



G7 INDUSTRY, TECHNOLOGY AND DIGITAL MINISTERIAL MEETING

Verona and Trento 14-15 March 2024

Ministerial Declaration

1. We, the Industry, Tech & Digital Ministers of the G7, met on 14-15 March, 2024 in Verona and Trento under the co-chairmanship of Mr. Adolfo Urso – Minister of Enterprises and Made in Italy – and of Mr. Alessio Butti – Undersecretary of State to the Presidency of the Council of Ministers – to discuss the impact of digital innovation on economic growth and industrial competitiveness, and how to leverage the digital transformation and Artificial Intelligence (AI) to advance our economies and societies in an inclusive and sustainable way.
2. We welcomed invitations to Brazil, the Republic of Korea, Ukraine and the United Arab Emirates, the International Telecommunication Union (ITU), and the UN Secretary-General's Envoy on Technology. We are grateful for the efforts of the Organisation for Economic Co-operation and Development (OECD); United Nations Development Programme (UNDP); and the United Nations Education, Scientific and Cultural Organisation (UNESCO) as knowledge partners.
3. The future of our economies, and their sustainability and resilience, depends on our determination to promote innovation and on our ability to help translate the digital transformation into concrete benefits for our citizens and to address the related challenges. We reaffirm our unwavering commitment to the principles of the rule of law, due process,

democracy, and respect for human rights while harnessing the opportunities of innovation. In the context of the digital economy, we affirm our support for market-based economies and for promoting international cooperation, which is key to fostering prosperity, stability, and security. We acknowledge the importance and the impact of dynamic global digital markets for competition and innovation in our economies. We reiterate the importance of both using existing competition enforcement tools and considering, developing, and implementing new or updated competition policy initiatives or regulatory and competition frameworks, as appropriate, to foster fairness and contestability, address the issues caused by entrenched market power, and promote competition. These efforts complement our commitment to a digital ecosystem that benefits consumers, encourages new entrants, and fosters innovation.

4. Building on the reaffirmation of our commitment to an open, free, global, interoperable, reliable, and secure Internet, we remain committed to preventing Internet fragmentation and addressing fragmentation where it occurs today. We object to fragmentation of the Internet's technical infrastructure, which directly undermines the Internet's global function. We express concern for any proposals that undermine the Internet's inclusive and global multistakeholder system of governance.
5. In this same spirit, we look forward to continuing, with the support of UNDP and ITU, an open and constructive dialogue with developing countries and enhancing our collaboration to identify solutions to common challenges.
6. We reiterate our resolute condemnation of the Russian Federation's unprovoked aggression against Ukraine, which includes targeting of Ukraine's digital infrastructure. Ten years on since Russia's illegal attempted annexation of Crimea and into the third year of its full-scale invasion, in flagrant violation of the UN Charter, we firmly restate the call on Russia to promptly withdraw all forces from Ukraine and reaffirm our commitment to support the resilience of information and communication technology (ICT) infrastructure.
7. We acknowledge the significant opportunities that digital technologies, including AI, present across all policy areas and sectors. We are aware of the evolving and complex challenges that digital technologies, including AI, pose with respect to protecting human rights, including privacy, and of the risks to personal data protection, security and safety, intellectual property, the environment, and of widening digital divides, including the gender digital divide. We remain mindful that online platforms, together with AI-enabled products, can be used to enable the generation and spread of hate speech and disinformation and other forms of information manipulation, with the potential to fuel social divides and create mistrust in institutions and organisations. As such, we are committed to achieving an appropriate balance between fostering innovation and the need for appropriate guardrails as we advance our collective efforts to promote safe, secure, and trustworthy AI.
8. These challenges and risks reinforce the need to integrate ethical considerations in relation to the development, deployment, and use of such technologies.

9. We are committed to working together to continue fostering innovation and advancing the safe, secure, and trustworthy development, deployment, and use of AI and other digital technologies in a manner that respects democratic values and human rights in line with inclusive and sustainable economic growth, resilient public administrations, and well-being for our societies.
10. We further recognise the importance of data governance for digital transformation and reaffirm our commitment to operationalising Data Free Flow with Trust (DFFT) and to build upon commonalities, complementarities, and elements of convergence between existing regulatory approaches and instruments enabling data to flow with trust in order to foster future interoperability.
11. In this regard, we applaud the recent progress made in advancing DFFT through the Institutional Arrangement for Partnership (IAP), currently in the form of the DFFT Expert Community at the OECD. We call on the IAP to regularly update and exchange on its progress, next steps, and priorities, and collaborate with the G7 in subsequent meetings, upon invitation, to support our collective efforts to operationalise DFFT. We look forward to further work to promote DFFT, recognising the importance of strengthening global data governance, and welcome knowledge sharing in the context of G7 data protection authorities' roundtables.
12. We acknowledge the potential of AI and digital systems to help improve governments' provision of public services and the ongoing international discussions on different approaches to digital identity and other digital government services, including digital public infrastructure (DPI), and the value of sharing examples.
13. Mindful of the cross-disciplinary nature of digital technologies, including AI, we are also committed to broad and inclusive engagement with key partners and stakeholders, based on shared values. We further note the need to involve the private sector, given its key role in driving innovation in AI and other digital technologies, and welcome the G7/B7 High-level dialogue on the Future of Industry.
14. Applauding the outcomes achieved under the Japanese G7 Presidency in 2023, we remain committed to further advancing the Hiroshima AI Process Comprehensive Policy Framework ("Framework"), in accordance with the workplan, including the implementation of the International Guiding Principles ("Principles") and International Code of Conduct for Organisations Developing Advanced AI Systems ("Code of Conduct"). We look forward to further opportunities to implement, promote, and raise awareness of these outcomes, including at the forthcoming OECD Meeting of the Council at Ministerial level in May 2024, chaired by Japan. We also welcomed the 2023 UK hosted AI Safety Summit focused on advanced AI risks and look forward to the upcoming international AI summits to be hosted by the Republic of Korea and France.
15. We stress the importance of international discussions on AI governance and interoperability between AI governance frameworks, while we recognise that like-minded approaches and

policy instruments to achieve the common vision and goal of safe, secure, and trustworthy AI may vary across G7 members. We welcome ongoing efforts by G7 members and encourage members to advance and reinforce interoperability between AI governance frameworks.

16. We have therefore resolved, under the Italian G7 Presidency and building on the achievements of previous G7 Presidencies, and with the support of the OECD, UNESCO, and other international organisations, to advance our discussions on policies, tools and mechanisms in the areas of AI in the public sector; on digital government; on the outcomes of the Hiroshima AI Process.
17. Based on the premises of past G7 Digital and Tech Ministers' meetings, we discussed AI and emerging technologies in industry; secure and resilient networks, supply chains and key input factors; and digital development – growing together.
18. We recognise the continued importance of G7 collaboration on technical standards for digital technologies and reaffirm our support for private sector-led standards development based on inclusive multistakeholder approaches. We reinforce the critical role of international standards across digital topics outlined in this Declaration.

Industry and Technology

AI and Emerging Technologies in Industry

19. We recognise that AI and other emerging technologies, if shaped to be safe, secure, and trustworthy, can be pivotal for the achievement of the Sustainable Development Goals (SDGs). They can positively impact many industries, with vast potential to increase productivity, efficiency, innovation, and scientific discovery. Adoption of these technologies among companies, particularly in the manufacturing sector, can enhance industrial competitiveness, new business opportunities, and market participation. We reaffirm the importance of an enabling environment that maximises the benefits of AI while mitigating its risks, for instance with respect to cyber-enabled threats, social and economic inequalities, gender discrimination, bias, and disinformation, including foreign information manipulation.
20. We recognise that AI can be integrated into industrial processes with the potential to increase productivity and output in an environmentally sustainable way. If deployed in a safe, secure, and trustworthy manner consistent with respect for human rights, AI and other emerging technologies, can be used to optimise business processes, generate new products or product designs, analyse large amounts of data and generate insights that can help companies make informed decisions and reduce costs, while enhancing job quality. We seek to ensure that micro, small, and medium sized enterprises (MSMEs) benefit from the digital transformation, grasping the full potential of this technology. We recognise the importance of training and workforce development for enterprises, particularly MSMEs, to increase awareness and skills needed to develop, deploy, and use AI.

21. To achieve this, we consider technical collaboration, as well as voluntary knowledge exchanges, as key mechanisms to foster industrial competitiveness, promote new business opportunities, and encourage a level-playing field for wide market participation.
22. To this end, we affirm the importance of joining forces to promote effective cooperation among G7 members and key partners from developing countries to encourage effective technology adoption among companies and robust technical collaboration amongst stakeholders across value chains.
23. Therefore, we endorse the proposal of the Presidency to develop a report by the end of the year on analysing driving factors and challenges of AI adoption and development among companies, especially MSMEs, providing policy options for G7 governments to promote safe, secure, and trustworthy adoption of this emerging technology whilst ensuring the full respect of applicable legal rights, including intellectual property rights and protection of trade secrets.
24. More specifically, the aim of the report is to:
 - Improve our joint understanding of how strategies on technology adoption, technical collaboration, and voluntary knowledge exchanges can support the integration of AI in business processes.
 - Collect and assess policy strategies and experiences across G7 countries for AI adoption among MSMEs to identify best practices and develop knowledge repositories, with case studies and lessons learned.
 - Engage stakeholders with the aim to raise awareness of how AI can be used to optimise business processes, promote voluntary knowledge exchanges among trusted companies, and discuss obstacles in adopting this technology.
 - Provide a set of recommendations to key stakeholders on effective strategies to support MSMEs in the deployment and uptake of safe, secure, and trustworthy AI.
25. The safe, secure, and trustworthy use of AI has the potential to rapidly transform our lives, societies, and economies. We call on the G7 competition authorities to remain mindful of the development of the AI industry, address competition issues, and prevent adverse effects at an early stage to foster fairness and contestability and ensure that the benefits of digital technologies, including AI, are fully reaped through a competitive environment. As we recognise that competition in the digital economy is key in fostering innovation and strong, sustainable, and inclusive growth, we encourage further discussions on competition in AI and digital markets among G7 competition authorities and policymakers, including on applying existing laws and regulatory tools. Against this backdrop, we acknowledge that international cooperation in the digital economy is key and therefore we support continuing the G7 Digital Competition Summit, to be held this year in Rome, building on the knowledge accumulated and shared by the past G7 Presidencies, with a particular focus on AI. The Summit will facilitate an exchange on horizon scanning activities, enforcement and new regulatory

approaches with the goal of further strengthening international cooperation among G7 competition enforcers and policymakers.

26. Amongst emerging technologies, we acknowledge that quantum technologies can increasingly become part of the economic landscape, as both public and private investments have been growing over the last decade. Quantum technologies are expected to provide novel ways to acquire, transmit, and process information, with the potential of quantum computing to drive breakthroughs in chemistry, materials, and physics that could support applications across many industries. Moreover, quantum sensors could transform how critical infrastructure is monitored and maintained and improve healthcare outcomes, for example, by potentially enabling earlier diagnosis. Finally, quantum communications and networking could interconnect quantum technologies through distributed entanglement, offering the potential for increased precision of quantum sensors and the enhanced capabilities of quantum computers.
27. Quantum industry consortia, comprising active companies from start-ups to large corporations, are present in all G7 countries. New quantum ecosystems are thus emerging, and many different hardware platforms are being developed to explore industrial implementations of these nascent systems. We welcome G7 collaboration to foster the growth of the quantum industry, leading to shared benefits.
28. We recognise the benefits of sharing information among G7 countries to promote the development of human resources and the sharing of technical knowledge and to support research and development toward the industrial adoption of quantum technologies. We welcome the efforts of the G7 Science and Technology Ministers to consider exploring the skills needed for the quantum workforce and collaboration between academia and industry.
29. The emergence of a global market for quantum technologies should include the development and appropriate adoption of technical standards, as well as pre-standardisation activities, such as benchmarking, terminology, and metrics. This may support comparison and interoperability among different quantum devices and facilitate compatibility with existing technologies. We encourage, where appropriate, the development and adoption of international technical standards in standards development organisations.
30. We applaud the efforts of the OECD Global Forum on Technology, which brings together the multistakeholder community to tackle future risks and opportunities of emerging technologies, including quantum technologies.

Secure and Resilient Networks, Supply Chains and Key Input Factors

31. Building upon the G7 Leaders' Statement on Economic Resilience and Economic Security at the Hiroshima Summit, including *the principles on resilient and reliable supply chains*, we acknowledge the need to ensure resilient and reliable global supply chains. We recognise the importance of cooperative efforts to pursue resiliency of global supply chains especially

in digital industries in order to promote sustainable, reliable, and trustworthy sources for strategic goods.

32. Within this framework, we acknowledge the key role of semiconductors as foundational to the digital economy and their supply chain critical to economic security and resilience. To that end, we welcome the establishment of a semiconductors Point of Contact (PoC) Group dedicated to facilitating information exchange and sharing best practises among G7 members. The PoC Group plans to exchange information on issues impacting the semiconductor industry, including but not limited to: pre-competitive industrial research & development priorities, sustainable manufacturing, the effect of non-market policies and practices, and crisis coordination channels, leveraging the work of and in collaboration with the OECD Semiconductor Informal Exchange Network. The PoC Group intends to work throughout Italy's G7 Presidency and engage key stakeholders from industry, academia, and others.
33. Building on the 2023 G7 Digital and Tech Ministerial Declaration, we continued our discussion on secure and resilient terrestrial networks, undersea cable networks, and non-terrestrial networks to promote global connectivity. Under the Italian G7 Presidency and against the background of current stage deployment of Open RAN, we have continued to exchange views on open architectures and security-related aspects and opportunities. We affirm the importance of secure ICT ecosystems that avoid critical dependencies as we look to strengthen safe, secure, and resilient multi-layered global connectivity. We also discussed efforts to advance sustainability, including energy efficiency, of global connectivity given its growing role in underpinning our economies and societies. To further strengthen G7 priorities on secure and resilient digital infrastructure, we are committed to continue working collaboratively within the G7 and with industry and other stakeholders to promote global connectivity.
34. We especially reiterate the importance of undersea cables given the growing value of secure connectivity. To that end, we intend to deepen our discussion on supply chain risks for secure undersea cable networks, including maintenance and repair.
35. We believe promoting connectivity through undersea cables would benefit our economies and societies by improving security and resilience of global communication networks.
36. Therefore, we support the endorsement of a Joint Statement on Cable Connectivity for Secure and Resilient Digital Communications Networks [Annex 1].
37. Furthermore, as indicated in the 2023 G7 Vision for future networks in the Beyond 5G/6G era, we recognise non-terrestrial networks as vital elements of secure and resilient ICT ecosystems, particularly in our efforts to build redundancy through multi-layered ICT networks, such as satellites and high-altitude platform stations.
38. In particular, satellite networks provide crucial support for global telecommunications and applications. They provide essential services to both governments and the public through satellite operations in times of peace, natural disasters, and crisis.

39. We note that space technologies play an important role across the global economy, including in space and earth observation, environmental monitoring, position, navigation and timing (PNT), and telecommunications. In line with the 2023 Sendai G7 Science and Technology Ministers' Communiqué and the G7 Hiroshima Leaders' Communiqué, we strongly encourage further efforts to ensure the long-term sustainability of outer space activities, including through researching and developing methods and tools, capacity building, orbital debris mitigation and remediation and global coordination on space situational awareness.
40. To that end, we see the need for services and applications via satellite constellations, considering that the development of these networks can advance ICT ecosystem resilience and provide global and uninterrupted broadband connectivity.

Digital Development – Growing Together

41. We recognise the need for a multifaceted approach aimed at fostering global digital advancement for inclusive and sustainable development to help accelerate progress toward achieving the SDGs. Grounded on an international rules-based system, which includes international human rights frameworks, additional joint efforts are needed to bridge digital divides, including bridging the gender digital divide by 2030, promote sustainable economic growth, address the challenges associated with digital transformation among individuals and society at large, and ensure that the benefits of digital technologies are shaped and shared equitably.
42. To accelerate progress toward the achievement of the SDGs, it is vital to pursue a whole-of-society, multistakeholder, and collaborative digital transformation notably via voluntary efforts between public and private institutions. This is particularly crucial in enabling a deeper and more systemic digital transformation, inter alia, in the safe, secure, and trustworthy development, deployment, and use of AI aimed at achieving the SDGs. To that end, we affirm the potential of AI to help address development challenges, for instance the climate crisis, education, and health. We also recognise the importance of AI systems that reflect the cultural and language diversity of local communities, including in emerging economies and developing countries. We further acknowledge the importance of building local capacity in AI in developing countries that reflects local cultures and language.
43. We welcome progress on the UN General Assembly resolution “Seizing the Opportunities of Safe, Secure, and Trustworthy Artificial Intelligence Systems for Sustainable Development” to advance international conversation on leveraging AI systems for sustainable development, while managing the risks of these technologies. We also look forward to the discussions initiated by the Brazilian G20 Presidency on AI for sustainable development. We welcome inclusive discussions on the opportunities and risks associated with AI for sustainable development, in particular with key partners from developing countries.
44. We acknowledge the need for strengthening multistakeholder collaboration for local impact in developing countries – to promote and support them as key partners in the safe, secure,

and trustworthy development, deployment, and use of AI for sustainable development. To this end, we recognise the need to strengthen local digital ecosystems, including through enabling policy frameworks and incentivising innovation for sustainable development. We acknowledge that challenges within local digital ecosystems can create roadblocks for fully leveraging the benefits of the digital transformation for sustainable development. The Italian G7 Presidency is pleased to continue gathering ideas and to identify mechanisms, fora, and tools supporting multistakeholder collaboration with developing countries, with a particular focus on Africa in 2024, including on its proposal for an AI Hub for Sustainable Development.

45. We reiterate our willingness to work with key partners in emerging economies and developing countries to ensure that AI is inclusive, responsible, and equitable. To this end, we recognise the need for shared dialogue between the public and private sectors, including in multistakeholder and multilateral fora, and to build on existing initiatives and consortia mobilised by G7 members to support collaborative efforts toward partnering with developing countries to bridge digital divides and leverage digital technologies to promote sustainable development.
46. We emphasise the importance of digital development efforts that, aligned with the 2030 Agenda for Sustainable Development, promote respect for human rights and foster inclusive and sustainable development at the local, national, and international level, in close co-operation with civil society, non-governmental organisations, and the private sector.

Digital and Technology

AI in the Public Sector

47. AI is already changing the way we work, live, and interact, contributing positively to innovation, productivity, and economic growth, across the private and public sectors, while bringing important changes to sectors such as manufacturing, education, health, public administration, and services, and the world of work. To harness the opportunities of innovation, we recognise the critical role and responsibility of governments in shaping and steering the safe, secure, and trustworthy development, deployment, and use of AI systems, including to design and deliver better public services tailored to citizens' needs and expectations.
48. At the same time, it is more apparent than ever that the development, deployment, and use of AI systems should respect the rule of law, due process, democracy, human rights, including privacy, and protect personal data and intellectual property, including by promoting transparency, fairness, and accountability, while preventing and mitigating possible misuse and abuse. We recognise in this regard the 2019 OECD Recommendation on AI, as well as its ongoing revision, and the 2021 UNESCO Recommendation on the Ethics of AI.

49. We reaffirm that AI policies, regulations, and governance approaches should be risk-based and forward-looking to preserve an open and enabling environment for AI development and deployment that maximises the benefits of the technology for people and the planet while mitigating its risks.
50. Recognising the need for G7 members to ensure that their public sectors are equipped to deal with AI systems, we look forward to the development of a toolkit, to be finalised during the Italian G7 Presidency, informing an open and enabling environment for the safe, secure, and trustworthy development, deployment, and use of AI in the public sector.
51. The toolkit will help the public sector and, where relevant, other stakeholders, translate principles for safe, secure, and trustworthy AI into actionable policies, recognising opportunities and risks. The toolkit will act as a snapshot to further help assess AI's relevance in the public sector, including for specific domains, as detailed in Annex 2. It may also explore mechanisms to encourage, as appropriate, the role of relevant public sector data to support governments developing safe, secure, and trustworthy AI.

Advancing the Outcomes of the Hiroshima Artificial Intelligence Process

52. We remain committed to advancing the Hiroshima AI Process outcomes, including through expanding support and awareness among key partners and organisations, as well as increasing their involvement, as appropriate.
53. Based on the Framework we look forward to continuing our work, including the development of mechanisms to monitor the application of the Code of Conduct by organisations that will commit to these outcomes on a voluntary basis, with the support of the OECD and informed by other stakeholders, organisations, and initiatives as relevant, such as UNESCO and the Global Partnership on AI (GPAI), and on the basis of the steps set out in Annex 3. We welcome the awareness raising event that took place on 22 January 2024 and look forward to other opportunities for engagement with key partner countries, including from developing countries and emerging economies, and organisations.

Digital Government

54. We acknowledge ongoing international discussions on various approaches to digital government services to contribute to societal inclusion, especially of vulnerable groups, and trust in government. This includes the potential of DPI, as noted by the 2023 Indian G20 Presidency as an approach that could foster resilience, catalyse sustainable growth, and promote more inclusive and equitable access to digital services. The development of reliable and well-functioning DPI, with appropriate safeguards, including with regard to privacy and security, can help deliver efficient, equitable, inclusive, and human-centric public services. It has the potential to foster growth and innovation in the digital economy, including by increasing opportunities for MSMEs.

55. When developing, deploying, and governing DPI, we are committed to prioritising secure and inclusive approaches that respect human rights and protect personal data, privacy, and intellectual property rights. We recognise that interoperable elements of DPI can be developed by the public sector, private sector, or jointly, and, with appropriate safeguards, can improve access to digital services across sectors and borders. Acknowledging the value that DPI can provide to society, including to developing countries and emerging economies, when deployed alongside meaningful digital inclusion efforts, by enabling safe, secure, and trusted access to public services, we recognise the importance of international collaboration.
56. We recognise that G7 members have different approaches to the development of digital solutions, including DPI, digital identity, and digital government services. We look forward to the forthcoming G7 Compendium of Digital Government Services to be developed with the support of the OECD. The Compendium will collect relevant examples of digital public services from G7 members; it will complement existing work produced by the G20, with details set out in Annex 4.
57. In relation to digital identity, we reaffirm our commitment to the OECD Recommendation on the Governance of Digital Identity, promoting the development of digital identity systems that are user-centred and inclusive, supported by appropriate governance, including security and privacy safeguards. We look forward to developing the Mapping Exercise of Digital Identity Approaches across the G7 to find commonalities in G7 members' approaches to digital identity, as outlined in Annex 4, to be developed with the support of the OECD.

Way Forward

58. We express our appreciation to our knowledge partners, OECD, UNDP, and UNESCO, for contributing their expertise and experience, and to ITU for its valued participation in this ministerial meeting, and welcome continuous cooperation to realise a prosperous, digitally connected world based on our shared democratic values.
59. We had fruitful discussions on the importance of sharing best practices to foster the digital transformation of industry, with the aim of mitigating against the risks arising from the adoption of new technologies and fully leveraging the benefits in terms of productivity and sustainability.
60. We plan to continue our dialogue on policies, tools and mechanisms for safe, secure, and trustworthy AI in the public sector and on digital government and reaffirm our commitment to jointly advancing the outcomes of the Hiroshima AI Process.
61. We plan to continue our work as set out in this Declaration, under the Italian G7 Presidency, with a view to presenting progress at the Leaders' Summit taking place in June, and to

keeping abreast of further developments in AI, advancing our related efforts in subsequent meetings.

62. We look forward to Canada's G7 Presidency in 2025 and to continue building on the outcomes of Italy's 2024 G7 Presidency.

