DIGITALEUROPE

Public Consultation on 'Science 2.0': Science in Transition

- A DIGITALEUROPE Position -

Brussels, 30 September 2014

KEY MESSAGES

DIGITALEUROPE welcomes the European Commission's consultation on 'Science 2.0: Science in Transition' as an exercise to better understand the opportunities and challenges of new modes of (collaborative) research.

ICT industry in general – including the members of DIGITALEUROPE – plays a very important role in Europe in advancing science and technology to bring digital innovation into the market. By the same token digital industries acknowledge the need to bring citizens and science closer, considering that ICT may help bridging the gap.

Drawing from their expertise and experience, DIGITALEUROPE members recognize many of the trends listed by the European Commission in its background document. By responding to the questionnaire, we hope to contribute to the EU executive's efforts to have an informed view of possible future trends and implications of 'Science 2.0'.

It is in this spirit that DIGITALEUROPE wishes hereby to address some additional points and issues of concern which should be taken into account by European policy-makers when considering any policy action in the field of Science 2.0.

We have addressed here below a few specific items. On a more horizontal level, we also would like to draw attention to the overall approach of 'Science 2.0':

(a) given the relevance of ICT as driver of listed trends, we would advise DG Research and Innovation as the lead DG of 'Science 2.0' to closely work with DG Communications Networks, Content and Technology in order to have a more comprehensive overview of barriers and opportunities;

(b) while DIGITALEUROPE is not well positioned to suggest which disciplines would most /least benefit from 'Science 2.0' opportunities, we would like to underline that any approach should pay particular attention to those sectors/disciplines that are closer to commercial exploitation. In commercially oriented areas, the business and competitiveness environment need to be taken into account if the EU wished to spur research and innovation activities.

1. Open access

In principle, we support the concept of open access to publications as a driver of scientific and technological process.

However, DIGITALEUROPE members believe that open access to scientific information from publicly funded research can stimulate and promote research and innovation *only* if the protection of intellectual property rights is ensured.

DIGITALEUROPE
Rue de la Science, 14 B-1040 Brussels [Belgium]
T. +32 (0) 2 609 53 10 F. +32 (0) 2 431 04 89
http://www.digitaleurope.org | mailto:info@digitaleurope.org | @DIGITALEUROPE_
Transparency register member for the Commission: 64270747023-20

Open access to scientific publications

We have welcomed the approach taken by the European Commission in the Horizon 2020 Framework Program, which extends to the entire program the open access to publications yet not interfering with commercial exploitation of research results or the possibility to protect results by intellectual property.

While acknowledging that digital technology has been enabling an ever wider access to scientific information[1], and that growing public demands for science to provide answers need to be addressed, DIGITALEUROPE believes that ensuring more innovation and economic growth will result from such developments does not require any additional mandatory policy provisions.

"Potential benefits for the economy for innovation and the economy through the uptake of results by business" will only materialize if boundary conditions apply and the protection of intellectual property rights is respected.

Open access to research data

DIGITALEUROPE members do not see the need for European legislators to develop any additional policy action with regard to open access to research data. In particular with regard to Horizon 2020, our members voiced their concerns arguing the EU Framework program should not require participants to provide unrestricted, open access to research data from Horizon 2020 funded research.

In fact, if the EU requires participants to publically disclose all data and results from their projects, it would severely damage the commercial value of project results. Industry will choose not to participate in the Horizon 2020 programme if they cannot exclusively exploit the results of their own hard work. Instead of open access, the EU should let project owners voluntarily decide themselves on a case-by-case basis whether or not to disclose their research data and results publicly.

DIGITALEUROPE hereby reconfirms the statement above and encourages the European Commission to take it in consideration when evaluating the desirability of any policy action in this field. Open access to research data can only be supported on a voluntary basis; any mandatory regime would highly discourage industry participation to EU-funded R&D&I projects.

2. IP Ownership

As we also indicated in the questionnaire, 'Science 2.0' is influenced by legal constraints, mainly pertaining to privacy and intellectual property. With regard to the second point, DIGITALEUROPE members have been expressing their concerns regarding current mechanisms of EU-funded R&D&I.

Despite the benefits of participation to EU Framework programs, we believe more efforts should be done in order to encourage and leverage European R&D and innovation at an industrial/commercial level, and in the forthcoming midterm review of Horizon 2020 the IP provisions need to be revised in order to make them able to achieve such objectives. As a matter of fact, existing mechanisms do not support a fast transfer of results for entrepreneurial or industrial exploitation; we would like to refer the European Commission to our "Statement of Principle of the European ICT industry on collaboration in H2020-funded projects" for more details on our position.

1 See below for a short illustration on how ICT enables and support Science 2.0

If Europe wishes to "strengthen the competitiveness of the European science and research by enabling it to take full advantage of the opportunities offered by Science 2.0" it cannot overlook issues related to IP ownership. The innovative strength of the continent depends on an efficient and fruitful cooperation between academic and industry research.

3. Science-base policy-making and innovation

DIGITALEUROPE members also appreciate the links which are made between science and its role in solving social challenges by the European Commission. Not only we believe that science has a role to play in finding solutions for society, but we also think science and scientific evidence should serve as a basis for informed policy and decision making.

Policy-making which is based on evidence and science, within well-designed and implemented regulatory frameworks, would both achieve this objective and stimulate innovation.

Against this framework, DIGITALEUROPE has suggested the introduction of the 'Innovation Principle' in his letter to the President-designate Juncker[2], in order to more rationally manage risk and strengthen science-based policy options. The principle stipulates that whenever legislation is under consideration, its impact on innovation as a driver for jobs and growth should be assessed and addressed.

CONCLUSION

DIGITALEUROPE members are committed to science and technology investment in Europe and therefore highly look forward to being involved in the debate on 'Science 2.0'. In particular, we would be delighted to offer our contribution in the framework of the workshops the European Commission plans to organize to validate the outcomes of the consultation[3].

'Digitally empowered science': the role of ICT industry in supporting Science 2.0:

As stated by the European Commission, the changes in the dynamics of science and research are in large part enabled by digital technologies. For instance, networked data-intensive science is set to support researchers in solving 'Grand Social Challenges'.

DIGITALEUROPE members have been supporting science in this regard, and look forward to continuing bring their expertise. As a way of example, we could refer to Computing and Digital Technologies: through their successful methodology and cycles from basic R&D to company creation and growth, these can be a benchmark and inspiration for Science 2.0 activities. Computing helps researchers check the validity of their conjecture on first examples.

Recent cases include:

• Application of artificial neural networks to clinical medicine: William G. Baxt, Use of an Artificial Neural Network for Data Analysis in Clinical Decision-Making: The Diagnosis of Acute Coronary Occlusion

• Use of digital simulation in biology: population evolution models, climate science, etc

2 Joint letter to Claude Juncker, 20 August 2014

3 As indicated in the background document to the public consultation.