Tech7 Joint Statement

International conflicts and supply chain disruptions are a few of the challenges created by a new political, societal, and economic reality that need to be addressed and overcome collectively by like-minded partners who share the same values, such as an open market economy, human rights, freedom, equality, and the rule of law. The G7 Countries should work together more closely than ever to address the challenges we face today. Regional conflicts around the globe, geopolitical tensions, and climate change as key global challenges are increasing divisions and frictions among governments and economies. The G7 tech industry ("Tech7") has promoted solutions to various challenges through cooperation on technological innovation and will continue to do so in the future.

For the G7 Takasaki Digital and Technology Ministerial Meeting, we, the Tech7, propose the following focus areas and recommendations:

1. Facilitation of data flows to sustain and promote recovery of the international economy

Cross-border data flows are essential to modern economies and supply chains. The free flow of data underpins trade, R&D, innovation, and business operations across sectors, supporting the development and functioning of the products and services on which we all depend. The importance of cross-border data flows for international innovation and collaboration has been demonstrated during the fight against the COVID-19 pandemic. Instructively, the pandemic also demonstrated clearly how the lack of effective frameworks for international data flows can negatively impact the collaborative work urgently needed to develop and deliver vaccines. International governmental cooperation is essential to support a robust, reliable, and consistent approach to cross-border data transfers, which limits fragmentation, challenges, and unwarranted barriers, and reduces uncertainty for everyone.

The concept of Data Free Flows with Trust (DFFT), which was first proposed by Japan at the World Economic Forum (WEF) and at the G20 in 2019, has been widely understood through international dialogue so far, but there are still few concrete results.

The G7 and any international trade regime under negotiation should always include

provisions on international data flows. The ultimate goal should be for these agreements not only to support the flow of physical and digital goods but also the flow of data.

Recommendations:

- The Tech7 supports the roadmap for cooperation on DFFT formulated at the G7 in 2021 and the action plan for promoting data flows agreed upon at the G7 in 2022.

- We look forward to the leadership of the G7 in advancing the ongoing WTO Joint Statement Initiative on Electronic Commerce (JSI). The JSI negotiations have the potential to establish new global standards for digital trade that significantly reduce uncertainty for companies in all sectors doing business across borders. Particular attention should be paid to:

  - Ensuring the free flow of data across borders by combating restrictions on the global digital economy through harmonization of principles and international standards, which balance regulatory autonomy on privacy and data protection issues with the need for a globally consistent framework.

  - Refraining from imposing unjustified localization measures that require local storage or processing of data or use of local technology facilities (e.g. data centers).

  - Continued support for the World Trade Organization (WTO) Moratorium on Customs Duties on Electronic Transmissions and work towards a permanent moratorium. Numerous industries rely extensively on the seamless transmission of goods and services electronically, as well as the free flow of data. These industries encompass a wide range of sectors such as manufacturing, agriculture, entertainment, software development, financial services, semiconductors, aerospace, automotive, robotics, and medical technology.

  - Working together towards setting a common rulebook that prioritizes non-discriminatory and/or reciprocal approaches with regards to service providers, based on the location of their headquarters, ownership, or

sector; especially within the G7.

- Ensuring that governments do not undermine international protections of trade secrets and do not require the forced transfer of technology as a market access requirement or take any action that requires access to source code, algorithms, or cryptographic information.

- Encourage government-to-government and public-private sector dialogue to strengthen multi-stakeholder engagement in order to enhance interoperability in the application of data transfer rules and mechanisms, and to build trust among nations. We expect the G7 to take the initiative to create an international framework to operationalize DFFT, work towards practical and trustworthy ways to ensure the free flow of data while addressing challenges related to privacy, data protection, intellectual property rights, and security, and enable innovation and business growth. Tech7 members are ready to provide knowledge, expertise, and concrete use cases to support this process.

- In addition, the G7 should support building regulatory and institutional data protection capacity in developing countries. This will build public trust, increase understanding of different international approaches to privacy, facilitate improved international transfer mechanisms, and support cross-border data flows.

2. Utilization of digital technology in addressing global sustainability challenges such as climate change and the energy transition

The 2030 United Nations Sustainable Development Goals cover a wide range of areas, including climate change countermeasures, sustainable production and consumption, affordable and clean energy, and the realization of an inclusive society that leaves no one behind. By adopting digital technology globally and accelerating adoption in the global south, we will be able to provide effective solutions to address all of these issues. Above all, digital technology and connectivity will play a key role in attaining climate goals, and in accelerating the rollout of renewable energy, improving energy efficiency, and saving costs for consumers and businesses. G7 countries should work in concert to increase digital inclusion around the globe. The tech industry stands ready to assist the G7 in the implementation of the Partnership for Global Infrastructure and Investment.

We are convinced G7 countries should step up work on the alignment of subsidy packages for recovery and resourcing. Subsidies should be aligned between G7 members so that no discrimination takes place and common growth strategies are developed amongst partners.

Recommendations:

- We ask the G7 to recognize the role of digital technologies, in particular connectivity, sustainable networks, and digital infrastructure, AI/machine learning, and cross-border and cloud-based services, in accelerating and supporting decarbonization. G7 Countries should facilitate the cross-border diffusion of digital climate goods and services and address local content requirements and barriers to investment, trade, and data flow that currently inhibit technology diffusion. G7 countries should also pave the way for multilateral discipline on subsidies, including for clean technologies in a way that is compatible with the WTO.

- We call on the G7 to adopt an integrated approach to digitization and green transformation, that deploys digital technology rapidly across all heavy emitting sectors. Efforts towards carbon neutrality and improved energy efficiency are being promoted on a global level to deal with climate change. In this effort, the visualization, traceability, and authenticity of carbon data in the supply chain play a significant role. It is important to ensure security and reliability in order to analyze data and work to reduce emissions throughout the supply chain involving various entities. In other words, advancing the societal implementation of DFFT will greatly contribute to reaching carbon neutrality, and we look forward to a mechanism that encourages the use of secure and trusted digital technology in this context.

- We welcome the G7's approach to developing data-sharing agreements to support greenhouse gas reduction, climate adaptation, and ecosystem monitoring.

- The global shift to net zero is being hindered by the lack of consistent taxonomies, and reporting frameworks. There should be equivalence and interoperability between the different sustainability reporting standards and disclosure frameworks to avoid ‘compliance shopping’, as well as to provide

stakeholders (investors, customers, regulators, and the public) with accessible and credible data on business environmental performance.

- G7 countries should step up their support for international research efforts to back up the rapid deployment of promising AI, digital twins, and emerging technologies to help mitigate climate change. A global and collaborative approach is also needed to strengthen support for the development of international standards and strengthen incentives for circular design and business models in electronics.

- G7 Countries should increase investment in R&D funding programs that should align on common objectives and allow more cross-border cooperation and participation by increasing funding resources and involving more stakeholders and organizations.

- G7 countries should provide aid and support to countries most at risk from climate change to adopt digital tools to strengthen their adaptation and resilience to climate risks. Adaptation is hardly possible without the latest technology, however, countries often lack the skills, connectivity infrastructure, and equipment to deploy and use it.

3. Global dissemination of human-centered AI principles:

The use of AI, including the new generative AI system, is rapidly expanding around the world, and along with other technologies, it is expected to help solve complex social and environmental challenges facing the modern world, advance productivity, and support growth in a wide range of fields. AI drives the world's economic productivity and growth, supports people in all aspects, including helping to deliver public services, and contributes to the development of mature digital markets. The G7 should share the same understanding of AI's role in building trust and align around core principles.

Recommendations:

- Collaborating across borders to establish common principles, standards, governance approaches, and safeguards is critical to ensuring that AI is developed and deployed responsibly. A number of initiatives, including the OECD AI Principles agreed upon in 2019, represent positive progress in this

direction, empowering citizens around the world to see how AI can make a positive difference in people's lives. We hope the G7 will continue to work together to prove it.

- As the AI ecosystem develops, the role of international industry-driven standards will need to be considered. AI is a complex and globally evolving topic. The G7 needs to respect the progress of industry-led international standardization (especially through ISO/IEC) in accordance with WTO rules and should work towards the creation of a global environment where compliance with policy and regulatory requirements and interoperability between different implementations can be achieved without limiting the potential for innovation by mandating, or restricting the development of, specific technologies.

- Ensuring that citizens and businesses are well educated about the benefits of AI and emerging technologies, from schools to workplaces to public debates, is a key factor in building trust in AI.

- Furthermore, we recommend the G7 acknowledge the importance of advancing deeper multi-stakeholder collaboration at a global level on these important issues and commit to sponsoring work in the Global Partnership on AI. This should focus on shared terminology and taxonomy for trustworthy AI and risk management, and research how best to use AI, including generative AI, to address major societal challenges, and the creation of new channels for participation in global dialogues (such as GPAI) for representatives from civil society, academia, and industry.

- Tech7 supports the idea of promoting cross-border AI Regulatory Sandboxes to test AI solutions across borders and promote regulatory cooperation and innovation.

4. Cyber security to secure trust

With the increase in online services and activities, the digitization of industries, and the increase in connected devices (IoT), the role of cybersecurity has become even more important in providing stable networks. Strong cybersecurity measures that protect systems and data from cyber threats are fundamental to securing the digital economy and consumer trust. From critical infrastructure to consumer device

makers, ensuring cyber security has become imperative for all participants in the digital ecosystem. Risk-based cybersecurity is a prerequisite for unlocking the potential of data for economic growth and social good in areas such as healthcare. Yet, each country and region has its own cybersecurity policies and measures (e.g. EU's NIS2, cybersecurity certification scheme and NLF, Japan's Cyber/Physical Security Framework (CPSF), and IoT Security Safety Framework (IoT- SSF)), leading to fragmentation and in some cases discrimination against companies from allies countries. G7 members must align on internationally-recognized cybersecurity frameworks, measures, and risk management best practices to ensure interoperability and data flows among the G7 to address cross-border cyber risks that may jeopardize the functioning of our economies and societies.

Recommendations:

- Harmonization among domestic policies must be achieved to ensure shared cybersecurity outcomes among trusted nations. It is imperative that G7 countries work together in an integrated approach that promotes open, international, consensus, and risk-based cybersecurity standards to facilitate cross-border collaboration by experts, promote cybersecurity best practices, and facilitate trade and data transfers between trusted partners and avoid any action that could weaken the availability or security of systems across borders or hinder effective cooperation amongst companies of G7 members.

- Promote international standards, mutual recognition frameworks, and cross-border data flows, which are important to protect and detect cybersecurity risks and ensure the cybersecurity of IT equipment.

- Promote voluntary sharing of vulnerability information to help prevent, mitigate, and respond to cyberattacks.

- Promote information sharing between law enforcement agencies to counter the transnational threat of cybercrime.

- Ensure that government policies do not attempt to insert backdoors or impede end-to-end protection in order to protect the foundations of a safe internet as well as fundamental human rights.

- Promote and expand the industrial control system cybersecurity training for the Indo-Pacific region conducted in Japan, the US, and Europe to cover more regions and industries. Promoting responsible state behavior in cyberspace through international fora is essential.

5. Advancing connectivity for new digitalization opportunities for society (6G)
Secure digitalization comes with great potential to transform industries and our society. It is also vital to achieving sustainability targets. The mobile network platform, as defined by 3GPP for 4G and 5G, is already the primary and most reliable means of internet access and digital services interaction for most of the world's population and constitutes critical infrastructure for the functioning of society. Still, the future mobile network platform will and must continue to evolve and achieve further advances in e.g., openness, configurability, capacity, security, and reliability needs, to meet the demands of being the communication and digitalization backbone of society.

The Tech7 supports the ambitions to expand the global ecosystem to ensure affordability for the global south, combined with new possibilities for security. Future mobile network platforms can continue to create an unprecedented foundation for a sustainable, secure, and more accessible digital economy for consumers, enterprises, and governments.

Recommendations:
G7 members are well positioned to produce ground-breaking research while furthering each other's capabilities through increased research cooperation creating mutual benefits toward leadership ambitions in 6G. G7 economies will benefit immensely from global, open 6G standardization efforts founded on WTO/TBT principles for international standards development. The importance of these principles was reconfirmed by G7 in 2021 and 2022.

While initial 6G research is already being performed at national and regional levels, the G7 should work together with global ambition in the following areas:

- Recognize the importance of 6G as an emerging critical technology and the need for alignment across the G7 on a common 6G research vision. Research collaboration should be promoted by building innovation bridges between G7

members' initiatives, and standardization of 6G should adhere to WTO/TBT principles for international standards development.

- 6G research should be built on an open and interoperable architecture that also ensures ground-breaking achievements in terms of functionality, performance, security, and energy efficiency, which is also well aligned with the ambitions stated by G7 digital ministers in 2021.

6. Proactive Cooperation to improve basic and advanced digital skills

In a rapidly changing world, digitization is an issue for all: businesses, governments, and civil society as a whole. Acquisition of basic digital skills at an early age is critical to the future of all countries and their citizens, and a precondition to narrowing the digital divide, by upskilling and reskilling citizens. Advanced digital skills in ICT processes from software development to new information systems design and management, and in several innovative areas, from data security to AI and data analytics/big data, are essential to accelerate adoption and reap the full benefits of new digital solutions. Ensuring that young people have access to online resources to develop digital skills and participate in the global digital ecosystem with their peers is essential to equip this and future generations with essential knowledge and expertise. Collaboration among G7 countries will be critical in affording young people the full opportunities of digitization and ensuring that vulnerable and disadvantaged young people are not excluded.

While policies are already in place at national and regional levels to address the digital skills gap, the G7 should work together globally in the following areas:

- Establish compulsory computer science modules in the curricula of primary and secondary education.

- Develop shared human resources initiatives specializing in cyber security, data, and AI for universities and polytechnics, and ICT-specific secondary schools.

- Encourage ambitious public-private partnerships, providing advanced digital skills education opportunities to upskill and reskill existing workforce in areas such as cybersecurity, data, AI, and the green and digital transition.

- Encourage better recognition and reskilling validation of industry-led

certification to make labor markets more inclusive and aligned with market reality. Encourage life-long learning pathways through a faster uptake of relevant schemes.

- Promote STEM education in particular among the female student population.