

Meeting of the Council at Ministerial Level, 9-10 June 2022**RECOMMENDATION OF THE COUNCIL ON BLOCKCHAIN AND OTHER
DISTRIBUTED LEDGER TECHNOLOGIES****(Adopted by the Council at Ministerial level on 10 June 2022)**

THE COUNCIL,

HAVING REGARD to Article 5 b) of the Convention on the Organisation for Economic Co-operation and Development of 14 December 1960;

HAVING REGARD to other standards developed by the OECD in the areas of consumer protection, data governance, digital security risk, financial education, innovation, labour, regulatory policy, and responsible business conduct;

HAVING REGARD to the Sustainable Development Goals set out in the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly ([A/RES/70/1](#)), the 1948 Universal Declaration of Human Rights, the 2011 United Nations Guiding Principles on Business and Human Rights, and the 2019 International Labour Organisation's Centenary Declaration on the Future of Work, as well as the work of and standards developed by the International Organization for Standardization's Technical Committee 307 on Blockchain and Distributed Ledger Technologies; the International Telecommunication Union's Telecommunication Standardization Focus Groups on Application of Distributed Ledger Technology, and on Digital Currency; and the European Telecommunications Standards Institute's Industry Specification Group for Permissioned Distributed Ledgers; and by the World Wide Web Consortium;

CONSIDERING that Blockchain and other distributed ledger technologies (DLT) may facilitate traceable record-keeping and the transfer of value and data, as well as innovative tools such as "smart contracts" and potential use cases, for example asset tokenisation, that may stand-alone or form a component of broader technology solutions across the private and public sectors in areas as diverse as digital identity, financial services, public services, and supply chains;

CONSIDERING that Blockchain may have the potential to contribute to innovation, productivity, resilience, transparency, due diligence in supply chains, integrity of data, competition, multi-stakeholder collaboration, accountability and to ensuring a level playing field, and may thereby foster trust and confidence in institutions and promote responsible business conduct and the Sustainable Development Goals;

ACKNOWLEDGING that Blockchain carries certain limitations and risks, some of which are specific to Blockchain while others are relevant to digital technologies more broadly, for example risks relating to privacy and security, custody of access credentials, and cryptography vulnerabilities;

RECOGNISING that Blockchain verifiable digital identity is a component of many Blockchain applications, and at the same time, that Blockchain may itself be an enabler of verifiable digital identity;

ACKNOWLEDGING that national and international policy, legal, and regulatory frameworks apply to Blockchain and its applications and that Blockchain and its applications will need to be periodically assessed to ensure appropriateness, particularly with respect to Blockchains operating across borders;

ACKNOWLEDGING the importance of technology neutrality both in terms of policy, legal, and regulatory, frameworks, as well as when identifying the most appropriate and suitable technology and applications to meet the needs and requirements of a given situation;

RECOGNISING that consulting, engaging and empowering stakeholders is an essential part of fostering public confidence in the appropriate adoption of Blockchain applications;

RECOGNISING that the rapid development and application of Blockchain has created demand across the globe for clear and coherent policy guidance for Blockchain innovation and adoption aiming to prevent and mitigate risks, while preserving incentives to innovate, collaborate and compete, while taking into account regional- and country-specific contexts;

SUPPORTING the sustainable use of Blockchain applications, while identifying and mitigating any negative environmental impacts;

RECOGNISING that a values-based approach to responsible Blockchain innovation and adoption may help encourage innovation, reduce economic, social, gender, and other inequalities, promote quality and safe jobs, foster financial inclusion, investor and consumer protection, support financial system resilience, fair competition and market integrity, empower individuals, and encourage fair transitions and skills development, enhance digital security and data protection, build trust in the digital economy and society, protect natural environments, and encourage efficient energy use, thereby supporting inclusive growth, well-being, transparent and responsible business conduct, human rights and other fundamental values.

On the proposal of the Committee on Financial Markets, in co-operation with the Committee on Digital Economy Policy:

I. AGREES that, for the purpose of this Recommendation, the following definitions are used:

- **‘Blockchain’** refers to all types of Blockchain technologies and distributed ledger technologies (DLT), including the protocol, network, and application layers. Blockchain technologies and DLT are part of a broader ecosystem of technologies. DLT is a combination of technologies that together create a digital, shared and self-updating ledger of verified transactions or information among parties in a network based on innovative database technologies, including blockchain technologies. DLT uses various types of multi-party consensus mechanisms to validate and record transactions and has various governance systems, ranging from “centralised” models through to instances where there may be no control by a central authority(ies) (also known as “decentralised”).
- **‘Blockchain Stakeholders’** refers to all organisations and individuals involved in utilising, innovating in relation to, or affected by Blockchains, directly or indirectly, including but not limited to governments, enterprises, workers, developers, academics, consumers, and citizens.
- **‘Blockchain Actors’** refers to those Blockchain Stakeholders playing an active role in the Blockchain ecosystem, including in setting practices and policies, and includes organisations, consortia and individuals, including but not limited to governments, that develop or operate Blockchains or their applications.

RESPONSIBLE BLOCKCHAIN INNOVATION AND ADOPTION

II. RECOMMENDS that Members and non-Members having adhered to this Recommendation (hereafter, the “Adherents”) encourage an ethical and responsible approach to Blockchain innovation and adoption that harnesses its opportunities and minimises its risks and **CALLS ON** all Blockchain Actors, as appropriate to their role and involvement in Blockchains, to take such an approach, by:

1. Compliance and Coherence

Putting in place mechanisms to assess and ensure Blockchain applications’ compliance and coherence with relevant policy, legal, and regulatory requirements, including those operating across borders.

2. Governance, Transparency, and Accountability

Taking steps such that the governance frameworks of Blockchains and their applications are transparent and clearly defined, consistent with legal and regulatory obligations, including by:

- a) Taking an inclusive, multi-stakeholder approach to the governance of Blockchains, including the development of measures to ensure accountability, including in the case of wind-down of a Blockchain or its applications;
- b) Providing transparency, as appropriate, to Blockchain Stakeholders on the use of Blockchains, their design and operation, their governance frameworks, related incentive mechanisms, and on the identities, roles and responsibilities of the relevant Blockchain Actors involved in any Blockchain, in particular with respect to accountability to their compliance obligations;
- c) Undertaking initial and regular assessments of Blockchains in relation to compliance with this Recommendation, aimed at continuous verification and validation over their lifecycle through proportionate approaches, for example, assessment by design, and promote transparency of the results of such assessments to the maximum extent appropriate, as well as providing for remediation if applicable; and
- d) Disclosing any changes to governance frameworks or code of Blockchains in a responsible and timely manner.

3. Interoperability

Facilitating interoperability of Blockchains, including through open standards and with non-Blockchains and with existing information technology (IT) systems, to support the flow of data and improve protection and individual control of personal data.

4. Digital Security and Privacy

Providing digital security and safeguarding privacy in the application of Blockchains, including by:

- a) Taking measures to understand and mitigate digital security and privacy-related risks relevant to Blockchains and their applications, including those related to digital identity management, access control, governance and infrastructure;
- b) Taking responsibility for risk management, supported by business continuity and aligned with relevant privacy and digital security standards and risk management functions, including by acting transparently, for example, by providing timely reports on digital security incidents including those affecting privacy; and
- c) Due to the specific features of many Blockchains, including their near immutability, longevity, and distributed or centralised nature, only gathering and storing personal data where strictly necessary for the intended purpose of the Blockchain application and in compliance with relevant policy, legal, and regulatory frameworks.

5. Education and Skills Development

Fostering understanding of Blockchain and the development of Blockchain-related skills, as well as supporting those displaced by the adoption of Blockchain applications and paying due regard to the interests of users, including by:

- a) Promoting understanding of Blockchain and its potential applications, benefits, and risks amongst all Blockchain Stakeholders, including as to where and how decision-making takes place in decentralised and centralised governance frameworks, and in order to prevent the emergence of digital divides;
- b) Supporting a fair and secure work environment by ensuring workers are appropriately informed and consulted on how Blockchains are deployed in their workplaces; and
- c) Endeavouring to provide opportunities and relevant training to build skills, as well as to assess the potential impact of, and assist fair transitions for those displaced by Blockchain applications.

6. Environmental impact

Supporting the sustainable use of Blockchain, while identifying and mitigating any negative environmental impacts.

NATIONAL POLICIES AND INTERNATIONAL CO-OPERATION

III. RECOMMENDS that when establishing or implementing policy measures related to Blockchain innovation and adoption, taking into account the importance of technology neutrality, and consistent with the above provisions, Adherents:

1. **Develop coordinated policy approaches**, in particular by:
 - a) Developing an integrated approach across levels of government to address the challenges and potential opportunities brought by Blockchain, where appropriate, to economies and societies more broadly, taking into account the intersection with other technologies and applicable policies, as well as its cross-border implications; and
 - b) Considering Blockchain as a potential tool for achieving policy objectives where appropriate, including for the delivery of government administration and services as well as in international co-operation.
2. **Foster an environment that is supportive of technological innovations, such as Blockchain research and development**, with multi-stakeholder collaborations (e.g. with the public, private, and academic sectors), that would provide a supportive environment for, among other things, the use of Blockchain technology by small and medium-sized enterprises and entrepreneurs and its use in infrastructure and the provision of services, where appropriate.
3. **Strive to build human capacity** by supporting education and training for all Blockchain Stakeholders on the skills necessary to understand and work with Blockchains, where appropriate, including to support fair transitions for those whose jobs are disrupted and displaced.
4. **Support an enabling policy environment for technological innovations**, in particular by:
 - a) Gathering diverse inputs when forming public policy related to Blockchain based on transparency and inclusive multi-stakeholder dialogues; and
 - b) Developing institutional capacity and mechanisms for examining potential Blockchain applications with a view to:

- i. ensuring their coherence with policy, legal, and regulatory requirements;
- ii. assessing the need, benefits and risks for adapting those requirements as well as adequate risk management controls, and implementing modifications as necessary and appropriate;
- iii. supporting, as appropriate, research, development, and/or deployment of Blockchains, including through, for example, regulatory sandboxes or innovation labs.

5. **Co-operate internationally**, in particular by:

- a) Working together to progress towards global co-operation across frameworks for Blockchain innovation and adoption and thereby best harness its potential opportunities, while preventing or minimising its risks;
- b) Working together in the OECD and other international and regional fora to foster the sharing of knowledge and enhancing cross-border co-operation and collaboration on and through Blockchain and its applications; and
- c) Promoting multi-stakeholder, consensus-driven, and open processes for the development of global technical and ethical standards for Blockchain and its applications.

IV. ENCOURAGES all Blockchain Stakeholders, as appropriate to their role and involvement in Blockchains, to support and promote the implementation of this Recommendation.

V. INVITES the Secretary-General and Adherents to disseminate this Recommendation.

VI. INVITES non-Adherents to take due account of, and adhere to, this Recommendation.

VII. INSTRUCTS the Committee on Financial Markets, in co-operation with the Committee on Digital Economy Policy and in consultation with other relevant committees, to:

- a) serve as fora for exchanging information on Blockchain policy in their respective policy areas, as well as for exchanging experiences with the implementation of this Recommendation and fostering multi-stakeholder and interdisciplinary dialogue on innovation and adoption of Blockchain; and
- b) report to the Council on the implementation, dissemination, and continued relevance of this Recommendation no later than five years following its adoption and at least every ten years thereafter.