



# EDPB Report on Public Consultation: Guidelines 02/2025 on processing of personal data through blockchain technologies

## 1. Background on the process of the public consultation

This public consultation concerned the EDPB Guidelines 02/2025 on processing of personal data through blockchain technologies. The consultation was carried out as an open written consultation hosted on the EDPB website and targeted all interested stakeholders, including industry actors, civil society, academics, experts in blockchain technologies, and individual citizens.

It was held from 14 April 2025 to 9 June 2025, after the adoption of the first public version of the Guidelines adopted on 08 April 2025 (v1.1), with the aim of gathering feedback on the clarity, completeness and practical applicability of the guidelines. The consultation had three main objectives: First, to identify specific questions and problem areas which are causing problems for stakeholders; secondly, to identify any aspects where there is a lack of harmonisation; and thirdly, to gather existing material and best practices which are commonly used by controllers.

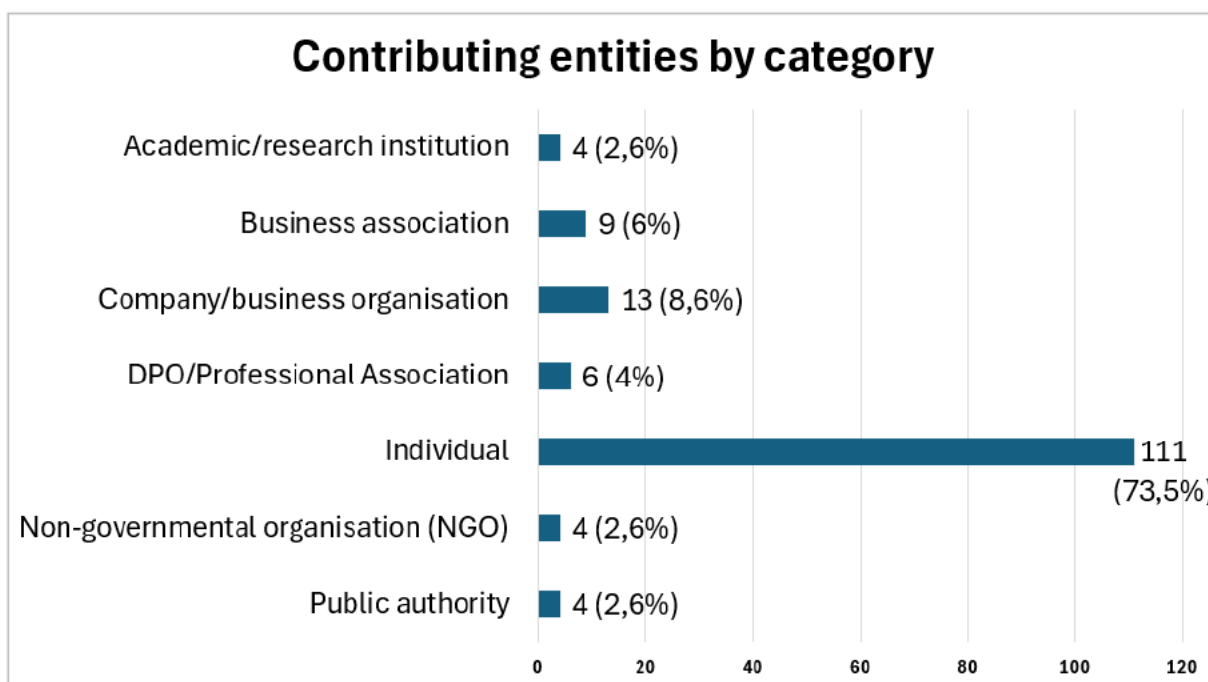
## 2. Amount and nature of contributions received

**Total number of contributions received:** 151, of which 98 were unique contributions. There were 53 duplicate submissions, of which 50 corresponded to a single repeated contribution. The majority of contributions came from individuals.

Link to the page where the contributions are published: [https://www.edpb.europa.eu/our-work-tools/documents/public-consultations/2025/guidelines-022025-processing-personal-data\\_en](https://www.edpb.europa.eu/our-work-tools/documents/public-consultations/2025/guidelines-022025-processing-personal-data_en)

**Number of contributing entities by category:**

Business association	Company	Individual	NGO	Public authority	Academic/ research institution	DPO/ Professional Association
9	13	111	4	4	4	6



#### Total number of contributions received from EU/EEA and third countries:

EU/EEA		Third countries	
Austria	4	China	1
Belgium	10	Israel	1
Czech Republic	2	South Korea	1
France	57	Switzerland	3
Germany	40	United Kingdom	3
Greece	2	United States	2
Hungary	2		
Ireland	2		
Italy	5		
Luxembourg	2		
Netherlands	6		
Norway	1		
Poland	2		
Romania	1		
Slovakia	1		
Spain	2		
Sweden	1		
<b>TOTAL</b>	<b>140</b>	<b>TOTAL</b>	<b>11</b>

### 3. Main outcomes of the public consultation

The contributions received covered a wide range of legal, technical and operational issues. The consultation enabled the correction of several typographical errors and inaccuracies and informed several terminology clarifications incorporated into the revised Guidelines.

Overall, the feedback revealed several recurring themes:

- Questions about whether public keys, wallet addresses, and other on-chain identifiers constitute personal data.
- Concerns regarding erasure and immutability.
- Comments on the allocation of roles and responsibilities, particularly in decentralised environments.
- Perceived tensions between GDPR obligations and AML/KYC requirements.
- Objections to the recommendations of permissioned blockchains and their operational implications.
- Proposals for further and additional guidance, technical clarifications, examples, DPIA templates and architectural recommendations.
- Suggestions for correcting typographical errors and improving terminology
- Ideological objections, including assertions that the Guidelines would ‘ban Bitcoin’ or ‘undermine decentralisation

The main positive responses from the public consultation were:

- Useful proposals for terminological clarification and typographical errors (ledger, identifiers, ...).
- Suggestions to reinforce references to PETs, selective disclosure, or ZKPs (although many proposals go far beyond the intended scope of the Guidelines).
- Requests for additional examples, technical specifications, or operational guidance such as recommendations and templates for DPIAs and architectural analysis.

Among these positive contributions, the EDPB has incorporated those relating to terminology clarifications and typographical corrections, while other proposals, such as extended DPIA templates or detailed architectural models, were not taken on board as they fall outside the scope of the Guidelines.

Several critical observations were received, most of which fell into the following categories:

- Concerns about the qualification of public keys, wallet addresses and similar identifiers as personal data, particularly in public blockchains.
- Comments questioning the interpretation of erasure requirements and the discussion of data remaining on-chain.
- Divergent views on the allocation of controllership roles in decentralised environments.
- Concerns about the perceived tension between GDPR requirements and AML/KYC obligations.
- Comments suggesting that the Guidelines appeared to favour permissioned blockchains.

Most critical comments were based on misunderstandings of GDPR or related to matters outside the EDPB’s remit and were therefore not incorporated. Instead, clarifications have been added where appropriate.

Having considered the feedback received, the EDPB has incorporated the following elements into the Guidelines:

- Correction of minor typographical errors: fixes in paragraphs 9 (“*minimization*”) and 45 (“*might*”)
- Correction in paragraph 24 replacing *identities* with *unique identifiers*.
- Terminology clarifications, introduced to reduce misinterpretations and to include some of the feedback suggestions. These modifications aim to improve precision and clarity in technical terminology and address ambiguities highlighted by stakeholders:

- Paragraph 15: clarification on the meaning of “*ledger*” and addition of a supporting footnote.
- Paragraph 30 (Section 3.2): footnote clarifying that on-chain metadata, such as transaction identifiers, wallet addresses, event logs, transaction receipts, state transitions, smart contract storage and other traces, may constitute personal data when they enable direct or indirect identification.
- Paragraph 51 (Section 4.2): replacement of “*one way*” with “*measure*” for consistency.
- Paragraph 56 (Section 4.2) has been updated to include, at the beginning of the paragraph, an additional reference to ZKPs, PETs and other advanced cryptographic protocols, when carefully tested and validated, as potential complementary techniques to reduce risks to data subjects. The original concluding sentence, emphasising that such techniques, and those techniques mentioned in the previous paragraphs, should in all cases be accompanied by other appropriate technical and organisational measures to ensure GDPR compliance, has been retained as it reflects the core message of the provision.
- New footnote 38 added to Paragraph 80 (Section 4.7). AML/CFT, KYC and MiCA regulations restrict the use of identity obfuscation techniques (such as anonymous accounts) by requiring clear customer identification and data retention for at least 5 years. These obligations can limit the use of anonymity or obfuscation techniques, especially in the context of crypto-assets and blockchain. However, they do not ban obfuscation in all cases, and the GDPR does not directly conflict, as its principles allow balancing these obligations with other legal requirements. After the 5-year period, data deletion is possible, unless other laws mandate retention.
- Glossary (Paragraph 128): clarification that the ledger is materialised in nodes through a database (typically *LevelDB* or *RocksDB*).
- Glossary update (new Paragraph 129): introduction of clearer definitions for *wallet address/account/public key*.

Further, the EDPB has not incorporated the following elements into the Guidelines:

- Proposals which were outside the scope of the mandate of the guidance. This primarily included contributions which addressed:
  - Proposals requesting extensive sector-specific guidance (e.g., AML/KYC operational frameworks).
  - Requests for detailed DPIA templates or risk-assessment methodologies (risk matrices), governance models, etc. which would require extensive reworking and might be addressed in other future EDPB guidelines.
- Proposals relating to matters not within the remit of the EDPB:
  - Comments concerning legislative changes to the EU financial regulatory framework.
  - Proposals relating to the design or governance of specific public blockchain ecosystems.
- Changes based on misinterpretations of the content of the document subject to the public consultation. The main misinterpretations were:
  - comments requesting recognition of specific cryptographic approaches as fully compliant solutions, which has been clarified in the Paragraph 30 footnote.
  - Views that blockchain immutability supersedes GDPR obligations.
  - Interpretations of controllership that would contradict the definitions in GDPR and EDPB Guidelines on controller/processor.

- Suggestions to exclude wallet addresses or transaction-level identifiers from the notion of personal data, irrespective of their potential to identify or single out individuals.
- Proposals to consider certain public blockchain architectures as exempt from GDPR obligations due to decentralisation.
- Miscellaneous: Individual comments expressing general opinions unrelated to the substance of the Guidelines, such as claims that the Guidelines “ban public blockchains”
- Comments for which, after due consideration, the EDPB decided to take another position. This primarily included contributions which addressed:

Comments regarding the Guidelines recommendations for permissioned blockchains. The fact is that a permissioned blockchain offers an easier way to allocate responsibilities and other GDPR requirements.