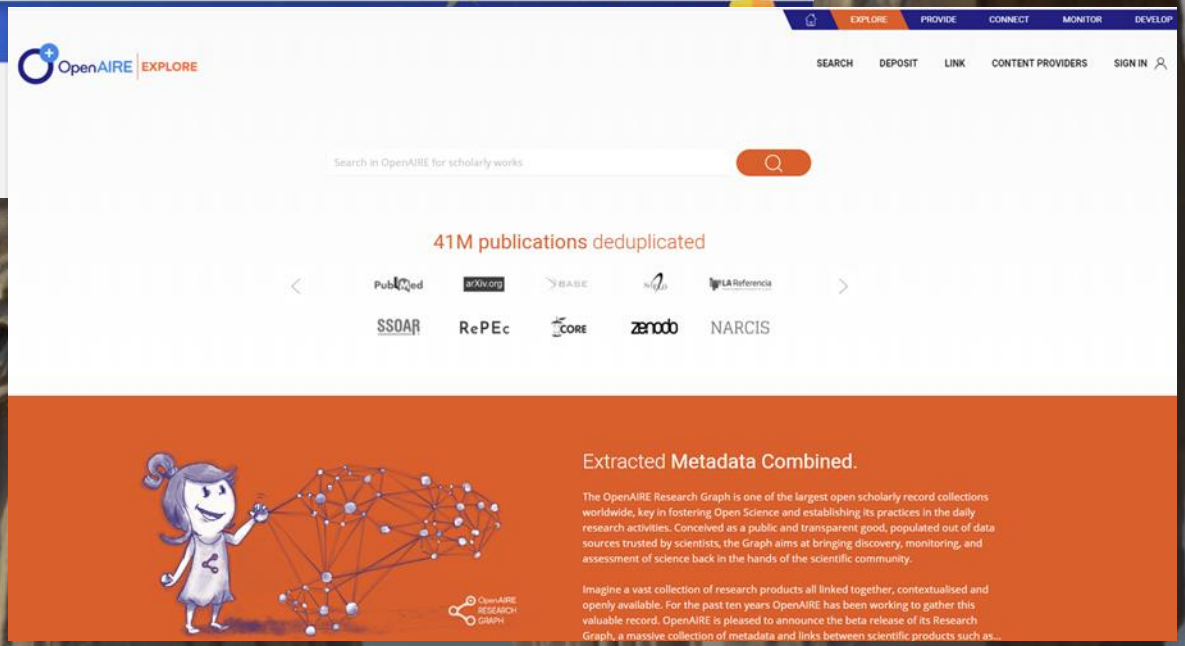
- costs for consumables and supplies *(e.g. raw materials etc.)*
- dissemination costs (including regarding open access to peer-reviewed scientific publications, *e.g. article processing or equivalent charges*, costs related to open access to research data and related costs, *such as data maintenance or storage and conference fees for presenting project-related research*)
- costs related to intellectual property rights (IPR) (including costs to protect the results or royalties paid for access rights needed to implement the action)

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf#page=89

OpenAIRE: un supporto

https://www.openaire.eu/





VQR 2015-2019

…Open Access è
UN PREREQUISITO
NON un elemento di valutazione


National Agency for the Evaluation of Universities and Research Institutes
anvur
Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca

Evaluation of Research Quality
vQr
Valutazione Qualità della Ricerca

BANDO
Valutazione della Qualità della Ricerca
2015-2019 (VQR 2015-2019)

3. Al fine di riportare l'URL corretto sarà cura di ogni Istituzione procedere, entro il 3 novembre 2021, a inserire le informazioni necessarie per consentire il collegamento ai prodotti della ricerca consultabili in accesso aperto indicando il collegamento corretto a uno degli archivi di cui al comma 4.

4. I prodotti di cui al comma 1, lettera a) e, laddove possibile in base agli accordi sottoscritti con gli editori, quelli di cui alle lettere b) e c) dovranno essere resi disponibili in accesso aperto in almeno una delle seguenti modalità:

   a) Pubblicazione ad accesso aperto in Rivista o Volume;
   b) Archivio di Ateneo ad accesso aperto;
   c) Archivio disciplinare ad accesso aperto (es. PubMed, ArXiv, etc);
   d) Documenti di Lavoro (serie);
   e) Siti Web personali dei ricercatori.

IRIS PREFERENZIALE PER IL DEPOSITO

e in almeno una delle seguenti versioni:

   a) versione finale pubblicata (*Version of Record, VoR*); PDF EDITORIALE
   b) versione manoscritta accettata per la pubblicazione (*Author's Accepted Manuscript, AAM*) POST-PRINT
   c) versione inviata alla rivista per la pubblicazione (*Submitted Version*). PRE-PRINT

LA VERSIONE DA DEPOSITARE NON È AD ARBITRIO VOSTRO… DIPENDE DALLA POLITICA DI COPYRIGHT DELL'EDITORE

Definizioni

SHERPA/RoMEO
Publisher copyright policies & self-archiving

Articolo 8
Accesso Aperto (*Open Access*)

e in almeno una delle seguenti versioni:

a) versione finale pubblicata (*Version of Record, VoR*);
b) versione manoscritta accettata per la pubblicazione (*Author's Accepted Manuscript, AAM*);
c) versione inviata alla rivista per la pubblicazione (*Submitted Version*).

PREPRINT:
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c) VERSIONE INVIATA ALLA RIVISTA PER LA PUBBLICAZIONE (SUBMITTED VERSION)

POSTPRINT:
LA VERSIONE FINALE REVISIONATA, CONTIENE I COMMENTI DEI REVISORI MA NON HA LA VESTE GRAFICA ED EDITORIALE

b) VERSIONE MANOSCRITTA ACCETTATA PER LA PUBBLICAZIONE (AUTHORS' ACCEPTED MANUSCRIPT)

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LA VERSIONE FINALE PUBBLICATA, CON VESTE GRAFICA ED EDITORIALE

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- **SI APPLICA ALLA VERSIONE CONSENTITA** E NON AL PDF EDITORIALE!
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Grazie!


pentru că fiecare dintre noi merită o viață demnă și prosperă
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perché scelgo di avere una voce in Europa
scegli il tuo futuro
weil diesmal
du deine Zu
wählst
kunft