



INDEX METHODOLOGY

NASDAQ YEWNO AEROSPACE & DEFENSE INDEX

DEFENSE

INDEX DESCRIPTION

The Nasdaq Yewno Aerospace & Defense Index is designed to track the performance of companies involved in the aerospace and defense industries. The companies are selected based on proprietary data aggregated by Yewno, including US government contract data (i.e. “national security” revenue) and global patent data. The US government contract data is sourced from databases published by the Department of Defense, Department of Energy, Department of Homeland Security, and NASA.

Yewno, Inc. (“Yewno”) has created a theme and sub-theme classification process to review innovative technologies by analyzing millions of approved patents on a rolling 1-year basis. The index aims to select companies that may be innovative in their space based on their rolling 1-year patent data, while also ranking highly according to the current and projected national security revenue with the US government. The patent classifications determined by Yewno as relating to aerospace & defense are as follows: Aerospace, Ammunition, Communications, Explosives, Heavy Weapons, Infrastructure, Naval Equipment, Small Arms and Training, Nuclear, and Personal Equipment.

SECURITY ELIGIBILITY CRITERIA

Eligible security types

Eligible security types generally include common stocks, ordinary shares, and depositary receipts.

If the security is a depositary receipt representing a security of a non-U.S. 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 securities, the security with the highest three-month average daily dollar trading volume is considered for possible inclusion into the Index.

Eligible exchanges

Securities must be listed on The Nasdaq Stock Market, the New York Stock Exchange, NYSE American, or the CBOE BZX Exchange.

Market capitalization eligibility

Each security must have a minimum free float market capitalization of \$100 million.

Liquidity eligibility

Each security must have a minimum three-month average daily dollar trading volume of \$1 million.

Seasoning eligibility

Each security must have been traded for at least three months prior to the Index Reconstitution reference date.

Other eligibility criteria

The issuer of the security generally may not currently be in bankruptcy proceedings.

The issuer of the security generally may not have entered into a definitive agreement or other arrangement that would make it ineligible for Index inclusion.

INDEX CALENDAR

Reconstitution schedule

Nasdaq selects constituents semi-annually in April and October.

Reconstitution reference dates

The “Eligible security types” and “Eligible exchanges” Security Eligibility Criteria are applied using market data as of the end of February and August, respectively.

All other Security Eligibility Criteria are applied using market data as of the end of March and September, respectively.

Reconstitution announcement dates

Index Reconstitutions are announced in early April and October.

Reconstitution effective dates

Index Reconstitutions become effective at market open on the trading day after the third Friday in April and October.

Rebalance schedule

The Index is rebalanced semi-annually in conjunction with the Index Reconstitution. The announcement and effective dates are the same as those of the Index Reconstitution.

Rebalance reference dates

The Index Rebalance uses the end of February and August for all data other than Last Sale Price (“LSP”), which is taken as of the end of March and September.

CONSTITUENT SELECTION

Constituent selection process

Securities that meet the applicable Security Eligibility Criteria are included in the Index.

Nasdaq determines Index constituents by ranking each company in the Yewno dataset according to its total (current and projected) national security revenue (“Revenue”) and its aerospace and defense patent “Exposure” and “Contribution” ratios.

- 1) The top 50 companies by Revenue are included.
- 2) Companies ranked 51-200 by Revenue and ranked in the top 50 by either patent “Exposure” or “Contribution” ratios are also included.
 - a. The patent “exposure” ratio is defined as the share of a company’s total patents filed in the most recent 12-month period that are classified as aerospace and defense patents.
 - b. The patent “contribution” ratio is defined as the share of a company’s aerospace and defense patent volume in comparison to the total aerospace and defense patent volume filed by all companies considered for inclusion in the Index in the most recent 12-month period.
- 3) Firms without any listings in the US are removed.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Index is a custom-weighted index, with each constituent weighted according to its national security revenue as determined by Yewno, with an adjustment factor. The Index weights are then further adjusted via a process of capping.

Constituent weighting process

The Index employs a two-stage weight adjustment scheme.

The first step of the initial weighting is to determine a security's adjusted national security revenue. The adjusted national security revenue is determined by taking a security's national security revenue as determined by Yewno, with an adjustment of 10x ("gross-up" or "bonus" factor) for its rolling 1-year patent activity to account for expected future growth in government contract revenue.

The "bonus factor" formula for adjusted national revenue is evaluated as

$$\text{Revenue} * [1 + (\% \text{ contribution of total aerospace and defense related patents in the last 12 months}) * 10]$$

Index Securities' initial weights are determined by dividing each Index Security's adjusted national security revenue by the aggregate adjusted national security revenue of all Index Securities.

Stage 1: Initial index weights are adjusted to meet the following Stage 1 constraint, producing Stage 1 weights:

- No Index Security weight may exceed 8%.

Stage 2: Stage 1 weights are adjusted to meet the following Stage 2 constraints, producing the final weights:

- For Index Securities with the five largest adjusted national security revenues, Stage 1 weights are maintained.
- For all other Index Securities, no weight may exceed 4%.

The final weights meet the following constraints:

- No Index Security weight may exceed 8% of the index; five may exceed 4%.

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

INDEX MAINTENANCE

Deletion policy

If, at any time other than an Index Reconstitution, Nasdaq determines that an Index Security has or will undergo a fundamental alteration that would make it ineligible for Index inclusion, the Index Security is removed as soon as practicable.

Such alterations may include:

- Merger, acquisition, or other major corporate event that would otherwise adversely impact the integrity of the Index.

Corporate actions

In the interim periods between scheduled index reconstitution and rebalancing 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 “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 Policy**.

Holiday schedules

The Index is calculated according to the NYSE/NASDAQ holiday calendar.

Unexpected market closures

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

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 and the classification of dividends and associated tax rates, please refer to the **Nasdaq Index Methodology Policy**.

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 Policy**.

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).

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

Index governance

All Nasdaq Indexes follow the same governance structure. For a detailed list of this information, please see the **Nasdaq Index Methodology Policy**.

Nasdaq Index Management Committee

The Nasdaq Index Management Committee approves all new Index Methodologies. This committee is comprised of full-time professional members of Nasdaq. The committee meets regularly, and reviews items including, but not limited to, pending corporate actions that may affect Index constituents, statistics comparing the composition of the indexes to the market, companies that are being considered as candidates for addition to an Index, and any significant market events.

For a detailed overview of the Index Management Committee, please see the **Nasdaq Index Methodology Policy**.

Internal reviews of methodology

For a detailed description on internal reviews of the Methodology, please see the **Nasdaq Index Methodology Policy**.

Communication with stakeholders and consultations

For a detailed description on Consultations and Communications with Stakeholders, please see the **Nasdaq Index Methodology Policy**.

Index cessation

Nasdaq has a documented procedure that is followed for Index Cessation that includes termination/retirement of an Index or Index Family.

For more information, please refer to the **Nasdaq Index Cessation Policy**.

Discretionary adjustment

This Index Methodology was created by Nasdaq to achieve the aforementioned objective of measuring the underlying purpose of each Index governed by this methodology document. Any deviations from this methodology are made in the sole judgment and discretion of Nasdaq so that the Index continues to achieve its objective.

For more information on potential adjustments including Calculation and Pricing Disruptions, Expert Judgment, and Unexpected Reconstitution/Rebalances, please refer to the **Nasdaq Index Methodology Policy**.

GLOSSARY OF TERMS AS USED IN THIS DOCUMENT

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

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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