From Repositories to APCs – a tour of the French and Inria open science policies

Laurent Romary

Inria, director for scientific information and culture

Scientific information and open science — why do we need national and institutional policies?

- Supporting researchers in managing and communicating scientific research productions
  - Publications, data, software
  - At the service of science and mankind
- Scientific transparency
  - Proving, comparing, reproducing
- Impact
  - Visibility, citability, measure
- Quality
  - Formats, metadata, authorities
  - Researchers/library specialists
- Budget control
  - Subscriptions, APCs, investments
- Ensuring our (digital) sovereignty
  - Sustainable public infrastructures, text and data mining, indicators

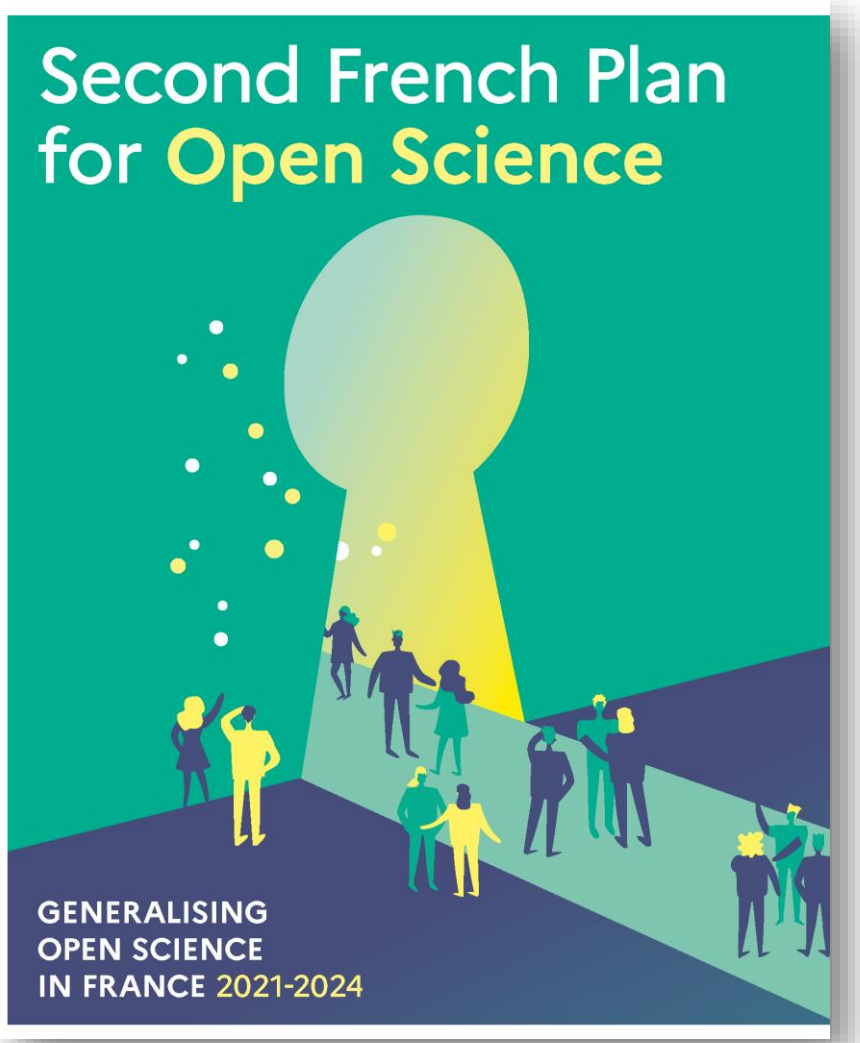
MINISTÈRE
DE L'ENSEIGNEMENT
SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'INNOVATION
Liberté
Égalité
Fraternité

Open science: (French) national context

- **2016:** Loi pour une république numérique (Lemaire)
  - Allows self archiving with maximal embargo periods for accepted authors' manuscripts
  - Open data became mandatory for all publicly funded data, including research data
- **2018**: Premier plan national pour la science ouverte
  - Creation of French Open Science Committee
  - Setting up a National Open Science Fund
- **2021**: Deuxième plan national pour la science ouverte
  - New action plan with 70+ items
  - The pillars of open science: publications, research data, research source codes and software, transforming scholarly practices

https://www.ouvrirlascience.fr/second-national-plan-for-open-science/

For those who want to know more…



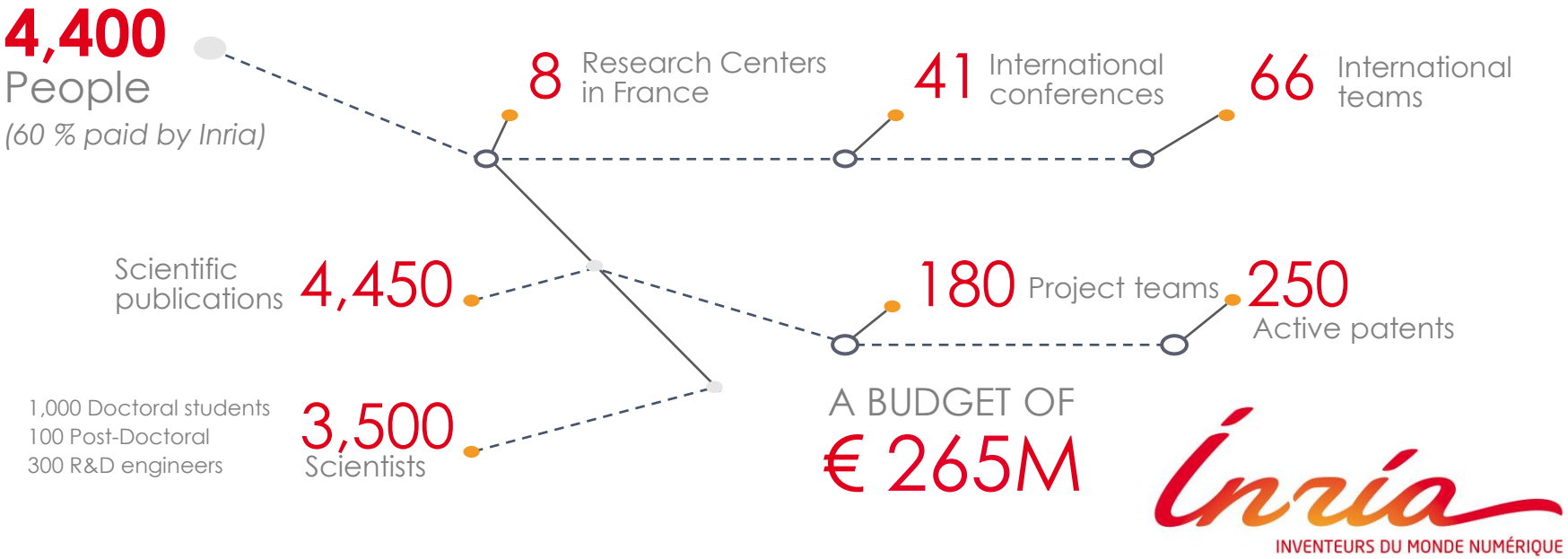
- **Publications -** Supporting economic models of open access publishing without publication fees for authors ("diamond" model)
- **Publications -** Promote multilingualism and the circulation of scientific knowledge through the translation of French researchers' publications
- **Data -** Create Recherche Data Gouv, the federated national platform for research data
- **Code and software –** Foster Software Heritage as a reference platform for signaling and preserving
- **Transformation -** Develop and value open science skills throughout the educational and career pathways of students and research staff
- **Transformation -** Value open science and the diversity of scientific production in the evaluation of researchers, projects and research institutions
- **Transformation –** Rely more on research on research (metaresearch) to overcome the obstacles. Creation of an Open Science Lab

Main infrastructures for open science

- HAL – the multidisciplinary national publication repository
  - Publications, theses, reports etc. (1 million+ documents, 3 million+ references)
  - Additional services: conference management, overlay journal platform (Episciences)
  - Inria is one of the hosting institutions of HAL (with CNRS and INRAe)
- Software Heritage – the international repository that collects, preserves, and shares all software that is publicly available in source code form
  - Harvests all (GitHub, Gitlab etc.) open software forges - 2 billion+ source files
  - Collaboration with Unesco
  - Inria is a co-founder to SH – e.g. linking HAL and Software Heritage
- Recherche Data Gouv – the national open research data repository
  - Initiated by the French national committee for open science
  - Dataverse solution - set up by INRAe
  - Officially on air since 8 July 2022

Open Science at Inria – a comprehensive policy

The underlying vision



Objectives of Inria's scientific information policy

- Maximising the **dissemination of our scientific assets** (visibility and swift communication of knowledge), for a reasonable price
- Constitution of a **reliable** and **sovereign institutional corpus** (documentation, preservation, access), with clear public governance principles
- Contribution to **shaping the scientific communication landscape** in terms of editorial processes and usage made of scientific productions

Inria scientific information policy in concrete terms

- Deposit mandate on all scientific publications (in HAL, CC-BY)
  - Condition to appear in annual research reports
  - Comprising articles in gold open access journals
  - Strong library support
  - Encouragement towards preprints
- Central budget for APCs
  - Management of a national dashboard of costs and journals
  - Forbidding hybrid open access
- Engaging in developing new publication models and infrastructure
  - Editorial support to *Episciences* based journals
  - Investment and support to *Software Heritage*
- Research data support group
  - Data management plan, support to the use of the new Recherche Data Gouv infrastructure
  - National network of scientific contacts/champions for research data
- Printed material as disposable goods
  - Creation of a central collection of reference works
  - On going digitization project (on HAL)

See an overview under: https://www.inria.fr/en/open-science-inria-role

Welcome to HAL-Inria

Hal-Inria allows to access all publications in HAL and, for Inria team members, to deposit the full text of their scientific contributions

Zoom on...

Episciences survey: users highlight advantages

épisciences.org

A survey was conducted in the form of a questionnaire and distributed to the editors of the 11 journals active on Episciences in April 2018.

The survey highlighted the strengths of Episciences:

- an economic model considered virtuous by the journals on Episciences;
- publication of references of articles, volumes and sections on a personalised website;
- independent evaluation by members of editorial boards outside traditional private editorial circuits;
- technical support and day-to-day assistance in using the platform.

Read the results of the survey

Reminder: The Inria Scientific Edition team accompanies you in your epijournal project in computer science and applied mathematics.

LATEST DEPOSITS

Nour El Houda Ghanmi. Etude DFT de l'influence des ions fluorure sur les mécanismes de croissance des oxydes nanoporeux par oxydation anodique. Chimie-Physique [physics.chem-ph]. Université Pierre et Marie Curie - Paris VI, 2017. Français. ⟨NNT : 2017PA066354⟩ . ⟨tel-01879538⟩

Mahmoud Teimouri. D'une pensée moderniste à une approche paysagère : étude du rôle de l'identité dans les approches de rénovation urbaine à Téhéran contemporain (depuis la fondation de l' organisation de la rénovation urbaine de Téhéran en 1975). Art et histoire de l'art. Université Panthéon-Sorbonne - Paris I, 2015. Français. ⟨NNT : 2015PA010550⟩ . ⟨tel-01879537⟩

Enrica Montalban. Long-lasting effects of operant conditioning and cocaine on D1 pyramidal neurons in prefrontal cortex and on the D1 and D2 striatal neurons mRNAs. Neurons and Cognition [q-bio.NC]. Université Pierre et Marie Curie - Paris VI, 2016. English. ⟨NNT : 2016PA066723⟩ . ⟨tel-01879536⟩

SEARCH

Termes de recherche

LINKS

- Documentation
- Helpdesk Inria
- contact

NEWS

SAVE THE DATE "INTEROPÉRABILITÉ ET PÉRENNISATION DES DONNÉES DE LA RECHERCHE: COMMENT FAIR EN PRATIQUE ? RETOURS D'EXPÉRIENCES" *(10/9/18)*
Paris, November 27th, 2018

NEW UPDATE OF HAL RELEASE NOTES (IN FRENCH) *(6/9/18)*

AN EXTREMUM STRONG NEWS FOR OPEN SCIENCE (IN FRENCH) *(7/13/18)*

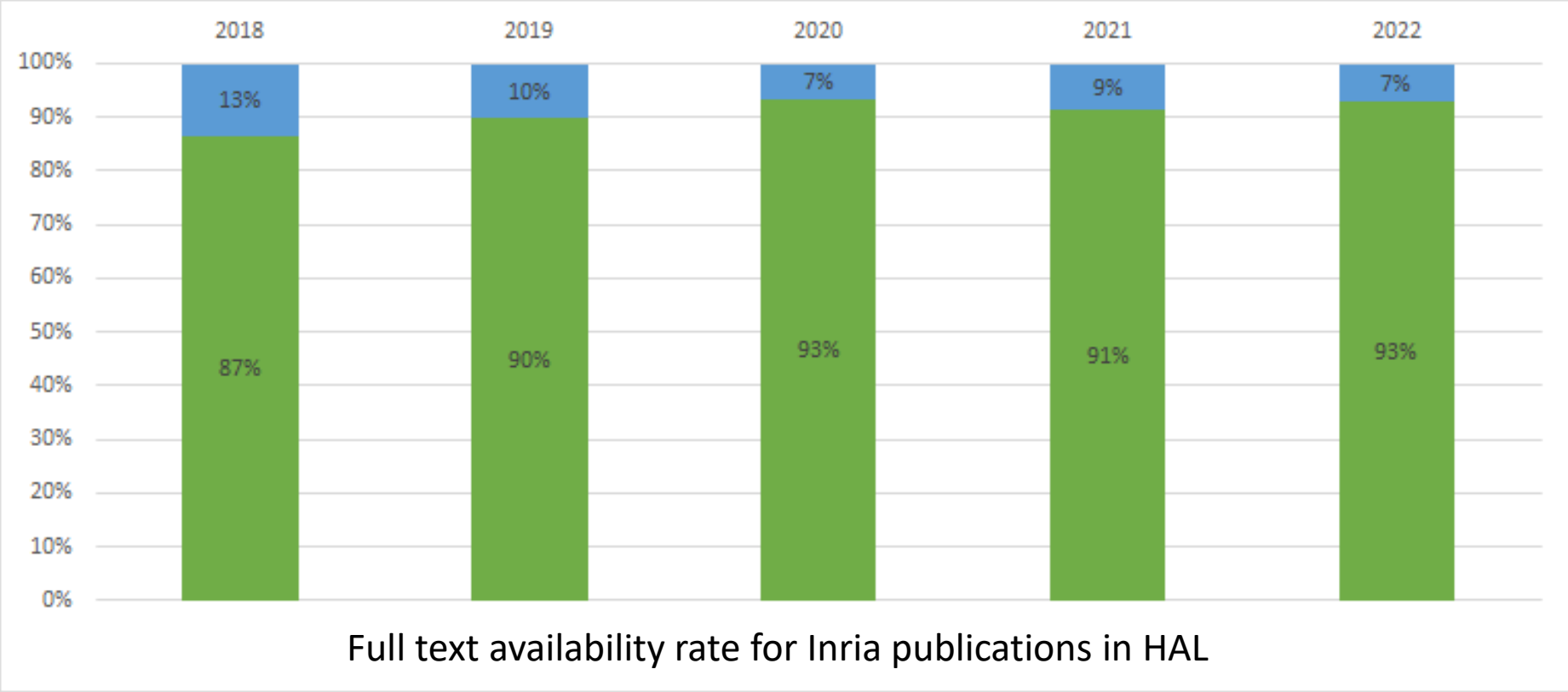
SEMINAR PDS/EHESS INTERVENTIONS ARE NOW AVAILABLE IN AUDIO *(6/22/18)*

WHY COLLECT, PRESERVE AND SHARE TEH SOURCE CODE OF ALL THE SOFTWARE THAT IS AVAILABLE? *(6/19/18)*

NUMBER OF FULL TEXT DOCUMENTS

581 298

A successful policy ☺

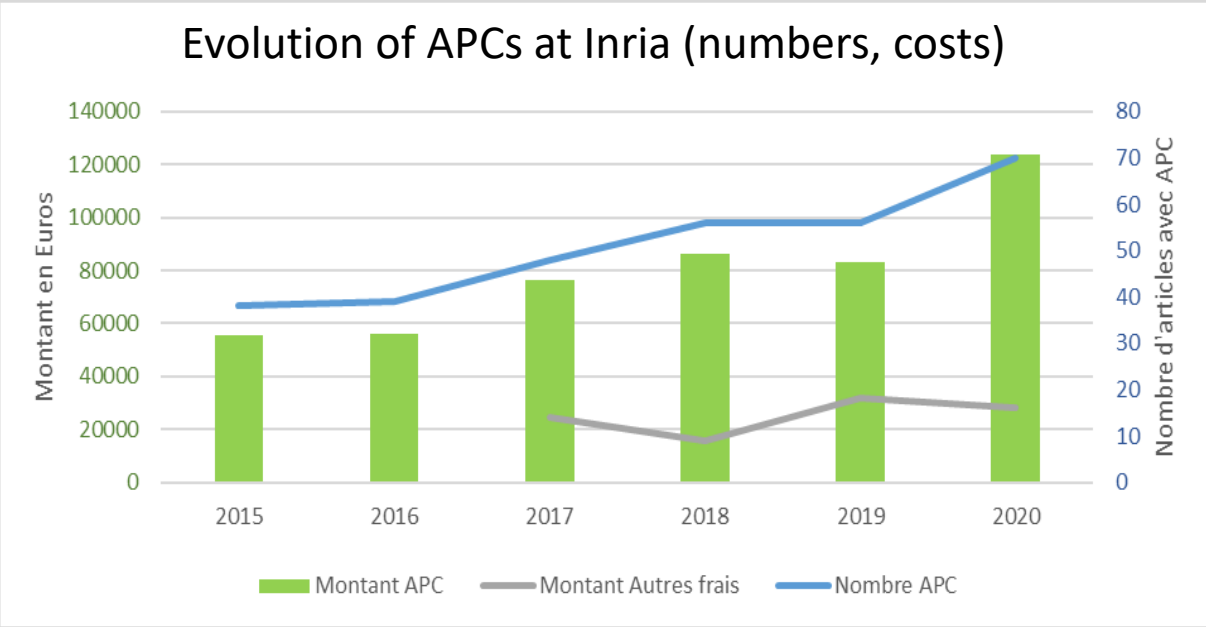


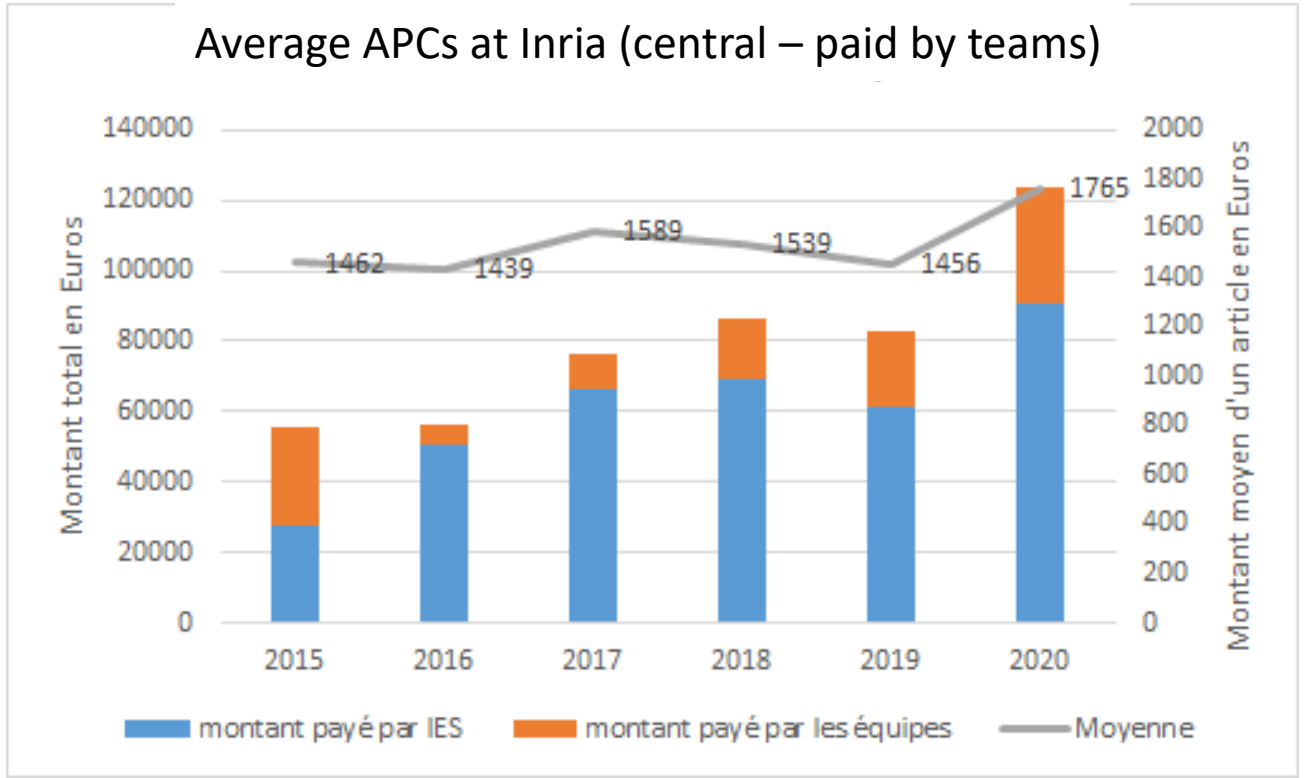
Full text availability rate for Inria publications in HAL

Assessing the evolution of APCs in the recent period

- APC - Article Processing Charges
  - Implements the author-pays model (subscriptions: reader-pays)
  - APCs come in various settings: publication charges (“gold OA”), colour and photo charges, submission charges, conference fees :-}
  - May be the sole funding source of a (natively gold) journal or combined with subscriptions (“hybrid”)
- Issues
  - Double dipping in the case of hybrid journals
  - Fragmentation of scientific information budget, conflation with research budgets
    - And integration of new processing costs (for publishers and HER institutions)
  - Extremely conservative: for major publishers, this is business as usual
  - Encourages predatory practices (each new article is a new fee)
  - Financial risk for research producers - absence of non-publishing entities (e.g. patent offices, industry R&D departments)
- Note: not all open access journal are based on APCs (diamond, freemium)

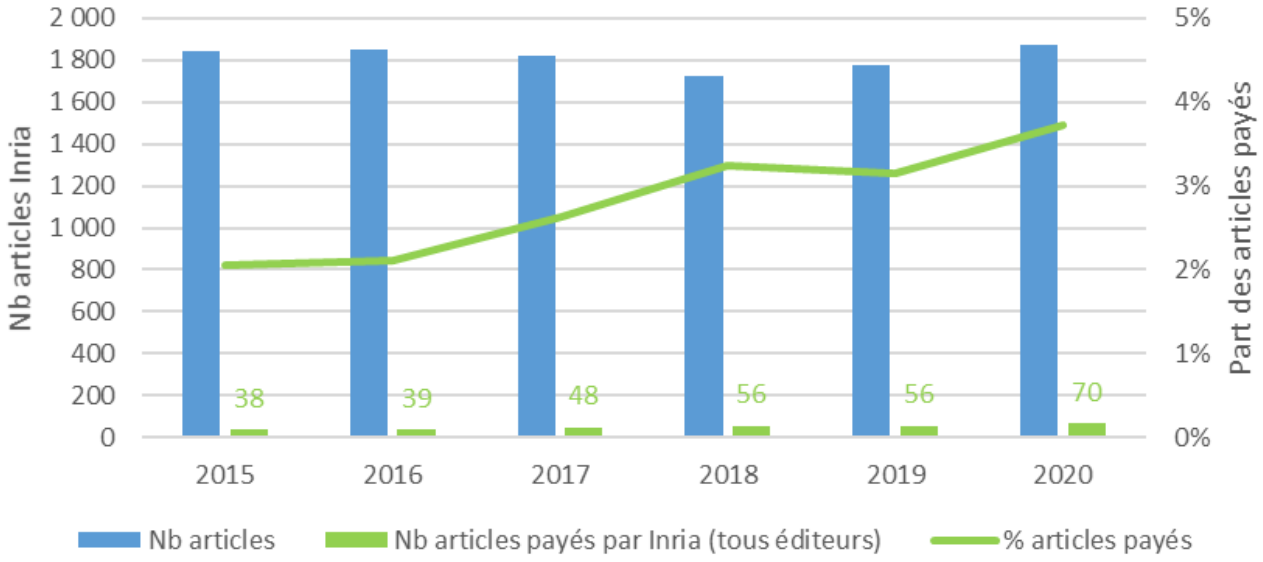
General evolution of our APC budget



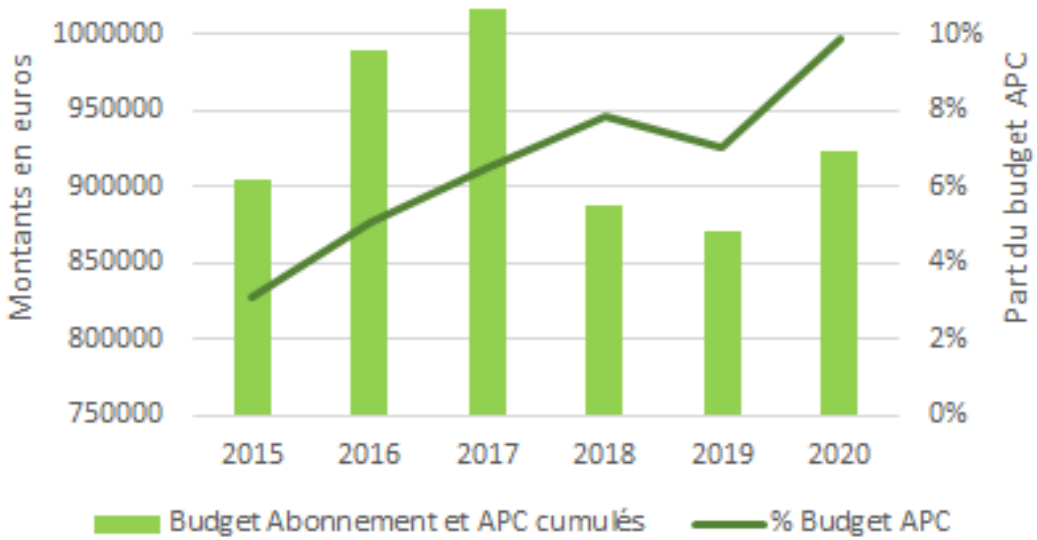


A risky transition…

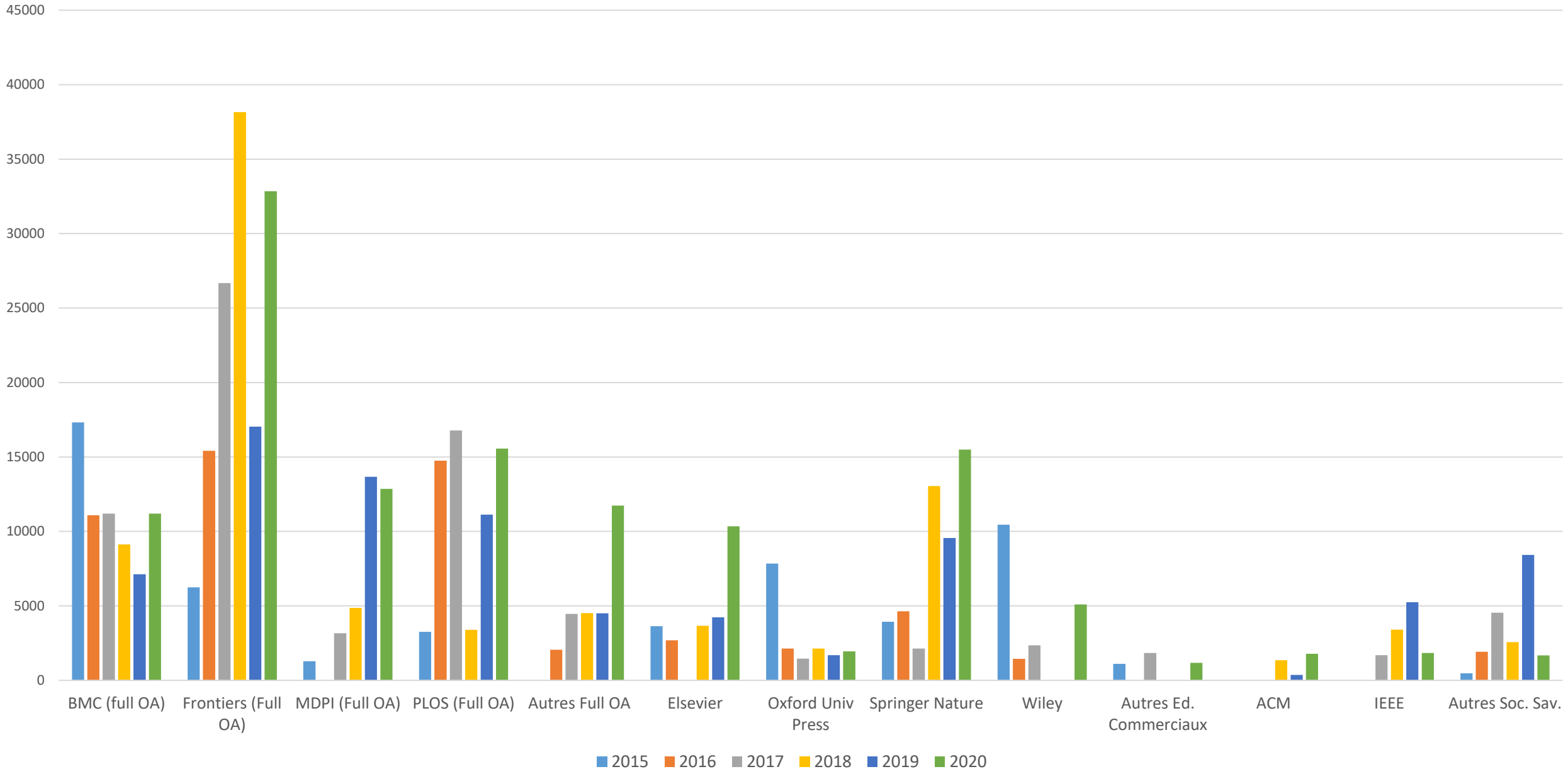
Proportion of (paid by Inria) APC-based articles (out of all our publications)



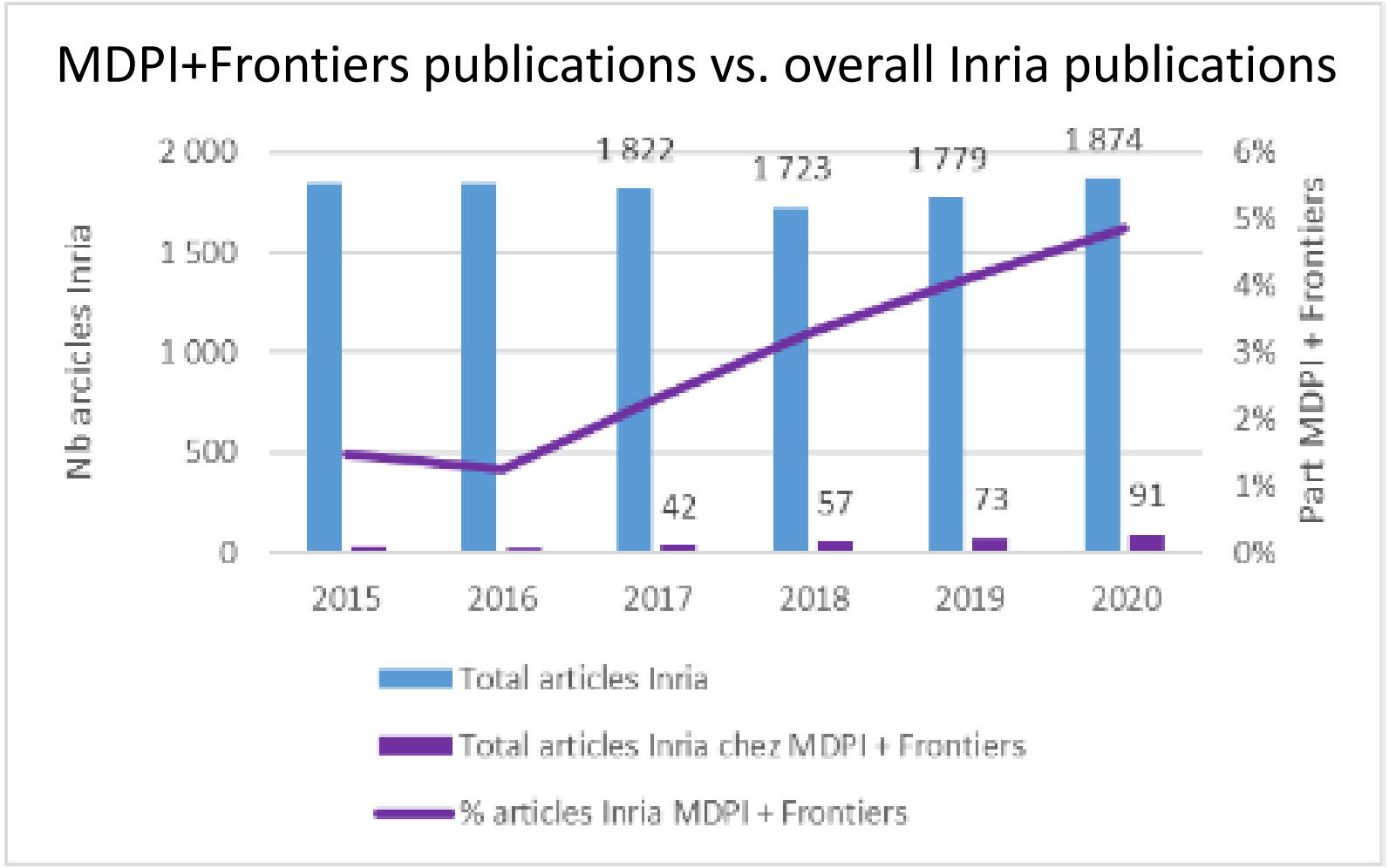
Proportion of (paid by Inria) APCs within our publication costs



Budget evolution by publisher



The specific cases of MDPI and Frontiers



Pulling the handbrake

- Identifying measures to slow down the process
  - Reducing the scope: corresponding authors
  - Increasing the researchers' awareness
    - Authorisation for non permanent staff
    - Journal screening form
    - Informing about predatory strategies: irrationality of APCs settings, special issues, pressures on editorial committee
  - Keeping a centralised budget – never break the thermometer
- Transforming agreements?
  - Real transformation (ACM) vs. empty promises
- Implementing the Rights Retention Strategy (cOAlition S)?
  - Imposing vs. asking for permission – cf. Inria policy
- Acting as a community – Informatics has a role to play
  - Conceptual unity (a sense of digital sovereignty)
  - Joint policies and shared infrastructures

Merci de votre attention !