The European Commission's Scientific Advice Mechanism

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http://ec.europa.eu/research/sam/index.cfm
1990
So, this climate change thing could be a problem...

1995
Climate change: definitely a problem.

2001
Yep, we should really be getting on with sorting this out pretty soon...

2007
Look, sorry to sound like a broken record here...

2013
We really have checked and we're not making this up.

2019
Is this thing on?

Tap tap tap

Source: www.kudelka.com.au
Why?

"..a focus on...making sure that Commission proposals and activities are based on sound scientific evidence and contribute best to our jobs and growth agenda"

President Jean-Claude Juncker, in his mission letter to Carlos Moedas, 1 November 2014

"The new mechanism will provide high quality, timely, independent scientific advice to policy making... and will build upon the wealth of expertise available both in Europe and in the services of the European Commission".

Commissioner Moedas, Informal Competitiveness Council lunch, July 2015
How do we get there?
How?

Demand for independent high level scientific advice

High Level Group
- Operational support (within DG RTD)

European/National Academies & Learned Societies
- Wider Scientific Community
- Existing specialist advisory bodies

Research Cser

President & College

Supply of high level, independent scientific advice

Commission services*

Other stakeholders

* Including the Joint Research Centre which provides in-house scientific support
Learning from others

Eight ways to improve expert advice
*Sutherland, Burgman; Nature, 15 Oct 2015*

- Use groups
- Choose members carefully
- Don't be starstruck
- Avoid homogeneity
- Don't be bullied

Science Advice to Governments: Diverse systems, common challenges
*Wilsdon, Allen, Paulavets; The Guardian Aug 2014*

- Distinguish between 'Science for Policy' and 'Policy for Science'
- Improve quality through multi- and inter-disciplinary expertise
Learning from experience

We also need a fundamental review of the way European institutions access and use scientific advice. In the next Commission I want to set up a Chief Scientific Advisor who has the power to deliver proactive, scientific advice throughout all stages of policy development and delivery. This will reflect the central importance I attach to Research and Innovation.

José Manuel Barroso, 18 September 2009
Avoiding duplication & adding value

Cyber Defence

Cyber defence capability information was assessed according to a community-wide underlying framework of Functional Capabilities in the area of Azalea, namely: detection, response, containment, mitigation, and recovery. The framework allows for the assessment of capabilities within the domain of Cyber defence, with a particular focus on the domains of Cyber defence, detection, response, containment, mitigation, and recovery. The framework is designed to support the identification of capabilities and to enable the assessment of their effectiveness in achieving the desired outcomes.

The study found that the integration of cyber defence capabilities across different domains and at various levels of the value chain is essential for effective cyber defence. The study also identified the need for a comprehensive, multi-disciplinary approach to cyber defence that incorporates both technical and non-technical aspects.

Results

The study’s comprehensive analysis of cyber defence capabilities in Europe provided valuable insights into the current state of cyber defence and the potential for improvement. The study highlighted the need for a strategic approach to the development and implementation of cyber defence capabilities, as well as the importance of international cooperation and collaboration.

The study also emphasized the importance of investment in research and development to ensure that Europe’s cyber defence capabilities remain effective and up-to-date. The study concluded that a comprehensive, multi-disciplinary approach to cyber defence is essential for achieving effective and sustainable cyber defence capabilities.

EDADstocktaking study

Objective & methodology

EDAD commissioned a report to assess the state of cyber defence capability in Europe. The report aimed to identify opportunities for improvement and to provide recommendations for enhancing cyber defence capabilities in Europe.

The report was based on a comprehensive review of the current state of cyber defence capability in Europe, including an analysis of the existing frameworks and methodologies for assessing cyber defence capabilities. The report also included a detailed examination of the challenges and opportunities for enhancing cyber defence capability in Europe.

Expert Opinion on the public health needs of refugees, asylum seekers and migrants across the European Union’s southern and south-eastern borders

The report concluded that the current state of cyber defence capability in Europe is strong, with a comprehensive approach to the development and implementation of cyber defence capabilities. The report recommended that future efforts should focus on enhancing the integration of cyber defence capabilities across different domains and at various levels of the value chain.

The report also emphasized the importance of investment in research and development to ensure that Europe’s cyber defence capabilities remain effective and up-to-date. The report concluded that a comprehensive, multi-disciplinary approach to cyber defence is essential for achieving effective and sustainable cyber defence capabilities.
Trickier questions?

**Internal organisational**
Ensure synergy
Ensure buy-in

- President's priority
- Close working relationship in college and at services level
- JRC
- EU-ANSA

**External organisational**
Go beyond the HLG

- HLG - Academies and other science advice providers - MS
- Long, medium, short
- Critical to EU policy development or legislation
- Pro-active

**Scope**

**Communications**
- Under development: relations with scientific community, civil society
Whom?

**Professor Janusz M. Bujnicki**  
Head of the Laboratory of Bioinformatics and Protein Engineering, International Institute of Molecular and Cell Biology, Warsaw

**Professor Pearl Dykstra**  
Professor of Sociology, Erasmus University, Rotterdam

**Professor Julia Slingo**  
Chief Scientist, Met Office, Exeter

**Professor Elvira Fortunato**  
Professor, Materials Science Department of the Faculty of Science and Technology, NOVA University, Lisbon

**Cédric Villani**  
Director, Henri Poincaré Institute, Paris

**Professor Rolf-Dieter Heuer**  
Director-General, European Organization for Nuclear Research (CERN)

**Professor Henrik C. Wegener**  
Executive Vice President, Chief Academic Officer and Provost, Technical University of Denmark
What?

- **RESPONSIVE**:  
  - Provide independent scientific advice to EU policy and legislation (not duplicating existing advice)

- **PROACTIVE**:  
  - Identify policies where advice required
  
  - Recommend improvements to interaction between policy and advice
First meeting, 29th January 2016

- Closing the gap between light duty vehicles real world CO2 emissions and laboratory testing
  ✓ October 2016

- Cybersecurity
  ✓ Longer term

- Rules for procedure

Ongoing / Next steps (provisional)

- JRC Ispra – 4 March
- 2nd meeting 17 March; 3rd ESOF 24-27 July; 4th 29-30 INGSA September; 5th November.