Memorandum of Understanding¹

for the implementation of the Cross-Cutting Activity (CCA):

How to address the increasing challenge of science communication in a diverse European landscape?

¹ In line with CSO Decision COST 076/18 and based on 'A Quick Guide to Tasks and Decisions of Management Committees'

OPENING STATEMENT

COST presents this Memorandum of Understanding (MoU) outlining the **rationale**, **objective and specific objectives**, **working groups**, **deliverables and budget** for the CCA network on science communication.

The MoU is based on the input received from participants at the Cross-Cutting Activity (CCA) scoping event on science communication, held at the COST premises on 1-2 July 2019.

The CCA network on science communication will operate in the context of a limited timeframe and resources.

The timeline of activities, including the organisation of network meetings and production of deliverables, will be decided by the CCA network at the kick-off meeting.

The CCA network will aim to achieve maximum engagement from its members for the full duration of its lifetime.

CCA DETAILS

- CSO approval date: 7-8 November 2018;
- Start of the CCA network on science communication: 2 October 2019;
- End of the CCA network on science communication: 1 October 2021;
- Network activities and budget spending are subject to approval of the COST Association;
- Network members may suggest additional stakeholders to join the CCA, bearing in mind that new members will have to be approved by the COST Director;
- Leader of the CCA network will be presented at the kick-off meeting on 2 October.

RATIONALE FOR THIS CCA

Every year, hundreds of EU-funded research projects are facing the challenge to achieve impact and communicate with relevant target audiences, whether they are policy makers, the private sector, NGOs, or the general public. Project participants, at that stage, have often not yet built relationships with these audiences and are not familiar with the appropriate channels or most effective communication options available to them.

At the same time, science journalists are constantly looking for news and background stories which could be interesting for their audiences. It is often a lengthy and challenging process to incorporate the perspectives of an appropriate range of experts and stakeholders.

While communicating the (potential) impacts of the sciences is an important goal, there is a need for an increased focus on reflection, dialogue, debate and participation (e.g. through cocreation) in the context of science communication practices. In this context, efforts should be made to involve and mobilise a wide range of relevant stakeholders, with the aim to obtain research results and innovations which are coherent, sustainable, transparent and relevant for society.

A related challenge can be found in the need to better facilitate appropriately science-informed policy development and implementation processes at both national and international levels. The substantial increase of the science base, and the pace of innovation is both an opportunity and a challenge for societies and governments.

Considering these challenges, the need for effective, high-quality, evidence-based science communication has never been greater. In order to address this need and maximise the impact

of science communication, the CCA network will organise its activities from an interdisciplinary, cross-sectoral perspective, working on the basis of existing efforts and focusing on achieving tangible deliverables for specific target groups.

For the purposes of this CCA network, 'science communication' is defined as follows (Bakker et al. 2020):

Science communication describes the many ways in which the process, outcomes, and implications of the sciences – broadly defined – can be shared or discussed with audiences. Science communication involves interaction, with the goal of interpreting scientific or technical developments or discussing issues with a scientific or technical dimension.

That is, the CCA network takes an expansive view of science communication, spanning journalistic, event and other face-to-face or digital methods of engaging with audiences on topics relating to research and innovation.

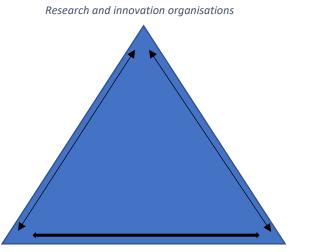
KEYWORDS

- Science communication
- Researchers
- EU and national policy
- Media
- Public engagement
- Young researchers
- Science informed policy advice

OBJECTIVE

The main aim and objective of the CCA network on science communication is to achieve highquality, evidence-based and cross-sectoral science communication to enhance the societal value of research and innovation across Europe. In this context, the network will encourage stakeholder engagement and dialogue across Europe, set priorities, and define tools and channels necessary to connect researchers, journalists, diverse stakeholders and citizens and policymakers.

The CCA network on science communication will facilitate exchange between researchers, journalists, media centres, policy makers, research funding bodies, stakeholder organisations and public institutions in order to meet the objectives outlined below as well as to facilitate 'matchmaking' of relevant actors across Europe to enhance the effectiveness of the sector.



Science communicators/Journalists

Citizens/Stakeholders

Policy makers

In order to maximise the impact of R&I investments, policy makers, researchers and civil society need to work together and engage in dialogue in an effective way. The CCA network on science communication will work towards this overall objective, which is reflected in all activities carried out by the network.

SPECIFIC OBJECTIVES

To achieve the main objectives described in this MoU, the following specific objectives shall be accomplished:

- 1. Create learning tools to enhance the value and impact of public engagement with science
- Develop evidence-based tools and guidelines to engage with the public and tailor scientific messages to the appropriate target audience;
- Explore new opportunities and methods for engaging audiences with research and innovation processes and outputs, based on the best available research in science communication;
- Encourage interactive engagement with the public via approaches that have been shown to be effective for particular purposes when employed appropriately, for example, citizen science, dialogue and new and innovative media platforms.
- 2. Explore ways of achieving high-quality, evidence-based, interdisciplinary science communication, targeting diverse audiences
- Present tools and best practices for science communication rooted in robust science communication research and theory;
- Develop innovative frameworks and strategies for communicating about the sciences with non-expert audiences, based on research about 'what works and why';
- Consider how to increase trust in the science-society relationship, striking the right balance between working with stakeholders on EU, national and local levels;
- Explore reward systems aimed at recognising and encouraging effective practices in science communication, including rewarding the time that researchers and support staff invest in developing and delivering high quality science communication;
- Encourage funding agencies to re-design incentives towards effective science communication.

- 3. Address the gap between the scientific community, policy makers, journalists and citizens/stakeholders
- Build bridges between researchers, policy makers, journalists and citizens/stakeholders by defining effective tools and channels for connecting these groups based on existing research;
- Explore ways to foster fruitful knowledge exchange between researchers, policy makers and journalists/science communicators;
- Identify productive processes, practices and ways of exchanging perspectives between researchers and science journalists/communicators, researchers and policy makers, stakeholders/citizens and policy makers;
- Clarify 'best practice' advice on simple steps researchers can take to get more involved in science communication (e.g. how to 'make themselves findable' to appropriate science journalists and policy makers);
- Identify ways of negotiating the gap between relatively slow research processes and the 'fast fact' needs of news media, which promote good science communication outcomes;
- Identify practical steps to 'mainstream' key opportunities for engagement with science, rather than having science news segmented off in its own section.

4. Develop high-quality training in science communication

- Define target groups for training based on systematic analysis of empirical evidence (at EU, national and regional level);
- Define training needs and objectives based on systematic analysis of empirical evidence;
- Define the format and tools needed to address key demonstrated training needs based on the state of the art in science communication research and theory;
- Explore opportunities to leverage greater impact through the 'train the trainers' principle;
- Increase understanding, among researchers, of the range of communication tools available to them to address different communication challenges and teach them how to apply these tools effectively for specifically targeted audiences based on the best available research and theory in science communication.

LIST OF WORKING GROUPS AND DELIVERABLES

Based on the objectives and specific objectives outlined above, the following working groups and deliverables have been identified:

Working Groups	Deliverables
WG 1 on high-quality, interdisciplinary and evidence-based science communication (in line with Objectives 1+2)	 D1.1 Rapid Evidence Review: 'What works to develop impact in science communication?' D1.2 Scoping review on reward and award mechanisms for effective science communication D1.2.1 Reward – Rapid review paper: How do institutions / research systems reward researchers? D1.2.2 Award – Recommendations paper: Proposal for an 'Impact enabler' award for excellence in science communication support. D1.3 Scoping Review: Establishing a code of practice for EU science communication. (Involves reviewing existing codes of practices for science communication globally)
WG 2 on effective, high-quality training in science communication (in line with Objectives 1+4) with a focus on training based on the state of the art in science communication.	 D2.1 Reflection event: analysis and assessment of lessons learned in existing training programmes. D2.2 Test event: testing the refined model of training for science communication on a target group (i.e. COST Action Science Communication Managers). D2.3 Developing a train-the-trainer programme based on D2.1 and D2.2 and offer practical recommendations for future training programmes.
WG 3 on connecting researchers, science journalists/communicators, stakeholders and policy makers, engaging citizens where possible (in line with Objective 3)	 D3.1 Exchanges of professional experiences between researchers, journalists and policy makers; D3.2 Comprehensive stakeholder mapping – 'Who is who?' – in the field of science communication in Europe; D3.3 Organisation of mid-term and final conferences.

BUDGET

The CCA network will organise its activities in line with the available budget. COST will make available EUR 180.000 for a 2-year period (subject to fund availability). This amount will be spent on the network's activities, e.g. general network meetings, WG meetings, conferences and final dissemination activities of the network. All activities and related budget spending are subject to approval by the COST Association.

Network members from institutions based in countries that are COST Full or Cooperating Member² can request reimbursement for their participation in meetings and conferences. Network members will be reimbursed on the basis of a daily allowance and travel expenses (i.e. economy flights and first-class train tickets).

Expenses related to your participation in this CCA network will be reimbursed according to the CCA Rules for reimbursement, available here: <u>https://www.cost.eu/wp-</u> <u>content/uploads/2019/05/Travel-Reimbursement-Rules-Cross-Cutting-Activities.pdf</u>.

ROLE OF RAPPORTEUR

The activities carried out by the network will be evaluated by an independent rapporteur, who will be appointed by the Director of the COST Association. The rapporteur will attend the network's mid-term and final conferences and will produce a final assessment report for the COST Committee of Senior Officials (CSO) at the end of the network's lifetime.

² Should you be a UK-affiliated participant, please note that in case of a no-deal Brexit, expenses incurred by UK-affiliated researchers in the framework of COST activities may become ineligible. UK-affiliated participants should not exclude that reimbursement could occur via other sources. For more information, please contact the UK COST National Coordinator, here: cost@beis.gov.uk.

ANNEX 1: TIMELINE FOR ACTIVITIES

At the kick-off meeting on 2 October the CCA network will decide on the following:

- the planning of general network meetings, WG meetings and conferences;
- the division of WG tasks and timeline for producing the deliverables. The WG tasks will be based on the objectives and deliverables that align with the respective WG (as outlined in the sections above).

General network meetings	Dates
	2019
	2020
	2021

Working Groups	Leader and members	WG tasks	WG meetings		
	WG 1				
	WG 2				
	WG 3				

Deliverables	Timeline
D1.1	
D1.2	
D2.1	
D2.2	
D2.3	
D2.4	
D3.1	
D3.2	

Conference(s)	Dates
Mid-term conference	2020 (exact date in 2020 to be confirmed)
Final conference (dissemination of results)	2021 (exact date in 2021 to be confirmed)

ANNEX 2: LIST OF CCA NETWORK MEMBERS³

Academia Europaea Knowledge Hub at Cardiff University, UK

AJSPI: French Association of Science Journalists, FR

ALLEA (European Federation of Academies of Sciences and Humanities), BE

Barcelona Supercomputing Center, Centro Nacional de Supercomputación, ES COST Action: CA16202

Center for Science and Innovation, RS

Danish Board of Technology, DK

Davidson Institute of Science Education, Weizmann Institute of Science, IL

Department of Communication and Psychology, Aalborg University, DK

Elsevier, NL

Esplora Interactive Science Centre, MT

European Citizen Science Association, IT

European Commission

European Science Communication Institute, DE

European Science Engagement Association, DE

European Science-Media Hub, service within STOA, European Parliament, BE

³ Those institutions that will be represented by 2 people will alternate their participation in the CCA network meetings and activities between themselves.

European Union of Science Journalists' Associations, DK

Eurotech Universities Alliance, BE

EU Framework Programmes National Coordination Office, TR

HÉTFA Research Institute and Center for Economic and Social Analysis, HU

Humanomics Research Centre - Department of Communication & Psychology, Aalborg University, DK

Institute for Advanced Studies (IHS)

Institute for Advanced Sustainability Studies, DE

Institute for Methods Innovation, IMI

Institute for Science and Innovation Communication (INSCICO), DE

Istituto Nazionale di Fisica Nucleare, Sezione di Milano Bicocca, IT

Instituto de Tecnologia Química e Biológica António Xavier - Universidade NOVA de Lisboa, PT

Jardin des sciences, Université de Strasbourg

Joint Research Centre (JRC) – ISPRA

KU Leuven, BE

Natural History Interactive Science Centre, MT

SciConnect Ltd, UK

Sense about science, IE

Stiftung Science et Cité, CH
Tallinn University, EE
Trinity College Dublin, IE
Tubitak, TR
University of Antwerp, BE
University of Bristol, UK
Université Catholique de Louvain, BE
University of Iceland, IS
University of Liverpool, UK
University of Lodz, PL
University of Lyon
University of Malta, MT
University of Tartu, EE
UK Parliament's Knowledge Exchange Unit, Parliamentary Office of Science and Technology, UK
Vetenskap & Allmänhet (promoting dialogue between the public and researchers), SE
Vrije Universiteit Brussel, BE
VWN: Dutch Association of Science Journalists, NL

Wissenschaft im Dialog, DE

Young Academy of Europe