Submission #984

> **Submission information**
> Form: [Consultation Science 2.0](#)
> Submitted by Anonymous (not verified)
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> 193.137.236.185

Are you responding to this questionnaire on behalf of/as:
Public Authority

Please enter your name or the name of your company/organisation: (max. 50 characters)
Fundação para a Ciência e a Tecnologia, IP

Please indicate your principal country or countries of residence or activity:
Portugal

Other

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B. Recognition of the Issue

Do you recognise the trends described in the consultation paper as ?Science 2.0??
Yes, but with a different emphasis on particular elements of 'Science 2.0' (Please specify)

Specify :
Some of the concepts have been around for some time. Science 2.0 contains a package of different ideas that alltogether may have a significant impact on research, but that were born to solve specific, unrelated problems. These proposals also carry significant contradictions with current EU science policies, including H2020, e.g., relating to IPR. Open access to data and publications may have serious contradictions with promotion of patents and participation of industry in projects requiring the full implementation of all ideas in Science 2.0.

What are the key drivers of ?Science 2.0??

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Availability of digital technologies and their increased capacities	X				
Increase of the global scientific population	X				
Public demand for faster solutions to Societal Challenges	X				

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Public demand for better and more effective science (replicability of research results, avoidance of duplication of research etc.)	X				
Researchers looking for new ways of collaboration	X				
Researchers looking for new ways of disseminating their outputs (including publications)	X				
Growing criticism of current peer-review system	X				
Citizens acting as scientists			X		
Growing public scrutiny with regard to research integrity and accountability of science and research		X			
Scientific publishers engaging in ?Science 2.0?		X			
Public funding supporting ?Science 2.0?	X				

Other (please specify):

D. Implications of ?Science 2.0? for society, the economy, and the research system

Implications of ?Science 2.0? for research and the economy

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
Science will become more efficient, e.g. by accelerating discovery and avoiding duplication.	X				
Citizen science practices could help reconnect science and society.			X		
Crowd-funding could become an important funding source for research		X			
Research could be become more responsive to society through crowd-funding		X			
Data-intensive science can become a key driver of economic growth and development.	X				
Science will become more reliable, e.g. by facilitating the re-use of data.	X				

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
Science will become more responsive to demands for scientific integrity.		X			
Science will result in faster and wider innovation.		X			
Science will become more responsive to societal challenges.	X				

Other (please specify):

Open access to publications   11

Open access to research data   10

Open code   1

Open source   3

Text and data mining   5

Data-intensive science   4

Citizen science   2

Research metrics   6

Assessment of quality of research   8

Alternative reputation systems   7

Research infrastructure   9

Other: please specify

With regard to the first three priorities you indicated above could you please specify what kind of policy intervention would be desirable?
Open access to publications / Open access to research data ? Prevent the establishment of legal, economical, social and technical barriers for the dissemination, sharing and intensive re-use of scientific publications and research data
Research infrastructure ? public policies are irreplaceable for the development of these infrastructures, namely those related to electronic infrastructures, which are key to Science 2.0

1. Are there specific disciplines with more potential than others to engage with ?Science 2.0?? Why?
Since one of Science 2.0 characteristics is its trans-disciplinarily, we should refocus our perspective looking into thematic fields more than individual, closed, disciplines. Even so, with this in mind we may indicate the following thematic fields as those with more potential to engage in Science 2.0 activities/modus operandi:
? Fields of knowledge and innovation production related with ICT;
? Nanotechnological fields of research;
? Physics, Biotechnology and other laboratorial-based disciplines.

2. Are there specific disciplines with potential to engage with ?Science 2.0?, but where uptake so far has been slow? Why?
Yes, namely in the social sciences and humanities. For example, sociological and psycho-sociological

studies, economical and political studies, historical and archaelogical studies. The uptake of Science 2.0 has been slow in these fields due maybe to the dominance of non-technological processes and the more geographically / thematically localised character of the research objects and teams.

3. Are there specific disciplines without real potential to engage ?Science 2.0?? Why?
Even if all disciplines may have real potential to engage with some aspects of Science 2.0, there are a number of them that cannot easily take full advantage of all aspects, namely the open dimension of Science 2.0. We imagine that it will be very difficult for some areas to uptake the open dimension of Science 2.0 because they may be dealing with personal data (e.g. some medical and social sciences studies), with constraints due to industrial property rights (e.g. pharmaceutical and food-related research) or security/defense issues.

E: Implications of ?Science 2.0? for researchers' careers development

Acknowledgement of ?Science 2.0?-based activities

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
?Science2.0?-based activities (including data curation) should be taken into account for career progression of researchers.		X			
?Science 2.0?-based activities should not have any impact on the recruitment modes of research performing organisations.				X	

Other (please specify)

What are the most effective channels for awareness-raising of ?Science2.0??

	I totally agree	I partially agree	I partially disagree	I totally disagree	don't know
Organising debates at universities	X				
Engagement of learned societies		X			
Funding of specific actions by research funding organisations	X				
Awards for specific initiatives	X				
Integration in career promotion procedures		X			
Integration in research training	X				

Other (please specify)

F. Opportunities for and barriers to ?Science 2.0?

What are the opportunities for ?Science 2.0?? (Potential opportunities at the level of the individual scientist)

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Wider dissemination and sharing of research outputs	X				
Greater publication opportunities	X				
Involvement in extended, international networks of researchers	X				
Involvement in more multidisciplinary research	X				
Enhanced career perspectives		X			
Possibility to review the peer review system		X			
Research on problems that could not be addressed otherwise	X				
Engaging with a wider public and with society at large	X				

Other: (please specify)

at the institutional level:

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Driving economic growth		X			
Facilitating accountable and collaborative research modes		X			
Promoting better science			X		
Better value for money through avoiding duplication		X			
Better value for money through accelerating the research process		X			
Creating scientific output to underpin public policy		X			
Fostering new forms of research	X				
Supporting new forms of research-based teaching	X				

Other (please specify)

What are the barriers to ?Science 2.0?? (Potential barriers at the level of the individual scientist)

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
Lack of acknowledgement / credit-giving for ?Science 2.0? activities (e.g. curated data, science blogs, etc.)	X				

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
Limited awareness about the potential benefits of ?Science 2.0 for researchers	X				
Concerns about quality assurance of new and non-traditional research outputs	X				
Lack of new research skills necessary in the context of ?Science 2.0?, e.g. data management skills	X				
Lack of financial support	X				
Legal constraints (e.g. copyright law)	X				
Lack of incentives for junior scientists specifically to participate in new science and research practices	X				
Lack of integration in the existing infrastructures	X				
Uncertainty / doubts about the potential benefits of ?Science 2.0? for researchers		X			
Concerns about ethical and privacy issues	X				

Other (please specify)

at the institutional level:

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don?t know
Limited awareness of ?Science 2.0? and its potential benefits	X				
Concerns about quality assurance of new and non-traditional research outputs	X				
Concerns about ethical and privacy issues	X				
Uncertainty / doubts about the potential benefits of ?Science 2.0? for research	X				
Uncertainty / doubts about the potential benefits of ?Science 2.0? for the economy and society	X				

Other (please specify)

G: Development of research metrics and quality assurance

	I totally agree	I partially agree	I partially disagree	I totally disagree	don't know

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
The determination of research metrics cannot be left to private actors, such as Mendeley or Research Gate.	X				
The recent developments in metrics (e.g. altmetrics) are well known within the research community.				X	
Altmetrics should be further developed and take into account impact beyond academic context, e.g. 'market impact'.		X			
Altmetrics should take into account the involvement of civil society.		X			
Altmetrics should take into account researchers' degree of openness (e.g. practicing open access) and their engagement in collaborative research practices.	X				
The European Commission should fund research to advance altmetrics.	X				
Data and formula/algorithms for metrics should be transparent.	X				
Altmetrics should supplement conventional metrics	X				
Altmetrics should replace conventional metrics			X		
Research needs to be done in order to advance quality assurance procedures.	X				

Other (please specify)

H: Role of research funding organisations, Member States, and the European Union

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

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Developing policies on data sharing for research purposes	X				
Developing policies on facilitating public access to scientific publications	X				
Reviewing evaluation criteria of research proposals		X			
Reviewing procedures of quality assessment of research	X				
Increasing acknowledgement of ?Science 2.0?-based research output	X				
Public authorities should increasingly take into account ?Science 2.0?-related activities by setting benchmarks.		X			

	I totally agree	I partially agree	I partially disagree	I totally disagree	I don't know
Public authorities should focus on implementing framework conditions enabling the uptake of ?Science 2.0? activities.			X		
There is no need for any initiatives of public authorities to encourage the up-take of new science practices since it is a bottom-up driven process happening anyway.				X	
The European Commission should promote ?Science 2.0? under Horizon 2020.	X				
The European Commission should dedicate specific actions under the European Research Area to ?Science 2.0?.	X				

Which ?Science 2.0?-based activities would be desirable to be taken into account under the European Research Area? (Please specify)
The areas of Open Access to Publications, Open Data and Research Infrastructures (namely e-Infrastructures).

Other: (please specify)

Which of the following options is the most appropriate term to use for what is described as 'Science 2.0' in the background document?

Other: (please specify)
Connected Research

Do you have any additional comments?
Additional and specific comments will be sent by email to RTD-SCIENCE-2.0@ec.europa.eu, to explain the FCT answers "I partially agree", "I partially disagree" and "I totally disagree".

Source URL: http://www.consultation-science20.eu/node/17168/submission/1207