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COMER 49
CYBER 108
HYBRID 18
DISINFO 26
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NOTE

From: European Commission
To: Delegations

Subject: Revised draft Joint Statement of the EU-US Trade and Technology Council
(Luleå, 31 May 2023)

Member States will find in Annex, for the Council's endorsement, the revised EU-US Joint Statement and accompanying documents intended to be issued at the EU-US Trade and Technology Council meeting on 31 May 2023.

The draft Joint Statement is accompanied with the revised version of the work program of the Transatlantic Initiative on Sustainable Trade, the statement setting out actions to counter foreign information manipulation and interference, the document on transparent and accountable platforms listing high-level principles on the protection and empowerment of minors and data access for researchers, and the document setting out a 6G outlook.

The circulated documents reflect the latest state of play of exchanges with the US Discussions with the US are continuing, and notably the text/sections in brackets are still subject to further discussion.

**EU-US Joint Statement
of the Trade and Technology Council**

31 May 2023

Luleå, Sweden

I. Introduction

The fourth Ministerial meeting of the Trade and Technology Council (“TTC”) took place in Luleå, Sweden, on 31 May 2023 [placeholder for participants].

On this occasion, the European Union and the United States reiterated the central role of the TTC in the broader transatlantic partnership, the strategic nature of which was reconfirmed in the context of Russia’s illegal and unjustifiable war of aggression against Ukraine. We reaffirm our unwavering commitment to support Ukraine for as long as it takes.

The TTC continues to contribute to a coordinated and effective response to Russia’s war in Ukraine by the European Union and the United States, including in areas such as sanction-related export restrictions, combatting foreign information manipulation and interference (FIMI) and disinformation campaigns which undermine human rights and threaten the functioning of democracies and the well-being of societies, including in third countries.

We recognise that the changing international environment requires enhanced cooperation and information exchange to identify and respond to challenges affecting our economic security. We recognise that the changing international environment requires enhanced cooperation and information exchange to identify and respond to challenges affecting our economic security. We further reaffirm that the basis of our cooperation to strengthen our economic security is rooted in the international rules-based system. We continue to strengthen our bilateral coordination in these areas as well as working with other partners, including the G7, to diversify our supply chains, to address non-market policies and practices [designed to reinforce dependencies] and to increase our mutual collective preparedness, resilience, and deterrence to economic coercion.

The European Union and the United States are committed to joint leadership in promoting and upholding an international rules-based order grounded in shared values. We continue to cooperate in multilateral discussions related to trade and technology in fora such as the G20 and G7, continue our efforts to modernize global trade rules by seeking solutions to reform the World Trade Organization (WTO) and make substantive progress as we prepare for the 13th WTO Ministerial Conference.

Given the rapid pace of technological developments, the European Union and the United States are committed to deepening our cooperation on technology issues, including on artificial intelligence (AI), 6G, online platforms and quantum. We are committed to make the most of the potential of emerging technologies, while at the same time limiting the challenges they pose to universal human rights and shared democratic values. In this context, we seek to continue advancing the principles presented in the Declaration for the Future of the Internet (DFI), together with like-minded partners. The European Union and the United States share a commitment to develop our workforces with the skills to spur the next wave of economic growth.

As the pressing need to tackle the challenges posed by climate change has become a priority on both sides of the Atlantic, the European Union and the United States are placing decarbonisation efforts at the heart of trade policy to accelerate the transition towards a net zero economy. Via the Transatlantic Initiative for Sustainable Trade, the European Union and the United States are strengthening engagement towards a transatlantic green marketplace. The ongoing work on a Global Sustainable Arrangement for Steel and Aluminium shows our resolve to rise to this challenge [with a view to achieve an ambitious outcome by October 2023]. During the visit of President von der Leyen to the White House in March, the European Union and the United States announced the beginning of negotiations of a critical minerals agreement for the purpose of enabling relevant critical minerals extracted or processed in the European Union to count toward requirements for clean vehicles in the Section 30D clean vehicle tax credit of the Inflation Reduction Act as well as part of a broader process by the European Union and the United States to collaborate on securing supplies of critical minerals.

In addition, the European Union and the United States launched the Clean Energy Incentives Dialogue to share information about clean energy incentive programs on both sides of the Atlantic. It will also allow the European Union and the United States to discuss systemic issues related to the design and effects of incentive programs and also develop a common understanding of market dynamics. We plan to also undertake joint analyses of non-market policies and practices of third parties to better understand their impact on US and EU companies.

II. Key Outcomes of the Fourth TTC Ministerial meeting

A. Robust Transatlantic Cooperation on Emerging Technologies for Joint EU-U.S. Leadership

Artificial Intelligence

AI is a transformative technology with great promise for our people, offering opportunities to increase prosperity and equity. But in order to seize the opportunities it presents, we must mitigate its risks. The European Union and the United States reaffirm their commitment to a risk-based approach to AI to advance trustworthy and responsible AI technologies. Cooperating on our approaches is key to promoting responsible AI innovation that respects rights and safety and ensures that AI provides benefits in line with our shared democratic values.

Recent developments in generative AI highlight the scale of the opportunities and the need to address the associated risks. These developments further highlight the urgency and importance of successful cooperation on AI already taking place under the TTC through the implementation of the Joint Roadmap on Evaluation and Measurement Tools for Trustworthy AI and Risk Management, as further outlined below.

The European Union and the United States decided to extend the work on the Roadmap to include generative AI systems. This will include the consideration of the risks presented by generative AI. This work will complement the G7 Hiroshima AI process.

In addition, the European Union and the United States have advanced the implementation of the Joint Roadmap on Evaluation and Measurement Tools for Trustworthy AI and Risk Management ([hyperlink](#)) through the launch of three dedicated expert groups which focus on:

- 1) AI terminology and taxonomy,
- 2) Cooperation on AI standards and tools for trustworthy AI and risk management, and
- 3) Monitoring and measuring existing and emerging AI risks.

The groups have (i) issued a list of 65 key AI terms essential to understanding risk-based approaches to AI, along with their U.S. and EU interpretations and shared US-EU definitions [hyperlink tbc]; and (ii) mapped the respective involvement of the European Union and the United States in standardisation activities with the goal of identifying relevant AI-related standards of mutual interest. Going forward, we will continue to consult and be informed by industry, civil society, and academia. We intend to expand shared AI terms, continue our progress towards advancing AI standards and tools for AI risk management, and develop a catalogue of existing and emergent risks, including an understanding of the challenges posed by generative AI.

We will continue to cooperate in multilateral discussions such as the G7 or in the Organisation for Economic Co-operation and Development (OECD). We remain, as founding members, actively involved in the Global Partnership for Artificial Intelligence.

AI Cooperation to Address Global Challenges

On 27 January 2023, the European Commission and the United States enhanced our ability to cooperate through the signing of an administrative arrangement expressing our intent to support collaboration on advanced AI research focused on five areas which represent shared significance and benefit: extreme weather and climate forecasting, emergency response management, health and medicine improvements, energy grid optimization, and agriculture optimization. We reaffirm our intent to share findings and resources in collaboration with other international partners, including low- and middle-income countries, to foster broad societal benefits in the selected focus areas.

We intend to start implementation of this cooperation by establishing an internal catalogue between European Commission and U.S. government's scientific agencies, as appropriate, of relevant research results and resources in the five focus areas. For example, for the topic of extreme weather and climate forecasting, we intend to exchange information on challenges in using AI for Earth Science Digital Twins, and to identify areas of collaboration.

Standardisation work on critical and emerging technologies

The European Union and the United States are advancing concrete work and outcomes on joint technical specifications for key critical and emerging technologies.

In collaboration with the respective EU and U.S. standardisation organisations, we encourage increased development of international standards for **additive manufacturing (3D printing) that bear three logos (ISO, CEN, ASTM)**, for example on health and safety. This would strengthen transatlantic developments and growth in the area of additive manufacturing where digital design guides the fabrication of complex, three-dimensional products built up additively layer-by-layer. This area has the potential for significant growth in the coming years enabling innovative new designs and material compositions for manufactured parts.

The European Union and the United States are **advancing collaboration in the promising area of digital identity** and have held a series of U.S.-EU technical exchanges and an event to engage subject matter experts from government, industry, civil society, and academia. By the next EU-U.S. TTC Ministerial, and in close consultation with these expert communities, we intend to develop a transatlantic mapping of digital identity resources, initiatives, and use cases with the aim of advancing transatlantic pre-standardization research efforts, facilitating interoperability, and streamlining implementation guidance while respecting human rights. This work will be without prejudice to EU and U.S. legislative work and in full compliance with applicable law in this area.

The European Union and the United States have cooperated to develop a shared vision on a standard for charging electric heavy-duty vehicles. This achievement is also accompanied by recommendations resulting from the long history of scientific collaboration between the EU's Joint Research Centre and the U.S. Department of Energy's Argonne National Laboratory. We recognize the Megawatt Charging System (MCS) adoption by IEC, SAE and ISO for the charging of electric heavy-duty vehicles, where our aligned approach to standardisation is critical for the roll-out of dedicated recharging infrastructure. [Both sides welcome the recognition of compatible physical connectors (plugs) and a common vehicle-to-grid communication interface for all power levels, recognizing that other solutions may be also possible additionally among private sector operators.]

We will continue to work together to develop a transatlantic test procedure for high power-charging, up to MCS levels, assuring interoperability and system charge performance. These efforts will ensure that stakeholders will benefit from fully compatible technical specifications, reducing manufacturing and deployment costs and thus facilitating transatlantic cooperation for electromobility to become mainstream. During our meeting in Luleå, we displayed the MCS physical connector as well as a truck and recharging station – a visible proof of this success. This cooperation also paves the way for possible MCS applications in inland shipping, marine, mining, and aviation sectors among others.

By the end of 2023, we expect to [have] develop[ed] joint EU-U.S. policy recommendations on accelerating access to and the **uptake of digital tools by small- and medium-sized enterprises (SMEs)**. They will also address the role, access to and participation of SMEs in international standardisation activities thanks to feedback collected from SMEs through dedicated consultations. The European Union and United States also plan to explore and exchange best practices on how to educate and train technical experts in standards development, especially with a view to the new skillsets required for critical and emerging technologies.

E-Mobility standards and interoperability with smart grids

We also welcome the publication of E.U.-U.S. joint technical recommendations for government-funded implementation of e-vehicle charging infrastructure [add link] which were developed in consultation with governments, industry, and grid-service stakeholders.

Transatlantic collaboration on EV infrastructure technical requirements can more efficiently roll out publicly funded charging infrastructure, enhance our power grids, and enable our industries to be more competitive across global markets. The recommendations propose 1) the development of a joint standards support strategy; 2) support for the development and implementation of cost-effective smart charging infrastructure that avoids stranded assets; and 3) identification of the pre-normative research, development and demonstration required to tackle remaining challenges and to support consumers, industry, and the grid.

Semiconductors

As a critical technology and essential linkage in an ever-growing range of industries, the European Union and the United States face a shared imperative to build resilient semiconductor supply chains.

The European Union and the United States have completed a joint early warning mechanism for semiconductor supply chain disruptions and a transparency mechanism for reciprocal sharing of information about public support provided to the semiconductor sector.

With regard to the early warning mechanism, the European Union and the United States have outlined the operational steps to be taken in the event of a future disruption and have shared their assessments of the current situation of the semiconductor value chain.

The European Union and the United States have also started formal exchanges of information on public support granted to the semiconductor sector in their respective jurisdictions.

The European Union and the United States are committed to avoiding a race to the bottom in semiconductor public support. Therefore, a reciprocal mechanism has been put in place for consultation at the principals' level to facilitate communication to head off [and prevent subsidy races]. The European Union and the United States also believe that semiconductor investments in both jurisdictions are mutually beneficial. Increased investment in semiconductors in Europe supports resilience in U.S. supply chains, and increased investment in the semiconductors in the United States similarly supports resilience in EU supply chains. Consequently, the United States applauds the political agreement on the EU CHIPS Act. The EU welcomes progress in the implementation of the U.S. CHIPS Act.

The cooperation between the European Union and the United States is reinforcing the success of our respective efforts to promote semiconductor supply chains. Exchanges on best practices facilitated by the TTC has informed our respective approaches and will remain a useful tool for their implementation of efforts related to public support frameworks, workforce development, and demand forecasts. In particular, the European Union and the United States have discussed common elements of our respective public support frameworks, such as the possible use of upside sharing/claw-back of excessive profits and requirements for information from companies, with an aim to improve effectiveness and share lessons learned. We share the commitment to good stewardship of public funds, and through our cooperation aim to make each of our respective public support programs more efficient and more effective.

Going forward, we are exploring additional ways to collaborate, including how to cooperate on incentives for research on alternatives to the use of per- and polyfluorinated substances (PFAS) in semiconductor manufacturing. We will also explore building a robust semiconductor supply chain ecosystem from material inputs to packaging, including through sharing views and exchanging information on targeted supply chain supports.

Quantum technologies

The European Union and the United States have established a joint Task Force to address open questions on science and technology cooperation in quantum technologies. The Task Force is expected to elaborate on reciprocity for participating in the respective public R&D programs, the applicable intellectual property rights framework, the identification of critical components, standardisation, defining benchmarking of quantum computers, and export control related issues as appropriate. The Task Force is also discussing activities in Post-Quantum Cryptography (PQC) standardization and discussed potential avenues for future cooperation, feeding into the EU-U.S. Cyber Dialogue.

B. Promoting sustainability and new opportunities for trade and investment

Transatlantic Initiative on Sustainable Trade

The European Union and the United States, recognising the important role of trade policy in driving the transition towards a net-zero economy and building on the cooperation already ongoing under the TTC, are working together to amplify the potential of the transatlantic marketplace as a catalyst for decarbonization and a green transition.

The Transatlantic Initiative on Sustainable Trade launched at the third EU-U.S. TTC Ministerial meeting in December 2022 offers a pathway for dialogue that aims to: boost transatlantic trade and investment to further the deployment of goods and services essential to the transition to more circular and net-zero economies; strengthen the resilience and sustainability of key supply chains; ensure that the green transition is fair and inclusive; and promote efforts to advance the transition to a low-emission and green future at a global level.

To guide these endeavours the European Union and the United States are endorsing a work program (in annex to the statement).

EU-U.S. Clean Energy Incentives Dialogue

In light of the need for increased investments on both sides of the Atlantic to build clean energy economies and industrial bases, the European Union and United States on 10 March 2023 launched a Clean Energy Incentives Dialogue as part of the TTC to ensure our respective incentive programs are mutually reinforcing. We are taking steps to avoid any disruptions in transatlantic trade and investment flows that could arise from our respective incentives. We are working against zero-sum competition to ensure that our incentives maximise clean energy deployment and jobs. The dialogue should also [address] systemic issues on design and effects of incentive programs going forward. The Clean Energy Incentives Dialogue will also facilitate information-sharing on non-market policies and practices of third parties to serve as the basis for joint or parallel action and coordinated advocacy on these issues in multilateral or other fora.

Critical Minerals

To achieve a successful green transition, and to ensure our economic security, the European Union and the United States recognize the need to work together on our shared concerns around supply chains for critical minerals, metals, and material inputs. For many critical minerals, we note that the European Union and the United States are both reliant on imports, often from limited sources, and that this reliance leaves us vulnerable to disruptions such as geopolitical shocks and natural disasters. Successfully addressing our shared concerns will require close coordination.

[Increasing the Use of Digital Tools to Enhance Trade]

[The European Union and the United States plan to explore concrete steps to enhance cooperation on trade facilitation.]

In this sense to make it easier for companies, particularly small- and medium-sized enterprises, to engage in trade, the European Union and the United States have already exchanged information on their respective initiatives to use digital technology to enhance trade and held a stakeholder event dedicated to this topic on 4 May 2023. In consultation with stakeholders, the European Union and the United States intend to [continue to explore ways to increase the use of digital tools in transatlantic trade-related transactions.]

Mutual Recognition Agreements and Conformity Assessment-Related Initiatives

The European Union and the United States have extended the scope of the EU-U.S. Mutual Recognition Agreement annex for Pharmaceutical Good Manufacturing Practices to include veterinary medicines. Moreover, the European Union and the United States updated the existing U.S.-EU Marine Equipment Mutual Recognition Agreement to keep it aligned with the latest developments at the international level.

With the goal of promoting more frictionless trade between our markets, the European Union and the United States are working to facilitate conformity assessment across a range of sectors, [and to continue exploring opportunities in machinery and in cooperation on horizontal approaches to conformity assessment.] For this purpose, we intend to conduct stakeholder outreach and will have regular expert meetings, including the relevant U.S. agencies and European Commission services.

Trade and Labour and Sustainable Supply Chains

The European Union and the United States continue to promote sustainable and responsible supply chains with strong protection for labour rights. For this purpose, they had in-depth exchanges on relevant existing and upcoming regulations and rules, and on their implementation, as well as on approaches to support the successful development of sustainable and responsible supply chains and support stakeholders in their efforts. On 3 March 2023 they jointly convened a roundtable with multiple stakeholders to discuss practical approaches to effective due diligence implementation, including for the eradication of forced labour from supply chains. [*add link to report on Futurium*].

Today, the European Union and the United States also held their second principal-level session of the Trade and Labour Dialogue (TALD) that brought together senior representatives from labour, business, and government from both sides of the Atlantic. The meeting offered an opportunity to deepen discussions on the eradication of forced labour from global trade and from global supply chains and to examine the impact of the green transition on workers. The European Union and United States took note of a new set of joint recommendations on combatting forced labour in global supply chains that were developed by a group of representatives of U.S. and EU labour unions and companies. We welcome the spirit of collaboration that made these joint recommendations possible. The European Union and the United States will continue working with our labour and business stakeholders to ensure that the TALD continues to provide useful input on trade and labour policies.

Promoting Global Digital Trade Principles

The European Union and the United States reaffirm their shared interest in a global digital trade environment that reflects our values and provides fair opportunities for our companies to compete. To that end - and building upon work on digital trade principals such as the G7 - we intend to identify additional commonalities in current U.S. and EU digital trade policies. We will then work jointly to promote those principles with other trading partners with the goal of ensuring that global trade in digital services and technology support our shared democratic values; the fair treatment of workers; sound environmental policies; fair competition; and strong consumer protection.

[Furthermore, within the Global Trade Challenges Working Group, the European Union and the United States intend to exchange information on non-market policies and practices affecting digital trade jointly consult with transatlantic stakeholders on the challenges posed by providers of digital goods, services, and technology that are supported by [non-democratic] [authoritarian] states. We will then jointly endeavour to address policies and practices that may unfairly disadvantage EU and U.S. firms.]

C. Trade, Security and Economic Prosperity

In a changing geopolitical environment, the European Union and the United States reiterate their commitment under the TTC to continue cooperation in the field of export controls and cooperation on investment screening and to address the challenges posed by, among other issues, non-market

policies and practices and economic coercion. We also remain committed to enhance cooperation on these matters in any relevant fora, including the G7 and the WTO.

Cooperation on Export Controls and Sanction-Related Export Restrictions

The TTC has continued to support the unprecedented cooperation by the EU, U.S., and other international partners on economic measures against Russia and Belarus for the war in Ukraine. The TTC continues to help support consistent implementation, including through exchanging information on the application of controls as well as working to address enforcement and circumvention risks. This work has delivered important results, including identifying key categories of goods critical to Russia's efforts on the battlefield that the EU, the United States, and their partners have focused cutting Russia off from and are investing in efforts to further tighten enforcement through counter-evasion actions. This cooperation also enabled the EU and the United States to design dedicated restrictions to prevent exports of technology found in Iran-manufactured drones and to allow information sharing on our trade restrictions. The European Union and the United States are coordinating engagements with third countries to counter evasion of export restrictions on sensitive items and are conducting coordinated capacity building actions to enable third countries' authorities to tackle export control evasion and circumvention more effectively.

The TTC has also supported technical consultation on regulatory development between the European Union and the United States, including on coordinated timing for publishing the new controls on biotechnologies decided in the Australia Group in 2022. The TTC is also working towards the clarification and simplification of re-export procedures for the benefit of exporters and to develop a common understanding of how the EU and U.S. rules are applied on both sides of the Atlantic.

The European Union and the United States have started to consult each other in advance of the introduction of new export controls on sensitive items and new controls, including on advanced semiconductors' manufacturing equipment.

The European Union and the United States will continue discussions on the introduction, where appropriate, of controls on emerging technologies with a view to enable transatlantic cooperation for the development of such technologies and address the associated risks for international security and human rights.

Finally, as recently underscored by the G7 Non-proliferation Directors Group, the European Union and the United States recall that export controls remain a key non-proliferation instrument in maintaining international security and stability and recognize the central role of multilateral non-proliferation export control regimes in that regard. Export controls are crucial for creating a favourable environment for further economic growth through more secure trade and investment, and we will continue cooperating among ourselves and work with other states in strengthening effective and responsible export controls to address the challenges posed by the misuse and illicit diversion of technologies critical for the development of weapons of mass destruction, their means of delivery, and for advanced military technology programmes by state and non-state actors, while promoting an environment in which science, technology and legitimate research collaboration can flourish.

Investment Screening

The European Union and the United States continued exchanges on investment trends impacting national security and security risks related to specific sensitive technologies and critical infrastructure. We look forward to working together on deepening our understanding of the policy tools available to address national security risks in a holistic manner. The European Union and the United States reiterate the importance of establishing, maintaining, and making full use of comprehensive, robust national security-based investment screening mechanisms on both sides of the Atlantic, while remaining open for investment. The European Union and the United States welcome the recent significant progress towards the adoption and full implementation of investment screening mechanisms in a number of European Union Member States without such systems. The European Union and the United States continue to support the development and implementation of these mechanisms, including through joint outreach to interested stakeholders starting with the Western Balkans.

Outbound Investment Controls

The European Union and the United States will seek to align approaches to address the national security risks associated with certain outbound investments in sensitive technologies, to prevent our companies' capital, expertise, and knowledge from supporting the technological advances of strategic rivals in ways that threaten our national security. As we explore our respective policy approaches, we will continue to exchange information and lessons, working in coordination with our G7 allies. We will coordinate efforts across the Atlantic to avoid the backfilling of any controlled exports and investments and will continue to share lessons and seek to align our approaches where feasible to maximize the effectiveness of our efforts.

Addressing Non-Market Policies and Practices

The European Union and the United States share concerns about the threat posed by a range of non-market policies and practices of third countries. We stand ready to address these practices, both bilaterally and through multilateral approaches making sure that our responses will not create unnecessary barriers to our industries and are consistent with our WTO commitments. We have exchanged views and information regarding these types of policies and practices in the medical devices sector in China and their adverse impact on our workers and businesses, and we are exploring possible coordinated actions. We also continue to exchange views and analysis on government-owned or government-controlled investment funds. We have begun mapping out the ecosystem supporting enterprises benefitting from these funds and are analysing the distortions caused by these funds.

The European Union and the United States also share concerns about the impact of non-market economic policies on the global supply of semiconductors, particularly in legacy chips. To avoid negative spillover effects from excess global capacity that undermine the health of our respective semiconductor ecosystems, the European Union and the United States, in cooperation with like-minded partners, will exchange information and market intelligence related to non-market policies and practices and explore cooperative measures to address those policies and their distortionary effects.

Addressing Economic Coercion

The European Union and the United States remain concerned with the continued use of economic coercion, which has been deployed with increasing frequency in recent years. This includes attempts to undermine other governments' legitimate policy decisions through the use, or threat of use, of targeting of foreign firms and individuals to prevent or interfere with the foreign government's exercise of its legitimate sovereign right or choices. Not only does economic coercion improperly impose costs on governments for making legitimate policy decisions, the threat of economic coercion alone chills other such decisions, including those of small- and medium-sized economies.

Without unduly limiting trade and investment, we remain committed to enhance cooperation in any relevant forum including the G7 Coordination Platform on Economic Coercion, and to strengthen coordination with each other and other likeminded partners to improve our preparedness, resilience, deterrence, assessment and responses to economic coercion. For that purpose, we intend to make full use of our respective tools to counter economic coercion. We will coordinate, as appropriate, to support targeted states, economies and entities as a demonstration of solidarity and resolve to uphold the rule of law. We also note in that connection the importance of the recent progress in the European Union on the adoption of an anti-coercion instrument.

D. Connectivity and digital infrastructure

Beyond 5G / 6G

The European Union and the United States have accelerated **cooperation to develop a common vision and roadmap on research and development for 6G wireless communication systems**. 6G is expected to start replacing 5G as the predominant commercial cellular wireless standard by 2030. We share the common aim to ensure these technologies possess the capability to enable use cases of the future and are designed based on our shared values and principles.

To that end, and in consultation with stakeholders, we have developed a **6G outlook** [add hyperlink]. It includes the conclusions of a transatlantic 6G workshop, guiding principles and key themes for a common vision, and next steps.

Secure and trusted digital infrastructure and connectivity in third countries

The European Union and the United States share the commitment to working with third countries, particularly emerging economies, on promoting digital inclusion and connectivity around the world. To that end, we will organize a **'Digital Ministerial Roundtable on Inclusion and Connectivity' with participation of the Digital Ministers of key emerging economies** to be convened in the coming months. This roundtable will help identify common needs and challenges around digital infrastructure and explore how the European Union and the United States can best collaborate to support the digitalisation needs of emerging economies. In addition, European Union and the United States intend to further enhance cooperation with like-minded countries, such as the G7, to support the deployment of secure and trustworthy ICT networks.

In line with the principles set at the second EU-U.S. TTC Ministerial meeting, and following the commitments at the third Ministerial meeting, we are operationalising our support for inclusive ICTS projects in Jamaica and Kenya, including by mobilizing EU and U.S. financial instruments, as available and appropriate. Within the framework of a memorandum of understanding signed between European Investment Bank and the U.S. International Development Finance Corporation

on 13 April 2023, we plan to scale up our common efforts to accelerate the roll-out of secure and resilient connectivity projects in third countries with trusted vendors. The United States and the EU are supporting new connectivity projects in Costa Rica and the Philippines.

- **Cooperation on connectivity with Costa Rica** - in close coordination with the government of Costa Rica, we are providing assistance to support the rollout of secure, resilient, and inclusive digital connectivity under Costa Rica's National Telecommunications Plan 2022-2027. Support includes EU and U.S. technical assistance on telecommunications security and intention to help finance Costa Rica's 5G roll-out. In addition, we are providing the Costa Rican government with assistance to secure its networks and critical infrastructure, including through the establishment of a sub-regional hub for cyber competences.
- **Cooperation on connectivity with the Philippines** - in close coordination with the government of the Philippines, we plan to support their efforts to bridge digital divides and provide trusted and resilient connectivity to its citizens. Support includes technical assistance grants to support the development and implementation of a 5G stand-alone network as well as cybersecurity training and other assistance to the Philippines Department of Information and Communications Technology (DICT). We are also supporting the establishment of the national Copernicus data centre, which will strengthen the Philippines' resilience to natural disasters and support climate change adaptation.

In addition to these activities, the European Union and the United States intend to further intensify coordination to ensure that third countries have access to trusted networks (and the benefits associated with such networks). This will include, for instance, coordination between a broad range of financing and assistance agencies within the U.S. and the EU, in close coordination with European Union Member States, to come forward with relevant and competitive financing and other assistance packages for projects with trusted suppliers in partner countries.

We also welcome supplier diversification efforts in ICTS supply chains and continue to discuss market trends towards open, interoperable approaches, alongside trusted, established architectures, in a technology neutral way.

International connectivity and subsea cable projects

The European Union and United States acknowledge the strategic importance of international connectivity for security and trade. For this purpose, we aim to advance cooperation to promote the selection of trusted subsea cable providers for new cable projects - in particular for intercontinental ICT cable projects that promote trustworthy suppliers, reduce latency and enhance route diversity [such as the transatlantic route to connect Europe, North America and Asia].

E. Defending human rights and values in a changing geopolitical digital environment

Transparent and accountable online platforms

The European Union and the United States share the view that online platforms should exercise greater responsibility in ensuring that their services contribute to an **online environment that protects, empowers and respects children and youth** and take responsible actions to address the impact of their services on children and youths' mental health and development. Similarly, we share the view it is crucially important for independent research teams to be able to investigate, analyze and report on how online platforms operate and how they affect individuals and society. As we enhance our bilateral work, the European Union and the United States developed a list of **high-level**

principles on the protection and empowerment of children and youth and facilitation of data access from online platforms for independent research (*add hyperlink*).

Foreign information manipulation and interference (FIMI) in third countries

The European Union and the United States are deeply concerned about foreign information manipulation and interference (FIMI) and disinformation, which threatens universal values, the functioning of democracies and the well-being of societies around the world. Russia's strategic and coordinated use of such activities in the preparation and execution of its war of aggression against Ukraine, and People's Republic of China's amplification of Russian disinformation narratives about the war, are stark examples of the dangers of FIMI, and the effects can be seen in many countries around the world, notably in Africa and Latin-America.

Strategic cooperation between the European Union and the United States has contributed to building a common situational awareness and understanding of the threats posed by FIMI and information operations. Close exchanges on developing effective, timely, and human rights-respecting responses continue. Cooperation in the TTC includes:

1. A shared **standard for structured threat information exchange on FIMI** between the European Union and the United States, as well as the underlying common methodology for identifying, analysing and countering FIMI. Moving forward, the European Union and the United States plan to support the use of this standard by stakeholders across the globe.
2. Actions to **enhance the preparedness of the multi-stakeholder community to step up their actions against FIMI threats**, including by exploring further support for capacity building in Africa, Latin America, and EU Neighbourhood countries.
3. A **call for action to online platforms** operating in Africa, Latin-America, and EU Neighbourhood countries to ensure the integrity of their services and to effectively respond to disinformation and FIMI, building on the example of the European Union's Code of Practice on Disinformation.

The European Union and the United States have issued a **joint statement** which sets out more details on the ongoing cooperation to combat FIMI in third countries [*weblink to be added to specific statement*].

Protecting Human Rights Defenders online

To advance Human Rights Defenders (HRDs) protection online and offline, we have deepened cooperation between EU- and U.S.-based emergency mechanisms and exchanged information on support strategies which seek to prevent, curb, mitigate and eliminate the use of arbitrary and unlawful surveillance targeting human rights defenders. HRDs play a key role in defending human rights and fundamental freedoms for all. Yet due to their work, they have increasingly become the target of attacks and rights violations and they need protection. We recall the obligations of States to respect, protect and fulfil human rights and fundamental freedoms, including those of HRDs. We recall the responsibility of the private sector, including technology companies and digital platforms, to respect human rights in line with the UN Guiding Principles on Business and Human Rights, and we call on companies to prevent the misuse of their products and platforms, and to support victims and survivors in their search for remedy and accountability for violations and abuses.

In consultation with stakeholders, we plan to issue joint guidance by the next ministerial meeting on how content hosting platforms can effectively collaborate and coordinate with civil society and

HRD protection providers to identify, address, mitigate, prevent, and enable access to remedy for digital attacks targeting HRDs.

This joint work seeks to make a practical contribution to enhancing the universal protection of human rights, which is particularly timely in 2023 when we celebrate the 75th anniversary of the Universal Declaration of Human Rights and the 25th anniversary of the adoption of the UN Declaration on Human Rights Defenders.

F. Talent for Growth

The Talent for Growth Task Force was launched on 27 April 2023 with the announcement of its U.S. Section Members and EU Section Members. We have begun to promote the development of the talent and skills of our working-age populations that we critically need to compete in emerging and existing technologies. Our ambitions to lead in these technologies cannot be achieved without expanding opportunity for people to get the skills needed and to that end, we intend to share best practices and serve as a catalyst for innovative skills policies. At the December 2022 TTC meeting in the Washington, D.C area., the European Union and the United States decided to cooperate and create the Talent for Growth Task Force, which brings together government and private sector leaders from business, labour, and organizations that provide training. The Task Force intends to report to the TTC Co-Chairs and address its initial undertakings at the next TTC Ministerial meeting.

III. Conclusion

The European Union and the United States underline the importance of the advances made across all workstreams established under the TTC. We are committed to continue to make full use of this cooperation forum to deepen the transatlantic partnership to respond to the challenges before us. [PLACEHOLDER FOR NEXT MINISTERIAL]

Attachments:

- Work program of the Transatlantic Initiative on Sustainable Trade
 - Actions addressing foreign information manipulation and interference
 - High-level principles on the protection and empowerment of minors and data access for researchers
 - 6G Outlook
-

Annex: “Transatlantic Initiative on Sustainable Trade” work programme

The objective of the Transatlantic Initiative on Sustainable Trade (TIST) is to build a structured and long-lasting bilateral engagement to promote a more integrated and resilient transatlantic marketplace that will help accelerate the transition to a climate neutral and circular economy to the benefit of businesses, workers, and consumers on both sides of the Atlantic.

By facilitating trade and investment in products that support the green transition, this cooperation will allow the EU and the United States to enhance the benefits of their respective policies and investments while ensuring that possible government incentives are transparent and fair. The TIST will also help drive forward innovative approaches to decarbonise energy-intensive industries.

The TIST will focus cooperation on different elements grouped around four building blocks: i) A sustainable business environment for an integrated transatlantic marketplace; ii) Resilient and sustainable supply chains for the clean economy; iii) Benefits for workers and consumers in the green economy; and iv) A global path for the green transition.

The cooperation will follow a two-tiered time horizon. The first milestone (step 1) is the fourth EU-U.S. TTC Ministerial meeting (TTC4), which will result in a first set of deliverables building on current workstreams in various TTC working groups and launch a set of additional projects. The second milestone (step 2) will be the fifth EU-U.S. TTC Ministerial meeting (TTC5), where an additional set of deliverables would be presented, and new initiatives would be launched.

The TIST is intended to build on ongoing cooperation within the TTC Working Groups, which will continue to discuss and advance the topics currently within their remit, irrespective of their presentation under the TIST.

Step 1: at TTC4

i) A sustainable business environment for an integrated transatlantic marketplace

- **Launch work on the identification of sectors and potential trade facilitation to support the green transition**
- **Step up cooperation on measuring embedded emissions**, involving experts from those Commission services and U.S. agencies responsible for the adoption of relevant methods and standards, building on the work that is already ongoing under TTC Working Group 2 and in the technical cooperation in the context of the Global Sustainable Arrangement for Steel and Aluminum negotiations.
- **Facilitate and support cooperation on regulatory approaches for green goods and technologies**, focusing on products, technologies, and smart protocols where stakeholders have identified a need but for which no standards exist.
- **Explore cooperation on conformity assessment**, with the focus on goods that can help promote the green transition. The objective is to agree on the way forward by TTC5.

- **Publication of a joint catalogue of best practices on green public procurement** to encourage exchange of experiences and promote a shared understanding on sustainability considerations in public procurement across contracting authorities. The aim is to pave the way for better policies and practices for environmental considerations in government procurement that can make a substantive positive impact on achieving our common environmental goals. The publication of the catalogue is a deliverable for by summer 2023.
- **Publication of first joint recommendations for government-funded implementation of electro-mobility charging infrastructure.** This has been accomplished and concluded by TTC4
- **Launch of follow up cooperation aimed to agree on joint recommendations for future public demonstrations of vehicle-to-grid integration pilots.** The objective is to have this ready by TTC5.
- **Conclusion of megawatt charging system standard for the recharging of electric heavy-duty vehicles** to ensure compatibility of physical connector plug standards, and a minimum communication requirement standard for recharging point operators. This is a deliverable for TTC4.
- **Transparency for green transition incentives.** In the U.S.-EU Clean Energy Incentives Dialogue, we have committed to work on transparency in our respective clean tech incentives and on third-country incentives of shared concern.

ii) Resilient and sustainable supply chains for the clean economy

- **Launch of early warning mechanisms on disruptions in supply chains of key sectors for the green transition;** initial focus sector will be solar panels. To support this work, the European Union and United States will organize a workshop with industry by TTC5 to discuss the challenges faced by the sector in terms of the functioning of the underlying supply chain.
- **Launch cooperation on supply chain transparency and traceability as well as on due diligence** to help ensure sustainable and responsible business practices. This will build on the work of international organisations like the OECD and UN and would involve exploring best practices, including the use of emerging technologies such as blockchain, Artificial Intelligence (AI), or Internet of Things (IoT). To support this work, the European Union and the United States will organize a government-to-business workshop by TTC5 to collect views from market participants on how EU-US cooperation can best promote transparency and traceability across supply chains.
- **Launch of a study on the cross-border deployment of digital tools to facilitate the bilateral trade linkages that underpin EU and U.S. supply chains** that are central to the green transition. To be ready by TTC5.
- **Launch cooperation to identify joint initiatives to support ongoing efforts to diversify EU and U.S. supply of rare earth magnets as a way to avoid reliance on geographically concentrated primary production and processing,** including the sharing of regulatory best practices and the promotion of recycling. A joint document with concrete proposals to start this cooperation to be ready by TTC5.

iii) Benefits for workers and consumers in the green economy

- **Organisation of a joint workshop on ways to encourage social dialogue and support for workers and employers** to promote successful just and inclusive green transitions. To be done by TTC5.

iv) A global path for the green transition

- **Discuss ways in which the EU and the United States can best contribute to the work of the Coalition of Trade Ministers on Climate**, which was launched on 19 January 2023.
- **Discuss and share views on how to advance trade, labour, and environment goals in multilateral organizations and processes** – in particular, in the ILO, the G7, G20, the OECD, WTO Trade and Environment Structured Discussions (TESSD), the WTO Committee on Trade and Environment, and the WTO GPA Work Program on Sustainable Procurement.
- **Deepen cooperation to support partner governments’ implementation of labor and environmental provisions** in EU and U.S. respective trade agreements with those partners.

Step 2: at TTC5

i) A sustainable business environment for an integrated transatlantic marketplace

- **[Consider the launch a broader initiative to create a “green transatlantic marketplace”**. The decision will be based on the assessment of the progress achieved on the cooperation in step 1, notably as regards the work on regulatory approaches for green goods and technologies, and on the cooperation on conformity assessment.].
- **Organisation of a comprehensive EU-U.S. stakeholder event on the Green Transatlantic Marketplace**. To be done at the time of TTC5.
- **Launch of a transatlantic circular economy initiative** to facilitate the conditions for bilateral trade in reusable, repairable, refurbished, or remanufactured products. The scoping work (to be achieved by TTC5) for this initiative should consist of the following elements:
 - Mapping exercise to identify priority sectors for which the trade in reusable, repairable, refurbished or remanufactured products would be of mutual interest, as well as of the existing barriers to circular trade in those sectors
 - [Description of possible cooperation to reduce packaging used and packaging waste generated in transatlantic trade.]
 - Exploratory discussions on the use of digital initiatives/tools to promote the circular economy like for example, the EU Digital product passport that concerns the collection and the secure sharing of product-related data across the value chain, with the aim of improving product sustainability and the transparency of supply chains and enabling sustainable business models.
- **Launch of a joint EU-U.S. initiative on green public procurement policies:** (based on the joint catalogue of best practices for green public procurement and following stakeholders’ consultation) to deepen the commonalities of the respective public procurement approaches

with the aim of contributing to achieving our climate ambitions. This initiative could also inform discussions within the WTO Agreement on Government Procurement.



TTC Ministerial**Transparent and accountable online platforms**

As part of the Data Governance and Technology Platforms Working Group, the European Union and the United States share a common goal that citizens and businesses should benefit from a safe, fair, transparent and open online environment. In this context, the European Union and the United States propose high-level principles both on the protection and empowerment of children and youth in the digital environment, as well as on access to data from online platforms for researchers to promote independent public interest research on these platforms' impact on society. These principles may be implemented in an appropriate manner by the United States and the European Union, in accordance with their respective laws and policies, and serve as basis for further discussion and action within the Trade and Technology Council.

Protection and empowerment of children and youth

The European Union and the United States share the view on the protection of minors that:

- Online platforms should exercise greater responsibility in ensuring that their services and products are safe, contribute to an online environment that protects and respects children and youth and prioritizes the well-being, privacy and safety of children and youth above commercial motives, and otherwise comply with domestic laws and regulations. Online platforms should not present advertisements based on profiling using personal data of children or youth.
- Online platforms should protect children and youth from harm, including to their mental health and well-being, through practices that improve health and safety, and set safeguards to prevent and mitigate risk. Online platforms should use age-appropriate design and default settings, appropriate to their services, to minimize data collection, support safe interactions on online platforms, and to protect against harmful content and interactions, sexual exploitation and abuse, and manipulation online.
- Governments must respect their international law obligations, including international human rights obligations, in their actions and policies regarding the online environment. This includes legal obligations related to privacy, freedom of expression, and freedom of association, for people of all ages.

The European Union and the United States share the view on the empowerment of minors that:

- Children and youth should have the opportunities to acquire the necessary skills and competences, including media literacy and critical thinking, to navigate, engage, and make informed choices in the digital environment safely.
- Every child deserves to thrive in a safe and empowering digital environment and to have inclusive access to digital technologies. A lack of opportunities to meaningfully engage with and learn how to navigate digital technologies can result in a lack of digital skills and confidence in adult life and reinforce the digital divide – a gap in access which is particularly pronounced for marginalized individuals and communities.

- Children and youth, and their parents and guardians, should be given the opportunity to engage on digital policies that concern them. Online platforms should consult children and youth, and their parents and guardians, in the development and deployment of their digital products and services.
- Responsible public interest researchers, in accordance with existing law, should be afforded appropriate access to relevant data and algorithmic systems, with appropriate privacy and security guardrails, to better understand the impact of the use of such platforms on children and youth's health and development.

Facilitation of data access from online platforms for independent research

The European Union and the United States share the view that:

- Over the past years, online platforms have become key facilitators of exchange of information and economic transactions; their actions have enormous impact on so many dimensions of society – including citizens' rights, opportunities, and safety; information integrity, public discourse, and the practice of democracy; and the economy, public safety and public security.
- For these and other reasons, it is crucially important for independent research teams to be able to investigate, analyze and report on how online platforms operate and how they affect individuals and society, including the possibility of their disproportionate impacts on vulnerable, marginalized or underrepresented communities. We must increase transparency and ensure that platforms are more aware of, and accountable for, the societal consequences of their actions and designs.
- Until now, most of the data from platforms allowing independent research on systemic risks has come from voluntary initiatives by online platform providers themselves. These voluntary initiatives are often narrow in scope, unclear in their limitations, unpredictable in terms of access conditions, and bespoke such that cross-platform research and replicability are difficult. This has resulted in limited research possibilities for third parties to analyze and monitor systemic risks on online platforms and advance our common understanding of the online ecosystem, and as a result, limited understanding of how the platforms operate and what impact they have.
- Online platforms should share meaningful data and testing opportunities for the purpose of independent research by vetted researchers. Easy and accessible solutions should be put in place to allow for the study of systemic risks online, including: risks to information integrity, electoral processes, and democracy; safety and security; human rights; individuals' physical and mental well-being; and gender-based violence and minors. Such actions should be consistent with privacy protections and research ethics.
- As with all professional research, such access to testing and data should appropriately protect the rights and interests of those concerned, including through compliance with applicable requirements on the appropriate use of data, including the protection of confidentiality, privacy, intellectual property, and security.

- Information sharing mechanisms should build upon and be consistent with applicable legal and policy frameworks, including privacy safeguards and specific reporting and monitoring requirements and protections to prevent the unauthorized disclosure of confidential business information.



TTC Ministerial**Foreign information manipulation and interference in third countries**

Foreign information manipulation and interference (FIMI) and disinformation is an ever-changing security and foreign policy issue, with a fast-evolving and complex threat situation. Russia's strategic and coordinated use of such activity in the preparation and execution of its war of aggression against Ukraine has increased global attention to the ways in which aggressors manipulate the information environment, amidst global conflict. Intentional manipulation by malign actors of the information environment and public debate threatens the functioning of democracies and the well-being of societies around the world. We are increasingly faced with hostile campaigns manipulating global, regional, and local audiences by spreading chaos and confusion, aiming to undercut trust in well-established/proven facts, global partnerships and alliances, universal values and international human rights, and democratic norms and processes. We also see attempts to corrode the international, rules-based order and fora such as the UN Security Council through manipulative behaviour that undermines democratic institutions and values.

The European Union and the United States are mutually concerned about foreign information manipulation and interference and disinformation; the long-standing cooperation on this issue between us has contributed to a mutual understanding of the threat and close exchanges on effective responses which respect human rights. The Trade and Technology Council proved to be a crucial forum to add another, even more strategic layer to existing and operational cooperation. Against this background, and next to other ongoing work in various different fora, the European Union and the United States have taken a number of actions to increase transatlantic cooperation to proactively address foreign information manipulation and interference and disinformation, while upholding human rights and fundamental freedoms.

Common methodology for identifying, analysing and countering FIMI - The European Union and the United States have built a close partnership around efforts to address such manipulative activity by actors that intentionally seek to undermine the rules-based international order. Operationally, information sharing and discussions of policy and responses have made considerable progress. The TTC provided the opportunity for fundamentally enhancing the existing cooperation on threat intelligence sharing as it pertains to FIMI. **The European Union and the United States have adopted a common standard for exchanging structured threat information on FIMI**, through a more interoperable and machine-readable approach. When fully operational, information will be shared more efficiently, effectively and with a greater level of detail when it comes to understanding the manipulative tactics, techniques and procedures. This standard that the European Union and the United States are now using to analyse FIMI and share information is comprised of the DISARM framework¹, the STIX² standard and the OpenCTI platform³. This approach will significantly strengthen our collective efforts to identify, analyse and counter FIMI by enhancing

¹ The DISARM framework or the DISinformation Analysis & Risk Management is an open-source framework designed for describing and understanding the behavioural parts of disinformation/FIMI. It sets out best practices for fighting such activities through sharing data & analysis, and can inform effective action. The Framework has been developed, drawing on global cybersecurity best practices.

² <https://oasis-open.github.io/cti-documentation/stix/intro.html>

³ The OpenCTI project (Open Cyber Threat Intelligence) is a platform meant for processing and sharing knowledge for cyber threat intelligence purposes. It has been developed by the French national cybersecurity agency (ANSSI) along with the CERT-EU (Computer Emergency Response Team of the European Union).

our common situational awareness of FIMI threats. At the same time, this standard and its elements are made up of open-source solutions, which is key to ensure an approach that can be used by stakeholders around the globe. We have begun socializing this standard with partners, and many have expressed a willingness and desire to align on the common methodology for identifying, analysing and countering FIMI. The European Union and the United States will continue to expand the network of partners around this shared standard and identify ways to fill gaps in terms of both capacity and funding.

Enhancing the preparedness against FIMI in third countries together with Civil Society Organisations ('CSOs) and platforms – The European Union and the United States organised several workshops to bring together civil society organisations, academic institutions, and media outlets from Africa and Latin-America, as well as platforms active in these regions, to explore how a multi-stakeholder community can step up its actions in coordinating the response to FIMI and how the European Union and the United States can support those actions. Next to this, we are gathering comparable insights from fact checking networks, academic institutions, and media outlets in African and Latin-American countries⁴ to further deepen understanding of information manipulation and disinformation, such as narratives and tactics, in third countries and the needs and capacity of local and regional stakeholders to respond to those risks.

The European Union and the United States intend to further enhance support for capacity building in third countries, including by exploring additional actions to support and reinforce civil society and fact-checking organisations that facilitate the fight against FIMI on online platforms through our respective development funding mechanisms⁵. We are also supporting media literacy and basic digital competence training in Africa, Latin-America and EU Neighbourhood countries to ensure that citizens have the ability to recognise misinformation, as well as disinformation and other forms of FIMI, hateful and harmful speech and address these challenges through a bottom-up approach. A free and pluralistic media landscape is also essential to counteract misinformation, as well as disinformation and other forms of FIMI.

Call for action to platforms - The European Union and the United States also call upon online platforms to ensure the integrity of their services and to effectively respond to disinformation and FIMI, building on the example of the EU's Code of Practice on Disinformation. In particular, such responses should be targeted to the local or regional context, be grounded on research of local information environments and values, include adequate cultural and language capabilities, ensure timely and effective responses to requests from fact checkers, academic institutions, and media outlets, step-up efforts during critical periods, including elections and public emergencies, integrate the work of fact-checkers in their services, compensate fact-checkers for their work, and provide increased transparency and accountability around their actions to counter disinformation and FIMI.

⁴ See for example EDMO's report on "Challenges and opportunities of cooperation among continental networks of fact-checking organizations" <https://edmo.eu/2023/04/24/from-the-eu-to-the-world-challenges-and-opportunities-of-cooperation-among-continental-networks-of-fact-checking-organizations/>

⁵ The EU is currently undertaking a study looking at main actors and methods of disinformation in LATAM, Asia and Sub-Saharan Africa and providing recommendations for DG INTPA and partners to act in this space.

Annex IV: 6G OutlookContext

In the TTC2 conclusions the European Union and the United States recognised “the importance of emerging technologies for global prosperity and security” and stated that they “are committed to exchange information and explore opportunities for collaboration in our research and development agendas, notably for Artificial Intelligence (“AI”), telecommunication technologies beyond 5G and 6G, and quantum computing. Given that 6G will be a critical global infrastructure, common approaches towards 6G international standards are particularly relevant.”

Moreover, we proposed “to work towards a common vision outlining some of the key challenges and needs of future generations of communication technologies, including 6G. This could include technology requirements based on future use case categories, trusted connectivity in the context of next generation networks, spectrum issues, standardization of security and interoperability standards, as well as large-scale testing and experimentation. The partnerships currently set up in the EU (Smart Networks and Services Joint Undertaking (SNS JU)) and the United States (ATIS-Next G Alliance, NSF RINGS) could cooperate to advance this effort.”

6G research cooperation is an area where the TTC can deliver not only concrete results but also ensure that transatlantic technology leadership of future communication networks is ensured at the global level, including through involvement and support for the global standardisation fora that have shaped previous generations of communications technology. Transatlantic cooperation on fundamental research of groundbreaking technologies should enable likeminded global partners to develop 6G technologies that align with our common values and that are successful in the global race for excellence in 6G science and technology.

Transatlantic 6G stakeholder workshop

In light of the above, the U.S. and EU governments convened a workshop on 20 April to gather input from experts and key stakeholders in the field. The conclusions of the workshop [add hyperlink] provide a valuable input for the upcoming work under the TTC towards a common 6G roadmap.

Firstly, the workshop provided an overview of the current process under the International Telecommunications Union to define a global 6G vision as well as prepare for the World Radio Conference 2023 that is expected to make first steps to identify spectrum for 6G systems.

Secondly, the workshop introduced the main activities of the ongoing partnerships on both sides as well as their high-level visions (SNS JU, ATIS-Next G Alliance, NSF RINGS) and the cooperation frameworks already in place at industry level as well as the joint research and development priorities identified in the current work programmes.

Key experts provided their views on envisaged use case categories, the main expected technology and architecture challenges, 6G spectrum considerations, security challenges, as well as societal aspects such as sustainability and accessibility in view of common values shared by the European Union and the United States.

Guiding principles and key themes for a common vision

We aim to develop a common vision based on the following guiding principles:

- 6G technologies should be in line with common principles and values such as sustainability, privacy, accessibility and inclusiveness. 6G wireless communication systems should be trustworthy, resilient, and affordable and contribute to closing digital divides in both developed and developing nations.
- Similarly, 6G standards should enable enhanced connectivity including, but not limited to Direct-to-Device (D2D) satellite connectivity in an open and interoperable environment. This would help ensure worldwide broadband connectivity, including in rural and low-income areas.
- 6G technologies must also be an enabler for sustainability, considering environmental, social, and economic perspectives. A reduced carbon footprint and energy efficiency will be important design goals for 6G networks. More broadly, 6G should allow for reduced energy consumption across all sectors of the economy and society. Ideally, 6G technologies will generate less pollution and reduce other environmental impacts to better contribute to long-term social sustainability while maintaining economic feasibility.
- 6G standards should be developed with security-by-design, be private-sector led, and built on consensus-based principles to enable an ecosystem of resilient, open, interoperable, and software-based 6G solutions. 6G standards should be set in a transparent manner by standard setting organizations in conformity with relevant WTO principles on technical barriers to trade.

In light of the above, further work to complete our joint vision could concentrate on the following key themes: technology challenges and research collaboration; security and resilience; sustainability and energy efficiency; openness and interoperability; efficient radio spectrum usage; and the standardisation process.

Next steps towards a common vision and roadmap

Looking forward, the EU is planning to participate in a high-level international 6G meeting organized by the United States later this year, which aims to align approaches to 6G across likeminded partners.

We aim to build on the Memorandum of Understanding between the two stakeholder groupings on both sides of the Atlantic, the 6G Industry Association (the private member of the SNS JU) and the Next-G Alliance to provide common aligned stakeholder input on a 6G industry roadmap by autumn 2023. This common private-sector input will then feed into a TTC 6G common vision established by the U.S. and EU governments.

With this TTC 6G common vision as a basis, we aim to scale up the existing R&D cooperation on 6G between the U.S. and EU funding agencies, the SNS JU and the National Science Foundation (NSF), create critical mass among like-minded partners in global regulatory and standardisation bodies, and cooperate in technology trials and pilots to foster market adoption.