

INDEX METHODOLOGY

# NASDAQ CTA ARTIFICIAL INTELLIGENCE AND ROBOTICS™ INDEX

## **NQROBO**<sup>TM</sup>

## **INDEX DESCRIPTION**

The Nasdaq CTA Artificial Intelligence and Robotics Index is designed to measure the performance of companies engaged in the artificial intelligence and robotics segment of the technology, industrial, medical and other economic sectors. The Index includes companies in artificial intelligence or robotics that are classified as either enablers, engagers or enhancers.

## SECURITY ELIGIBILITY CRITERIA

#### Eligible security types

Eligible security types generally include common stocks, ordinary shares, depositary shares (both American and Global), shares of beneficial interest or limited partnership interests and tracking stocks.

If the security is a depository receipt representing a security of a non-US issuer, then references to the "issuer" are references to the issuer of the underlying security.

#### Multiple classes of securities

One security per issuer is permitted. If an issuer has multiple otherwise-eligible securities, one of which is an Index Security as of the Reconstitution Reference Date, only that security may be eligible; otherwise, only the security with the highest three-month average daily traded value may be eligible.

#### Eligible exchanges

A security must be listed on an Index-eligible global stock exchange. Global stock exchanges are reviewed periodically for eligibility. For more information and a complete listing of Index-eligible exchanges, please refer to **Nasdaq Eligible Exchanges Policy**.

#### Industries and sectors

A company must be classified by Consumer Technology Association (CTA) as an Artificial Intelligence or Robotics company.

#### Market capitalization

A security not in the Index as of the Reconstitution Reference Date must have a free float market capitalization of at least \$500 million (USD).

A security in the Index as of the Reconstitution Reference Date must have a free float market capitalization of at least \$450 million (USD).

#### Liquidity

A security must have a three-month average daily traded value of at least \$3 million (USD).

#### Float

At least 20% of a security's total shares outstanding must be publicly available for trading (float shares).

#### **Other Eligibility Criteria**

If, at reconstitution, Nasdaq becomes aware that an issuer or security will soon undergo a fundamental change that makes it ineligible, Nasdaq will remove the security from consideration. This includes entering into a definitive merger or acquisition agreement or other pending arrangement that would make it ineligible for Index inclusion, or a filing of bankruptcy or similar protection from creditors.

## INDEX CALENDAR

#### **Reconstitution schedule**

The Index Reconstitution is conducted semi-annually in March and September.

#### **Reconstitution reference dates**

The Security Eligibility Criteria and Constituent Selection Process are applied using market data as of the end of January and July, respectively, with the exception of market capitalization, liquidity, and float, which use market data as of the end of February and August, respectively.

#### **Reconstitution announcement dates**

Index Reconstitutions are announced in early March and September.

#### **Reconstitution effective dates**

Index Reconstitutions are effective at market open on the trading day after the third Friday in March and September.

#### **Rebalance schedule**

The Index is rebalanced quarterly in March, June, September, and December.

#### **Rebalance reference dates**

The Index Rebalance uses Last Sale Price as of the prior month-end (February, May, August and

November, respectively).

#### **Rebalance announcement dates**

Index Rebalance changes are announced in early March, June, September and December.

#### Rebalance effective dates

Index Rebalance changes are effective at market open on the next trading day after the third Friday in March, June, September and December.

#### Holiday schedule

The Indexes are calculated Monday through Friday and does not close for holidays, as it is a Global Index.

#### Index calculation and dissemination schedule

The index is calculated starting by the earliest time zone (Asia/Tokyo) and closes by the latest time zone (America/New York).

## CONSTITUENT SELECTION

#### **Constituent selection process**

CTA's AI Intensity Ratings capture the perceived degree of a company's AI sector involvement within one of the three categories: Enabler, Engager and Enhancer.

- Enablers are companies that develop the building block components for robotics or artificial intelligence, such as advanced machinery, autonomous systems/self-driving vehicles, semiconductors, databases used for machine learning.
- Engagers are companies that design, create, integrate, or deliver robotics and/or artificial intelligence in the form of products, software, or systems.

• Enhancers are companies that provide their own value-added services within the Artificial Intelligence and Robotics ecosystem, but which are not core to their product or service offering.

Securities that meet the applicable Security Eligibility Criteria are ranked within their categories by their companies' CTA AI Intensity Ratings. Securities ranked in the top 30 within each category, including ties, are selected for the Index.

## **CONSTITUENT WEIGHTING**

#### Constituent weighting scheme

The Index is a modified equal-weight index.

#### **Constituent weighting process**

Category weights are set to the following values:

- Enablers: 25%
- Engagers: 60%
- Enhancers: 15%

All Index Securities are assigned equal Index market value within their respective categories.

For additional information about index weighting, see Nasdaq Standard Index Weight Adjustment Guidelines.

## INDEX MAINTENANCE

#### **Deletion policy**

#### Daily

If, at any time other than an Index Reconstitution, Nasdaq becomes aware that an Index Security has become ineligible for continued inclusion, it is removed from the Index as soon as practicable. This includes events such filing bankruptcy or similar protection from creditors, delisting or other arrangement including mergers and acquisitions. Refer to the **Corporate Actions and Events Manual – Equities** for further information.

#### Quarterly

Each quarter, in conjunction with the Index Rebalance, the following criteria are evaluated for each Index Security using market data as of the prior month-end (February, May, August, and November): Index Securities must have a free float market capitalization of at least \$450 million (USD) and a threemonth average daily traded value of at least \$3 million (USD). If an Index Security fails to meet either criterion at these times, it will be removed from the Index on the Rebalance Effective Date.

#### **Replacement policy**

Index securities deleted at any time during the year other than the Index Reconstitution(s) are not replaced.

#### **Corporate actions**

In the interim periods between scheduled index reconstitution events, individual Index securities may be the subject to a variety of corporate actions and events that require maintenance and adjustments to the Index. Specific treatment of each type of corporate action or event is described in **Nasdaq Corporate Actions and Events Manual – Equities**, which is incorporated herein by reference.

In certain cases, corporate actions and events are handled according to the weighting scheme or other index construction techniques employed. Wherever alternate methods are described, the Index will follow the "Non-Market Cap Corporate Action Method."

#### Index share adjustments

Other than as a direct result of corporate actions, the index does not normally experience share adjustments between scheduled Index rebalance and reconstitution events.

## ADDITIONAL INFORMATION

#### Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website at http://indexes.nasdaqomx.com.

For more information on the general Index Announcement procedures, please refer to the **Nasdaq Index Methodology Guide**.

#### **Unexpected market closures**

For information on Unexpected Market Closures, please refer to the Nasdaq Index Methodology Guide.

#### **Calculation types**

For information on the Index calculation types as well as the mathematical approach used to calculate the Index(es), please refer to the **Calculation Manual – Equities & Commodities**.

#### Recalculation and restatement policy

For information on the Recalculation and Restatement Policy, please refer to the **Nasdaq Index Recalculation Policy**.

#### Data sources

For information on data sources, please refer to the Nasdaq Index Methodology Guide.

#### **Contact information**

For any questions regarding an Index, please contact the Nasdaq Index Client Services team at indexservices@nasdaq.com.

#### Index dissemination

Index values and weightings information are available through Nasdaq Global Index Watch (GIW) website at https://indexes.nasdaqomx.com/ as well as the Nasdaq Global Index FlexFile Delivery Service (GIFFD) and Global Index Dissemination Services (GIDS). Similar to the GIDS offerings, Genium Consolidated Feed (GCF) provides real-time Index values and weightings for the Nordic Indexes.

For more detailed information regarding Index Dissemination, see the **Nasdaq Index Methodology Guide**.

#### Website

For further information, please refer to Nasdaq GIW website at https://indexes.nasdaqomx.com/.

#### FTP and dissemination service

Index values and weightings are available via FTP on the Nasdaq Global Indexes FlexFile Delivery Service (GIFFD). Index values are available via Nasdaq's Global Index Dissemination Services (GIDS).

## GOVERNANCE

All Nasdaq Indexes are managed by the governance committee structure and have transparent governance, oversight, and accountability procedures for the Index determination process. For further details on the Index Methodology and Governance overlay, refer to the **Nasdaq Index Methodology Guide.** 

## **GLOSSARY OF TERMS AS USED IN THIS DOCUMENT**

For the glossary of key terms, please refer to the Nasdaq Index Methodology Guide.

Effective Date	Methodology Section	Previous	Updated
12/23/2024	Security eligibility criteria: Market capitalization	A security must have a market capitalization of at least 250 million United States Dollars (USD).	A security not in the Index as of the Reconstitution Reference Date must have a free float market capitalization of at least \$500 million (USD). A security in the Index as of the Reconstitution Reference Date must have a free float market capitalization of at least \$450 million (USD).
12/23/2024	Index calendar: Reconstitution reference dates	The Security Eligibility Criteria are applied using market data as of the end of January and July, respectively.	The Security Eligibility Criteria and Constituent Selection Process are applied using market data as of the end of January and July, respectively, with the exception of market capitalization, liquidity, and float, which use market data as of the end of February and August, respectively.
12/23/2024	Index maintenance: Deletion policy: Quarterly		Each quarter, in conjunction with the Index Rebalance, the following criteria are evaluated for each Index Security using market data as of the prior month-end (February, May, August, and November): Index Securities must have a free float market capitalization of at least \$450 million (USD) and a three-month average daily traded value of at least \$3 million (USD). If an Index Security fails to meet either criterion at these times, it will be removed from the Index on the Rebalance Effective Date.

## APPENDIX A: METHODOLOGY CHANGE LOG

## 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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