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Pilot Regime for Market Infrastructures Based on DLT

ABC Research Position Paper

The **Austrian Blockchain Center (ABC)** is an interdisciplinary research institute focused on Blockchain and related technologies based in Vienna. Its mission is to be the one-stop-shop Austrian research center for *Blockchain* and related technologies to be applied inter alia in industrial applications, financial services, energy, logistics and government and administrative applications. The COMET centre ABC - Austrian Blockchain Center is funded within the framework of COMET - Competence Centers for Excellent Technologies by BMK, BMDW and the provinces of Vienna, Lower Austria and Vorarlberg. The COMET programme is run by FFG.

The ABC conducts research projects in cooperation with scientific partners, company partners and associated partners (e.g. public institutions). In 2020, ABC started a research project focused on legal aspects of ***Digital Assets based on DLT***[1] in cooperation with the **Vienna University of Economics and Business (WU)** and experts from **leading Austrian law firms**[2] in the area of digital assets and capital markets.

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I. Preliminary note

The **Austrian Blockchain Center** and the partners of the ***Digital Assets research project*** appreciate the European Commission's initiative to establish a pilot regime for market infrastructures based on DLT.

The **use of DLT in securities trading and post-trading** is generally regarded as one of the most promising applications of the technology. Currently, intermediation and multiple layers of closed systems characterize the trading and post-trading infrastructure. This may produce redundancies, require significant reconciliation efforts and impede straight-through processing. DLT systems, by contrast, enable direct participation of end investors and may provide a unified platform for all processes in the securities lifecycle. They thus could bring **potential efficiency gains** and start a **transformative process of the trading and post-trading**

infrastructure. By reducing costs, DLT based securities may also provide **easier access to financial markets for smaller issuers (e.g. SMEs)**.

However, some requirements of the existing regulations (i.e. mainly post-trading requirements laid down in the CSDR[1] and some requirements for trading venues laid down in MiFID II[2]) are currently not compatible with distributed systems. They thus effectively prevent the formation of secondary markets for DLT based securities in the EU. The existing barriers to establishing regulated trading facilities may also push trading of such assets towards the unregulated field, adversely affecting investor protection and market integrity. For these reasons, we consider **legislative action necessary for the sustainable development of DLT securities**. At the same time, the necessary changes concern regulatory areas that have been cautiously developed after the financial crisis. Market participants and regulators may thus need to gain more experience with the use of DLT in securities trading and settlement before permanent changes are made.

In our view, the **proposed pilot regime could be a suitable instrument** to address the existing regulatory obstacles. However, we believe the success of the pilot regime depends on certain decisive factors the European legislator may want to consider. In particular, to promote innovation and achieve the stipulated objectives, the **pilot regime should be sufficiently attractive and open to different kinds of market participants and DLT systems**. The aspects we consider most important are outlined below.

Executive Overview – Position on the pilot regime for DLT market infrastructures	
Sandbox approach	**Scope of the pilot regime**
• the sandbox is an appropriate tool to promote innovation and support institutional learning in order to prepare permanent changes	• a mandatory requirement for a CSD license (as initially proposed by ECON) is not suitable for a sandbox approach
• time-limits need to consider necessary investments of participants; a "hard cut" could have unintentional effects	• the scope should be extended to include more market participants and financial instruments
• a shorter period for evaluation and reports is needed due to the high speed of innovation	• a technology-neutral approach towards different kinds of DLT systems should be adopted

II. Design of the regulatory sandbox

The proposed pilot regime follows a time-limited **sandbox approach**, giving the participants the possibility to test the use of DLT on the market in a restricted environment and under close

[1] Regulation 2014/909/EU 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 2012/236/EU.
[2] Directive 2014/65/EU on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

supervision. For this purpose, participants may request certain exemptions from existing regulatory provisions, in particular MiFID II and CSDR. In principle, we welcome the chosen sandbox solution as an **opportunity to promote innovation and allow regulators and market participants to gain more experience** before adopting permanent changes. However, we suggest considering the following aspects concerning the design of the sandbox:

a. Limited timeframe

We understand that a time limit may be required due to the experimental character of the pilot regime and the exemptions granted. However, there is an inevitable tension between temporal restrictions and **investments that DLT market infrastructures will have to make**. The Commission proposal, stipulating a **validity period of six years from the date of the specific permission** granted under the pilot regime,[3] seems to constitute a **reasonable compromise.** By contrast, ECON suggests a "hard cut" six years after entry into force of the regime.[4] Despite the understandable intention, we believe a **"hard cut" could prevent market participants from subsequently entering the pilot regime** and thereby may unintentionally **discriminate new market entrants**. Furthermore, considering the rapid and continuous development of the underlying technology, we deem it reasonable to maintain the **possibility to extend the sandbox for another period** as proposed in Article 10 (2) of the Commission proposal.[5]

b. Evaluation and report

Pursuant to Art 10 (1) and (2) PilotR, ESMA shall present to the Commission a **report on the pilot regime after five years** at the latest, on the basis of which the Commission shall make recommendations to the European Parliament and Council. Due to the high speed of innovation, we recommend an **earlier evaluation and report**, e.g. an annual evaluation or an interim report after three years.[6]

III. Scope of the pilot regime

a. Types of DLT market infrastructures

The Commission proposal establishes two different types of DLT market infrastructures: **DLT MTFs** operated by investment firms and **DLT securities settlement systems (DLT SSS)** operated by CSDs. DLT SSS may, according to Art 5, be exempt from certain requirements of the CSDR, thereby enabling CSDs to use distributed systems. Furthermore, according to Recital 9, it is justified to allow a DLT MTF to perform activities normally performed by a CSD, because DLT systems could potentially be used as decentralized form of such depository. Consequently, under Art 4 investment firms or market operators operating a DLT MTF may be permitted to

[3] Art 7 (5) and Art 8 (5) PilotR.
[4] Proposed amendment to Art 10 (2) PilotR, ECON draft report ECON_PR(2021)689571, 88; ECON final report A9-0240/2021, 39.
[5] As opposed to proposed amendment to Art 10 (2) PilotR, ECON final report A9-0240/2021, 39.
[6] See ECON draft report ECON_PR(2021)689571, 83 ff, 96 f ; ECON final report A9-0240/2021, 38 ff.

admit to trading DLT transferable securities not recorded in a CSD. In our view, this is **generally a suitable approach**, as the pilot regime thereby

(i) facilitates the **use of DLT systems** for securities trading and settlement,

(ii) enables the **merger of trading and post-trading activities** and, importantly,

(iii) allows for experimentation with **DLT systems as a decentralized (and potentially more efficient) alternative to settlement systems operated by licensed CSDs**.

By contrast, ECON proposes a more restrictive approach and initially suggested removing the permission for DLT MTF laid down in Art 4 (2). Instead, ECON proposed to establish **DLT trading and settlement systems (DLT TSS)** as an additional type of market infrastructure that must be licensed under both MiFID II *and* CSDR for performing trading *and* post-trading activities. Notwithstanding the importance of a level playing field, in our view the **mandatory requirement for a CSD license is not suitable for a sandbox approach**. The requirement would abandon the possibility to test DLT systems as an **alternative** to settlement systems run by licensed CSDs and may even constitute a barrier for incumbent market participants. Furthermore, a mandatory requirement for a CSD license may be in conflict with the intention of recent national legislative acts such as the German Electronic Securities Act (Gesetz über elektronische Wertpapiere)[7]. We therefore appreciate that ECON amended its position and now mandates the **proportionate application of the respective requirements applicable to a CSD** on DLT MTF and DLT TSS. However, we would like to emphasize that the outright application of all requirements of the CSDR may be inappropriate to the extent DLT systems can provide an alternative to a CSD operating a SSS. A focus on proportionality and careful consideration of the objectives of the particular requirements are thus required.

Being restricted to CSDs and market operators or investment firms operating a MTF, the Commission proposal is **open only to established market infrastructures**. However, financial innovation is typically driven by FinTechs and other new market entrants. In a broader sense, we understand the deviation from the mandatory recording in a CSD explained in Recital 9 of the Commission proposal to be justified because **certain functions normally performed by a CSD may be automatically performed or facilitated by DLT systems**. Under these circumstances, the Commission deems it reasonable to allow investment firms and market operators to perform activities usually reserved for a licensed CSD. For the same reasons it may be justified to allow other market participants to perform these activities (i.e. the initial recording, settlement and safekeeping of DLT transferable securities) if they use DLT systems and sufficient safeguards are provided. The Commission should thus consider **additional permissions for other market participants under the pilot regime**, as proposed in the ECON final report.[8] **Proportional regulatory requirements** should be applied depending on the individual market participant. Possible institutions that may apply for a corresponding permission include depository banks, crypto-custodians or register operators established under

[7] German Federal Law Gazette I 2021/29.
[8] See proposed amendment of Recitals 8, 10, Article 7 (1a), 8 (1a) ECON final report A9-0240/2021.

the law of a Member State. Additionally, the Commission may want to evaluate to which extent a CSD could potentially perform its key functions (e.g. notary services) for DLT transferable securities outside of its proprietary systems.

b. Eligible DLT systems

The proposed regulation does not expressly state which DLT systems (**permissionless** *and/or* **permissioned**) are eligible for the use in DLT market infrastructures. References to "*proprietary DLT*"[9] and the requirements set out in Article 6 (2) of the Commission proposal[10] suggest that only permissioned systems are within the scope of the pilot regime. In order to adopt a technology-neutral approach, ECON proposes to implement a more neutral wording while clarifying that the liability for the functioning of the particular DLT used always remains with the DLT market infrastructure.[11]

In our opinion, it is not yet clear which kind of DLT systems are suitable for securities settlement. The scope of a sandbox should thus be broad enough to allow for the testing of different technologies. Furthermore, restricting the pilot regime to specific DLT systems does not necessarily mean that crypto-assets issued via other systems (e.g. ERC-20 security tokens) disappear from the market, but rather leaves them in the unregulated field. Therefore, we **support a technology-neutral approach**. While the amendments suggested by ECON adopt a more open wording, strict liability of the DLT market infrastructure may still inhibit the use of permissionless DLT systems, as market infrastructures do not have exclusive control over all aspects of such DLT systems. In order to promote innovation, the Commission may consider more nuanced liability frameworks with additional safeguards (e.g. additional investor information and/or investment limits for retail investors) to allow for experimentation with permissionless DLT systems.

If only certain DLT systems are included in the scope of the pilot regime, we advocate a **clear description of the requirements** eligible DLT systems need to fulfill. In this case, we also encourage the Commission to evaluate how existing assets based non-eligible DLT systems should be dealt with and which interfaces between such assets and regulated trading and post-trading market infrastructures exist.[12]

c. Financial instruments

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[9] See Recital 28, Article 7(2) lit.c and Article 8 (2) lit.c.

[10] According to Art 6 (2), DLT market infrastructures "[…] *shall establish rules on the functioning of the DLT they operate, including the rules for accessing the distributed ledger technology, the participation of the validating nodes,* […]".

[11] Proposed amendments to Recitals 11, 28, Article (7) (2) (c), 8 (2) (c), ECON draft report ECON_PR(2021)689571 and ECON final report A9-0240/2021; proposed amendment to Article 6 (1a) and (5a) ECON final report A9-0240/2021.

[12] For instance, despite their immaterial form, it may be reasonable to allow for the "immobilization" of assets issued on a permissionless DLT system in CSD or DLT MTF, in order to enable subsequent transfers via a DLT market infrastructure or traditional securities settlement system (see for example draft Article 6 (1) lit. d and Article 6 (3) of the Swiss Book Entry Securities Act, BBl 2020, 7801 [7812 f]).

Art 6 of the proposed regulation COM (2020) 595 final clarifies that all financial instruments may be issued by means of distributed ledger technology. By contrast, the definition of 'DLT transferable securities' in Art 2 (5) of the pilot regime only refers to certain transferable securities mentioned in Art 4 (1) (44) (a)[13] and (b)[14] MiFID II. Furthermore, Art 3 of the pilot regime specifically refers to **shares** and various **bonds**, which may indicate an even narrower scope of application compared to Art 4 (1) (44) (a) and (b) MiFID II.

In order to promote legal certainty, a clear and common understanding of which assets are eligible under the pilot regime (e.g index certificates and similar products) is important. Moreover, we consider that DLT trading and settlement could also provide an opportunity for financial instruments other than shares and bonds while comparable regulatory barriers may exist and risks are not fundamentally different (e.g. units in undertakings for collective investment in transferable securities[15]). We thus suggest **widening the scope** and at the same time **clearly defining the financial instruments covered by the pilot regime**, also with regards to the definitions of Art 4 (44) MiFID II.

Additionally, since there seems to be disagreement on the adequacy of the defined **thresholds**, an interim evaluation and possibility to adjust the thresholds as proposed by ECON[16] seems appropriate.

[13] Shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares.
[14] Bonds or other forms of securitised debt, including depositary receipts in respect of such securities.
[15] See also ECON final report, A9-0240/2021, 21 f.
[16] Proposed amendment to Art 3 PilotR, cf. ECON_PR(2021)689571, 51 ff, 94 f.