



European Blockchain Sandbox
Best practices report
2nd Cohort
Abstract and Executive Summary

Bird & Bird / OXYGY

 **European
Blockchain
Sandbox**

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1. Abstract

Bird & Bird, its consultancy arm OXYGY and other consortium partners have been commissioned by the European Commission to set up and operate the European Blockchain Sandbox, providing a framework for regulators, supervising authorities and blockchain innovators to engage in a cross-border regulatory dialogue, identify obstacles from a legal & regulatory perspective in a safe and confidential environment, and thus increase legal certainty for innovative decentralized technology solutions, including blockchain. The initiative brings together regulators/authorities and innovators across industry sectors, allowing regulators and authorities to enhance their knowledge of cutting edge blockchain technologies and allowing innovators to enhance their understanding of relevant laws and regulations.

The initiative annually supports 20 projects and has started in 2023. The sandbox is open to use cases based on any blockchain infrastructure.

Following the successful completion of the 1st round of dialogues and the publication of the 1st cohort best practices report in June 2024, the dialogues for the 2nd cohort took place from September 2024 until March 2025. The 2nd round of dialogues covered additional regulatory areas and topics, many of which were identified for further dialogue at the end of the 1st round. The lessons learned, best practices and recommendations which are relevant for the wider community are presented in this *Best practices report, 2nd cohort*.

2. Executive summary

a. Objectives and policies

The *European Blockchain Sandbox* is a regulatory sandbox which aims to establish a pan-European framework for regulatory dialogue. This initiative of the European Commission brings together national and EU regulators and authorities with providers of innovative blockchain/DLT¹ applications in both the private and public sector to identify possible issues and solutions from a legal & regulatory perspective in a safe and confidential environment. The cross-border regulatory dialogues will allow innovators to better understand relevant laws and regulations. The exchanges will allow regulators and authorities to enhance their knowledge of cutting-edge technologies involving blockchain and distributed ledger technologies, and to exchange views and experiences with other regulators and authorities.

The pan-European Blockchain Sandbox is set up and operated by a consortium consisting of legal experts from the law firm Bird & Bird and consultants from its consulting arm OXYGY, supported by blockchain experts from Warren Brandeis and website designers Spindox, which has been procured through an [open call for tenders](#) in 2022. The selection and the award process is overseen by a panel of independent academics consisting of Professor Roman Beck (IT-University, Copenhagen (until December 2024) and Bentley University (Boston, US) since January 2025), Professor Soulla Louca (University of Nicosia, Cyprus) and Professor Walter Blocher (University of Kassel).

The European Blockchain Sandbox initiative annually supports 20 projects and has started in 2023. The sandbox is open to use cases based on any blockchain infrastructure. Blockchain use cases are selected on the basis of published eligibility and award criteria and matched with relevant regulators and supervising authorities. The European Blockchain Sandbox does not imply legal endorsement or regulatory approval of the use cases, nor does it allow for derogations of applicable laws. Results are made available to the wider community through best practice reports.

Following the successful completion of the 1st round of dialogues and the publication of the 1st cohort best practices report in June 2024², the dialogues for the 2nd cohort took place from September 2024 until March 2025. Based on a broad range of selected 2nd cohort use cases across many industry sectors, and even further increased engagement by national and European regulators, the 2nd round of dialogues covered additional regulatory areas and topics including areas and topics that were identified for further dialogue at the end of the 1st round of dialogues. The lessons learned, best practices and recommendations which are relevant for the wider community are presented in this *Best practices report, 2nd cohort*.

b. Participants in the 2nd round of dialogues

After the launch of the 2nd round of applications on 25 January 2024, the European Blockchain Sandbox has gone through a successful second application round, which after a rigorous selection process resulted in an impressive 2nd cohort of 20 innovative blockchain/DLT use cases which were announced in June 2024. The 2nd cohort of selected

¹ **‘Distributed ledger technology’ or ‘DLT’** means a technology that enables the operation and use of distributed ledgers: Article 2(1) DLT-Pilot Regime and Article 3(1)(1) MiCA Regulation.

² [Best practices report 2023 - Part B - European Commission](#)

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use cases (including one EBSI use case³) represents between them all EU/EEA regions and a range of industry sectors. As in the 1st cohort, the financial/crypto asset applications are again well represented but not dominating, and a broad variety of other use cases is represented in the 2nd cohort, covering areas such as verifiable credentials/authentication, ESG⁴ reporting, digital product passports, e-voting, customs, cyber security, data sharing and DAOs and combinations with other innovative technologies such as Artificial Intelligence ('AI') and Internet of Things ('IoT').



The selected use cases in the 2nd cohort have been successfully matched with well over 80 national and EU regulators/authorities from across the EU/EEA and covering a broad range of regulatory areas. An overview of the participating regulators/authorities is published on the project website ([link](#)).

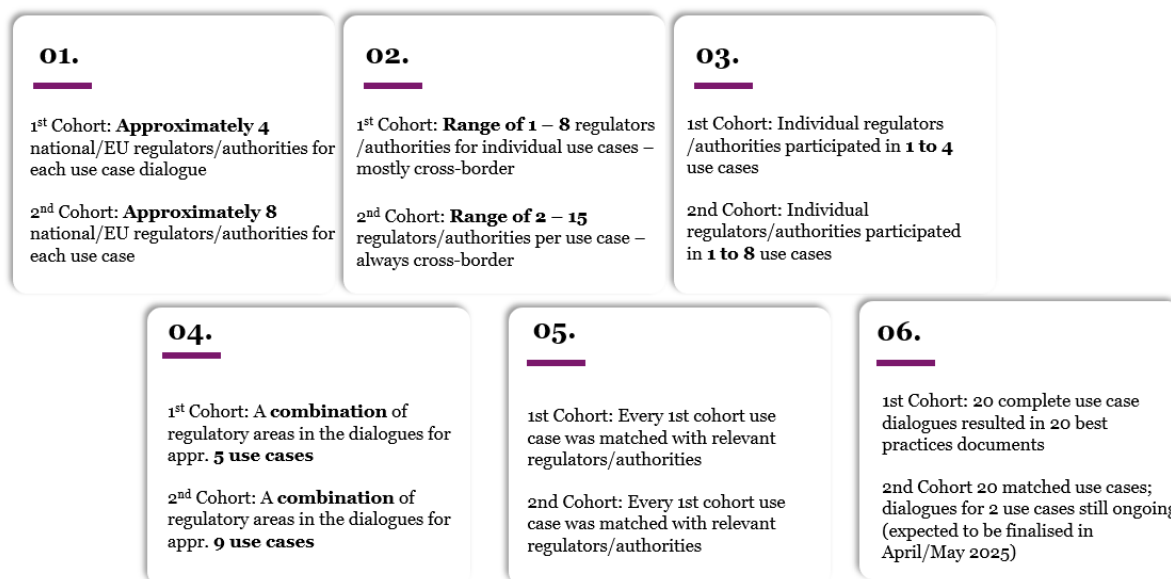
Each of the twenty 2nd cohort use cases were matched with relevant regulators/authorities and the dialogues resulted in the identification of many best practices/lessons learned. The combined results are presented in this report.⁵

A comparison on the basis of some of the key indicators for the 1st and the 2nd cohort is included in the overview below.

³ See for more information about the European Blockchain Services Infrastructure ('EBSI'): <https://ec.europa.eu/digital-building-blocks/sites/display/EBSI/Home>

⁴ Environmental, Social and Governance ('ESG')

⁵ The dialogues for two of the twenty 2nd cohort use cases are completed in April – June 2025. The results of these dialogues will be included in the next best practices report.



c. Format of the 2nd round of regulatory dialogues

The dialogues for the 2nd cohort were organized in accordance with the project’s Protocol for Sandbox Participation.⁶ The regulatory focus areas and regulatory topics for the dialogues were determined based on the selected use cases and in consultation with the selected use case owners while taking into account the topics identified for further dialogue at the end of the 1st cohort and an appropriate balance of relevant regulatory areas for the 1st round of dialogues.

Blockchain technology is not a one size fits all. The characteristics of the blockchain infrastructure and technical standards, the data flows and the use cases are important to understand the regulatory issues. Therefore, understanding the characteristics of the use case from a regulatory perspective was an important element during the dialogues.

In preparation for the dialogue meetings, one-hour blockchain expert sessions were held for the participating regulators/authorities. These sessions covered different blockchain infrastructure and applications.

The basic format for the dialogues consisted of two online dialogue meetings each of 1.5 hours. For each of the use cases, the first dialogue meeting started with a presentation by the use case owner followed by a Q&A. Based on the dialogue in the first meeting the agenda could be adjusted, additional participants could be invited and further information could be shared. For some dialogues an additional meeting was held.

For a number of use cases, in particular in the financial sector, a regulator-only meeting was held between the 1st and the 2nd dialogue meeting and moderated by Bird & Bird experts. The regulator-only meeting between the 1st and the 2nd dialogue meeting was introduced following feedback after the 1st cohort of dialogues and allowed the participating regulators/authorities to reflect on the use case presentation, to formulate additional

⁶ This Protocol (version 2.0) can be accessed through the following hyperlink: [Sandbox Protocol version 2.0](#).

questions for the use case team and to exchange initial observations in preparation for the 2nd dialogue meeting with the use case team. The questions that were raised and the initial findings that were exchanged during the regulator-only meeting were shared with the use case team and answers/further observations could be shared in preparation for the 2nd dialogue meeting.

For some use case dialogues an additional dialogue meeting or final dialogue call was scheduled in consultation with the participants to properly complete the regulatory dialogue.

Regulatory experts from Bird & Bird have taken the lead in preparing the agenda for the dialogue meetings, taking on board suggestions and information from the use case owners and the participating regulators/authorities.

To ensure an efficient use of time, information about the use case and the agenda for the dialogue meetings with relevant legal/regulatory context and further relevant information as appropriate were made available on a secure platform in advance of every dialogue meeting. Depending on the use case and the regulatory area(s) as well as the competences and expertise of the participating regulators/authorities, the roles of the regulators/authorities ranged from very active to a semi-observer role.

Summaries of the discussions during the dialogue meetings were shared in draft with the participants to the individual dialogues after each meeting.

Following the dialogue meetings, a draft best practices document was prepared by Bird & Bird with proposed draft lessons learned, best practices and recommendations to be considered for the best practices report for review by the participants to the dialogue. If any of the participants had any reservations in relation to any of the elements proposed in the draft best practices document, such element would not become part of the best practices report.

The focus of the regulatory dialogues depended on the use case and the regulatory area. As in the 1st round of dialogues there were three main approaches:

- Several dialogues focused on **regulatory compliance** by DLT/Blockchain use cases.
- Other dialogues focused on how the use DLT/Blockchain applications can **support efficient and effective compliance and oversight**.
- Finally the use of new areas of regulation and existing or new regulatory tools and qualifications with a focus on **regulation as a facilitator** were discussed in some of the dialogues, such as the use of the EUDI Wallet and new categories of qualified trust services in scope of the eIDAS 2 Regulation.

d. Relevant legal & regulatory areas for the 2nd round of dialogues

The 2nd round of dialogues focussed on many relevant regulatory areas and have resulted in a wide range of lessons learned, best practices and recommendations. The combined results are presented in [Chapters 3 – 19](#) of the *best practices report, 2nd cohort*. The 2nd round of dialogues was able to build on the findings of the 1st round of dialogues. Where appropriate the individual chapters in the best practices report, 2nd cohort, refer to relevant findings in the *best practices report, 1st cohort, Part B*.

A full list abbreviations, terms and common short forms of EU legislation is included in the full report ([Chapters 21 and 22](#)).

The main focus points for each of these chapters are set out below.

- (i) Data Protection (GDPR) - Regulatory compliance (Best practices report, 2nd cohort, Section 3)

The findings in the 1st cohort best practices report regarding the key question if the data that is recorded on the ledger qualifies as personal data in the sense of the GDPR⁷ were confirmed in the 2nd round of dialogues.

If the data that are recorded on the ledger qualifies as personal data, certain measures will have to be taken to ensure GDPR compliance. Measures that can be taken were discussed in more detail during the 2nd round of dialogues, also in the context of public permissionless blockchains.

The GDPR will again be an important regulatory area for the 3rd round of dialogues in view of the upcoming EDPB blockchain guidelines and the decision of the ECJ in the SRB case which are expected in the 1st half of 2025.

- (ii) Relevance of the eIDAS regulation for Blockchain/DLT solutions (Best practices report, 2nd cohort, Section 4)

Pursuant to the amended eIDAS 2 regulation⁸ the EUDI Wallet⁹ will be introduced and the list of “trust services” is extended.¹⁰ DLT solutions typically qualify as or rely on eIDAS-defined trust services and the eIDAS regulation applies to both qualified and non-qualified trust services.

During the dialogues the relevant factors to determine the appropriate mix of eID means¹¹ and qualified or non-qualified trust services were discussed, taking into account the characteristics of various use cases. In addition, the interplay between eIDAS 2 and IoT services was explored.

Certain other EU legislative instruments such as AML¹² legislation and the Company Directive¹³ include references to the eIDAS 2 regulation for identification and assurance. The report analyses in more detail how Blockchain/DLT solutions could make use of eIDAS regulatory instruments to support compliance with regulatory AML requirements and to support or use the EU Company Certificate which needs to be established pursuant to the Company Directive.

⁷ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (**‘General Data Protection Regulation’**).

⁸ Regulation (EU) 2024/1183 of the European Parliament and of the Council of 11 April 2024 amending Regulation (EU) No 910/2014 as regards establishing the European Digital Identity Framework (**‘eIDAS 2’**).

⁹ European Digital Identity Wallet as defined in Article 3(42) of the eIDAS 2 Regulation: [CL2014R0910EN0020010.0001_cp 1..1](#).

¹⁰ The list of trust services is defined in Article 3(16) of the eIDAS 2 Regulation.

¹¹ As defined in Article 3(2) eIDAS regulation: A material and/or immaterial unit containing person identification data and which is used for authentication for an online service or, where appropriate, for an offline service. The EUDI Wallet is an eID means.

¹² Anti-money laundering legislation: AMLD IV, V, VI and the AMLR.

¹³ Directive (EU) 2017/1132 of the European Parliament and of the Council of 14 June 2017 relating to certain aspects of company law as most recently amended by Directive (EU) 2025/25).

(iii) Blockchain/DLT and AI (Best practices report, 2nd cohort, [Section 5](#))

The application of Blockchain/DLT and AI technology became more prominent in the 2nd round of dialogues compared to the 1st round. Examples are supply chain monitoring and the use of Blockchain/DLT to support reliable and predictable AI through decentralized knowledge graphs.

A key question is if and to what extent the provisions of the AI Act are applicable to such use cases and how the use of such applications might facilitate/enhance the compliance with the AI Act by other actors, including in particular the obligations that apply to providers of high-risk AI systems in connection with requirements for data (and data governance), record-keeping, transparency, accuracy, robustness, cybersecurity and post-market monitoring.

Many of these combined DLT/AI solutions are at least in part based on open-source AI systems or products as open-source is one of the corner stones for DLT. The report discusses the application of the open-source provisions in the AI Act in more detail.

(iv) Decentralised Autonomous Organisations (DAO's) – legal wrapper; GDPR compliance (Best practices report, 2nd cohort, [Section 6](#))

The term "Decentralised Autonomous Organisation" ("DAO") is not defined and is currently not used in EU legislation. There are different types of "DAOs": with/without a legal wrapper and for profit/non-profit.

DAOs lacking legal entity status and lacking a central authority figure (depending on their activities) may face compliance issues under certain existing legal frameworks and may incur (extra) liability for individual DAO members and/or initiators. Moreover, a tension exists between smart contracts deployed in a DAO context (which are self-executing and immutable) and traditional legal frameworks, which assume human decisions and flexibility.

The report discusses in particular GDPR compliance measures which can be taken in the context of a DAO which operates on a public permissionless blockchain and explores to what extent an SCE¹⁴ could be used as a legal wrapper to accommodate the DAO characteristics.

(v) Blockchain/DLT solutions for e-voting (Best practices report, 2nd cohort, [Section 7](#))

E-voting is not regulated on an EU level. The question if and to what extent (DLT based) e-voting is accepted in elections depends on the national legislation on elections. A distinction should be made between formal elections, referendums and consultations. The report discusses experiences with e-voting in Estonia, Romania and Greece

The report concludes that regulatory instruments laid down in the eIDAS 2 regulation could become important regulatory enablers for e-voting applications.

E-voting in the private sector, e.g. for shareholders in Annual General Meetings in the context of the Shareholder Rights Directives, would be an area for further discussion.

(vi) Blockchain/DLT solutions enhancing CSRD compliance (Best practices report, 2nd cohort, [Section 8](#))

¹⁴ Council Regulation (EC) No 1435/2003 of 22 July 2003 on the Statute for a European Cooperative Society (SCE).

The CSRD reporting requirements¹⁵ are technology neutral but ESG data must be relevant, comparable and reliable, meeting the applicable European Sustainability reporting Standards (ESRS) criteria for qualitative and quantitative information.

Blockchain/DLT solutions can provide integrity, immutability, transparency, and tamper-proof characteristics which make them well-suited for collecting, monitoring and reporting sustainability data. Such solutions can enhance compliance with CSRD reporting obligations, provided they align with regulatory parameters.

The report analyses compliance with the regulatory conditions when applying Blockchain/DLT solutions for collecting, monitoring and reporting sustainability data in accordance with the CSRD reporting obligations.

- (vii) Blockchain/DLT solutions enhancing compliance with the EUDR and the interplay with horizontal Data Regulation (Best practices report, 2nd cohort, [Section 9](#))

As for the CSRD reporting requirements, Blockchain/DLT solutions can support compliance with the EUDR¹⁶ data related requirements, including analyses of supply chains, due diligence obligations and data collection, data storing, data sharing and reporting obligations.

The report analyses the interplay with the UN Transparency Protocol¹⁷ and Recommendation 49. Discussions during the 2nd round of dialogues focused on the question to what extent Blockchain/DLT applications that deploy the UNTP/Recommendation 49 solutions can support EUDR compliance.

In addition the interplay between the EUDR and horizontal EU data regulation (Data Act (DA)¹⁸, Data Governance Act (DGA)¹⁹ and Digital Services Act²⁰ (DSA)) in the Green Deal Data Space²¹ was discussed. The report analyses the relevance of the provisions of the Data Act (in particular regarding data processing services and interoperability requirements) as well as the provisions of the DGA and the DSA (See Section 11 below).

- (viii) Blockchain/DLT solutions for Battery Passports and DPP's and the interplay with horizontal Data Regulation (Best practices report, 2nd cohort, [Section 10](#))

¹⁵ Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting

¹⁶ Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010.

¹⁷ [UN Transparency Protocol | UN Transparency Protocol](#)

¹⁸ Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data (**'Data Act'**).

¹⁹ Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance (**'Data Governance Act'**).

²⁰ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services (**'Digital Services Act'**).

²¹ https://environment.ec.europa.eu/events/european-green-deal-data-space-moving-implementation-2024-03-06_en

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EU legislation for Battery Passports²² and Digital Product Passports (DPP's)²³ is technology neutral and does not preclude the use of Blockchain/DLT applications. During the 2nd round of dialogues the progress in relation to the development of standards and the preparation of secondary legislation were discussed.

In addition the interplay between data processing and interoperability requirements in the Battery Regulation/ESPR and the Data Act was discussed as well as the interplay with the DGA and the DSA (See Section 11 below).

- (ix) Compliance with the Data Governance Act and the Digital Services Act (Best practices report, 2nd cohort, [Section 11](#))

Depending on the characteristics of the Blockchain/DLT use case the provisions of the Data Governance Act (DGA) and the Digital Services Act could be relevant, in particular if the use case qualifies as Data Intermediation Service or Data Altruism Organisation in the sense of the DGA or as Intermediary Service in the sense of the DSA.

The 2nd round of dialogues focused in particular on the questions if and under what conditions Blockchain/DLT solutions qualify as Data Intermediation Services Providers (DISPs) in the sense of the DGA and/or as Intermediary Services in the sense of the DSA. Further details about the findings are provided in the full report.

- (x) Blockchain/DLT solutions to enhance compliance with sanctions lists (Best practices report, 2nd cohort, [Section 12](#))

The 2nd round of dialogues provided the opportunity to discuss Blockchain/DLT solutions that can enhance effective and efficient compliance and oversight of sanctions lists²⁴.

Blockchain/DLT solutions that support (almost) real time implementation of compliance with sanctions lists in a consistent and immutable/auditable manner across branches and group companies can enhance efficiency and effectiveness of compliance with sanctions regulations. Such solutions could also enhance effective and efficient oversight for regulators as regulators could follow a timestamped and solid audit trail which is the same among branches and across jurisdictions.

More details are provided in the 2nd cohort best practices report.

- (xi) Blockchain/DLT solutions to enhance AML compliance (Best practices report, 2nd cohort, [Section 13](#))

DLT/Blockchain providers that are active in e.g. the financial/crypto-asset sectors and qualify as service providers under financial sector regulation or crypto-assets service providers (CASPs) under MiCAR will have to comply with AML requirements. The AML requirements will become more harmonized under the AMLD6 and the AMLR. If a token is neither covered by MiCAR nor by MiFID, AML regulation will still be relevant for obliged entities dealing with such tokens and the obliged entity will still need to include this in its general risk assessment.

²² Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries (**'Battery Regulation'**).

²³ Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (**'ESPR'**).

²⁴ Consolidated list of persons, groups and entities subject to EU financial sanctions: data.europa.eu.

Questions how blockchain solutions can help to ensure AML compliance in a more efficient/effective way were discussed during the dialogues. In this context the interplay with the eIDAS regulation appears to be very relevant.

Rights and obligations for Blockchain/DLT use cases using or providing outsourcing/third party services in relation to AML/KYC obligations are laid down in several regulatory instruments and are analysed in more detail in the report.

(xii) DORA – Regulatory compliance (Best practices report, 2nd cohort, [Section 14](#))

The dialogues in relation to cyber security legislation concentrated on DORA²⁵ which became directly applicable in all EU Member States from 17 January 2025.

The DORA provisions are of direct relevance for blockchain/DLT providers that qualify as "financial entities", including certain CASP's. In addition, DORA is indirectly relevant to blockchain/DLT providers that offer services to financial entities/CASP's and qualify as "ICT third-party service provider". These providers may be subject to additional regulatory requirements, particularly concerning ICT third-party service contracts that support critical or important functions.

Smart contracts will normally qualify as "ICT asset" under DORA meaning that financial entities must assess related ICT risks before deploying smart contracts.

During the 2nd round of dialogues the (indirect) application of DORA in the context of Blockchain/DLT applications was discussed and areas where additional guidance would be welcome were identified.

(xiii) Scope and delineation MiFID & MiCAR (Best practices report, 2nd cohort, [Section 15](#))

Irrespective of MiFID²⁶ harmonizing national legislations, there are still different interpretations whether a token may qualify as security in each member state. Different approaches to transferability of shares or interest under national corporate or partnership law can be a reason for the national differences in interpretation if a token qualifies as a security.

If a tokenized instrument is not a perfect digital twin of the original instrument, the qualification of the tokenized instrument could be different from the qualification of the original instrument depending on the technical and contractual characteristics.

During the 2nd round of dialogues the following consecutive steps were identified: i) are the tokenized quota a financial instrument in the sense of MiFID 2, or ii) if not, are the tokenized quota a crypto asset in the sense of MiCAR²⁷, or an Investment Fund in the sense of the AIFMD²⁸, and iii) if regulation laid down in the MiFID2, MiCAR and the AIFMD is not

²⁵ Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector ('DORA').

²⁶ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments ('MiFID 2').

²⁷ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets ('MiCAR').

²⁸ Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010.

applicable financial products and services could still fall under national legislation covering specific non-EU regulated types of financial products or services. More details are provided in the full report.

(xiv) Use of the DLT Pilot Regime (Best practices report, 2nd cohort, [Section 16](#))

The DLT Pilot Regime²⁹ provides the possibility to apply for exemptions from MiFID 2 and/or the CSDR³⁰ if the applicable conditions are met. In a letter to ESMA³¹ dated 3 May 2024, the European Commission clarified that the DLT Pilot Regime has no expiry date.

Exemptions from MiFID 2 and/or the CSDR are not granted automatically. The applicant should provide evidence on counterbalancing measures to address the risks associated with the exempted obligations. Moreover, the applicant should implement the compensatory measures requested by the competent authority to meet the objectives pursued by the requested exempted provisions.

Recommendations for an efficient application process were discussed during the 2nd round of dialogues. Reference is made to Section 16 of the report.

(xv) Compliance with MiCAR (Best practices report, 2nd cohort, [Section 17](#))

The 2nd round of dialogues provided the possibility to discuss the application of the MiCAR regulatory requirements.

The transferability criterion determines if a token qualifies as a crypto-asset that falls under MiCAR. The fungibility criterion determines if the MiCAR requirements are applicable and MiCAR provides for several possible exemptions from regulatory requirements laid down in MiCAR if certain conditions are met.

Further details and examples are given in the 2nd cohort best practices report.

(xvi) Application of the ECSPR (Best practices report, 2nd cohort, [Section 18](#))

The European Crowdfunding Service Provider Regulation (“ECSPR”)³² regulates crowdfunding services. Crowdfunding services are subject to an independent authorisation requirement.

During the 2nd round of dialogues the application of possible overlapping capital requirements in the ECSPR and MiCAR were discussed. In addition, the dialogues touched on the role of virtual assets in this regard. In addition, the question to what extent crowdfunding service providers are bound to hold custody of issued securities or investor assets. Further details are provided in the full report.

²⁹ Regulation (EU) 2022/858 of the European Parliament and of the Council of 30 May 2022 on a pilot regime for market infrastructures based on distributed ledger technology.

³⁰ Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012 (Central Securities Depository Regulation), lastly amended by Regulation (EU) 2022/858 (DLT Pilot Regulation).

³¹ European Securities and Markets Authority.

³² Regulation (EU) 2020/1503 of the European Parliament and of the Council of 7 October 2020 on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937.

(xvii) Automated Market Makers & Liquidity Pools (Best practices report, 2nd cohort, Section 19)

An Automated Market Maker (“AMM”) is a decentralized protocol that uses algorithmic formulas and smart contract based liquidity pools (“LP”), rather than traditional order books, to facilitate trading.

MiCAR allows AMM under certain conditions and regulatory transparency requirements are developed. However, AMM is not specifically considered under MiFID 2. AMM’s are not prohibited in the DLT Pilot Regime, but the DLT Pilot Regime does not include specific provisions for AMM’s.

During the dialogues the application of MiFIR³³ pre- and post-trade transparency requirements was discussed in the context of an AMM trading system under the DLT Pilot Regime and if the regulation of AMMs under MiCAR could provide a model for measures within the DLT Pilot Regime. This would be an area where further guidance by ESMA would be welcome.

e. Conclusions and next steps

This 2nd cohort best practices report presents the best practices, lessons learned and recommendations that were identified during the 2nd round of dialogues for the European Blockchain Sandbox. The 2nd round of dialogues was able to build on the robust regulatory sandbox framework and the experiences and feedback gained during the 1st round of dialogues and the 1st cohort best practices report that was published in June 2024.³⁴

The 2nd round of dialogues has again resulted in impressive and encouraging results with numerous best practices, lessons learned and recommendations at the intersection of innovation and many regulatory areas.

Feedback from the 2nd cohort of selected use cases and participating regulators/authorities is again very positive. The use cases appreciate the legal/regulatory guidance and the opportunity for open dialogue with regulators/authorities. The regulators/authorities appreciate the chance to learn more about DLT use cases (where relevant in combination with other innovative technologies) and to have a cross-border dialogue with other national and EU regulators/authorities. The adjustments in the format of the dialogues which were implemented as a result of the feedback from the 1st round of dialogues were welcomed by the participating regulators/authorities. These adjustments included, in particular, a change of the set-up of the blockchain expert meeting in the preparation of the dialogues (no longer on a per use case basis) and the introduction of a regulator-only meeting between the 1st and 2nd dialogue meeting for the financial sector dialogues, with many participating national competent authorities for each dialogue.

In its 2nd year of operation, the project has further matured. More regulatory areas and competent authorities were involved in the dialogues with even more engagement by participating national and EU regulators than in the 1st round as shown by the following key indicators:

³³ Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012, lastly amended by Regulation (EU) 2022/858 (DLT Pilot Regulation).

³⁴ [Best practices report 2023 - Part B - European Commission](#)

Abstract and executive summary

- As for cohort 1, in the 2nd round all 20 selected use cases were matched with competent regulators/authorities and all dialogues resulted in best practices and lessons learned that could be used as building blocks for 2nd cohort best practices report.³⁵
- On average 8 national/EU regulators per dialogue (compared to an average of 4 national/EU regulators in the 1st round and a minimum number of 1.5 regulators per dialogue in the tender specifications).
- Range of 2 – 15 national/EU regulators per dialogue (compared to a range of 1 – 8 national/EU regulators in the 1st round).
- Individual regulators participated in 1 to 8 use case dialogues (compared to a range of 1 to 4 in the 1st round).
- A combination of regulatory areas in 9 dialogues (compared to a combination of regulatory areas in 5 dialogues in the 1st round).
- The 2nd round of dialogues resulted in more concrete and extensive best practices and lessons learned compared to the 1st round of dialogues, involving even more regulatory areas and many more regulators (in total 85 participating regulators/authorities compared to over 50 in the 1st round).

After having successfully completed two rounds of dialogues for the 2023 and 2024 cohorts of use cases, it is safe to say that the European Blockchain Sandbox is delivering a clear and positive impact to enhance legal/regulatory certainty for Blockchain/DLT solutions, often in combination with other innovative technologies through an open and constructive regulatory dialogue between innovators and regulators. This important outcome has been achieved thanks to the following results:

- increased legal certainty through enhancing a better understanding of relevant laws and regulations by innovators and greater confidence of compliance;
- enhancing confidence among stakeholders and regulators/authorities by showing the potential of Blockchain/DLT solutions, in combination with other innovative technologies and/or regulatory instruments such as the eIDAS 2 regulation to support effective and efficient compliance and supervision across different industry sectors;
- the possibility to improve the regulatory framework as a result of the identification of regulatory issues and solutions and of areas for clarification, leading to more effective regulations;
- cross border collaboration facilitated by the project among European and national regulators/authorities and innovators, promoting a more unified regulatory approach of Blockchain/DLT solutions, where relevant in combination with other innovative technologies, which will enhance more harmonized regulatory practices and will help to create a more cohesive regulatory framework;
- facilitating the sharing of knowledge and experience between regulators/authorities and with innovators on the basis of concrete use cases resulting in a better understanding of compliance requirements among innovators and regulators/authorities;
- acceleration of innovation by providing a safe environment for refining innovative applications including Blockchain/DLT solutions to support compliance by design;

The European Blockchain Sandbox project team is looking forward to the 3rd cohort. Regulatory areas and topics for further discussion have been identified in the 2nd round and during the application and selection process for the 3rd cohort. Important elements for the 3rd

³⁵ One regulatory dialogue is still ongoing and will be completed in May 2025.

cohort will be, on the one hand an increased focus on a combination of innovative technologies such as DLT/Blockchain in combination with AI, IoT, Cloud computing, and on the other hand deeper dives on the basis of ongoing experiences in the Member States and new regulatory developments on EU level such as the expected blockchain guidelines by the EDPB, the implementing regulations for electronic ledgers on the basis of eIDAS 2 and expected further developments in the areas of auditing/certification of smart contracts, the development of standards including for the development and deployment of smart contracts and the implementation of the AI Act. In addition, the 3rd round of dialogues will provide the opportunity to discuss Blockchain/DLT solutions in additional industry sectors such as energy and health care.

Almost all 2nd cohort participating regulators/authorities are interested in participating again in the 3rd round of dialogues (depending on use cases and regulatory areas/topics) and the adjustments in the format of the dialogues in accordance with the feedback at the end of the 1st round of dialogues have worked out well. Therefore no major adjustments in the format of the dialogues are foreseen for the 3rd round of dialogues.

In conclusion, the expectation is that the regulatory dialogues with the lessons learned from the 1st and the 2nd cohort can be further developed and deepened in the 3rd round, enhancing legal/regulatory certainty for innovators and regulators and enhancing trust and cooperation between innovators and regulators/authorities to ensure that regulation can increasingly become a catalyst for innovation.

The European Blockchain Sandbox project team would like to thank all participants in the 2nd round of dialogues for sharing their most valuable expertise, insights and experiences and for contributing to the best practices, lessons learned and recommendations that were identified during the dialogue meetings and are published in this best practices report.

Finally, the European Blockchain Sandbox project team would like to thank the project team at DG CONNECT for another year of seamless cooperation with excellent input and guidance that is provided at all stages of the project.

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