





Lancement d'Horizon Europe



horizon-europe.gouv.fr









BIENVENUE ! L'atelier débute à 15h00

Horizon Europe – La science ouverte, une opportunité Organisé par le PCN juridique & financier





Avertissement

Le contenu de la présente présentation ainsi que les éléments de toute nature l'accompagnant sont réalisés et fournis pour information uniquement, à la date indiquée ci-dessous.

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Bonjour & bienvenue à tous !

Atelier dédié à la science ouverte

Merci de veiller :

- à couper votre micro
- à désactiver votre caméra



- à laisser le contrôle aux présentateurs

Session de questions/réponses prévue à l'issue des présentations

poser vos questions via <u>Slido.com</u> (code **#ScienceOuverte**) ou <u>https://app.sli.do/event/jgvaccvb</u>







Introduction



4 webinaires sur les aspects juridiques et financiers

- 1. aspects juridiques généraux (<u>A revoir</u>)
- 2. aspects financiers d'Horizon Europe (<u>A revoir</u>)
- 3. éléments clés de la préparation d'une proposition de projet (A revoir)
- 4. aspects juridiques spécifiques PI, valorisation, EIC -(A revoir)

2 webinaires transversaux

- 5. La science ouverte, une opportunité 1^{er} juin à 15h
- 6. La dimension du genre dans Horizon Europe 3 juin à 10h





Vos intervenants

ORGANISATION

vos PCN juridiques & financiers pour HEU (MESRI) :

- Fanny SCHULTZ, coordinatrice
- Ingrid LY-KY
- Marion BONLIEU
- Cécile BARAT
- Lucie VAUCEL

Contact : <u>formulaire de contact</u> Site : <u>page dédiée du portail national</u>

INVITÉ.E.S VEDETTES

Ministère de l'enseignement supérieur, de la recherche et de l'innovation

- •Marin DACOS, Conseiller pour la science ouverte du DGRI
- •Isabelle BLANC, Administratrice ministérielle des données de la recherche, de l'enseignement supérieur et de l'innovation

Commission européenne

•Jean-François DECHAMP, DG RTD - Direction A -Unité H4 Science Ouverte

Université Paris Saclay



La Science ouverte, une opportunité

éléments clés:

- Pourquoi l'ouverture de la science ?
- La science ouverte dans Horizon Europe
- Les obligations au titre du contrat de subvention
- La science ouverte dans les programmes de travail
- Open Research Europe



La Science ouverte, une opportunité

15h00 – Accueil

- 15h10 Introduction par Marin Dacos (MESRI)
- 15h20 Intervention de Jean-François Dechamp (DG RTD, unité Science ouverte)
- 16h00 Intervention de Nicolas Thiery (Université Paris Saclay)
- 16h15 Conclusion par Marin Dacos et Isabelle Blanc (MESRI)
- 16h30 Temps de questions/réponses







Intervention du MESRI



MERCREDI 4 JUILLET 2018

La France s'engage pour que les résultats de la recherche scientifique soient ouverts à tous, chercheurs, entreprises et citoyens, sans entrave, sans délai, sans paiement.

	Edward - Fighti + Fannait HEPORTAGE FEANCARE
#scienceouverte	MINISTÈRE
esr.gouv.fr	SUPÉRIEUR, DE LA RECHERCHE ET DE L'ANDUMETRIA



Principe : Public money ? Public data !

Scientifique : une recherche de meilleure qualité.

Société : une science plus ouverte, plus accessible à la société.



Pourquoi la science ouverte ?



1 IMPACT : CITATIONS ET LECTURES

2 Efficacité budgétaire & économique

3 REPRODUCTIBILITÉ

HEURISTIQUE ! CUMULATIVITÉ DE LA SCIENCE VS DUPLICATE EFFORTS

5 Ethique, intégrité, transparence

Et la conservation, aussi !

L'Open Data Citation Advantage

Impact de l'ajout de données associées aux articles en termes de citations des articles concernés



Direction générale de la recherche et de l'innovation



French Open Science Monitor An open monitor for open science based on open data and open methodology

2018 monitor date:

41%



French Open Science Monitor An open monitor for open science based on open data and open methodology

41% 49%



2018 monitor 2019 monitor



French Open Science Monitor An open monitor for open science based on open data and open methodology

56% 2018 monitor 2019 monitor 2020 monitor 45 -Année de publication

41%

49%

SCIENCE OUVERTE

GUIDE PRATIQUE À L'USAGE DES DOCTORANTS

Sur le terrain

Sacha H., doctorant en génie électrique, G2Elab. Grenoble

Avant mon doctorat, en tant qu'ingénieur de recherche, jai participé au développement d'OMEGAlpes, un outil doptimisation de systèmes énergétiques en open source. Cet outil permet de modéliser et d'explorer différents scénarios énergétiques pour déterminer celui qui répond le mieux à fobjectif choisi.

Aujourd'hui, je fais des recherches transdisciplinaires sur des modèles, méthodes et outils pour une approche de conception collaborative et ouverte des composants et systèmes énergétiques au ser systèmes de transition. Jal pu faire une résidence avec un collectif d'artistes, Organic Orchestra, qui était à la recherche de solutions technologiques pour être autonomes en énergie tout en réduisant Timpact environnemental de leur spectacle vivant d'arts numériques. Nous avons travaillé ensemble pour définir les contraintes et les objectifs, et ainsi proposer des scénarios énergétuques.

L'aspect ouvert d'OMEGAlpes était une accroche pour eux : ils ont participé à produire du savoir qui peut être utile aux autres, en utilisant un outil ouvert.

Je suis convaincu de l'intérêt et la nécessité de la science ouverte pour faire face au dérèglement climatique : les chercheurs doivent ouvrir les articles, données, méthodes et outils lorsque c'est possible pour bien travailler ensemble, mais aussi avec les citoyens, les collectifs et les autorités publiques.





ACCUEIL RESSOURCES ~

ACTUALITES A PROPOS CONTACT

VOIR TOUTES LES RESSOURCES



DONNÉES DE LA RECHERCHE APPRENTISSAGE NUMÉRIQUE

DES RESSOURCES POUR ACCOMPAGNER LA COMMUNAUTÉ SCIENTIFIQUE DANS LA GESTION ET LE PARTAGE DE LEURS DONNÉES



TROUVER UNE RESSOURCE : VIDEO, FICHE, QUIZ ...

Toutes les ressources sont librement réutilisables. Vous pouvez les adapter à votre contexte et nous contacter pour des réalisations surmesure !

EN SAVOIR PLUS

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OUVRIR LA SCIENCE !



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Merci !



La France s'engage pour que les résultats de la recherche scientifique soient ouverts à tous, chercheurs, entreprises et citoyens, sans entrave, sans délai, sans paiement.

Contact : Marin Dacos marin.dacos@recherche.gouv.fr www.ouvrirlascience.fr Twitter @marindacos

#scienceouverte	
esr.gouv.fr	









Intervention de la Commission, européenne



La science ouverte, une opportunité

Jean-François Dechamp Commission européenne Direction générale de la Recherche et de l'Innovation Unité Science Ouverte

> Webinaire pour le Lancement d'Horizon Europe 1^{er} juin 2021, 15h-16h30

The European Commission in the R&I context

Policy maker

- It proposes EU legislation and monitors its implementation
- It works with the European Legislator (European Parliament and Council)
- It invites Member States to act

Funder

 It sets its own rules for EC-funded scientific research and innovation

Capacity builder

 It has research facilities (Joint Research Centre) and funds infrastructure that support EC/EU policy





DIRECTION GENERALE DE LA RECHERCHE ET DE L'INNOVATION





Open Science: the big picture



Why Open Science?

- A simple definition: Open Science means sharing knowledge and tools as early as possible, not only between researchers and between disciplines, but also with society at large
- Open Science has the potential to increase
 - Quality & efficiency of Research & Innovation, if all the produced results are shared, made reusable, and if their reproducibility is improved
 - **Creativity**, through collective intelligence and cross-disciplinary research that does not require laborious data wrangling
 - **Trust** in the science system, by engaging both researchers and citizens



Why do we care for Open Science?

- Open science is **beneficial** for scientists, funders, innovative companies and the society at large e.g. in:
 - Tackling the <u>reproducibility</u> crisis,
 - Making response to **societal challenges** (Ebola, <u>COVID</u>...) faster,
 - Yielding higher impact through collaborations,
 - Reducing inequalities, etc.
- Open science comes with values, rights and obligations



What are our main challenges and priorities?

Improve the **practice** of research and innovation

- Open access scholarly publications
- Early sharing of **all** research outputs
- All data FAIR & Research Data Management (RDM)
- Reproducible results
- Societal engagement and responsibility

Develop proper enablers

- Rewards and incentives to adopt Open Science practices, with appropriate metrics
- Appropriate **skills** and **education**, including for research integrity
- Open Research Infrastructures including the European Open Science Cloud (EOSC)



Where is Open Science in political agendas?

- Openness is a pillar of the EU policy for science
 - To **reinforce the standing** of all our universities, research centres and innovative companies
 - Not to let EU Member States or European regions left behind
- A growing number of <u>EU Member States</u> have been putting openness at the core of their vision for Research and Innovation
 - E.g. <u>Ouvrir la science</u> in France
- Open science does not work in isolation from international collaboration



Examples of Open Science in the EU legislation

- <u>Recommendations on access to and preservation of scientific information</u> (rev. 2018)
 - It sets the landscape for open science with a view to tackle disparities, introduces **FAIR data** (Findable, Accessible, Interoperable, Re-usable data) and also covers infrastructure, metrics, rewards, skills... in **EU Member States**
- Directive on copyright in the digital single market (rev. 2019)
 - It provides for an **exception for research organisations** to carry out text and data mining
- Directive on open data and the re-use of public sector information (rev. 2019)
 - It applies to publicly funded research data that are publicly available through repositories and refers to research data to be 'as open as possible, as closed as necessary'



(a legal parenthesis) The database Directive

• Public consultation on the review of the Database Directive

Feedback period

28 May 2021 - 25 June 2021 (midnight Brussels time)

The Commission would like to hear your views.

This roadmap is open for feedback for **4 weeks**. Feedback will be taken into account for further development and fine tuning of the initiative. The Commission will summarise the input received in a synopsis report explaining how the input will be taken on board and, if applicable, why certain suggestions can't be taken up. Feedback received will be published on this site and therefore must adhere to the <u>feedback rules</u>.

Give feedback >



Inception impact assessment - Ares(2021)3527151 English (487.6 KB - PDF - 9 pages)

Download 🕁



Importance of academic activities for research careers

"The low-ranking position of Open Science and Access indicates that this is not commonly included in university incentive and reward structures."





European Commission

Open Science in the European Research Area: the recent <u>ERA Communication</u>

Deepening the ERA (Action 9)

- Launch, via the Horizon Europe Programme, a platform of peer-reviewed open access publishing;
- Analyse authors' rights to enable sharing of publicly funded peer-reviewed articles without restriction;
- Ensure a European Open Science Cloud that is offering findable, accessible, interoperable and reusable research data and services (Web of FAIR); and
- Incentivise open science practices by improving the **research assessment system**.

Citizen Engagement (Action 13)

 Organise with Member States and stakeholders Europe-wide participatory citizen science campaigns to raise awareness and networking, crowdsourcing platforms and pan-European hackathons, in particular in the context of Horizon Europe Missions. The Commission will develop with Member States best practices to open up science and innovation to citizens and youth.



Open Science in Horizon Europe



From FP7 to Horizon Europe



2021: Horizon Europe

- Open Science (**OA**, **RDM**, citizen engagement, etc.) embedded all across:
 - Evaluation of proposals* (Excellence methodology, and Quality and efficiency of implementation)
 - Grant agreement, guidelines
 - Reporting during the project's lifetime
 - Work programmes
- In short: strengthening of the rights & obligations with respect to OA, and focus on responsible RDM in line with FAIR
 *: some exceptions may appear (e.g. ERC/EIC)



Open Science practices

What?	How?	Mandatory/recommended
Early and open sharing of research	Preregistration, registered reports, preprints, crowd-sourcing etc.	Recommended
Research output management	Data management plan (DMP)	Mandatory
Measures to ensure reproduciblity of research outputs	Information on outputs/tools/instruments and access to data/results for validation of publications	Mandatory
Open access to research outputs through deposition in trusted repositories	 Open access to publications Open access to data Open access to software, models, algorithms, workflows etc. 	 Mandatory for peer-reviewed publications Mandatory for research data but with exceptions ('as open as possible') Recommended for other research outputs
Participation in open peer-review	Publishing in open peer-reviewed journals or platforms	Recommended
Involving all relevant knowledge actors	Involvement of citizens, civil society and end-users in co-creation of content	Recommended

Open Science in Horizon Europe: key elements

- Immediate OA to peer-reviewed publications (via the repository and under open licenses). Beneficiaries/authors must retain sufficient intellectual property rights.
- **Responsible management of research data** in line with the principles of 'Findability', 'Accessibility', 'Interoperability' and 'Reusability' (FAIR). **Data Management Plans** are mandatory if generating or reusing data. OA to research data follows the principle 'as open as possible, as closed as necessary'.
- **Provision of access and/or information to research outputs** and tools/instruments for validating conclusions of scientific publications and validating/re-using data (reproducibility).
- Other open science practices (e.g. early and open sharing of research, measures to ensure reproducibility, citizens' engagement) are promoted and encouraged
- Work programmes may provide for **additional incentives or obligations** (including for EOSC) to adhere to **open science practices**



OA to peer-reviewed publications

- Obligation to ensure deposition at the time of publication in a trusted repository and immediate open access through repository
- Beneficiaries/authors must retain sufficient IPR (to comply with OA requirements) and ensure OA under <u>open licenses [CC BY (or equivalent) for</u> journal articles, CC BY NC/ND (or equivalent) allowed for long-text formats]
- Beneficiaries publish in venues of their choosing. Any publication fees (APCs/BPCs) only refundable if publishing venue is full open access (costs non-eligible if publishing venue is hybrid)
- Metadata of deposited publications/research data open (the latter with exceptions) under CC0 or equivalent in line with FAIR principles



Responsible research data management, in line with FAIR

- At proposal stage, beneficiaries will be evaluated on **preliminary** research data and research output management **considerations**
- All projects that generate (and/or re-use) research data will have to establish and regularly update a **Data Management Plan** (living document)
- Beneficiaries will have to deposit data in a **trusted repository** and link data to publications they underpin, if applicable
 - For some actions, additional obligation that the data repository is federated under EOSC.
- Ensure open access "as open as possible, as closed as necessary", ASAP within the deadline (set up in the DMP) under CC BY or CCO equivalent), unless exceptions (justified in the DMP)

European

Other research outputs

- Research outputs other than publications and data (e.g. software, algorithms, protocols, workflows, models) should also be properly managed and be FAIR:
 - At proposal stage, beneficiaries will be evaluated on **preliminary** research data and research output management **considerations**
 - It is recommended that beneficiaries describe other research outputs in the DMP and that they deposit and provide open access via a repository to these outputs, unless legitimate interests or constraints apply.



Additional obligations regarding Open Science practices

- Where the call conditions impose additional obligations regarding the validation of scientific publications
 - The beneficiaries must provide (digital or physical) **access** to data or other results needed for validation of the conclusions of scientific publications, to the extent that their legitimate interests or constraints are safeguarded
- Where the call conditions impose additional obligations in case of a public emergency
 - The beneficiaries must (if requested) immediately deposit any research output in a repository and provide OA to it under CC BY, CC 0 or equivalent
 - As an exception, if the access would be against the beneficiaries' legitimate interests, they must grant nonexclusive licenses – under fair and reasonable conditions, to legal entities that need the research output to address the public emergency, and commit to rapidly and broadly exploit the resulting products and services at fair and reasonable conditions.



Evaluation of proposals and open science

- Quality of open science practices evaluated under *Excellence*, under *Methodology* [both mandatory and recommended practices]
 - Up to one page to describe OS practices & up to one page to describe research data/output management
- Capacity of participant/consortium & List of achievements evaluated under Quality and efficiency of the implementation
 - Explain expertise related to OS
 - List publications, software, data etc. relevant to project with qualitative assessment and PIDs; Publications expected to be OA; datasets are expected to be FAIR and 'as open as possible, as closed as necessary'; significance of publications to be evaluated on basis of proposers' qualitative assessment and not per Journal Impact Factor.



Useful pointers

- <u>How to prepare a successful proposal in Horizon Europe</u> (Webinar, 24 March 2021)
 - Open Science starts at 00:53:00
 - Q&A (incl. on Open Science) start at 1:09:00
- <u>A successful proposal for Horizon Europe: Scientific-technical excellence is</u> key, but don't forget the other aspects (Webinar, 21 April 2021)
 - Presentation: <u>Open Science</u>
- Model Grant Agreement and other supporting documents
 - Always check for the latest versions (current MGA is version 1.0)



Selected Q&As: generalities

- Is it possible to **subcontract** open science experts in the project?
 - When open science practices are addressed in the action tasks, the general rules under Article 6.2.B of the Model Grant Agreement apply. This means that subcontracting may cover only a **limited part of the action**.
- What are the consequences of **non-compliance** with open science obligations?
 - Not different from other violations. General sanctions available can apply (Art. 17.5 and Chapter 5 of the Model Grant Agreement), including possibility of grant reduction (Art. 28).



Selected Q&As: publications

- What authors should plan in terms of agreements with **publishers**?
 - Authors must retain sufficient IPRs to ensure deposition in a repository and open access through it (either to Author Accepted Manuscript or Version of Record), under an open license (CC BY or equivalent for articles and CC BY NC and/or NC or equivalent for long-text formats). When signing a contract with a publisher, we recommend that authors do not give them exclusive rights of their work but rather a non-exclusive license, as this empowers them to remain in control of their rights
- Is Horizon Europe mandating Plan S?
 - Horizon Europe is not mandating or implementing Plan S, it is aligned to it.
- Are the **costs** for peer-reviewed open access publications eligible?
 - The following costs are not eligible: costs of publications in **hybrid** journals and any **proting fees** (for monographs / other books or articles).

Selected Q&As: repositories

- What is a trusted repository?
 - A repository is an online archive, where researchers deposit research publications, research data and other scientific outputs and provide (open) access to them. They can be general-purpose repositories or institutional repositories, as well as certified repositories (e.g. CoreTrustSeal, nestor Seal DIN31644, ISO16363) or repositories commonly used and endorsed by the research communities (usually recognised internationally).
- Do the venues where the work is published have to be fully open access?
 - No. The instrument required to provide open access to peer-reviewed publications is the repository, not the venue (e.g. the journal). Beneficiaries can publish in any venue of their choice (whether full open access, subscription, hybrid, etc.) but have to comply with the open access requirements to their peer-reviewed publications, that is to ensure immediate open access via trusted repositories, under open licenses.



Selected Q&As: data

- Are there any **Data Management Plan (DMP) examples** available?
 - A <u>DMP template</u> is provided under the reporting templates in the reference documents of the Funding and Tenders portal of the European Commission and is recommended for use.
- Can additional budget be requested to cover the costs of research data management?
 - Budgetary needs, including for research data management, need to be **forecasted** in the project proposal.



Open access in the first work programmes (planned) HORIZON-WIDERA-2021-ERA-01-43: institutional publishing HORIZON-WIDERA-2022-ERA-01-42: books and monographs HORIZON-INFRA-2022-EOSC-01-02: common technical solutions



Capacity-building for institutional OA publishing across Europe (2021)

HORIZON-WIDERA-2021-ERA-01-43 is a Coordination and Support Actions

- 1. Activities that provide a **comprehensive map** of the current landscape of institutional publishing activities across Europe;
- 2. Activities that **improve the coordination**, **quality and services** of **existing** and substantial institutional open access publishing in EU member states and associated countries (**non-technological aspects** of the services)
- 3. Explicit and actionable **recommendations** for strategies and policies to be adopted by **research institutions** to support the further flourishing of their mission-driven, open access publishing activities in a coordinated fashion across Europe.



Supporting the development of aligned policies for OA books and monographs (2022)

- HORIZON-WIDERA-2022-ERA-01-42 is Coordination and Support Actions with **possible international cooperation**
- 1. Activities that foster **greater understanding** of bottlenecks in the development of policies and strategies for OA to books and monographs by institutions and funders
- 2. Coordination of policies amongst funders and research institutions, and the sharing of good practices in policies and strategies for OA to books and monographs
- 3. Actionable and evidence-based **recommendations and resources** for comprehensive institutional and funder policies for OA to books and monographs.



Improving and coordinating technical infrastructure for institutional OA publishing across Europe (2022)

HORIZON-INFRA-2022-EOSC-01-02 is a Research and Innovation Actions

- Improve the understanding of technologies and services in institutional notfor profit services across Europe and provide recommendations for further alignment and interoperability;
- Coordinate the development and adoption of common technical solutions for interoperability, cross-referencing, cross-linking, and sharing metadata across the European Research Area and beyond;
- 3. Support the implementation of technical specifications required to provide services through the **EOSC**.



Open Research Europe (ORE)

The **option** of an open access publishing platform offered to **Horizon 2020** and **Horizon Europe beneficiaries** at **no cost to them**



Main assets of ORE for our beneficiaries

- High-quality, reliable and efficient publishing venue for EU research
 - Swift, explicit, accessible and transparent on business processes and publication policies
 - Oversight by an independent Scientific Advisory Board
- No cost to authors/beneficiaries, no administrative burden
- Venue where grantees can also publish **post-grant** the results of their work, while respecting their open access obligations
- **Fully aligned** with the European Commission policy and principles (i.e. it takes burden from researchers as it is fully compliant)
- Absolutely not an obligation to use (and never will it be)



The publishing service

- ORE is not a repository
- **Original** articles i.e. stemming from Horizon 2020-funded research and Horizon Europe
- All scientific areas of Horizon 2020 and Horizon Europe covered
- Immediate open access, with content licensed for re-use
- **Open peer review** (i.e. open reviewer identities, published reviews, post-publication comments)
- Each article has a **dedicated metrics** page
- 'Super-networked' and '**minable**': PIDs, connection to repositories, open data and software, interoperable technologies, preservation of content, etc.



An optional service to our grant beneficiaries

- Public Procurement 5.8 Million EUR contract signed in March 2020 with a consortium led by F1000 Research for four years
 - Includes unique APC of **780 EUR** paid by the Commission for each publication
 - **OpenAIRE** as a partner to help with syndication of ORE
- Visit ORE: <u>https://open-research-europe.ec.europa.eu/</u>





Merci !



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Témoignage de Nicolas THIERY

Disponible <u>ici</u>









Questions & réponses









MERCI DE VOTRE ATTENTION

A BIENTÔT !