Validating the Outcomes of the Public Consultation: 'Science 2.0': Science in Transition

Jean-Claude Burgelman

Silvia Luber, Rene von Schomberg

DG Research and Innovation

Workshop co-hosted with the Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)
Bucharest
20-11-2014

Do not quote

Research and Innovation

Outline

European Commission

- Background of the public consultation
- Perceptions regarding Science 2.0
- Drivers and barriers of Science 2.0
- Implications
- Opportunities of Science 2.0
- Need for policy intervention
- Policy recommendations

Background of the public consultation

Background

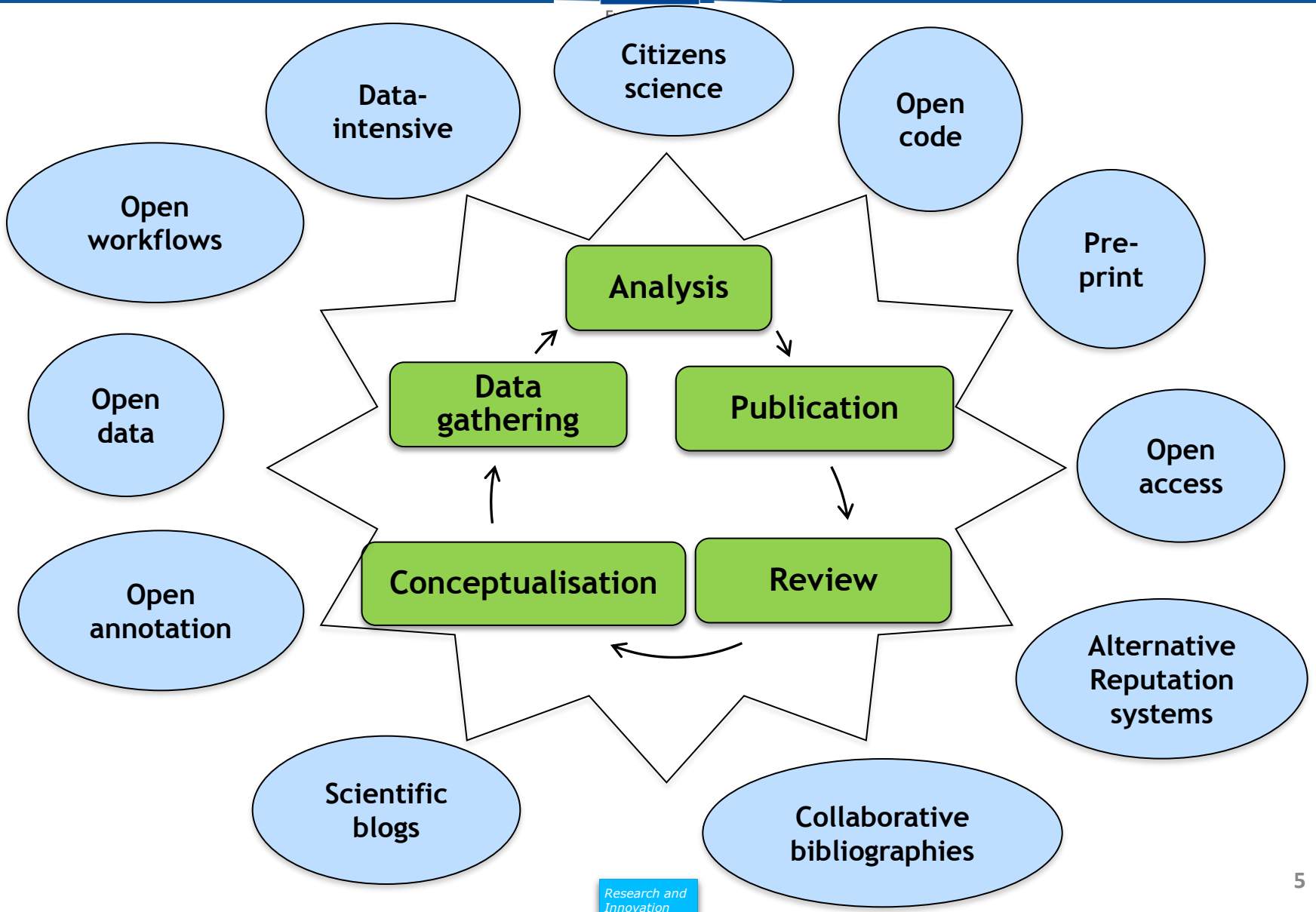
- *Purpose of the consultation:*

1. ***Assess the degree of awareness*** *amongst the stakeholders of the changing modus operandi,*
2. *Assess the perception of the* ***opportunities and challenges****,*
3. ***Identify possible policy implications*** *and actions to strengthen the competitiveness of the European science and research system*

- *From 03.07.2014 to 30.09.2014*
- *498 submitted responses of which 164 Organisations and 38 Public Authorities*
- *28 position papers voluntary submitted in addition to questionnaire*

This presentation is a first preliminary analysis of the closed questions (graphs), open questions and position statements (quotes and word clouds).

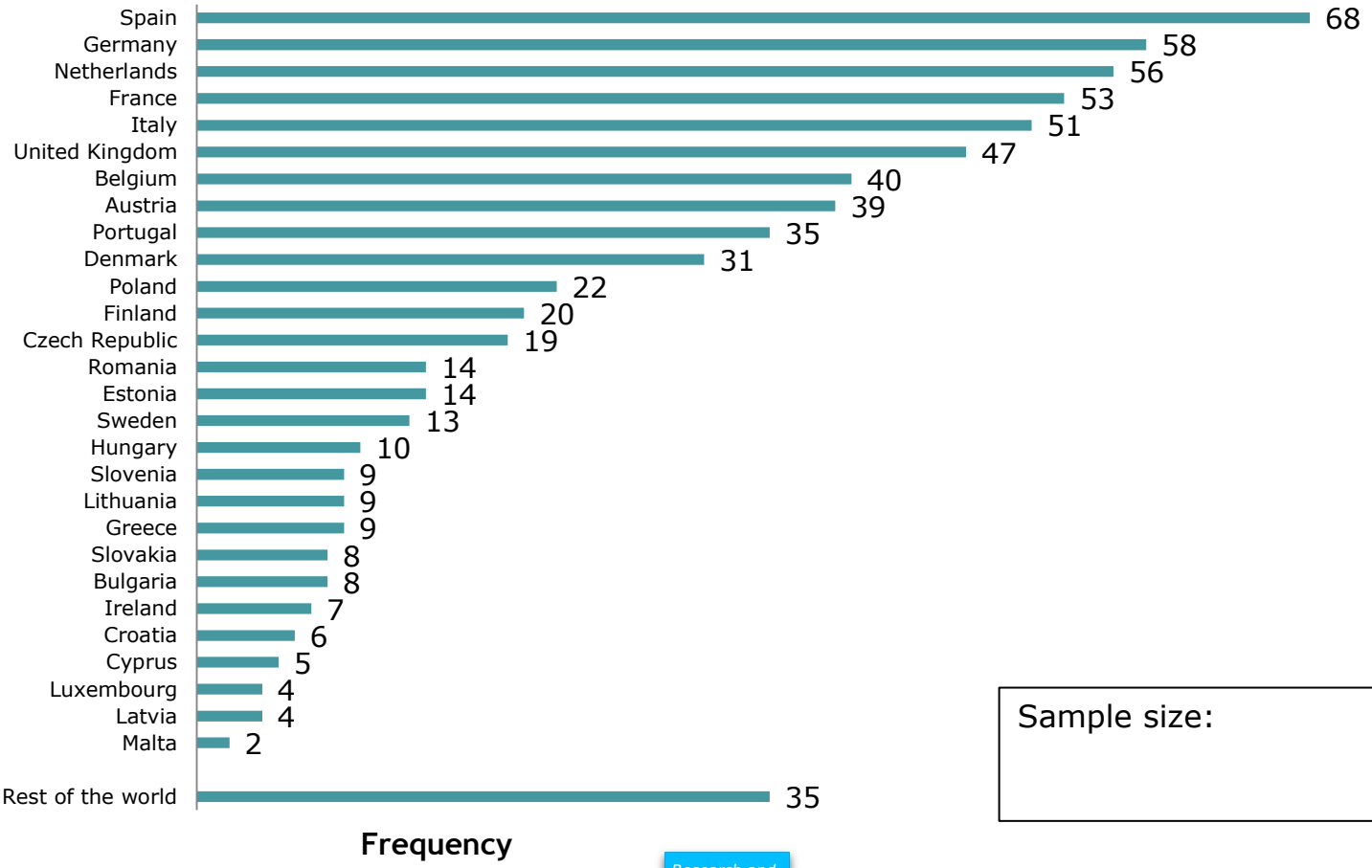
Background


Citizens science
Data-intensive
Open code
Open workflows
Pre-print
Analysis
Open data
Data gathering
Publication
Open access
Open annotation
Conceptualisation
Review
Alternative Reputation systems
Scientific blogs
Collaborative bibliographies

European Commission

Respondents' profile

Country or countries of residence or activity (Number of responses)



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Perceptions regarding 'Science 2.0'

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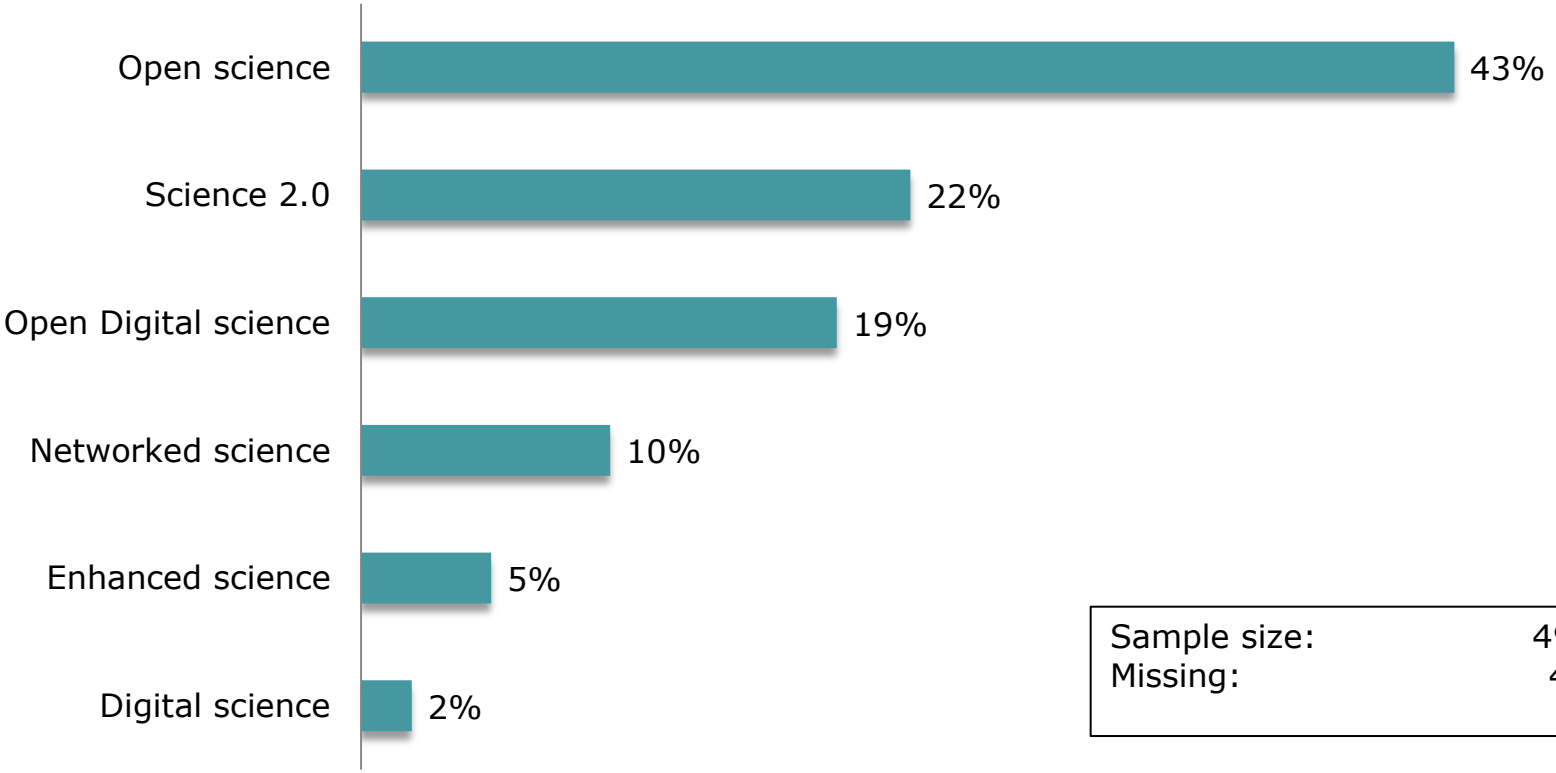
What is the most appropriate term to describe 'Science 2.0'? (closed question)



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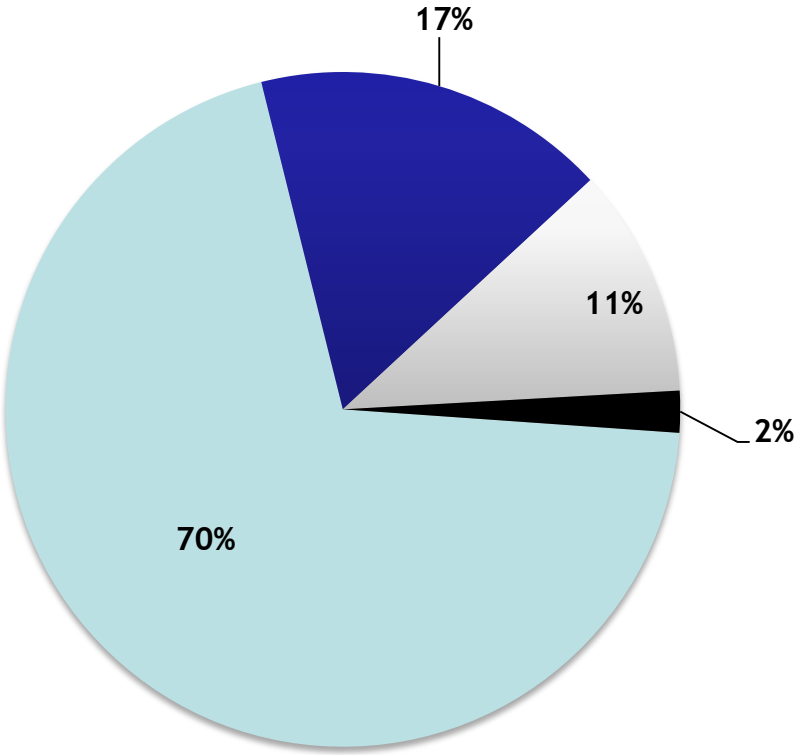
European Commission

Do you recognise the trends described in the consultation paper as 'Science 2.0'?



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Drivers and barriers of 'Science 2.0'

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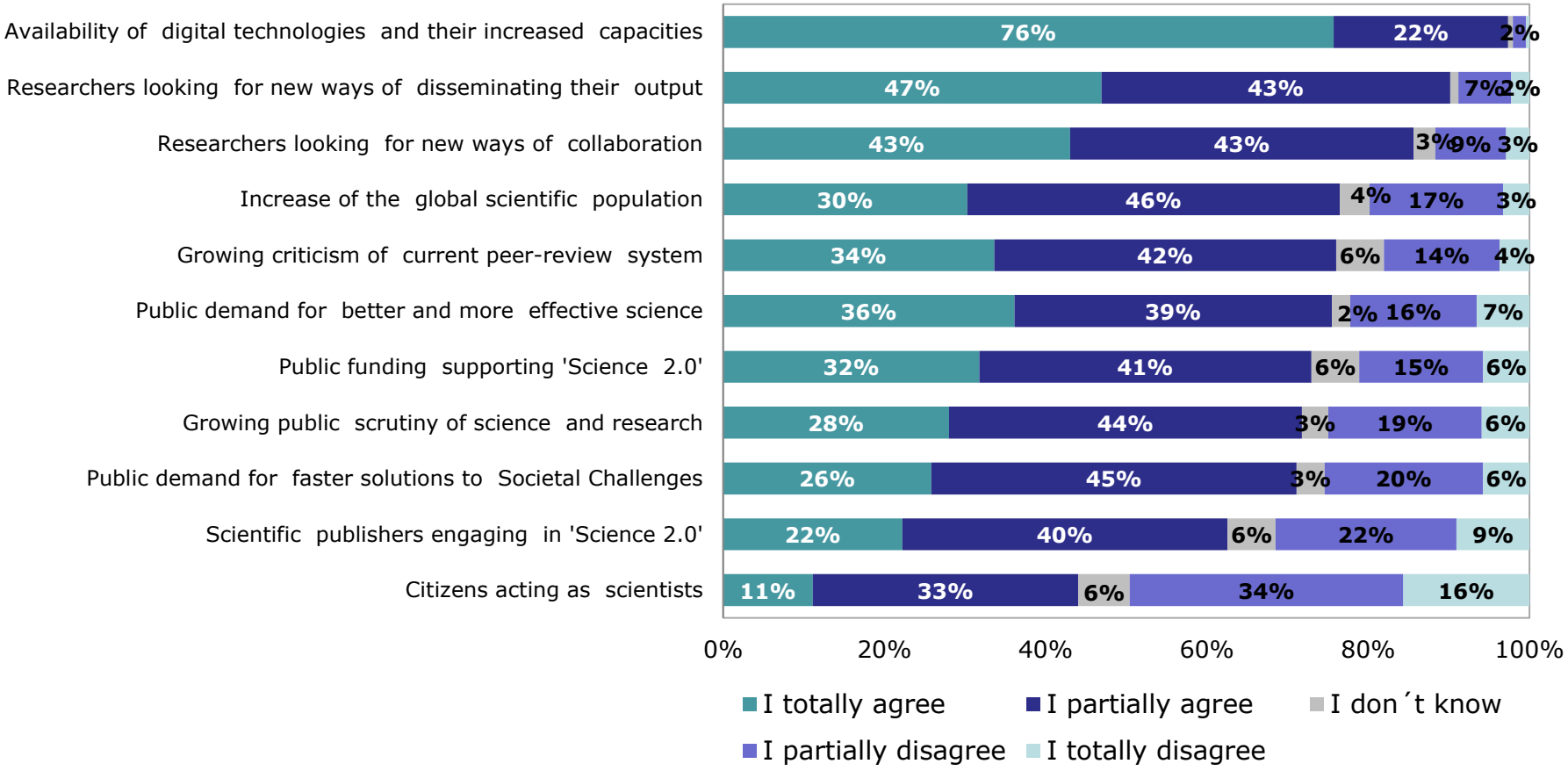
What are the key drivers of 'Science 2.0'?



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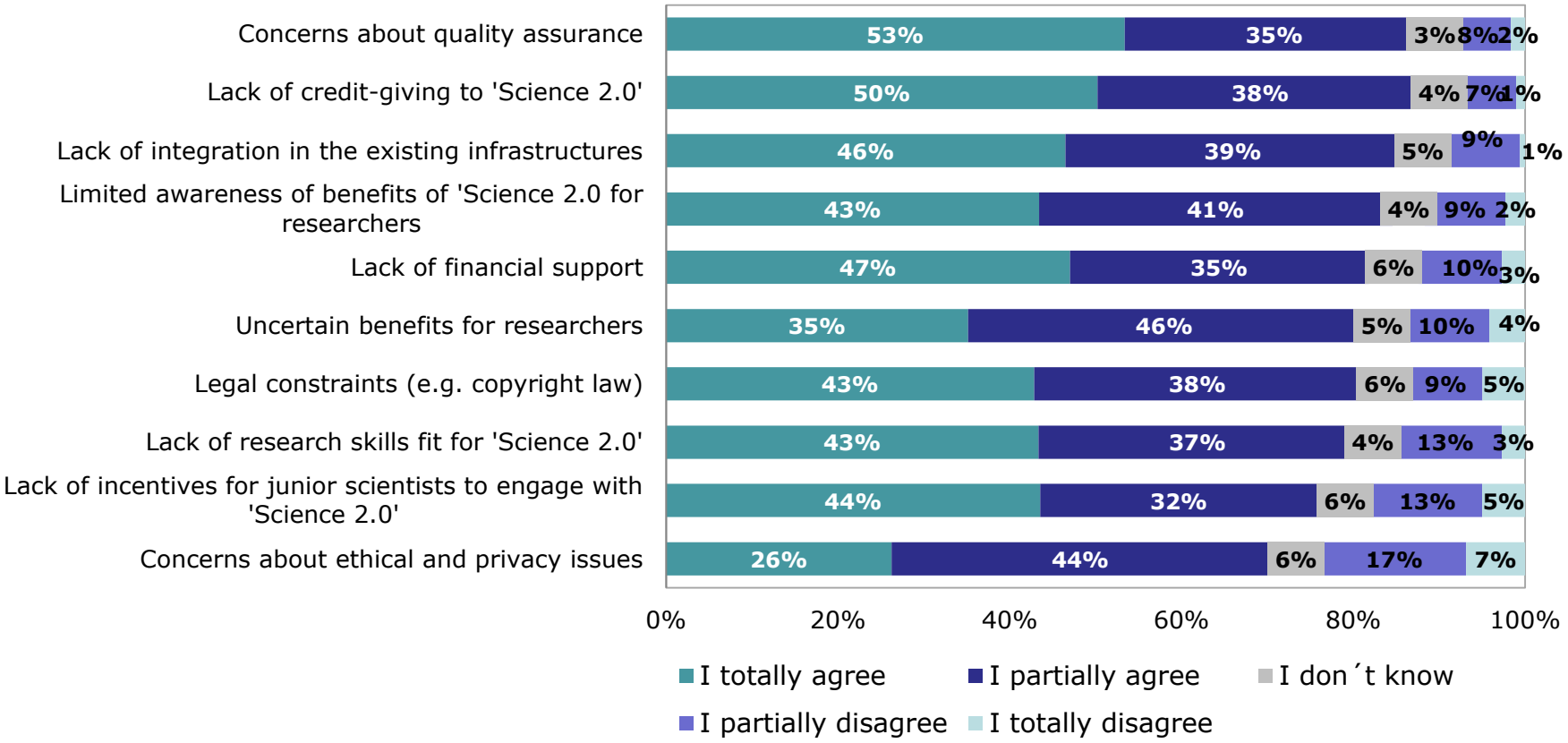
Barriers to ‘Science 2.0’

What are the barriers for 'Science 2.0' at the level of individual scientist?



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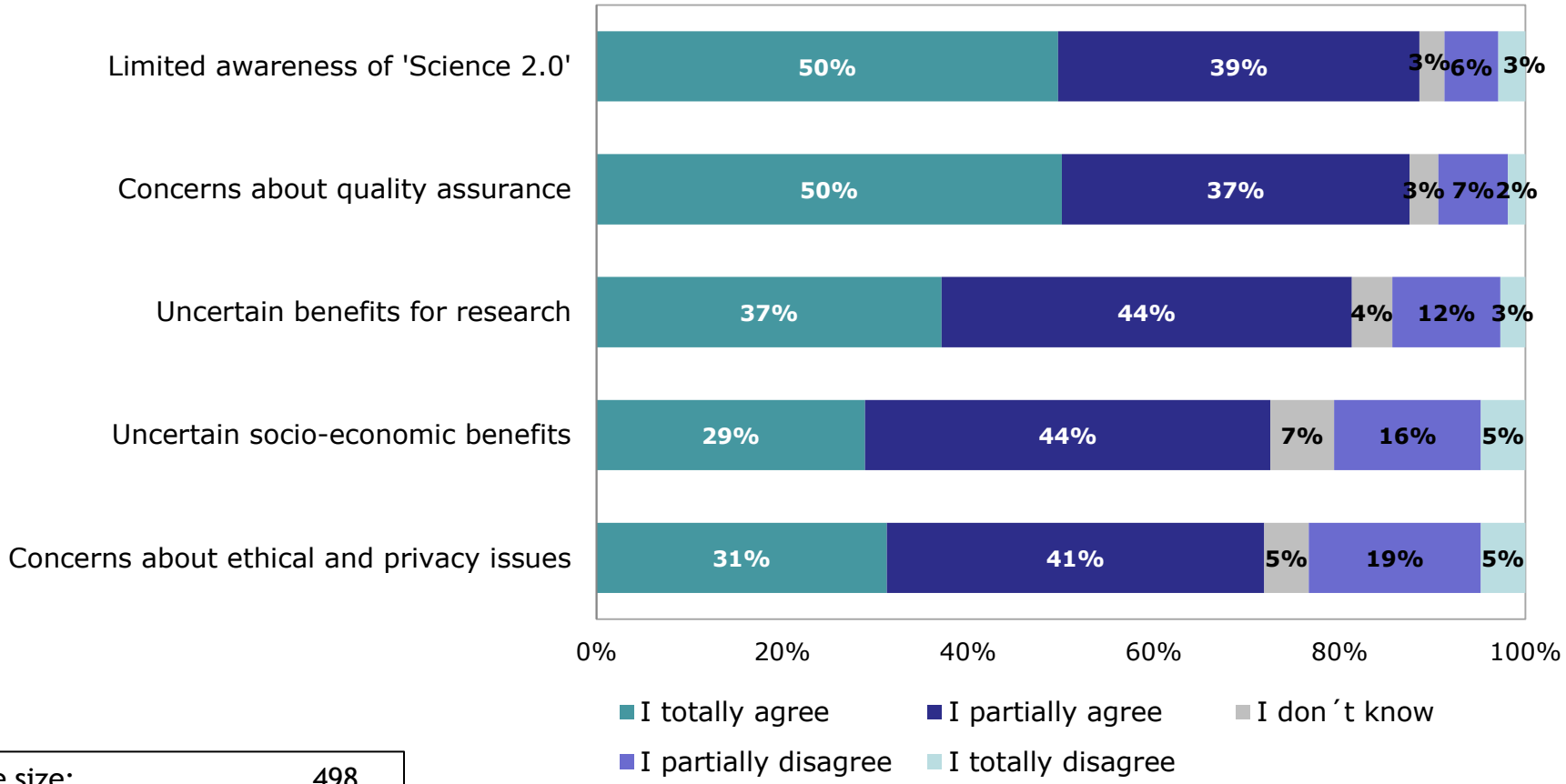
Barriers to ‘Science 2.0’

What are the barriers of 'Science 2.0' at the institutional level ?



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Barriers to ‘Science 2.0’

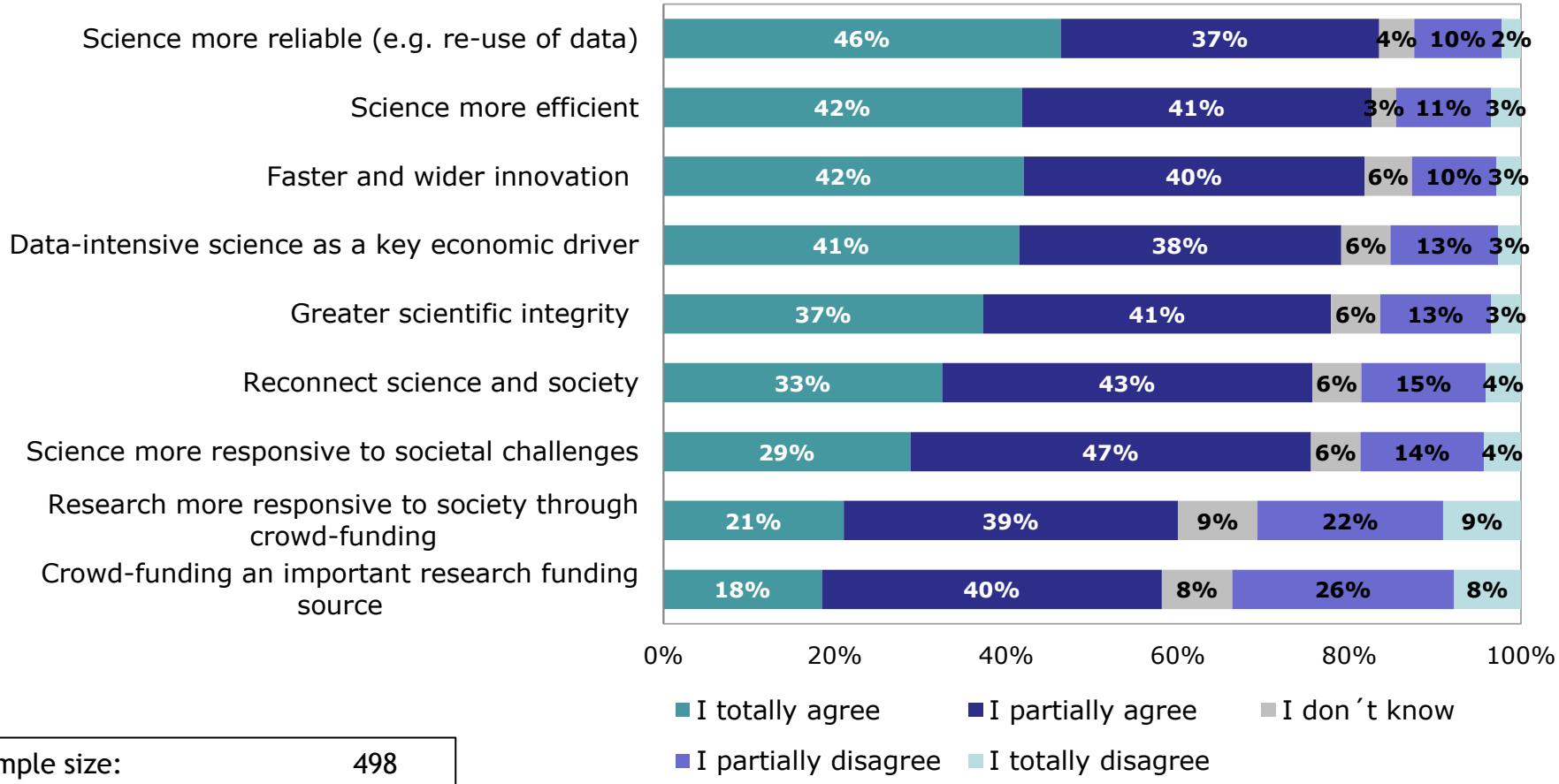
Example word cloud based on open responses to this question

Implications of 'Science 2.0'

European Commission

What are the implications of 'Science 2.0‘ for society, the economy and the research system?

(All respondents)



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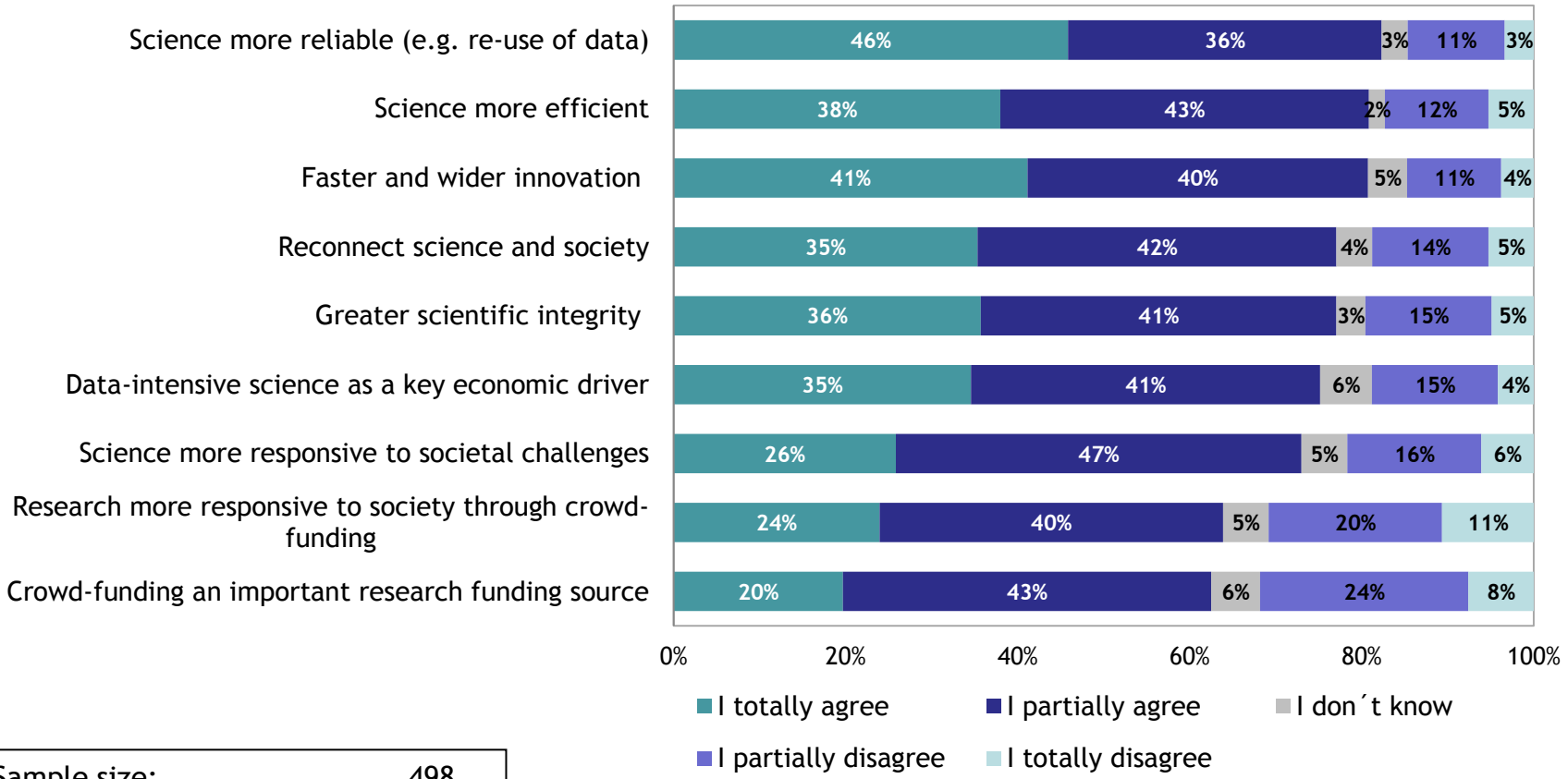
European Commission

What are the implications of 'Science 2.0' for society, the economy and the research system?
(Individuals, self-reported)



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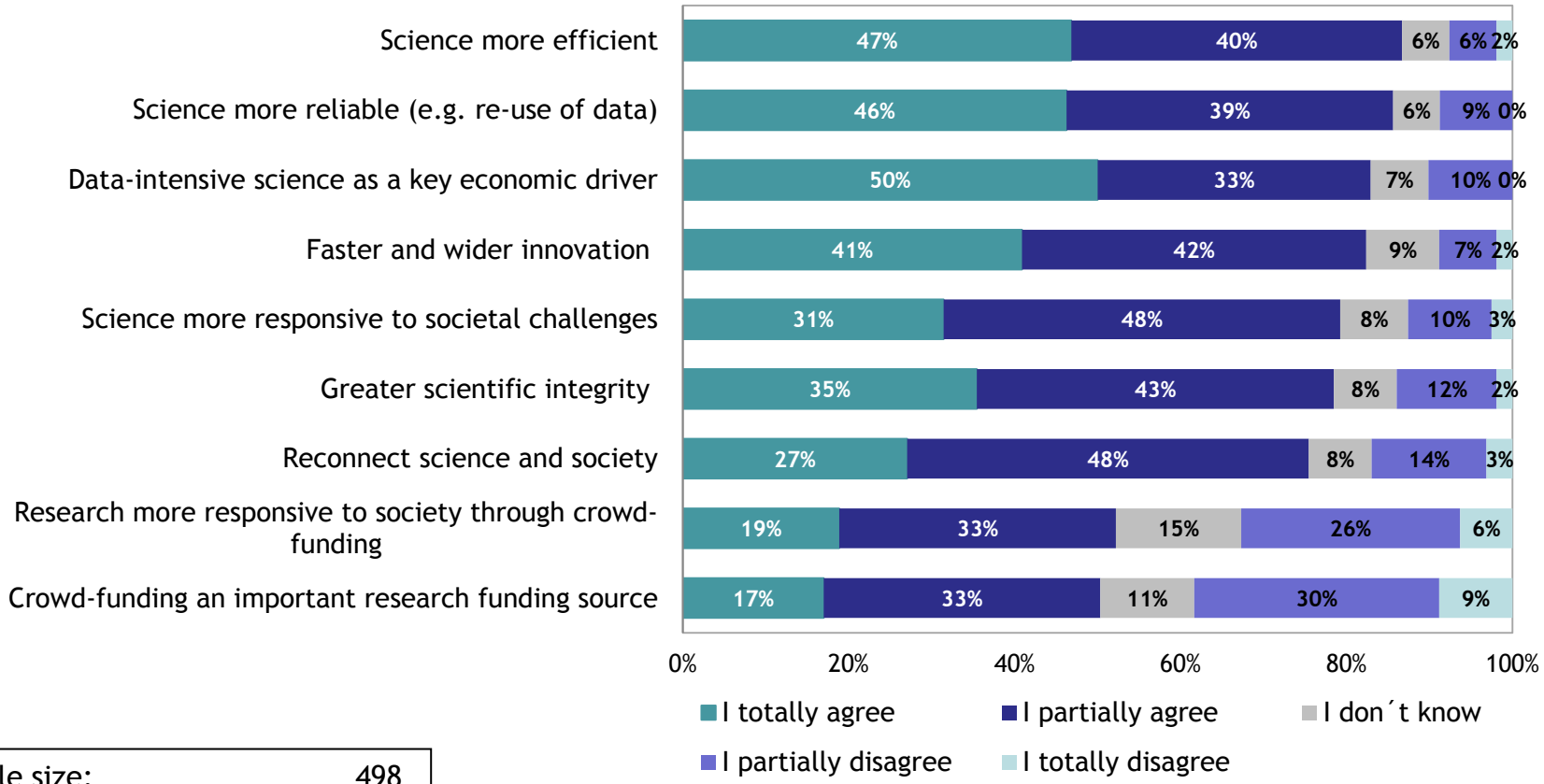
European Commission

What are the implications of 'Science 2.0‘ for society, the economy and the research system?
(Organisations, self-reported)



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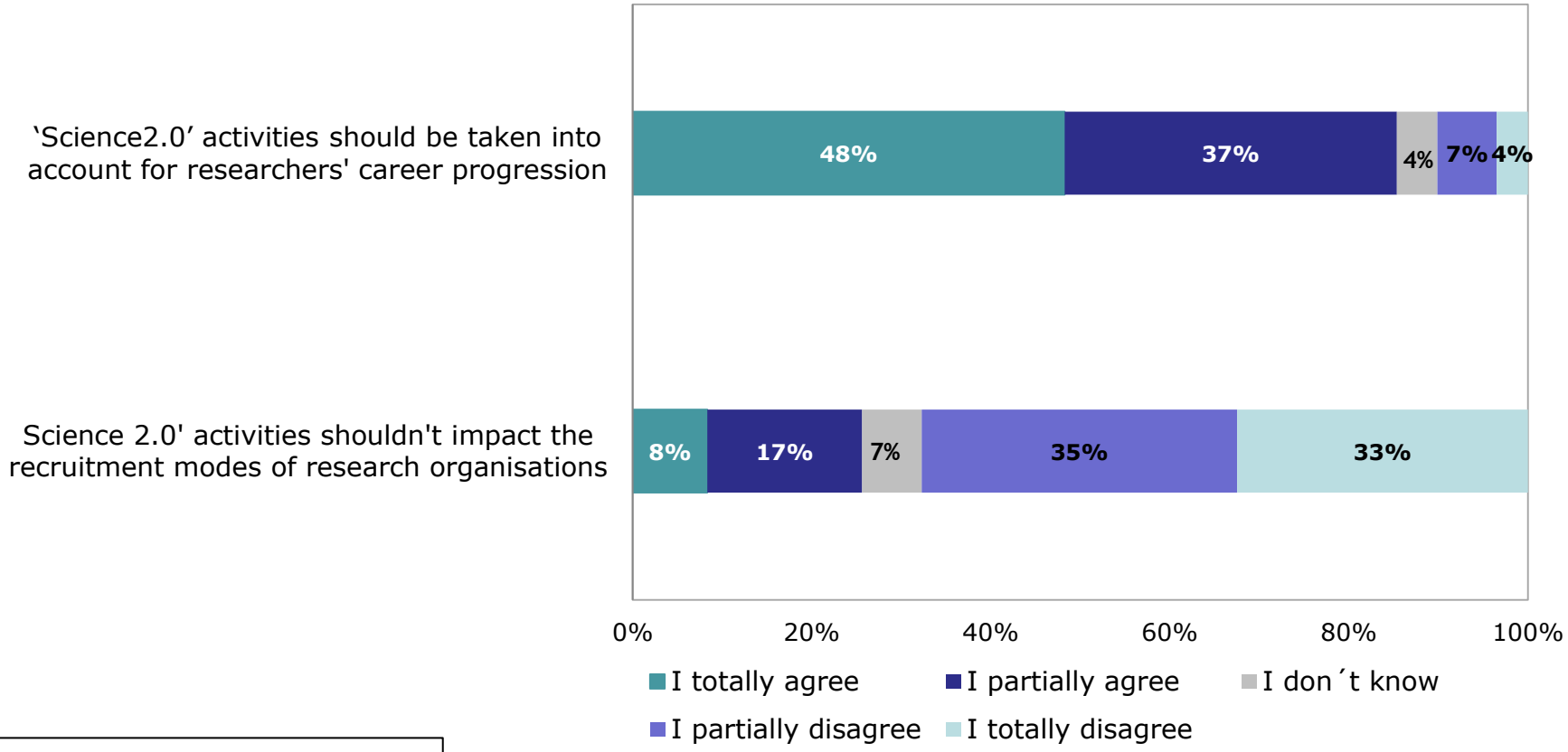
European Commission

Implications of 'Science 2.0' for researchers: Acknowledgement of 'Science 2.0'-based activities



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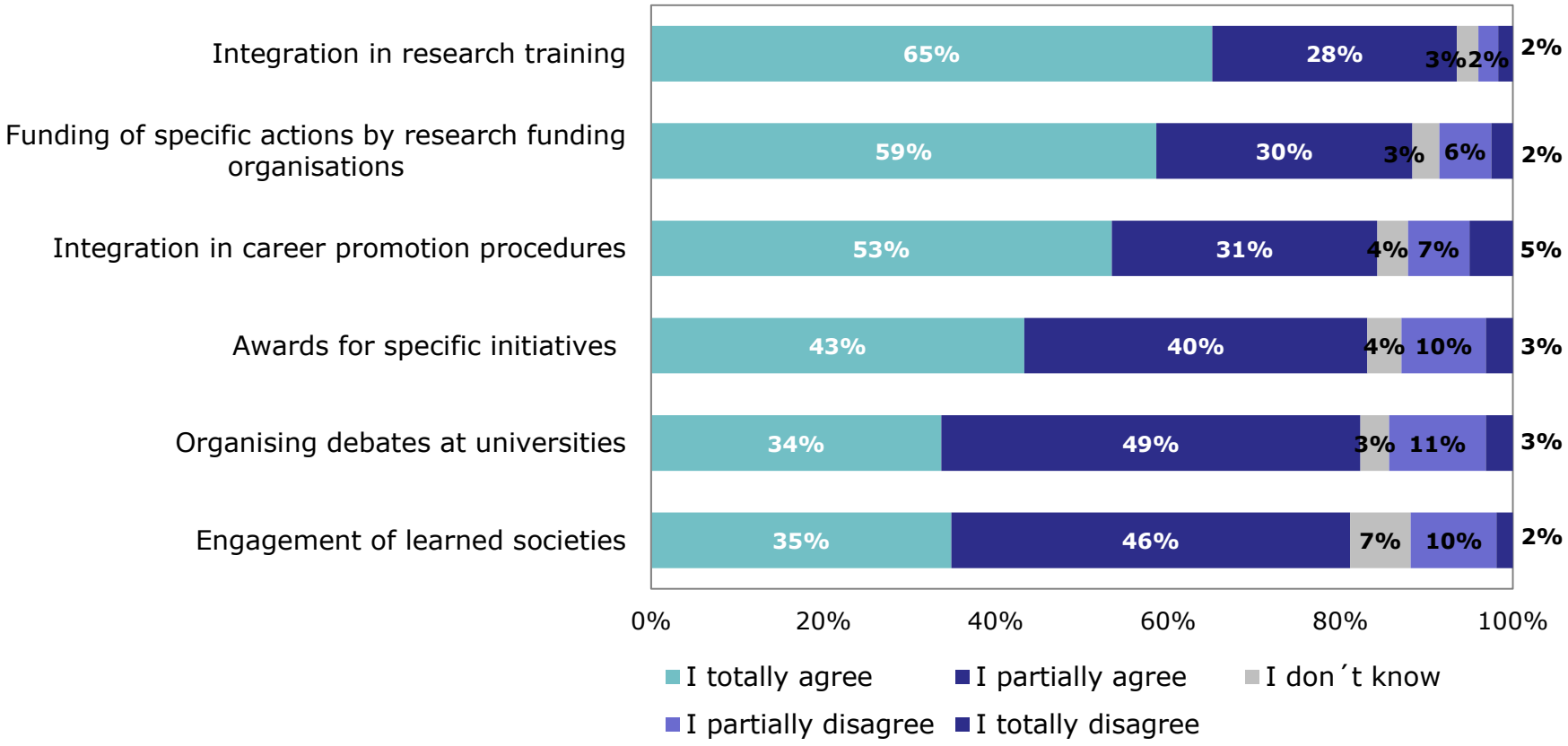
European Commission

What are the most effective channels for awareness-raising of 'Science 2.0‘?



No. of valid responses: 477 to 481
Sample size: 498

Opportunities for 'Science 2.0'

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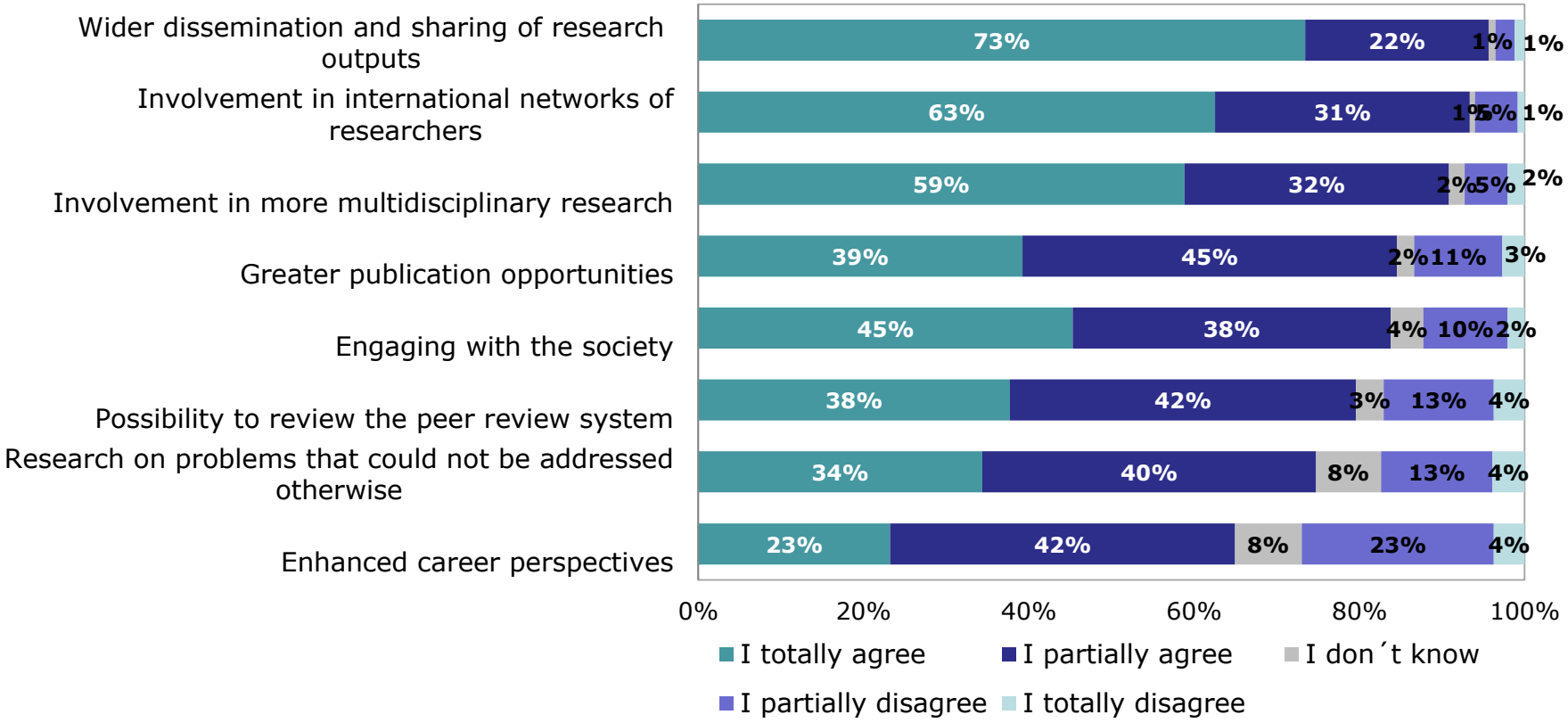
Opportunities for ‘Science 2.0’

•“

What are the opportunities for 'Science 2.0' at the level of individual scientist?



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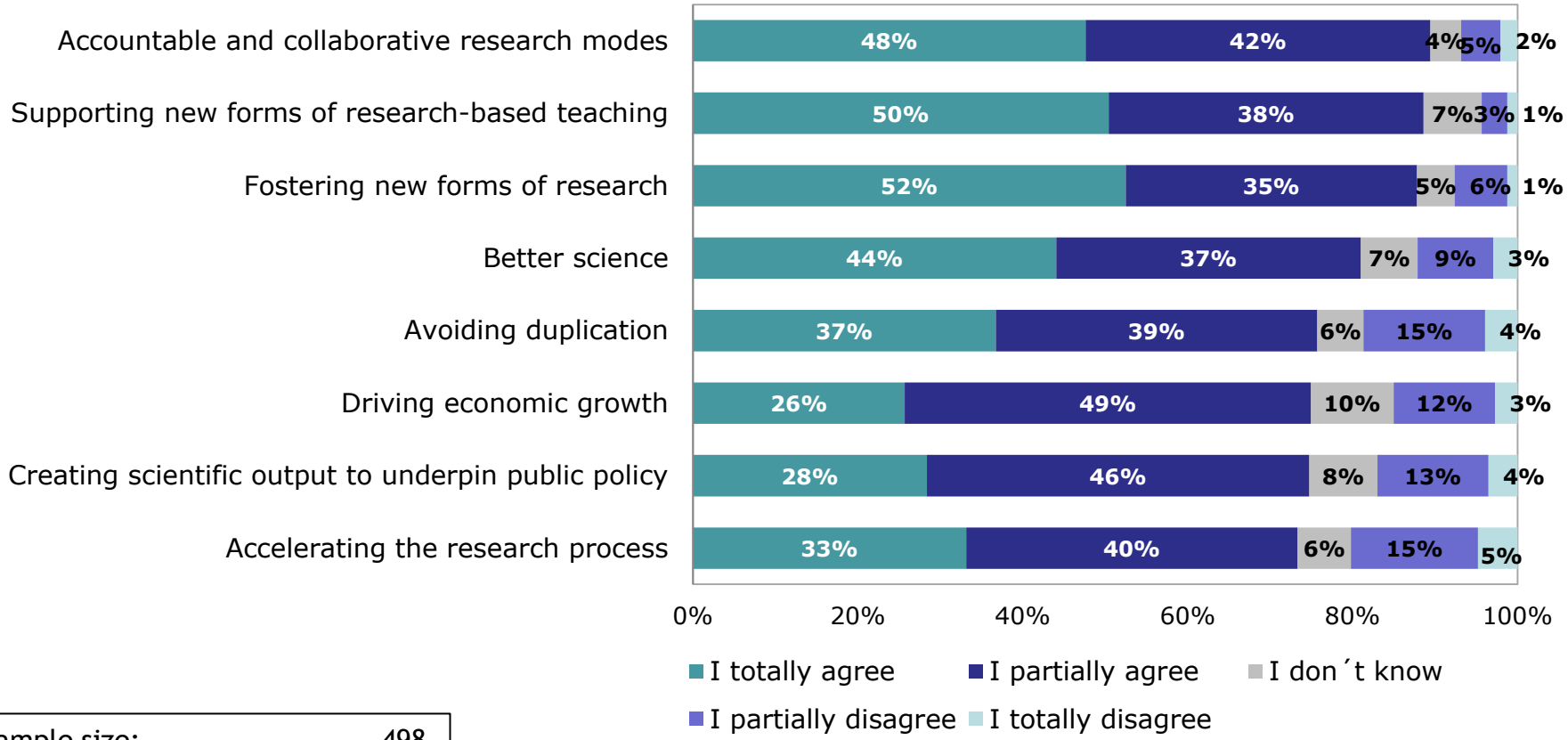
European Commission

What are the opportunities for 'Science 2.0' at the institutional level ?



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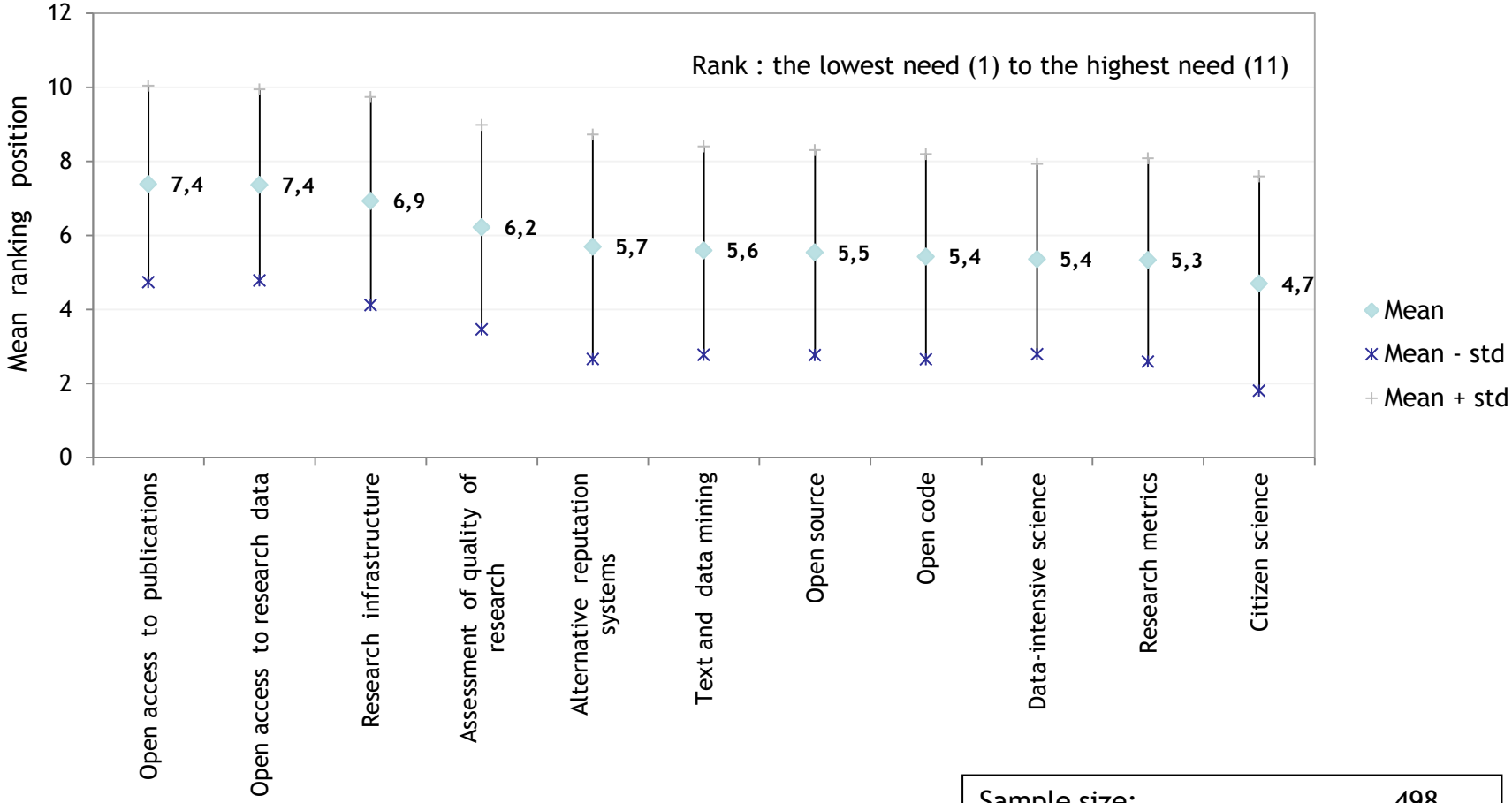
Need for policy intervention

Need for policy intervention

On what issues within 'Science 2.0' do you see a need for policy intervention? (All respondents)



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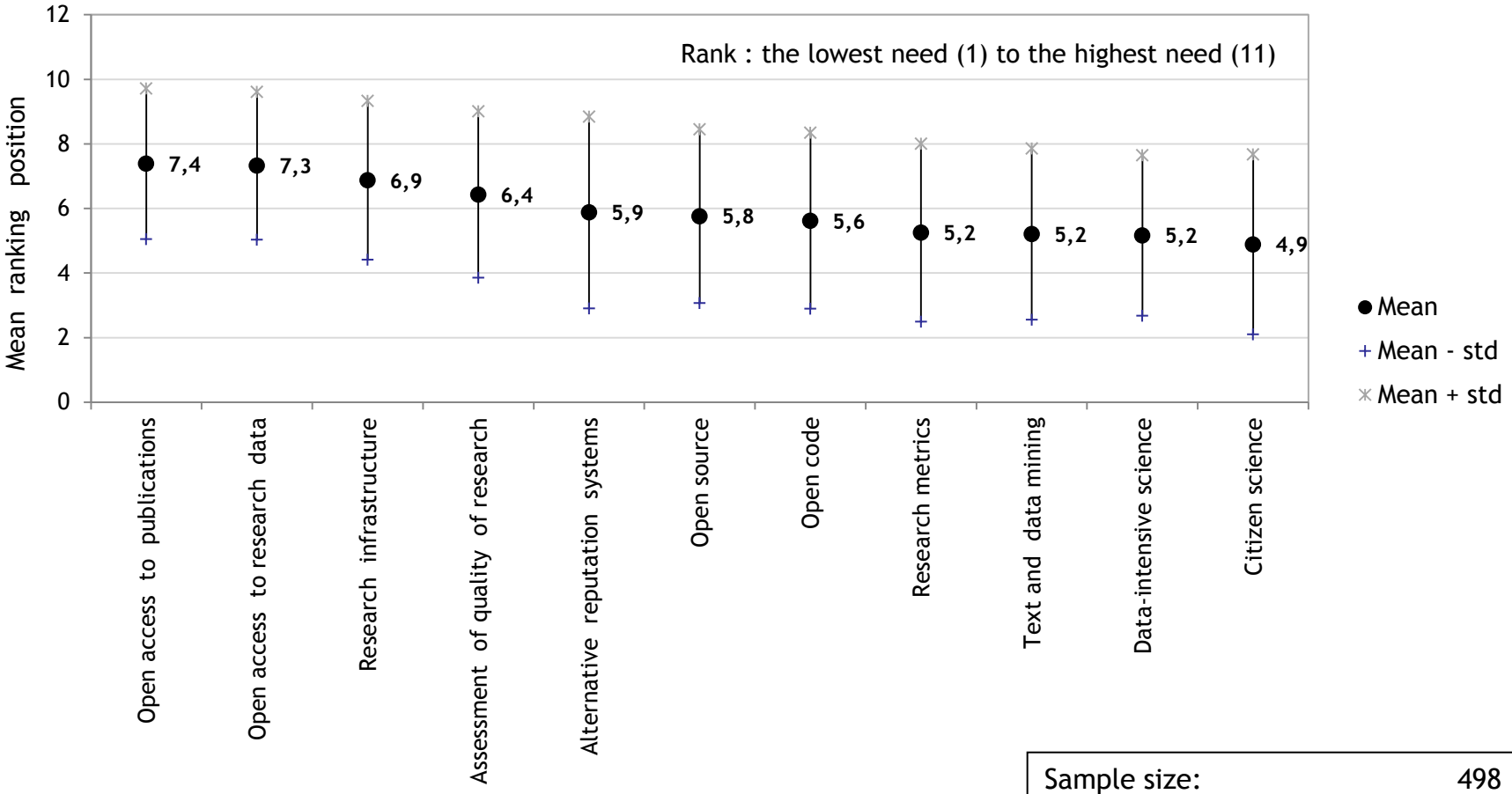
Need for policy intervention (cont.)

On what issues within 'Science 2.0' do you see a need for policy intervention? (Individuals)



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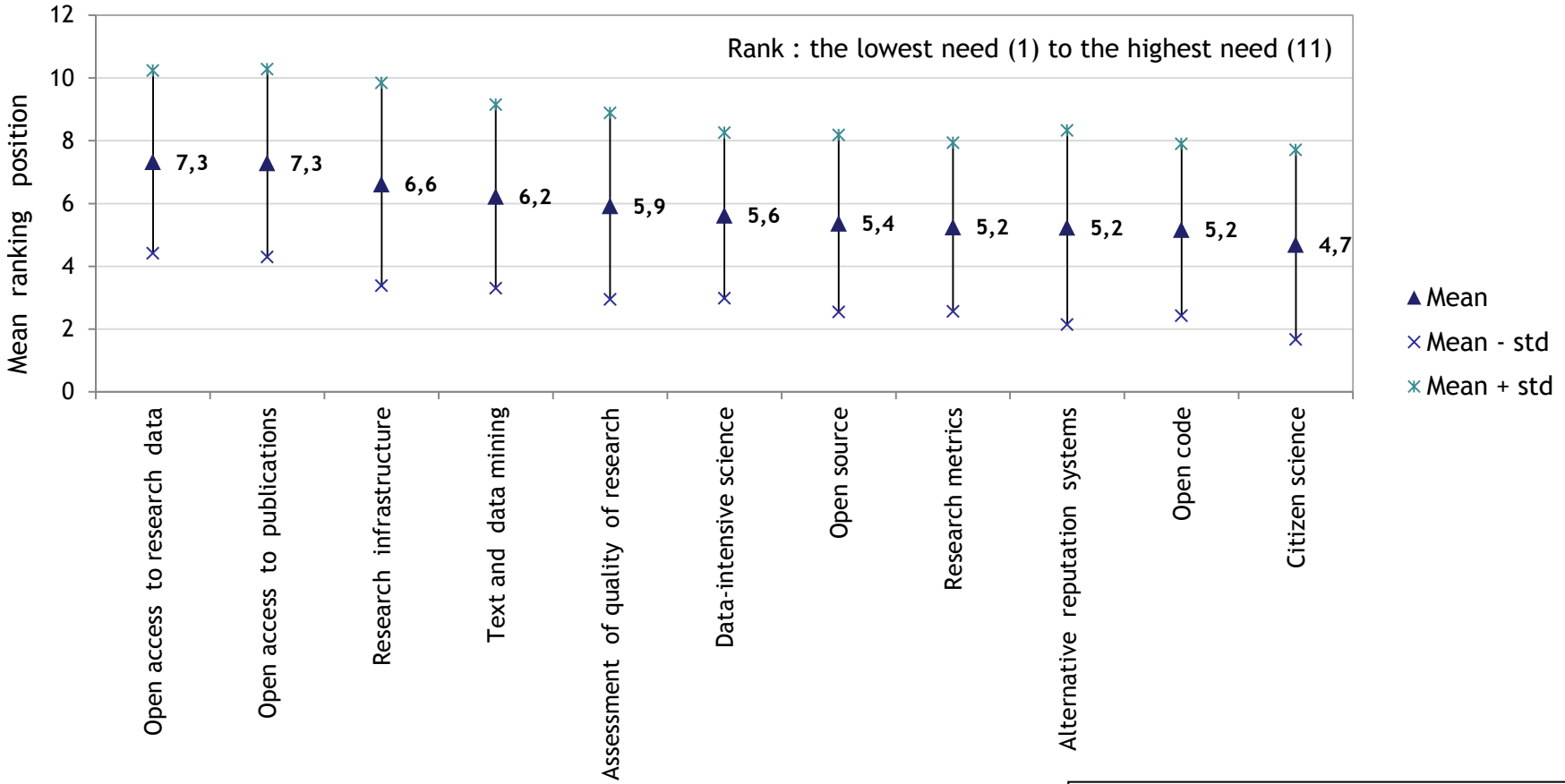
Need for policy intervention (cont.)

On what issues within 'Science 2.0' do you see a need for policy intervention? (Organisations)



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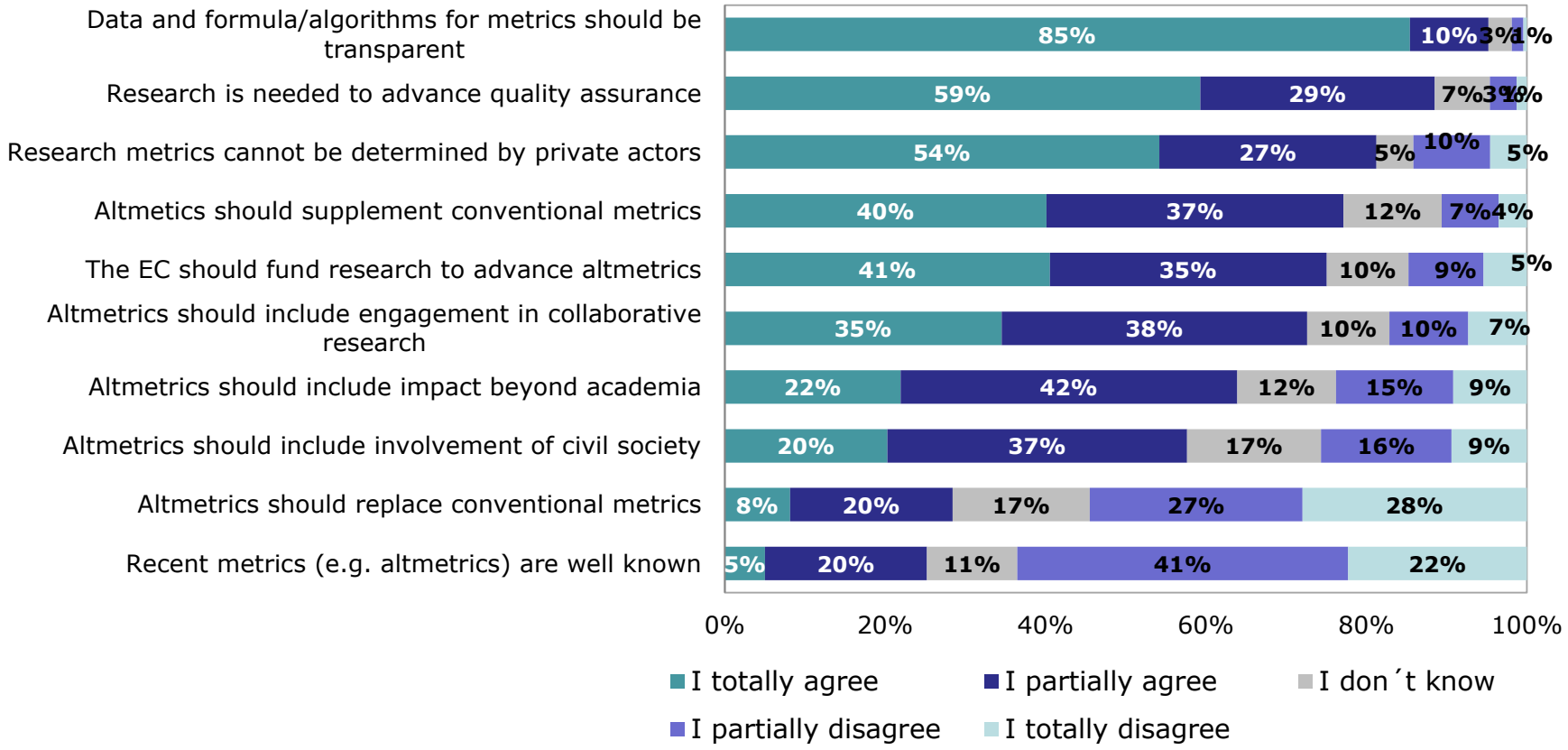
European Commission

Development of research metrics and quality assurance

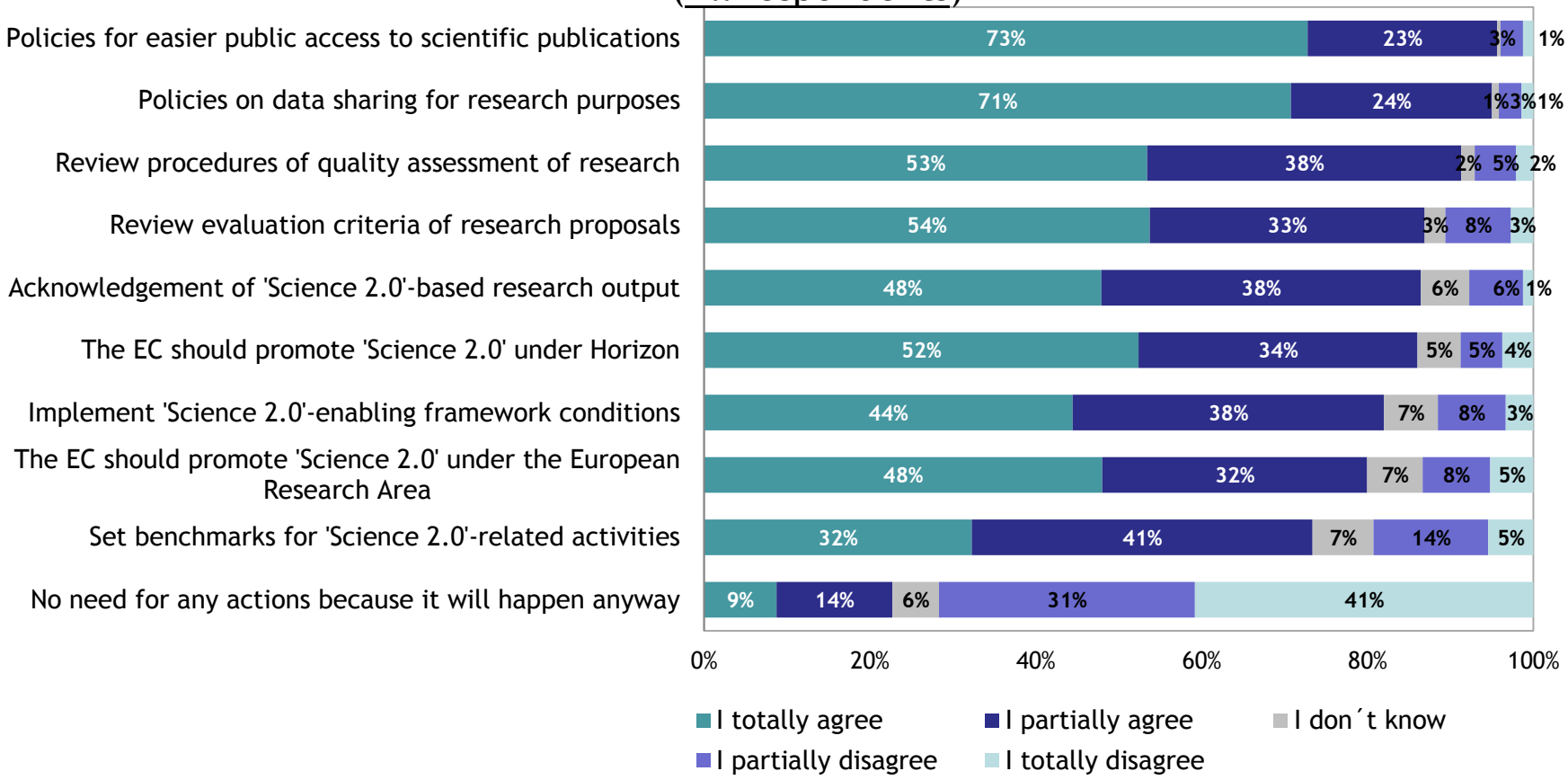


Sample size:	498
Missing:	17 to 19

Policy recommendations

European Commission

Role of research funding organisations, Member states and the EU
Public authorities could facilitate the uptake of 'Science 2.0' by:
(All respondents)



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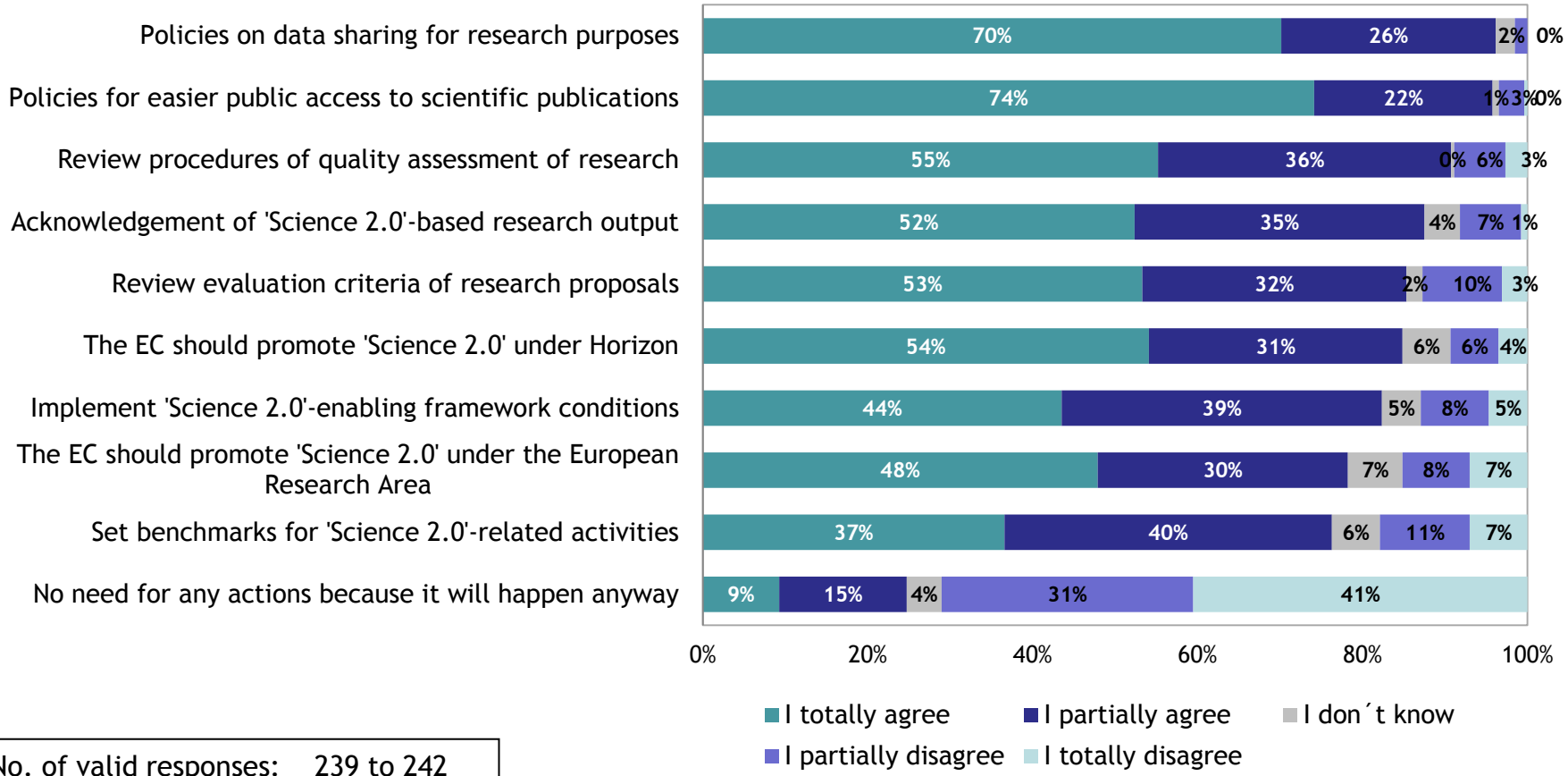
European Commission

Role of research funding organisations, MS and the EU

Public authorities could facilitate the uptake of 'Science 2.0' by:

(Individuals)

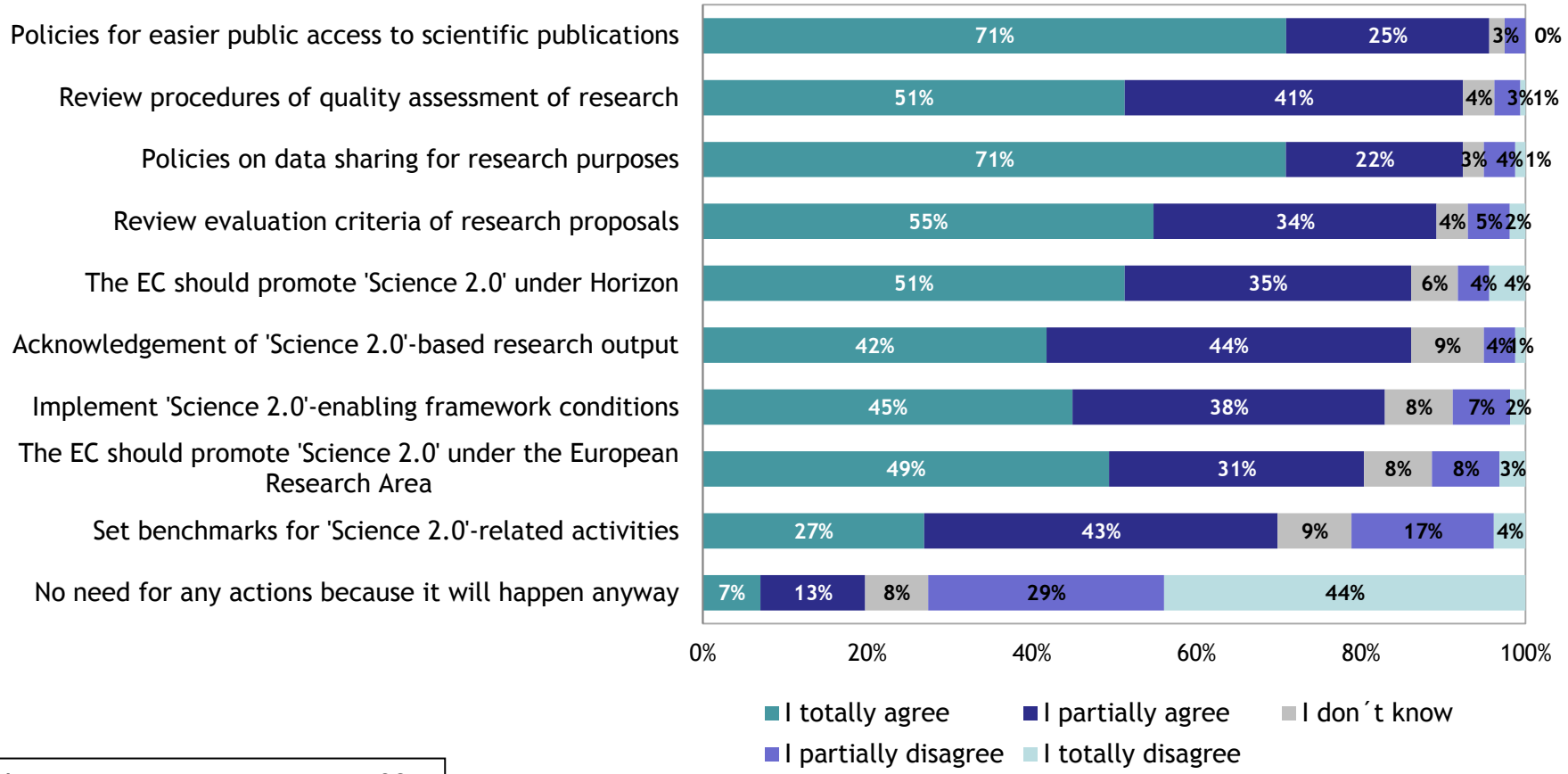


No. of valid responses: 239 to 242
Sample size: 498

European Commission

Role of research funding organisations, MS and the EU

Public authorities could facilitate the uptake of 'Science 2.0' by: (Organisations)



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European Commission

Science and Society - key points

- There needs to be a broader recognition for NGO, civil society groups and science journalists
  - NGOs and civil society groups should be recognised in H2020 (following the bigger role that SMEs have).
  - Independent science journalists can also help link science, politics and culture. But traditional media is losing ground amid “a cacophony of facts, lies and opinions” online
  - Wikipedia is often the first source the public goes to for science info.
- Citizen science platforms should be supported further(NESSI)
- Crowdfunding and citizen science can create public engagement, but should be an additional source of funding rather than a substitution
- European Commission could broker discussions on the role of citizen science (Is it public engagement? Is it robust research?)

Summary of position statements from academies, learned societies, funders, universities, RPOs, civil society organisations

Policy recommendations

European Commission

The EC/ERA should

- Support citizen science platforms
- Encourage the recognition of the civil society, NGOs, and journalists
- Increase openness and encourage barriers to publications and research data
- Regulate data access, copyright, text and data mining and data protection
- Develop infrastructure for Science 2.0, for example through H2020
- Highlight best practices in data management
- Encourage skills and training for science 2.0 (at all levels)
- Further discussion and consultation are needed to better understand Science 2.0 and the realm of policy intervention within it
- Consider creating an EU-wide science administration system

Summary of position statements for academies, learned societies and research funders

European Commission

Universities and research performing organisations should

- Raise awareness about Science 2.0
- Work to embed Science 2.0 in the research culture
- Reform career progression
- Promote research ethics and integrity
- Provide frameworks and training for researchers to share sensitive data appropriately
- Consider open data as default option and help provide needed infrastructure

"Research organisations must play an active part in setting standards for research integrity and to ensure that scientific misconduct is investigated and sanctioned" Research Council of Norway

Summary of position statements from academies, learned societies, research funders, universities, research performing organisations

European Commission

Academies, learned societies and research funders should

- Incentivise ‘good behaviour’ e.g. data management plan
- Require data to be open as a condition of grant funding, factor in data archiving and usage costs in projects costs, and find ways to support open data infrastructure
- Funders should not require grantees to participate on online platforms
- Funders should require intelligently open data as a condition for funding

National Governments and bodies should

- Make sure they have open data regulations for Science 2.0
- Review mechanisms for research assessment
- Help develop relevant research infrastructures
- ‘Protect’ science from commercial interests

Summary of position statements for academies, learned societies and research funders

European Commission

Thank you

Follow the validation process
and post your comments at:

http://scienceintransition.eu/

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