

PANEL FOR THE FUTURE OF SCIENCE AND TECHNOLOGY (STOA)

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Studies, event | **Online platforms: effects on the economy and society, liabilities and governance**

Online platforms play an increasingly central role in our lives, and a clear and enforceable set of principles is needed to safeguard the benefits society draws from them. This was one of the key messages of an event on [governing online platforms](#), which followed the publication of two studies on the [liabilities of online platforms](#) and on their [economic and societal effects](#). STOA's research activities take place in the context of recent Commission proposals for a [Digital Markets Act](#) (DMA) and a [Digital Services Act](#) (DSA).

While the event, chaired by STOA Chair [Eva Kaili](#) (S&D, Greece), focused on the disruptive effects of the digital revolution and examined the challenges associated with the growing datafication and platformisation of our societies, the studies formulated and assessed policy options for tackling these effects and challenges. Concerning liabilities, the respective [study](#) concludes that the legal status quo is not adequate for addressing the challenges. The study [proposes](#) that, instead of relying on self-regulation of the industry, and in addition to awareness-raising and media literacy, it is necessary to establish co-regulation mechanisms and tools, as well as to adopt statutory legislation. Concerning disruptive effects, the other [study](#) concludes that there is a need to strengthen the current law enforcement and regulation of the platform economy. While it welcomes such proposals as the DMA and the DSA, it [calls](#) in addition for a stronger merger control regime for gatekeeper platforms; an enforceable code of conduct tailored to each gatekeeper platform; greater scope for national authorities to intervene where there are country-specific issues; and a new users' right to reasonable inferences.



News | **Series of podcasts on AI and meeting of the STOA International Advisory Board**

In the context of its partnership with the OECD, STOA's Centre for Artificial Intelligence (C4AI) has co-produced a [series of three podcasts](#) examining various aspects of AI development and policy with key experts from the field. The [first](#) explores the role of international cooperation in AI governance. It includes an extensive conversation between STOA Chair [Eva Kaili](#) and [Anthony Gooch](#), Director of Public Affairs & Communications at the OECD. The [second](#) focusses on innovation, regulation and the role of citizens, including contributions from STOA Panel member [Lina Gálvez Muñoz](#) (S&D, Spain) and [Deirdre CLUNE](#) (EPP, Ireland). The [third](#) podcast turns to ethics, including an interview with [Anna-Michelle ASIMAKOPOULOU](#) (EPP, Greece).

Following the inaugural meeting of its International Advisory Board (INAB) on 5 February 2021, STOA hosted, on 24 June 2021, the second INAB meeting. Nineteen INAB members discussed their responses to the proposed Artificial Intelligence Act. A detailed summary of the discussion and written contributions made by INAB members can be found on the [EPRS blog](#).

Study | [Strategic communications as a key factor in countering hybrid threats](#)

What do strategic communications entail for the EU and its Member States? While democracies face an asymmetric fight against actors with no reservations about deploying illegitimate methods or illegal tools, the response resides in adherence to the very principles under attack. Truthfulness and credibility, the understanding of cultures, ideas and identities, reliance on and practice of mutual comprehension are the themes upon which strategic communications are structured. To present and assess these ideas, the [study](#) explores seven case studies extensively, where hybrid tactics with informational components were deployed and concomitant strategic-communications-based responses were used (external financing of religious extremism, foreign influence by Russia and China through academia and think tanks, disinformation campaigns against NATO operations in Lithuania, etc.).

The study derives a number of challenges to effective strategic communication campaigns from these case studies, followed by targeted [policy options](#). These extend from the regulatory domain to investment policy, including further harmonisation of the EU legal framework to specifically target hybrid threats, disinformation and foreign interference, arguing for example in favour of adaptations to the EU sanctions regime, and of streamlining the proposed regulation on AI currently in discussion.

Studies, events | [STOA activities related to the EU strategies for energy system integration and for hydrogen](#)

The EU strategies for energy system integration and for hydrogen have been in the limelight in recent months and a related [report](#), drafted by the ITRE Committee, was adopted by the Parliament's plenary in May 2021. Furthermore, the European Commission (EC) is now proposing a 'Fit for 55' legislative package to fundamentally overhaul the EU's climate policy architecture and put the EU on track to deliver on its 2030 climate target of 55% reduction in greenhouse gas emissions. This is expected to be followed by further debate and even by a fundamental decision by the European Council on the key features of an EU climate policy framework. The EC has set a new vision for a digitalised, integrated and circular energy system, driven by electrification, powered by renewables, and relying on energy efficiency and on reducing energy waste. This implies quickly scaling up renewable hydrogen production, driving down the costs and boosting demand in hard-to-abate sectors to make Europe the global hydrogen powerhouse with a set of ambitious targets: 6 GW of electrolyzers installed by 2024, and 40 GW by 2030.

STOA has engaged in a series of activities on these topics. In December 2020 STOA presented the briefing on '[The potential of hydrogen for decarbonising steel production](#)', which was followed in March 2021 by the online event '[Decarbonising European industry: hydrogen and other solutions](#)' and in April 2021 by the publication of the study '[Carbon-free steel production: Cost reduction options and usage of existing gas infrastructure](#)'. This last study explains the differences between alternative processes, their cost structures and the potential for further cost reductions, as well as the larger implications and consequences of switching to hydrogen in this key industrial sector.

A workshop on '[Energy Transition and the EU Hydrogen Strategy](#)', chaired by STOA Panel member [Tiemo Wölken](#) (S&D, DE), took place on 2 July 2021, featuring a presentation of the opinion presented in June by the EC's [Group of Chief Scientific Advisors](#) and [SAPEA](#), and a discussion anticipating the presentation by the EC of the 'Fit for 55' legislative package. STOA continues its work on the subject through the preparation of the study 'The potential of hydrogen for decarbonising EU industry', to be released in the autumn.



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Multimedia | [Knowledge map on 5G](#)

The European Science-Media Hub (ESMH) published an [interactive knowledge map on 5G](#), which addresses this complex topic in a new interdisciplinary, interactive and playful way, looking at the new technology from different angles: from the technology itself and the politics surrounding it to business, health concerns, cybersecurity and its impacts on society. The idea is to present all these aspects and the interlinkages among them as objectively as possible in a wider context.

The vast content, equivalent in terms of size to an 80-page publication, is presented in a visually attractive, non-linear way, allowing the reader to explore information across different layers by zooming in for more details. The map is enriched with 11 interviews with experts from different fields and nine infographics. It was produced in cooperation with an external partner, who developed a software combining the visual structures of mind and concept maps with multiple layers. Their expertise lies in using new techniques to explain complex topics in the most accessible way for a general audience.

News | [Update from the ESMH: Focus on COVID-19 vaccines](#)

This spring was characterised by a flood of new COVID-19 vaccines being put on the market in record time: which ones are there, which ones have been authorised and where, and how do they work? To demystify the matter, the ESMH published both an [article](#) and a [table](#) (available in 24 languages) for more visibility and better understanding. The ESMH also interviewed leading experts who talked about the [COVAX programme](#) that aims to get everyone in the world vaccinated; [science journalism](#) being under a lot of pressure; and what governments and hospitals can do to better [respond to health crises](#).

The key message that came out of the [debate](#) on ‘Science & misinformation: the first pandemic in the digital age’, held online on 22 March 2021, in cooperation with the EP Liaison Office in Lisbon, is that disinformation cannot be eradicated. One can fight it, though, and we can control its spread, or even prevent it from reaching the most ‘vulnerable’ – the ones that are most susceptible to believing false information. The event was part of the ‘Science Media Days’ series, organised by the ESMH in different EU Member States.

Study | [Europe's technological sovereignty](#)

Technological sovereignty is an important ambition for Europe. It can be understood as Europe's ability to develop, provide, protect and retain critical technologies required for the welfare of European citizens and the prosperity of businesses, and the ability to act and decide independently in a globalised environment. In order to evaluate strategies for pursuing technological sovereignty for the EU, a soon-to-be-published study and a related [event](#), chaired by STOA Second Vice-Chair [Ivars Ijabs](#) (Renew, LV), investigated the potential and the challenges in the areas related to six [Key Enabling Technologies](#) (KETs).

These technologies are crucial for making European society more interconnected, digitalised, more resilient and healthier, as well as for the EU's competitiveness and position on the global market. In developing and mastering these KETs, the EU faces four major obstacles: lack of critical resources and raw materials, dependence on non-European suppliers, deficit in digital skills due to lack or drain, and the insufficient commercialisation of research results. To address these issues, the study puts forward a total of 25 policy measures. These include: developing a new KETs-based strategy, promoting open data policies on all levels of government through the Data Governance Act, and encouraging and supporting education and training in the relevant digital and other skills.



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STOA (Panel for the Future of Science and Technology), an integral part of the European Parliament's structure, is tasked with carrying out expert, independent assessments of the impact of new technologies and identifying long-term, strategic policy options useful to the Parliament's committees in their policy-making role.

PANEL FOR THE FUTURE OF SCIENCE AND TECHNOLOGY (STOA)

The STOA Panel is composed of 27 Members of the European Parliament, including the EP Vice-President responsible for STOA and 26 MEPs appointed by eleven parliamentary committees. With the input of committees and individual Members, the STOA Panel, on the recommendation of its Bureau, decides on projects and other activities in the field of science and technology. Each STOA project is overseen by one or more Panel members.

STOA Panel

The STOA Panel includes Members from the following committees:

- Industry, Research and Energy (ITRE):** six Members
- Agriculture and Rural Development (AGRI):** three Members
- Employment and Social Affairs (EMPL):** three Members
- Environment, Public Health & Food Safety (ENVI):** three Members
- Internal Market and Consumer Protection (IMCO):** three Members
- Transport and Tourism (TRAN):** three Members
- Culture and Education (CULT):** one Member
- International Trade (INTA):** one member
- Legal Affairs (JURI):** one Member
- Civil Liberties, Justice and Home Affairs (LIBE):** one Member
- Regional Development (REGI):** one member

STOA Bureau

Ewa Kopacz, EP Vice-President responsible for STOA

Eva Kaili, STOA Chair

Christian Ehler, STOA First Vice-Chair

Ivars Ijabs, STOA Second Vice-Chair

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