



# NASDAQ DIGITAL ASSETS INDEXES GUIDELINES FOR CORE EXCHANGES AND CORE CUSTODIANS

## INTRODUCTION

This document aims to outline Nasdaq's default guidelines related to core exchanges and core custodians with respect to Nasdaq's digital asset indexes. The guidelines included herein represent Nasdaq's standard approach. However, an index may employ alternative guidelines, and where this occurs, the rules documented in the individual index methodology take precedence.

Please refer to the individual Nasdaq index methodology for further information on the specific rules applicable to a given index.

## CORE EXCHANGES

To be eligible for Index inclusion, a digital asset must trade on at least two exchanges that meet the criteria set forth by Nasdaq. At a minimum, to be considered eligible for designation as a Core Exchange, an exchange should:

- 1) Include strong forking controls.

Forks should be handled via a consistent framework and strong governance. Effective forking governance controls should include clear and documented policies that address:

- *Forking criteria*
- *Product and service impacts*
- *Technology and security impacts (including two-way replay protection to prevent the possibility of a new chain being wiped out by the original chain)*
- *Operational impacts*
- *Market risk*
- *Liquidity demands*

2) Have effective AML controls.

*The ability to confirm the identity, jurisdiction, and purpose of each customer is essential to the fulfilment of effective cryptocurrency exchange AML programs. For cryptocurrency exchanges, AML programs must protect against financial crime and stay compliant with heightening regulations. The AML program must include a Customer Acceptance Policy (CAP), a Customer Identification Program (CIP), ongoing monitoring of transactions to identify suspicious transactions to ensure customer details are up-to-date, and risk management procedures. The AML Program should also include periodically updated AML risk assessments that reflect changes to applicable BSA/AML laws, regulations and regulatory warnings, as well as any other information determined by the institution to be relevant from its related programs and initiatives. Effective KYC program controls reduce the likelihood of illicit activity occurring through the exchange or wallet.*

3) Have a reliable and transparent API that provides real-time and historical trading data.

*As data providers, exchanges serve the Index Methodology as important tools for price discovery and for measuring asset liquidity, so exchanges need to offer reliable means for collecting that information. Moreover, stable and transparent APIs are elementary indicators of the quality and trustworthiness of the exchange's systems and data.*

4) Charge fees for trading and structure trading incentives that do not interfere with the forces of supply and demand.

*Prices and trading volume should be formed by competitive forces of supply and demand. However, some exchanges offer trading incentives that inflate trading volume in an uncompetitive way, making them inadequate to serve the interests of the benchmark.*

5) Be licensed by a public independent governing body.

6) Include surveillance for manipulative trading practices and erroneous transactions.

*Trade surveillance should be performed by a third party or the organizations third line of defense, with escalation to the Chief Risk or Compliance Officer. Internal surveillance policies and procedures determined as sufficient by Nasdaq must be implemented.*

*Exchanges that are under external and/or internal surveillance are less likely to be involved in unfair manipulation of the market.*

7) Evidence a robust IT infrastructure.

*The IT infrastructure should be designed to protect the operation of the exchange and the trading activity taking place on the platform. This includes Business Continuity and Disaster Recovery systems, third party auditors, and cyber security review.*

- 8) Demonstrate active capacity management.

*The platform's technical infrastructure is designed and maintained in such a way that it can accommodate a sudden, significant increase in trade volume without impacting system functionality.*

- 9) Evidence cooperation with regulators / law enforcement.

*Notwithstanding commitments to maintain the confidentiality of the Platform's users, the User Agreement must allow for the sharing of confidential, identifying customer information and trading data with regulators or law enforcement agencies conducting investigations in their normal course of business investigating.*

- 10) Have a minimum market representation for trading volume.

*To compute an exchange's market size, we sum the USD volume of all eligible "digital asset"- "USD" pairs for the month of August each year. Exchanges with less than 0.05% of the total volume in eligible exchanges are eliminated.*

If an exchange meets these standards, Nasdaq will conduct further diligence to assess an exchange's eligibility for designation as a Core Exchange. In the process of conducting diligence of the exchanges, Nasdaq will consider additional criteria, including, but not limited to, the exchange's rules for admitting digital assets, its organizational and ownership structure, security history, and reputation.

Nasdaq will review new Core Exchange candidates throughout the year and announce any new additions when approved. Nasdaq will recertify the Core Exchanges on an annual basis by conducting a review on such topics as AML, surveillance and information security. Changes to the list of Core Exchanges may be made by approval of Nasdaq and announced accordingly in the case of exceptional events or in order to maintain the integrity of the Index.

## CORE CUSTODIANS

Custodians hold digital assets for safekeeping against theft and loss and ensure that digital asset transaction and trades are secure. At any Index Reconstitution, only digital assets that are publicly supported by at least one Core Custodian for the entire period since the previous reconstitution that offer high level security and legal guarantees to avoid theft or misappropriation of assets will be considered for inclusion in the Index. In designating a custodian as a Core Custodian, Nasdaq considers whether a custodian:

- 1) Provides custody accounts whose holders are the legal beneficiaries of the assets held in the account. In case of bankruptcy or insolvency of the custodian, creditors or the estate should have no rights to the clients' assets.

*There should be a separation of asset ownership such that clients are the legal beneficial owners of all assets held in their accounts, even in case of insolvency of the custodian. Custodians must offer segregated individual accounts. Index assets should be stored in segregated individual*

*accounts and not in omnibus accounts. Custodians must not allow securities lending against digital assets.*

- 2) Generates account-segregated private keys for digital assets using high entropy random number generation methods and employing advanced security practices.

*This rule aims to secure and isolate the client's blockchain accounts to protect them against misappropriation or loss of control of assets in the blockchain.*

- 3) Utilizes technology for storing private keys in offline digital vaults and applies secure processes, such as private key segmentation, multi-signature authorization, and geographic distribution of stored assets, to limit access to private keys.

*Custodians should use security technology for storing private keys aiming to avoid theft or misappropriation of assets due to online attacks, collusion of agents managing the storage services, or any other threat.*

- 4) Offers redemption processes for timely and secure transfer of digital assets and allows account holders to set withdrawal authorization restrictions such as whitelisting and multi-user account controls.

*This rule aims to provide a flexible redemption process so investment funds replicating the Index can design secure internal procedures to withdraw digital assets.*

- 5) Must support the Index's forking policy and allow the split of assets to be reflected in the Index asset holdings.

*There must be a comprehensive forking policy in place at each custodian which must include reasonable notice to the holders (Index) if the entity chooses not to support a Fork in any given asset.*

- 6) Custodians must have a comprehensive risk management policy and formalized framework of managing operational and custody risks. Custodians should have a control framework that is reviewed and managed by second and third line of defense.

- 7) Has a documented disaster recovery program that ensures continuity of operations in the event of a system failure.

*Custodians must have a business continuity plan to help ensure continued customer access to the assets at all times.*

- 8) Is licensed as a Custodian by a reputable and independent governing body (e.g., the U.S. Securities and Exchange Commission, the New York State Department of Financial Services, or other state, national or international regulators), as can be ascertained by certain public data sources.

*Custodians have to comply with higher standards of government oversight, external audits, and security, and as such, Custodians are able to offer better legal guarantees that safekeep asset ownership.*

- 9) Provides third-party audit reports at least annually on operational and security processes. This audit may be completed either by having a full SOC2 certification issued or the third-party auditor providing an attest report based off the full SOC2 methodology. If this third-party report is not available, Nasdaq may consider conducting such audit review directly upon request.

*Auditors provide reasonable assurance that the custodian operational processes are in accordance with the expected standards.*

- 10) Has an insurance policy that covers, at least partially, third-party theft of private keys, insider theft from internal employees, and loss of keys.

*This rule provides extra assurance needed by institutional investors that assets held in a Core Custodian will not be lost.*

A Core Custodian might lose eligibility if it does not comply with the above requirements or with any other Nasdaq requirements.

Nasdaq will review new Core Custodian candidates throughout the year and announce any new additions when approved. The list of existing Core Custodians will be recertified by Nasdaq at minimum on an annual basis. Changes to the list of Core Custodians may be made by approval of Nasdaq and announced accordingly in the case of exceptional events or in order to maintain the integrity of the Index.

## ADDITIONAL INFORMATION

### Contact information

For any questions regarding an Index, please contact the Nasdaq Index Client Services team at [indexservices@nasdaq.com](mailto:indexservices@nasdaq.com).

## APPENDIX A: CHANGES TO GUIDELINES

Effective Date	Section	Previous	Updated
06/01/2022	Core Exchanges	To be eligible for Index inclusion, a digital asset must trade on at least three exchanges that meet the criteria set forth by Nasdaq.	To be eligible for Index inclusion, a digital asset must trade on at least two exchanges that meet the criteria set forth by Nasdaq.
06/01/2022	Core Custodians	At any index reconstitution, only digital assets that are publicly supported by at least two Core Custodians for the entire	At any Index Reconstitution, only digital assets that are publicly supported by at least one Core Custodian for the entire

Effective Date	Section	Previous	Updated
		period since the previous reconstitution that offer high level security and legal guarantees to avoid theft or misappropriation of assets will be considered for inclusion in the Index.	period since the previous reconstitution that offer high level security and legal guarantees to avoid theft or misappropriation of assets will be considered for inclusion in the Index.

**DISCLAIMER**

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity, including but not limited to, quantitative inclusion criteria. Nasdaq may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the index construction and calculation. Nasdaq does not guarantee that any Index accurately reflects future market performance.

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