

CCI submission to European Data Protection Board (EDPB) guidelines 02/2025 on processing of personal data through blockchain technologies

The [Crypto Council for Innovation](#), the premier [global alliance](#) advancing crypto innovation, is grateful for the opportunity to provide this brief, high-level input to the European Data Protection Board (EDPB) on its [guidelines 02/2025](#).

We are extremely concerned that the EDPB's guidelines, whether intentionally or not, misunderstand fundamental features of blockchain technology. The guidelines, as drafted, pose a fundamental challenge both to regulated entities engaging in blockchain technology (be they digital native or traditional finance firms), who will not be able to comply and to National Competent Authorities, who will be powerless to enforce them.

We have consciously refrained from attempting to provide exhaustive commentary on the guidelines, in part as we know many of our peer organisations such as the European Crypto Initiative, the European Blockchain Association and Blockchain for Europe share our concerns and will make their own, more substantive and technical submissions.

Whilst we fully appreciate and recognise the EDPB's role and mandate in ensuring compliance with, and enforcement of, the EU's General Data Protection Regulation (GDPR), we fundamentally disagree with the general approach of treating decentralized, blockchain networks like any other, traditional database.

We'd like to provide just 3 examples of where we believe the guidelines significantly misunderstand the technology in such a way as to make compliance and enforcement impossible:

- 1. Deletion of blockchains is not technically feasible:** In para 63 on the principle of storage limitation, the guidelines suggest that 'when deletion has not been taken into account by design, this may require deleting the whole blockchain'. This is, in our view, technically impossible and legally problematic in a decentralized network - no single entity has the ability or control to do this (and besides, if they did, it wouldn't be a DLT blockchain). Such a position would render the deployment of public permissionless blockchains within the EU effectively impossible—undermining European competitiveness, innovation, and individual privacy rights.
- 2. Explicit preference for permissioned blockchains:** Despite references to tech neutrality, these guidelines explicitly favor permissioned vs. permissionless blockchains (section 3.3; para 40). Whilst both permissioned and permissionless blockchains indeed co-exist, market evolution (development of Web3 applications, decentralised exchanges etc) is seeing permissionless blockchains far outstrip permissioned ones, given their many benefits.
- 3. Impossibility of human intervention/kill switches in decentralised, permissionless networks:** In para 107 in section 5.4 (right to object to a solely automated decision) the guidelines speak of 'the possibility of human intervention' to allow 'the data subject to contest the decision, even if the smart contract has already been performed and regardless of what is registered on the blockchain.'. Once

again this suggestion, whilst no doubt well meaning in relation to the EDPB's mandate, is at odds with the very nature/concept of how blockchain technology operates.

We believe the GDPR must be interpreted in light of its purpose and the technical realities of blockchain. We challenge the assertion in paragraph 63, which is technically impossible in public permissionless networks, where data is replicated across nodes worldwide.

There exist potential solutions which would address the concerns the EDPB is seeking to address, such as:

- **Key deletion (crypto-shredding):** Deleting the encryption key renders the underlying data permanently inaccessible. = deletion
- **Off-chain storage with revocation capabilities:** Store sensitive data off-chain and only post hash or proof on-chain; enable revocation through smart contracts or access controls.
- **Zero-knowledge rollups:** Enable verifiable state transitions without revealing underlying data

In conclusion, we are deeply concerned by the impact of these misguided guidelines on the potential development and deployment of this ground-breaking technology in the EU and globally (given the global nature of the industry and potential scoping in blockchains involving any node or participant from an EU member state).

We believe these guidelines are impractical and may create obligations that are impossible to enforce for industry and regulators alike. Moreover, the uncertainty they bring will have a detrimental impact on investment in the EU, hampering the roll out of blockchain technology by both digital native firms and traditional operators. This will ultimately hurt EU citizens and companies. It also is diametrically opposed to the EU's alleged political intentions of closing the innovation gap¹ and improving its competitiveness, outlined in myriad political frameworks such as the [Draghi](#)²³ and [Letta](#)⁴ reports, the [Savings and Investment Union](#)⁵ and the [Competitiveness Compass](#)⁶.

CCI and its members stand ready to have a constructive dialogue with the EDPB and would be pleased to organise a bilateral meeting (in-person or virtually) to develop further some of the concerns raised in this short submission. We would also be happy to take part in a broader industry dialogue, should the EDPB prefer this approach

¹ See section 2 Draghi report entitled: 'Closing the innovation gap'. Innovation is mentioned 114 times in the report. Also see section 1.1 of the European Commission's Competitiveness Compass.

² Extract from Foreword p6: 'Innovation is blocked at the next stage: we are failing to translate innovation into commercialisation, and innovative companies that want to scale up in Europe are hindered at every stage by inconsistent and restrictive regulations'.

³ Extract from p10: 'For example, we claim to favour innovation, but we continue to add regulatory burdens onto European companies, which are especially costly for SMEs and self-defeating for those in the digital sectors'.

⁴ Letta's report includes a chapter entitled: 'A 5th freedom to enhance research, innovation and education in the Single Market' 'to enhance the Single Market's innovation capabilities within the new global landscape'.

⁵ There are several references to innovation including an explicit reference on p14 in relation to the role of the 'latest generation of technologies and innovations in financial market infrastructure, such as distributed ledger technology, tokenisation of financial assets and Artificial Intelligence' in Consolidating Trading and post-Trading Infrastructures.

⁶ The competitiveness compass speaks of the need for 'Diffusing innovation across the whole economy', with several upcoming acts related to this goal under Flagship Actions Pillar 1: 28th regime; European Innovation Act and the launch of a joint Commission/EIB TechEU investment programme.