

# Public Consultation: Horizon 2020 "Science with and for Society" Work Programme 2016-2017

### **Consultation Questions:**

1. What should be the main priorities needed to shape the next "Horizon 2020" Work Programme 2016-2017 to build an effective cooperation between science and society? 1,000 character(s) maximum

Develop capacity & impact assessment for societal impacts of research. Ensure the definition of society is sufficiently broad.

Differentiate between general scientific outreach activities (expert science communicators) & the specific impacts of individual scientists, demonstrating impact of their research.

Methods of assessing scientific excellence and communicating research relies on peer review, which although academically rigorous does not assess the societal impact of the work. Applying a Research Excellent Framework (www.ref.ac.uk) can address this issue & focus research towards societally relevant questions. Other examples of tools to assess impact are discussed in Longino (1990;press.princeton.edu/titles/4575.html)

Oceanography research can be difficult to link to general public societal impacts. Future WPs should define society sufficiently broadly to include users interested in operational data sets and build on the successes of past programmes such as CLAMER (www.clamer.eu).

## 2. Which are the main barriers preventing effective cooperation between science and society?

1,000 character(s) maximum

The main barriers include public knowledge, scientific willingness, scientific training & integration.

Many people have little understanding of the importance of the sea & ocean, hindering cooperation between science & society. Europe must promote Ocean Literacy and education- EurOcean Rome Declaration, eurocean 2014.eu.

Lack of formal recognition for academics undertaking outreach activities reduces willingness to engage. Scientific priorities focus on research, peer review publication & presentation, which help to secure continued funding and future jobs; both of which are competitive & difficult to secure.



Scientists need training to ensure the communication of scientific impact is effective & engaging. Specific funding should be allocated to train scientists to promote effective cooperation between science & society.

Science and society projects should be considered as integral work packages to research projects, e.g. HERMES/HERMIONE (www.eu-hermione.net) & NACLIM (www.naclim.zmaw.de).

3. Which topics could be supported by the next "Horizon 2020" Work Programme 2016 2017 with regard to "Science with and for Society"?

1,000 character(s) maximum "?

It is important that science funded under Horizon 2020 is recognised both in terms of scientific excellence and its societal impacts. To this extent the "Science with and for Society" programme could:

- 1. Develop tools to measure the societal impact of science, with the intention of promoting research funders & developing more holistic assessments of scientific output.
- 2. Build capacity in early-career researchers to enable them to demonstrate and measure the societal impacts of their work.
- 3. Promote general scientific outreach programmes, but recognise that this is not necessarily the remit of research scientists & may be best addressed by expert communicators.
- 4. Develop tools to allow citizen science (e.g. http://www.parliament.uk/briefing-papers/POST-PN-476/environmental-citizen-science) to be used in conjunction with traditional scientific programmes.
- 5. Create a forum to share best practice of different outreach techniques and encourage collaborations between different Member States.

# 4. What would you like to see as outcomes from the projects funded through the "Science with and for Society" calls for proposals 2016-2017?

1,000 character(s) maximum

Projects funded through the "Science with and for Society" should, in line with the outcomes of the Rome Declaration (2014; eurocean 2014.eu/declaration/):

- 1. Support new and existing scientific programmes in engaging with society, through capacity building and developing new tools to engage with society and measure the impacts of science.
- 2. Promote open access to scientific data; ensuring collected data are well managed, freely available and presented in a clear way.
- 3. Promote and encourage sustained support for ocean literacy projects to improve public understanding of ocean science.



4. Develop ways of archiving and ensuring continuity between projects which have engaged with society, so that lessons learn and knowledge can be transferred between discrete projects and funding rounds.

## 5. How do you see international cooperation (beyond EU borders) being addressed in "Science with and for Society"?

1,000 character(s) maximum

International cooperation can add credibility, from a societal perspective, to a scientific topic (e.g. presenting a consensus on climate change through IPCC). In the marine environment, it is often necessary to consider that the science being conducted is also relevant to countries outside of the European Union. The "Science and Society" programme could promote international cooperation by:

- 1. Developing best practices between European and outside states.
- 2. Looking at international scientific coordination programmes (e.g. SCOR, WCRP, WMO IOC) priorities for science and society cooperation and outreach.
- 3. Encouraging individual scientists to get involved with international coordination programmes focussing on science and society impacts.

6. In which priorities of "Horizon 2020" and how should science and society issues be integrated (e.g. in Excellent Science, in Industrial Leadership, in Societal Challenges)? 1,000 character(s) maximum

It could be used in all three.

In Excellent Science it could be used to enhance the science programmes and ensure that they produce results that have a demonstrable societal benefit, developing many of the points raised in the previous questions.

In industrial leadership science and society issues could be integrated through encouragement of industry to link up & work with academic partners to ensure that science is being used for societal benefit and data is collected that meets user requirements. It would also help ensure that industrial activities remain environmentally aware & compliant.

In Societal Challenges science and society issues should be better researched and understood, through scoping exercises and surveys working directly with both scientific and societal partners to better understand the barriers to cooperation and develop community led solutions.

### 7. Do you have further comments?

1,000 character(s) maximum



Marine Knowledge is needed for evidence-based decision-making. Working with organisations (European Marine Board www.marineboard.eu), utilising resources (Navigating the Future IV) & expertise, ensures efficient knowledge exchange & transfer of science to society.

The H2020 SwfS could benefit science and society through:

1. Promoting scientific & technical careers:

Encourage study into fields with a critical science knowledge gap e.g. taxonomy

Assessing science education systems to ensure that they are fit-forpurpose e.g. they meet the requirements of different career paths in science, industry or elsewhere

Ensuring science promotes growth through the ECs Blue Growth agenda; Promoting vocational courses & careers. The traditional focus of careers in science is through academia but vocational courses are equally important

Utilise exchange programmes (ERASMUS) to promote movement of talented young scientists around Europe

2. Gender equality:

Areas of science still suffer from gender inequality