

Open Science and scientific integrity in France

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Plan

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- University Gustave Eiffel
- LIGM: a computer science research laboratory

2 Open Science in France

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- Scientific integrity requirements

3 Research Integrity in Europe



- Launched January 1st 2020
- 1st time in France: merging university, research organisation, Écoles
- Goal: Transforming Life and Cities
- University: Université Paris-Est Marne-la-Vallée (UPEM), 2021: 30 years
- Research organisation: IFSTTAR
 - research on cities and territories, transport and civil engineering
 - merging of INRETS and LCPC, January 1st 2011
- Écoles: 3 engineers (ESIEE Paris, ENSG, EIVP), 1 architects (École nationale supérieure d'architecture de Paris-La Villette)



– Laboratoire d'informatique Gaspard-Monge

- LIGM stands for “*Laboratoire d'informatique Gaspard-Monge*”, that is, the Gaspard-Monge Computer Science laboratory
- <http://ligm.u-pem.fr/>, 20 years old
- Head institutions:
 - Le Centre National de la Recherche Scientifique (CNRS)
 - L'École de Ponts ParisTech (ENPC)
 - Université Gustave Eiffel (UGE)
- around 150 members, where 80 are permanent researchers
- research themes: *image analysis, image processing, geometry in computer science, learning, networks, real-time algorithms, combinatorics, algorithms, bioinformatics, computational logic and automata, automatic language processing, signal processing...*
- Important research software production, mostly FLOSS, part of the research activities:
 - 2008-13 : 61 software items, where 53 FLOSS
 - 2013-18 : 66 software items, where 50 FLOSS
- Part of Labex Bézout (funding research activities), <http://labex-bezout.fr/>
CERMICS, LAMA, LIGM: maths and computer science

Digital Republic Law in France

October 7th 2016 <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000033202746/>

- **Publications: a new right for authors**

Article 30: *When a research is 50% publicly funded, the author retains the right to publish in open repositories 6 (STM) to 12 months (HSS) after publication.*

- **Data: a new duty for universities and research performing organizations**

Article 6: *open data should be the default for all publicly funded data, including research.*

Article 30: *When a research is 50% publicly funded, and data are not protected by any specific law, and they have been made public by the researcher or research body, their reuse is free.*

- Décret N.2017-638 (27/04/2017) gives the list of licences for data, databases, software. List **modified** by Décret N.2021-1559 (1/12/2021) EPL, EUPL.

- Site Etalab, <https://www.data.gouv.fr/fr/licences>

gives the list of licences that can be used by administrations for the free reuse of their public information, whether data or software source code.

Legal documents

- 10/2016 Digital Republic Law
- 27/04/2020 Circulaire Castex sur la “*politique publique de la donnée, des algorithmes et des codes sources*” <https://circulaire.legifrance.gouv.fr/circulaire/id/45162>
- 22/06/2020 Lettre de mission du Premier Ministre adressée au député Eric Bothorel
https://www.mission-open-data.fr/uploads/decidim/attachment/file/1/Lettre_Mission_BOTHOREL.pdf
Mission Politique publique de la donnée (2020) + Consultations
- 23/12/2020 Rapport “Pour une politique publique de la donnée”, et ses annexes
<https://www.mission-open-data.fr/>
- 09/2021 Ministerial roadmaps 2021-2024: policy for data, algorithms and source code <https://www.data.gouv.fr/fr/datasets/feuilles-de-route-ministerielles-sur-la-politique-de-la-donnee-des-algorithmes-et-des-codes-sources/>
- 03/2022 The commitment of the ministries on the opening of source codes and the use of free software: feedback on the roadmaps published in September 2021 <https://www.etalab.gouv.fr/lengagement-des-ministeres-sur-louverture-des-codes-sources-et-lutilisation-de-logiciels-libres-retour-sur-les-feuilles-de-route-publiees-en-septembre-2021/>

The Ministry of Higher Education, Research and Innovation (MESRI)

10/2016 Digital Republic Law

07/2018 First French Plan for Open Science https://www.enseignementsup-recherche.gouv.fr/sites/default/files/content_migration/document/SO_A4.2018_EN.01.leger_982501.pdf

Open Science is the unhindered dissemination of publications and research data.

3 axes: publications, research data, European & International OS dynamic

Followed by <https://www.ouvrirelascience.fr/home/>

07/2021 Second French Plan for Open Science

<https://www.enseignementsup-recherche.gouv.fr/sites/default/files/2021-10/2e-plan-national-pour-la-science-ouverte-version-anglaise-13715.pdf>

4 axes: publications, research data, source codes, open science is the default principle

09/2021 Roadmap 2021-2024 MESRI policy for data, algorithms and source code

<https://www.enseignementsup-recherche.gouv.fr/fr/la-feuille-de-route-2021-2024-du-mesri-sur-la-politique-des-donnees-des-algorithmes-et-des-codes-50534>

02/2022 Paris Open Science European Conference (OSEC), Paris,

<https://osec2022.eu/>

Scientific integrity requirements

Décret N. 2021-1572 (3/12/2021) relatif au respect des exigences de **l'intégrité scientifique** par les établissements publics contribuant au service public de la recherche.

<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000044411360>, Article 2.

Public establishments and foundations (public utility) mentioned in the Research Code:

- 1 Ensure the **awareness and training** of their personnel...
- 2 Ensure that the organization of the research work .. is carried out **in compliance**...
- 3 **Promote the dissemination of publications in open access and the provision of methods and protocols, data and source codes associated with research results in order to guarantee their traceability and reproducibility...**
- 4 Ensure the **prevention of breaches** of these requirements...
- 5 Ensure that any admissible report relating to a possible breach is investigated...
- 6 Decide on the action to be taken in cases of proven breaches of the requirements...

Research Integrity in Europe

ALLEA is the European Federation of Academies of Sciences and Humanities... promotes science ... and facilitates scientific collaboration across borders and disciplines.

Publication: *The European Code of Conduct for Research Integrity* (revised, 2017)

<https://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research...pdf>

The European Commission recognises the Code as the reference document.

Principles:

- 1 **Reliability** ensuring the quality of research...
- 2 **Honesty** in developing, undertaking, reviewing, reporting and communicating...
- 3 **Respect** for colleagues, research participants,...
- 4 **Accountability** for the research from idea to publication...

Research Misconduct, Unacceptable Practices:

- 1 **Fabrication**
- 2 **Falsification**
- 3 **Plagiarism** using other's work & ideas without giving proper credit...