EU-U.S. TTC WORKING GROUP 4: Input on a Transatlantic Common Vision and Roadmap for 6G



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This summary was written following the online Trade and Technology Council (TTC) Working Group 4 Stakeholder Event on a Transatlantic Common Vision and Roadmap for 6G, held on 20 April 2023. This event was organised by the Trade and Technology Dialogue (TTD) and the Special Competitive Studies Project (SCSP).

The TTD is an EU-funded project, supporting the TTC by mobilising stakeholders and providing research outputs. It is a consortium of organisations based in the EU and the U.S. (CEPS, EUI, IAI, Forum Europe and the Providence Group).



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Executive Summary

On April 20, 2023, the Trade and Technology Dialogue (TTD) hosted representatives from the European Union (EU) and the United States (U.S.) government for an online stakeholder meeting to discuss topics of cooperation under the Trade and Technology Council (TTC) Working Group 4 (WG4) — Security and Competitiveness of ICTS. During the workshop, industry experts and representatives from both sides of the Atlantic engaged with over 100 TTC stakeholders to discuss and refine a Transatlantic Common Vision for 6G.

This event framed the importance of developing a joint EU-U.S. vision for 6G as well as the transformative potential of 6G technologies. The EU and U.S. are increasingly aligned on the strategic importance of 6G, the necessity of transatlantic cooperation, and the myriad of challenges and opportunities presented by this emerging technology. This workshop sought to emphasise the key imperatives for 6G development including standardisation, security, open architectures interoperability and embedding the **shared democratic values of the EU and U.S. in the global 6G vision.**

The first panel of the event introduced the work taking place in both the EU and the U.S. developing individual and joint 6G projects, such as Hexa-X, the Smart Networks and Services Joint Undertaking (SNS-JU) and the RINGS Programme. Speakers pointed to existing initiatives such as the memorandum of understanding (MoU) between the European 6G Industry Association (6G-IA) and NextG Alliance (NGA) to highlight the pathways available to the increasingly aligned EU-U.S. 6G vision. Building upon this, The TTC 6G roadmap could create an important critical mass among like-minded partners in global regulatory and standardisation bodies.

The second panel explored use case categories and technology visions for 6G. As wireless technology moves into the future, it will feature novel technology that can be tailored to serve needs well beyond traditional communications technology. Breaking this paradigm will have significant benefits, such as removing hardware limitations or improving security, and will also usher in new challenges for network orchestration and management. This session also underlined the competing challenges facing the 6G vision: limiting the financial and environmental burdens placed on operators, improving the efficiency of energy consumption, while also folding in privacy concerns and trustworthiness into technological developments.

The final panel of the workshop looked at key enablers for 6G. The deployment of 6G technology will face stringent security demands, as well as heightened expectations for environmental, economic and social sustainability. The current transition from a capacity and throughput-centric



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understanding of networks towards a beyond-communication conception also calls for new performance targets. This broader vision will further need to consider resilience, sustainability, agility, and tunability.

Throughout the workshop, stakeholders actively engaged with the presenters through Q&A sessions. The audience sought to delve further into the common EU and U.S. vision, its actual implementation, and how it might differ from approaches in the rest of the world. Stakeholders aimed to better understand the challenges and advantages of 6G technologies. Their questions built upon the panellists' emphasis on the transition away from narrower 5G technology frameworks towards new frameworks which better engage with the non-communications usecases for 6G. Stakeholders focused on the security, trustworthiness, openness and interoperability and energy efficiency demands of this technology. Across panels, stakeholder questions also reflected a deep concern for the impact of AI systems on 6G deployment, both in terms of uses cases and security.

This event thus reiterated the key themes of the transatlantic vision for 6G: sustainability and energy efficiency; viability at the technical and commercial level; inclusion and accessibility; trustworthiness of hardware and software; openness and programmability. As summed up by the co-facilitators, "the vision of 6G is helping to realise the promise of 5G" while also maintaining the delicate balance between pushing the frontiers of technology and ensuring adherence to the core democratic and social values of the EU and the U.S.

About the TTD

The **Trade and Technology Dialogue (TTD)** is designed to support the **EU-U.S. Trade and Technology Council (TTC)**, which serves as a forum for the European Union and the United States to coordinate approaches to key global trade, economic and technology issues and to deepen transatlantic relations based on shared values.

Over a three-year period – from May 2022 until May 2025 – the TTD will mobilise experts and stakeholders on both sides of the Atlantic with events and research outputs to facilitate inclusive, efficient and effective discussions and joint initiatives in support of the EU-U.S. TTC and its ten working groups.

The TTD is an EU-funded project, contracted to the Centre for European Policy Studies, the European University Institute, the Istituto Affari Internazionali, Forum Europe/Forum Global and the Providence Group.

We believe that stakeholders are a crucial resource to the success of the EU-U.S. TTC.

You can get in touch and learn more about the stakeholder activities and how you can contribute by regularly following the updates on <u>Futurium</u>, where all upcoming events, research outputs and further content will be announced (you can allow regular notifications in the settings of your Futurium account).

Sign up for the dedicated TTD Newsletter from the Newsroom <u>here</u>.

For any other queries or further information, please email: info@tradeandtechdialogue.com

About the TTD Consortium



Consortium Leader

The Centre for European Policy Studies (CEPS) is a leading think tank and forum for debate on EU affairs, ranking among top 10 non-U.S. think tanks.



Consortium Partner

The European University Institute (EUI) is a doctoral and postdoctoral academic institution.



Consortium Partner

The Istituto Affari Internazionali (IAI), founded in 1965, is a private, independent non-profit think tank that promotes the understanding of international politics through research, training, conferences and publications.

Forum Europe Consortium Partner

Forum Europe's raison d'être is to bring stakeholders together to analyse, debate and inform policy making through the medium of events.



THE **PROVIDENCE** GROUP

Capacity Providing Entity

The Providence Group provides strategic advice to transatlantic organisations in navigating the complexities of transatlantic data, privacy and cybersecurity risk.