



Open Innovation  
Open Science  
Open to the World



*– a vision for Europe*

Research and  
Innovation



## Objective of the Course

- *To give an introduction to the conceptual insights behind the policy priorities set by Commissioner Moedas: **Open Innovation, Open Science and Open to the World.***
- *To analyze the introduction of these concepts in **the priorities of the European Commission** in terms of:*
  - ***research and innovation policy development and***
  - ***sources of evidence and advice for sound policy-making.***

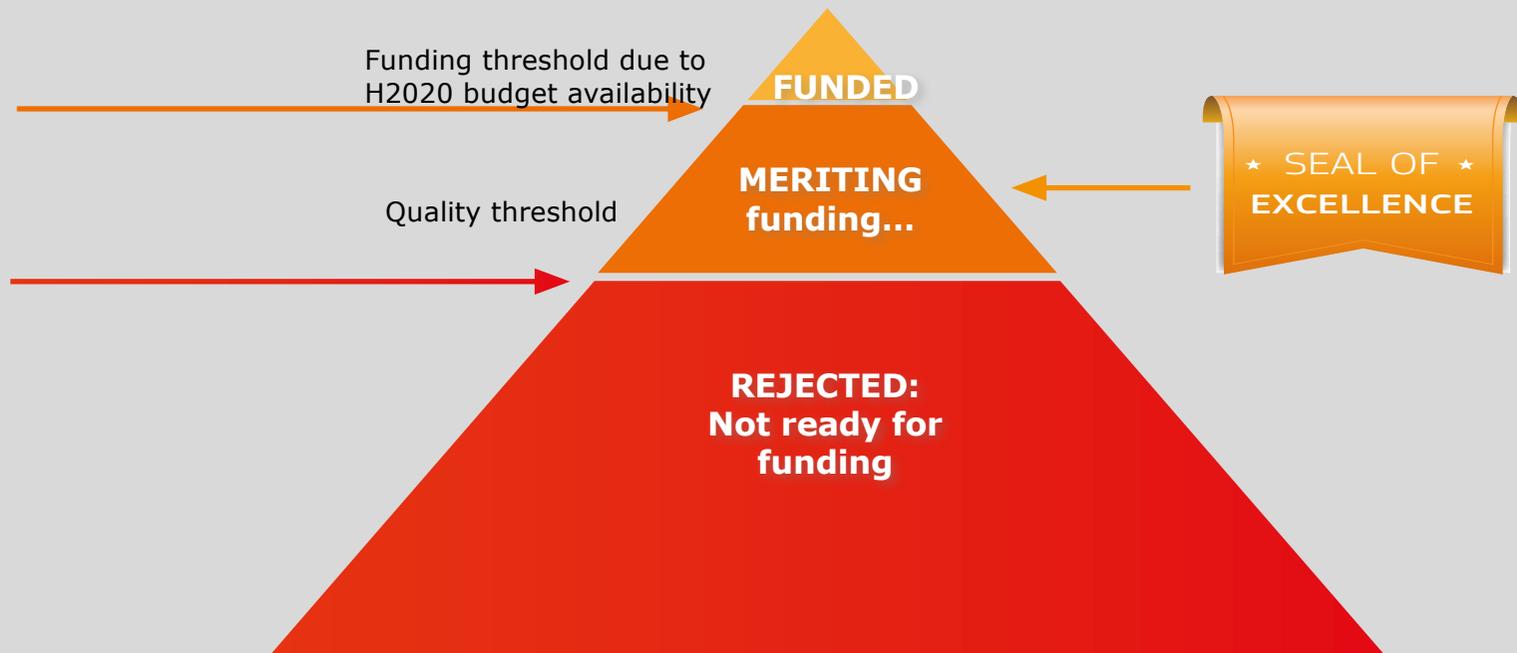
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Objectives





## Identifying proposals for the Seal of Excellence



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Open Innovation





# European Innovation Council

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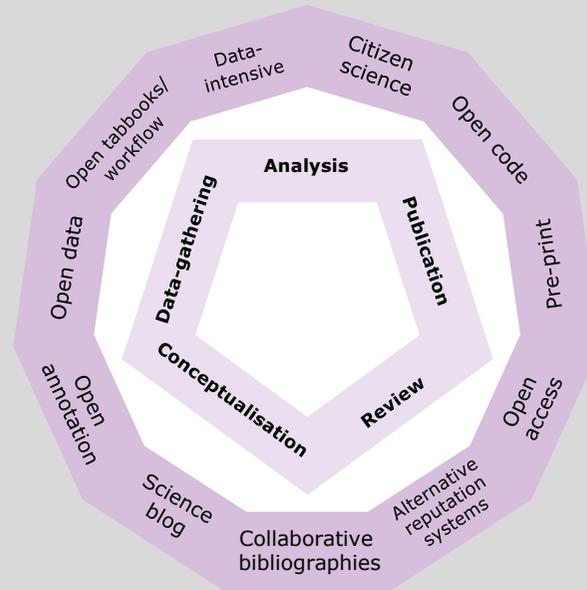


# Open Science

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# Open Science – opening up the research process



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Source : <http://ec.europa.eu/research/consultations/science-2.0/background.pdf>

Open Science





## 4 recommendations for policy actions

### 1. First, we recommend the removal of the barriers that extreme competition for limited resources creates for Open Science

- We recognize that this will involve a fundamental rethinking of how research is funded and how researchers are rewarded.
- For funding, we recommend that:
  - Funding success rates should be brought back to a position where Europe's best researchers can reasonably expect to attract and maintain funding for their best work.
  - It is also critical to support as many highly qualified, early-career researchers as possible - due to the proven difficulty in predicting productivity,



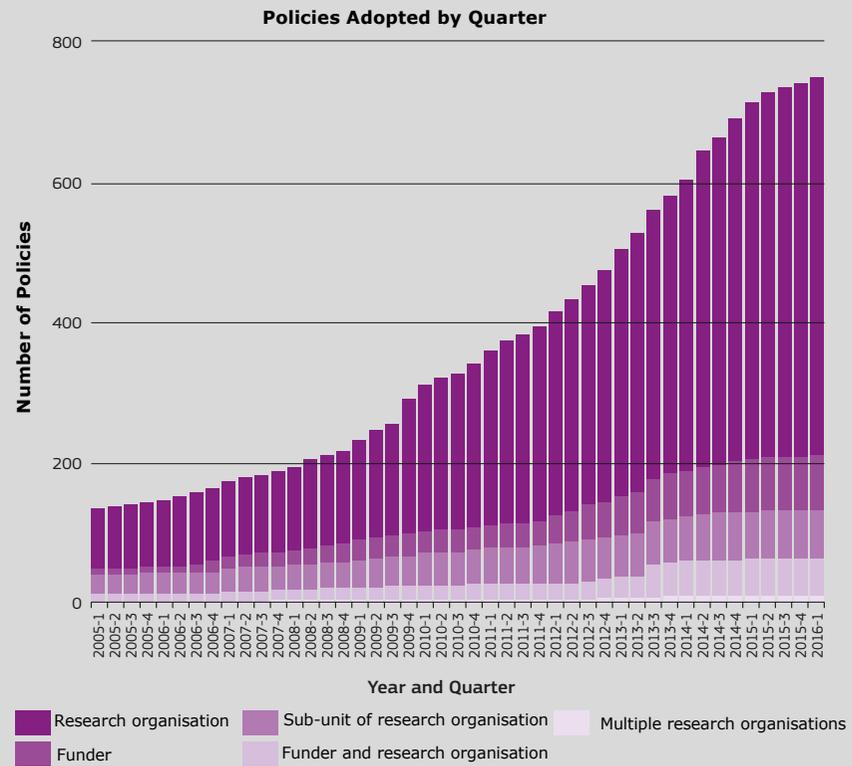


# ADVANCING OPEN ACCESS AND DATA POLICIES

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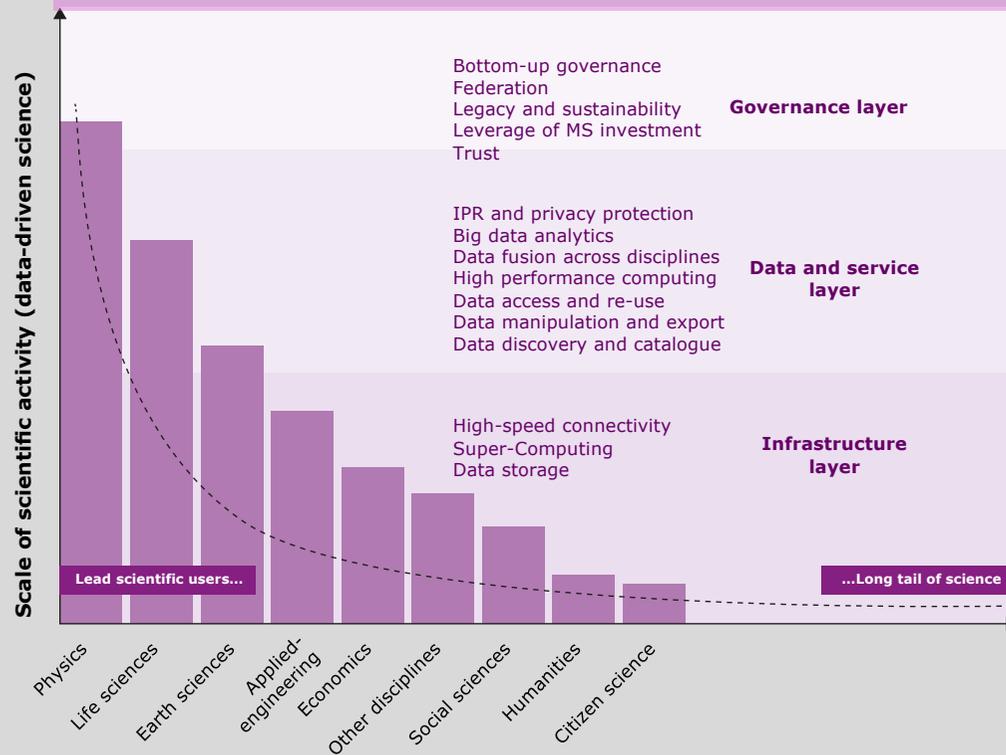
## Growth of Open Access Repository Mandates and Policies



Source: <http://roarmap.eprints.org/>



## Governance of the European Open Science Cloud



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Source: DG Research and Innovation (2015)

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# Open Science: From Open Access to Open Scholarly Communication

	Discovery	Analysis	Writing	Publication	Outreach	Assessment
Elsevier	Scopus, Crossref	?	Crossref	ScopusDirect, Cell-press	Crossref, ResearchGate	Journal Metrics, Scopus
Springer Nature Digital Science	Papers <sup>3</sup>	labguru	Overleaf, Papers <sup>3</sup>	nature, Dalgrive, BioMed Central	Nature Blogs	NATURE INDEX <sup>TM</sup> , Altmetric, Elements
Google	Google, Google books	Google Drive	Google Drive, Google	?	Google Scholar	Google Scholar, Google METRICS
Wikimedia	Wikidata	?	Mediawiki	Wikiversity, Wikibooks	Wikiversity, Wikiversity	?





## 2. Second, we recommend the full Implementation of Open Access publishing and numbers of publications

- We are concerned that monopolisation and cartelisation of publishing are not compatible with Open Science – too many papers are hidden behind pay-walls for too long after publication
- We believe the goal must be the development of new funding and business models to provide an affordable and sustainable Open Access publishing system.
  - In the interim, we recommend Green Open Access as a useful solution for immediate pre-publication sharing of Open Science research, using, for example, posting on recognized pre-print servers and data publishing platforms.
  - But the ultimate goal must be Open Access of the final peer-reviewed publication and the underlying data.
- Funding agencies can play a key role in achieving this goal
  - Gates Foundation where from 1 January this year, all publications emerging from Gates funded research must be immediately available in their final form - thus excluding some top journals



### 3. Our third recommendation focuses on Open Data – where we identify an urgent need to establish both competence and confidence in the practice of Open Data

- We identified three core challenges for the practice of Open Data:
  - Data management and data sharing
  - Establishing a holistic interoperable infrastructure and
  - Creating a culture for openness
- We recommend that these should be supported by
  - training programmes for best practice for data management skills
  - Promoting awareness of existing data repository options
  - Assessment and rewarding of data reuse
  - explicit career tracks for data and software specialists
  -



# Researchers Career

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## 4<sup>th</sup> RISE OS recommendation

- For evaluation of a researcher's work, we strongly recommend that:
  - Metrics should not substitute for meaningful assessment.
  - Assessment criteria should also reward reagent, protocol and data sharing, and open resource development



# Scientific panel for health suggestions

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## *What if we have a EuHRI?' or EHRC - potential gain*

Reduced waste of resources in duplications of research and evidence building

- Increased opportunity to translate research for societal and economic benefit (Impact)
- Take full advantage of inputs from each country to promote interdisciplinary "Team Science" (<http://www.acmedsci.ac.uk/file-download/38721-56defebabba91.pdf/>)
- Offer the opportunity for pan-European registries and bioresources (biobanks) and repository for serving as a Research Agency for clinical trial databases etc





## *What if we have a EuHRI?' - potential gain*

- Enable a combination of funding of research using EU funds, national funding and industry support
- Provide a sound mechanism for developing standard operating procedures for pan-European Research
- Create connectivity between research activity, growing research capacity and developing clinical and non-clinical careers
- Enable a more efficient way of combining the experience of different countries in helping others in building their research activity
- Visibility of health research under European leadership
- Create a stronger connection to other large bodies dealing with research such as the NIH and collaborative projects with them.
- Increased opportunities to contribute to Global Health agenda



**Thanks for your attention!**

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Thank's to Maria da Graça Carvalho for some  
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Conclusions

