

Nasdaq Global Index FlexFile Delivery (GIFFD)

Premium Delivery Service (SFTP)

Technical Specification V2.3

May 2019

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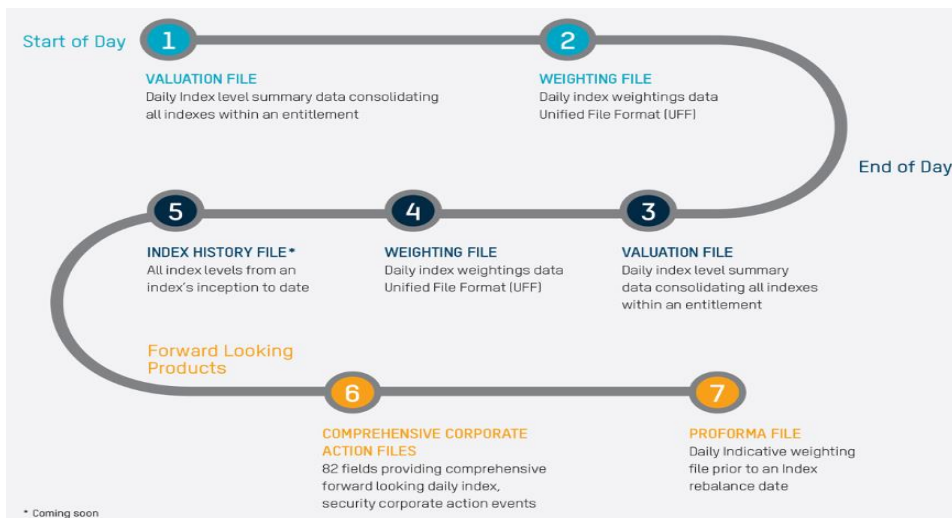
1 Overview

Global index FlexFile Delivery (GIFFD)

Nasdaq Global Index FlexFile Delivery (GIFFD) is a flexible and efficient delivery service for index weighting, advance corporate action and extensive additional data for Nasdaq indexes. This premium service provides access to new products with more comprehensive data fields within the files. It also allows clients to customize their daily index files available on request through an easy-to-download SFTP platform.

GIFFD provides

- ✓ More daily reports than GIW
- ✓ More efficient delivery
- ✓ New products with superior content
 - UFF Weighting (EOD, SOD & Proforma)
 - Comprehensive Corporate Action file (Advance Notification)
- ✓ Buildable custom and standard product formats available on request
- ✓ Group Index Valuations within one file by family



2 Access to the GIFFD Premium Service

New Clients wanting access to the GIFFD service can sign up by clicking on the following link [New GIFFD NASDAQ Subscriber](#)

Full List of indexes available via the [Index Directory](#) select drop down box to filter by [Index family](#)

2.1 GIFFD Log In (Manual Browser Access only)

<https://ftp.indexes.nasdaqomx.com>

Username and Password to be emailed directly to user

Request [Login details](#)

2.2 GIFFD Log In through FTP client (Automated Setup Access)

Host sftp://ftp.indexes.nasdaqomx.com
Username XXXX
Password YYYYYY
Port 22

2.3 GIFFD - SFTP Folder Structure

Year (YYYY)
Month Day (MMDD)
TOKENID
File Type

Example: <ftp.indexes.nasdaqomx.com/#/username/YYYY/MMDD/TOKENID/filetype/>

3 *Delivery Times*

Index file delivery is grouped by Datasets and file types specifically Start of Day (SOD) and End of day files (EOD).

Each index is calculated and produced on a Dataset – Full list of indexes and their Datasets can be found and downloaded from this [Link](#). Select the drop down box and then select an index family. “Export All” into excel and search the index you require, this will show the corresponding Dataset the index falls into. This Dataset can be cross referenced against the table below to work out the approximate time of delivery.

3.1 Delivery Timetable

Index Delivery Times by Dataset		
Global Index FlexFile Delivery (GIFFD) SFTP		
Dataset	Start of Day (SOD) US Eastern Time	End Of Day (EOD) US Eastern Time
GIC-AE	5:30: PM	1:30: PM
GIC-AUS	9:15: AM	2:30: AM
GIC-BAL	8:00: PM	10:00: AM
GIC-DK	8:00: PM	11:30: AM
GIC-HOX	8:00: PM	1:45: PM
GIC-NFI	1:45: AM	11:00: AM
GIC-NOR	8:00: PM	12:15: PM
GIC-SEBFI	8:00: PM	1:45: PM
GIC-SE-OMXN	8:00: PM	12:00: PM
GIC-SNAP	8:00: PM	10:30: AM
GIC-US	11:00: PM	7:00: PM
GIC-USFI	2:30: AM	5:00: PM
SandP	10:30: PM	8:45: PM
Corporate Action (CAUFF) and Proforma Files (PRO) are delivered at 12.30am US Eastern Time		

4 Products available

Description	Filenames
Equity Indexes	
GIFFD SFTP –“WEIGHT” Folder	
WSOD Start of Day Equity Weighting	YYYYMMDD_INDEXSYMBOL_WSOD_01.txt
WEOD End of Day Equity Weighting	YYYYMMDD_INDEXSYMBOL_WEOD_01.txt
TOKENID_WSOD Start of Day Equity weighting Entitlement Summary	YYYYMMDD_TOKENID_WSOD_01.txt
TOKENID_WEOD End of Day Equity weighting Entitlement Summary	YYYYMMDD_TOKENID_WEOD_01.txt
GIFFD SFTP – “VALUATION” Folder	
VSOD Start of Day Index Levels	YYYYMMDD_INDEXSYMBOL_VSOD_01.txt
VEOD End of Day Index Levels	YYYYMMDD_INDEXSYMBOL_VEOD_01.txt
TOKENID_VSOD Start of Day Index Levels Entitlement Summary	YYYYMMDD_TOKENID_VSOD_01.txt
TOKENID_VEOD End of Day Index Levels Entitlement Summary	YYYYMMDD_TOKENID_VEOD_01.txt
GIFFD SFTP –“HEDGEWEIGHT” Folder	
WCHSOD Start of Day Currency Hedged Equity Weighting	YYYYMMDD_INDEXSYMBOL_WCHSOD_01.txt
WCHEOD End of Day Currency Hedged Equity Weighting	YYYYMMDD_INDEXSYMBOL_WCHEOD_01.txt

GIFFD SFTP –“HEDGEVALUATION” Folder	
VCHSOD Start of Day Currency Hedged Index Levels	YYYYMMDD_INDEXSYMBOL_VCHSOD_01.txt
VCHEOD End of Day Currency Hedged Index Levels	YYYYMMDD_INDEXSYMBOL_VCHEOD_01.txt
GIFFD SFTP –“CAUFF” Folder	
CAUFF T+5 Corporate Action File	YYYYMMDD_INDEXSYMBOL_CAUFF_01.txt
CAUFF T+5 Corporate Action File Entitlement Summary	YYYYMMDD_TOKENID_CAUFF_01.txt
GIFFD SFTP –“PROFORMA” Folder	
PRO Proforma (Only published quarterly for select Indexes)	YYYYMMDD_INDEXSYMBOL_YYYYMMDD_PRO_01.txt
PRO Proforma - Entitlement Summary (Only published quarterly for select Indexes)	YYYYMMDD_TOKENID_YYYYMMDD_PRO_01.txt
Fixed Income Files	
GIFFD SFTP –“FIWEIGHT” Folder	
WFISOD - Fixed Income Start of Day Weighting	YYYYMMDD_INDEXSYMBOL_WFISOD_01.txt
WFIEOD - Fixed Income End of Day Weighting	YYYYMMDD_INDEXSYMBOL_WFIEOD_01.txt
WFISOD - Fixed Income Entitlement Summary Start of Day Weighting	YYYYMMDD_TOKENID_WFISOD_01.txt

WFIEOD - Fixed Income Entitlement Summary End of Day Weighting	YYYYMMDD_TOKENID_WFIEOD_01.txt
GIFFD SFTP –“FIVALUATION” Folder	
VFISOD - Fixed Income Start of Day Index Valuation Level File	YYYYMMDD_INDEXSYMBOL_VFISOD_01.txt
VFIEOD - Fixed Income End of Day Index Valuation Level File	YYYYMMDD_INDEXSYMBOL_VFIEOD_01.txt
VFISOD - Fixed Income Entitlement Summary Start of Day Index Valuation Level File	YYYYMMDD_TOKENID_VFISOD_01.txt
VFIEOD - Fixed Income Entitlement Summary End of Day Index Valuation Level File	YYYYMMDD_TOKENID_VFIEOD_01.txt
LadderRite & BulletShares Files	
GIFFD SFTP –“FIWEIGHT2” Folder	
WFI2SOD - Fixed Income 2 Start of Day Weighting	YYYYMMDD_INDEXSYMBOL_WFI2SOD_01.txt
WFI2EOD - Fixed Income 2 End of Day Weighting	YYYYMMDD_INDEXSYMBOL_WFI2EOD_01.txt
WFI2SOD - Fixed Income 2 Entitlement Summary Start of Day Weighting	YYYYMMDD_TOKENID_WFI2SOD_01.txt

WFI2EOD - Fixed Income 2 Entitlement Summary End of Day Weighting	YYYYMMDD_TOKENID_WFI2EOD_01.txt
GIFFD SFTP –“FIVALUATION2” Folder	
VFI2SOD - Fixed Income 2 Start of Day Index Level File	YYYYMMDD_INDEXSYMBOL_VFI2SOD_01.txt
VFI2EOD - Fixed Income 2 End of Day Index Level File	YYYYMMDD_INDEXSYMBOL_VFI2EOD_01.txt
VFI2SOD - Fixed Income 2 Entitlement Summary Start of Day Index Level File	YYYYMMDD_TOKENID_VFI2SOD_01.txt
VFI2EOD - Fixed Income 2 Entitlement Summary End of Day Index Level File	YYYYMMDD_TOKENID_VFI2EOD_01.txt
GIFFD SFTP –“FIPROFORMA” Folder	
PROFI – Proforma File (For select Indexes)	YYYYMMDD_INDEXSYMBOL_PROFI_01.txt

4.1 Restatement and Reissues

01.txt is the version of the file. If there is a reissue or a restatement its important the max version is coded for and is picked up as the latest file. Example 2nd version = 02.txt 3rd version = 03.txt (MAX)

The SFTP directory will store all versions of the restated files. Resulting in full transparency on any files delivered to the SFTP site and can be fully audited.

4.2 Output Format

GIFFD data output can be provided in pipe (|) delimited, ASCII-text format. To reduce the download time, Nasdaq will not include extra spaces or leading/trailing zeros for any fields. Additionally, fields that contain no data will not be populated, data will be returned with two delimiters in a row.

5 Product Specification – Field Definitions

5.1 Unified File Format (UFF) Weightings Data

- **Start of Day Equity Weighting**
YYYYMMDD_ INDEXSYMBOL_ **WSOD** _01.txt
- **End of Day Equity Weighting**
YYYYMMDD_ INDEXSYMBOL_ **WEOD** _01.txt

Field Definitions:

Header		
Data Field	Description	Max Field Size / Attribution
Header	Index Symbol Date/ File Type Example: NDX YYYYMMDD SOD	Varchar (65) – Alphanumeric
Weightings Content		
Data Field	Description	Max Field Size / Attribution
Symbol	Unique identifier of the index security assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)

Closing Price	<p>For EOD files, the last regular way trade or quote received from the Exchange for the index security. For Nasdaq securities it is the last sale price on Nasdaq which normally would be the Nasdaq Official Closing Price (NOCP).</p> <p>For SOD files, the previous day's Local Closing Price is adjusted for corporate actions (if any).</p>	Varchar (53) – Numeric (including decimal point)
Market Value	<p>Calculated value:</p> <p>Index Shares * Local Closing Price * FX Rate</p>	Varchar (53) – Numeric
Index Shares	The number of shares representing an index security within the index.	Varchar (53) – Numeric (including decimal point)
Index Weight	<p>Calculated Value:</p> <p>Market Value / Index Market Value</p>	Varchar (15) – Numeric (including decimal point)
Company Name	The name of the issuer of the index security.	Varchar (100) – Alphanumeric (including special characters)
SEDOL	<p>The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares.</p> <p>Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.</p>	Varchar (12) – Alphanumeric
Exchange	The exchange from which the Local Closing Price of the index security is utilized. Nasdaq will support the ISO 10383 standard, an ISO standard for "Codes for exchanges and market identification" (MIC): it defines codes for stock markets . This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383 .	Varchar (4) – Alphanumeric
Bloomberg Exchange	Blank awaiting License	Varchar (18) – Alphanumeric

		(including special characters)
Currency	Local currency in which the underlying index security is traded on its Exchange, using ISO 4217.	Varchar (3) – Alphanumeric
FX Rate	Rate at which the Currency is converted into the Index Currency.	Varchar (23) – Numeric (including decimal point)
Free Float Factor	The adjustment applied to the Shares to represent availability of shares to investors.	Varchar (12) – Numeric including decimal point
Domicile Country Code	Domicile Country Code follows the ISO 3166-1 standard and represents the country of domicile, headquarter or principal executive offices.	Varchar (2) – Alpha
Incorporation Country Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	Varchar (5) – Alpha
NQGI Country Code	NQGI Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of NQGI methodology. The methodology can be accessed from the below link. https://indexes.nasdaqomx.com/docs/NQGIFamilyMethodology.pdf Note: The field only applies to securities currently a member of the NQGI Index Family.	Varchar (5) – Alpha
Region	NQGI Asia Pacific (AP), Europe, Latin America Middle East Africa and North America Only to be populated for NQGI indexes and methodology	Varchar (25) – Alpha
Segment	NQGI index Methodology (Developed or Emerging) Only to be populated for NQGI indexes and methodology	Varchar (25) – Alpha
Size	Large/ Mid/Small NQGI Methodology	Varchar (25) – Alpha
Industry Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (4) – Numeric Varchar (10) – Numeric (from 2019)

Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
CUSIP	CUSIP is a unique nine-character alphanumeric code appearing on the face of each stock or bond certificate that is assigned to an index security by Standard & Poor's Corporation.	Varchar (9) – Alphanumeric (including special characters)
Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
ISIN	International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	VARCHAR (20) – Numeric
Security Shares	Number of shares representing an index security prior to any capping or float adjustment, in accordance to each Index methodology. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (53) - Numeric
TSO	NEW Issue shares outstanding for the issue.	VARCHAR (53) – Numeric (including

		decimal point)
TSI	NEW Issue shares issued for the issuer issues.	VARCHAR (53) – Numeric (including decimal point)
Capping Factor	Adjustment factor for capped indexes. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (53) – Numeric including decimal point
AWF Factor	Additional Weight Factor (AWF) may be used for certain index methodologies.	Numeric (25) including decimal point
CORR-FACTOR (Taken from OMX Files)	Taken Form OMX file	Numeric (25) including decimal point
Security Dividend Market Value	Represents the index securities dividend market values Dividend Market Value = Cash dividend * index shares per security	Varchar (53) – Numeric (including decimal)
Dividend Yield	Running Yield of a stock Please Note: This value is not currently supported and will be implemented in the near future.	Numeric (25) including decimal point
Growth	The Growth weight factor Please Note: This value is not currently supported and will be implemented in the near future.	Numeric (25) including decimal point
Value	The Value weight Please Note: This value is not currently supported and will be implemented in the near future.	Numeric (25) including decimal point
Valor	UNIQUE TO SIXTK NULL when Blank	Varchar(20) – Alphanumeric (including

		special characters)
NON-STD-INDEX-PRICE-TYPE	Indicates if there is a price type other than the standard for this index that is used specifically for this constituent in this index.	Varchar (25) - Alpha
ICB Subsector Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (8) Numeric

- **Proforma (Rebalance) Equity Weighting**

YYYYMMDD_INDEXSYMBOL_ **PRO** _01.txt

Header		
Data Field	Description	Max Field Size / Attribution
Header	Index Symbol Date/ File Type Example: NDX YYYYMMDD SOD	Varchar (65) – Alphanumeric (including special characters)
Weightings Content		
Data Field	Description	Max Field Size / Attribution
Symbol	Unique identifier of the index security assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)
Closing Price	For EOD files, the last regular way trade or quote received from the Exchange for the index security. For Nasdaq securities it is the last sale price on Nasdaq which normally would be the Nasdaq Official Closing Price (NOCP). For SOD files, the previous day's Local Closing Price is adjusted for corporate actions (if any).	Varchar (53) – Numeric (including decimal point)
Market Value	Calculated value: Index Shares * Local Closing Price * FX Rate	Varchar (53) – Numeric
Index Shares	The number of shares representing an index security within the index.	Varchar (53) – Numeric (including decimal point)
Index Weight	Calculated Value: Market Value / Index Market Value	Varchar (15) – Numeric (including decimal point)

Company Name	The name of the issuer of the index security.	Varchar (100) – Alphanumeric (including special characters)
SEDOL	<p>The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares.</p> <p>Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client’s responsibility to have proper approval from LSE prior to requesting SEDOL access.</p>	Varchar (12) – Alphanumeric
Exchange	The exchange from which the Local Closing Price of the index security is utilized. Nasdaq will support the ISO 10383 standard, an ISO standard for “Codes for exchanges and market identification” (MIC): it defines codes for stock markets. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	Varchar (4) – Alphanumeric
Currency	Local currency in which the underlying index security is traded on its Exchange, using ISO 4217.	Varchar (3) – Alphanumeric
FX Rate	Rate at which the Currency is converted into the Index Currency.	Varchar (23) – Numeric (including decimal point)
Free Float Factor	The adjustment applied to the Shares to represent availability of shares to investors.	Varchar (12) – Numeric including decimal point
Country	<p>Country code is variable and is determined by the index calculation methodologies follow the ISO 3166-1 standard. Nasdaq may use one of the following country code classifications:</p> <p>Country of Domicile - represents the country of domicile headquartered or principal executive offices.</p> <p>Country of Incorporation - identifies the country in which the company is incorporated or legally registered.</p> <p>NQGI Country Code – NQGI Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of NQGI methodology.</p>	Varchar (2) – Alpha

	<p>The methodology can be accessed from the below link. https://indexes.nasdaqomx.com/docs/NQGIFamilyMethodology.pdf</p> <p>Note: The field only applies to securities currently a member of the NQGI Index Family.</p>	
Industry Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (4) - Numeric
Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
CUSIP	<p>CUSIP is a unique nine-character alphanumeric code appearing on the face of each stock or bond certificate that is assigned to an index security by Standard & Poor's Corporation.</p> <p>Please Note: CUSIP information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from CUSIP authority prior to use or storage if this data.</p>	Varchar (9) – Alphanumeric (including special characters)
Third Party Assigned ID	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
ISIN	<p>International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.</p> <p>Please Note: ISIN information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from ISIN authority prior to use or storage if this data.</p>	Varchar (12) – Alphanumeric (including special characters)
Security Shares	Number of shares representing an index security prior to any capping or float adjustment, in accordance to each Index methodology.	Varchar (53) - Numeric
Capping Factor	Adjustment factor for capped indexes.	Varchar (53) – Numeric including decimal point
Security Dividend	Represents the index securities dividend market values	Varchar (53) – Numeric (including decimal)

Market Value	Dividend Market Value = Cash dividend * index shares per security	
ICB Subsector Code	Industry classification or industry codes organize companies into industrial groupings based on similar production processes, similar products, or similar behavior in financial markets.	Varchar (8) Numeric
Footer		
Data Field	Description	Max Field Size / Attribution
Index Market Value	Calculated value: Aggregate Market Value of all Index Securities	Varchar (53) – Numeric (including decimal)
Total Index Shares	Calculated value: Aggregate Index Shares of all Index Securities	Varchar (53) – Numeric (including decimal)
Index Weight	Represents the summation of the market percentage of all component securities within the index.	Varchar (15) – Numeric (including decimal point)
Net Change	Represents the difference between the current tick value and the prior day's closing tick value for a given index. Calculated value: Prior day's closing index value – Current Index Value Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
High	The highest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Low	The lowest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Divisor	Calculated value: Index Market Value / Current Index Value The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index.	Varchar (53) – Numeric (including decimal point)
Current Index Value	This field reflects the final calculated value for an instrument for the defined trade date. This value may be adjusted for corporate actions from prior days.	Varchar (53) – Numeric (including decimal point)

Index Dividend Point	Calculated value: Index Dividend Market Value / Divisor	Varchar (16) – Numeric (including decimal point)
Index Dividend Market Value	Calculated value: Aggregate dividend market value of all Index Securities	Varchar (53) – Numeric (including decimal)
Base Value	Index Value at inception.	Varchar (12) – Numeric (including decimal point)
Trade Date	Date of the report. YYYY-MM-DD (2011-02-17)	Varchar (10) – Alphanumeric (including special characters)
SOD/EOD	Data contained in the message represents the start-of-day or end-of-day data. Allowable values: SOD – Start-of-day adjusted for overnight corporate actions EOD – End-of-day positions for the given trade data	Varchar (3) – Alphanumeric
Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
Index Name	Index name as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (56)
ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)

- **Start of Day Currency Hedged Equity Weighting**
YYYYMMDD_INDEXSYMBOL_ **WCHSOD** _01.txt
- **End of Day Currency Hedged Equity Weighting**

Field Definitions:

Header		
Data Field	Description	Max Field Size / Attribution
Header	Hedged Index Symbol Date/ File Type Example: NDXCADH YYYYMMDD SOD	Varchar (65) – Alphanumeric
Weightings Content		
Data Field	Description	Max Field Size / Attribution
Trade Date	Current business day	YYYY/MM/DD
Trade Date Reference	The business day prior the last business day in the previous month.	YYYY/MM/DD
Trade Date Rebalance	The last business day in the previous month.	YYYY/MM/DD
Trade Date Effective	The first business day in the current month which the current weights are used in the calculations.	YYYY/MM/DD
Trade Date Future Reference	The business day prior the last business day in the current month.	YYYY/MM/DD
Trade Date Future Rebalance	The last business day in the current month.	YYYY/MM/DD
Trade Date Future Effective	The first business day in next month which the new weights will be effective in the calculation.	YYYY/MM/DD
Days Left	The number of calendar days from the current day (Trade Date (not counting)) until the last business day in current Month (Trade Date Future Rebalance).	Numeric (10)
Underlying Index Symbol	Unique identifier of the underlying index assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)
Hedged Index Symbol	Unique identifier of the hedged index assigned by its Exchange or other marketplace.	Varchar (18) – Alphanumeric (including special characters)

Underlying Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported for the underlying index, using ISO 4217.	Varchar (3) – Alphanumeric
Constituent Currency	Unique constituent currency in the underlying index on current business day (local), using ISO 4217. Please Note: One (1) row per unique constituent currency.	Varchar (3) – Alphanumeric
Constituent Currency Future	Unique constituent currency in the underlying index effective on the first business day in next month (Trade Date Future Effective) (local), using ISO 4217. Please Note: One (1) row per unique constituent currency. The number of records can vary as constituent currencies can be added or removed. This field will only be populated (SOD and EOD) on the last business day in current month.	Varchar (3) – Alphanumeric
No Of Cons	Number of Constituents on current business day by security currency.	Varchar (5) – Numeric
No Of Cons Future	Number of Constituents by constituent currency effective on the first business day in next month (Trade Date Future Effective). Please Note: This field will only be populated (SOD and EOD) on the last business day in current month.	Varchar (5) – Numeric

Market Value	<p>Constituent currency Market value on current business day in the underlying index currency.</p> <p>Calculated value:</p> <p>Market Value by constituent currency in underlying index currency.</p>	Varchar (53) – Numeric (including decimal)
Market Value Reference	<p>Constituent currency Market Value in the underlying index currency one business day prior (Trade Date Reference) the last business day (Trade Date Rebalance) in the previous month. This value will be constant from the first business day in the month until close on the last business day in the month).</p> <p>Calculated value:</p> <p>Market Value by constituent currency in underlying index currency which includes all actions effective as of SOD on the first business day in month (Trade Date Effective).</p>	Varchar (53) – Numeric (including decimal)
Market Value Future	<p>Constituent currency Market Value in the underlying index currency one business day prior (Trade Date Future Reference) the last business day (Trade Date Future Rebalance) in current month.</p> <p>Calculated value:</p> <p>Market Value by constituent currency in underlying index</p>	Varchar (53) – Numeric (including decimal)

	<p>currency which includes all actions effective as of SOD on the first business day in next month (Trade Date Future Effective).</p> <p>Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).</p>	
Weight	<p>Constituent currency weight on the current business day by security currency in the underlying index.</p> <p>Calculated Value: Constituent currency market value / Aggregate constituent currencies market value.</p>	Varchar (15) – Numeric (including decimal point)
Weight Reference	<p>Constituent currency weight one business day prior (Trade Date Reference) the last business day in the previous month (Trade Date Reference). Calculated value: Constituent currency market value / Aggregate constituent currencies market value.</p> <p>Please Note: This value will be constant from the first business day in the month until close on the last business day in the month).</p>	Varchar (15) – Numeric (including decimal point)
Weight Future	<p>Constituent currency weight one business day (Trade Date Future Reference) prior the last business day (Trade Date Future Rebalance) in the current month.</p> <p>Calculated value: Calculated Value:</p>	Varchar (15) – Numeric (including decimal point)

	<p>Constituent currency market value / Aggregate constituent currencies market value.</p> <p>Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).</p>	
Hedge Ratio	The currency Hedge Ratio 1 = 100 % by default in the Nasdaq standard indices.	Varchar (5) – Numeric
FX Rate	The spot rate (Underlying Index currency into Constituent currency) on current business day (Trade Date). For SOD files, the spot rate at close on the previous business day,	Varchar (23) – Numeric (including decimal point)
FX Rate Rebalance	The spot rate at the close on the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)
FX Rate Reference	The spot rate at the close on the business day (Trade Date Reference) prior the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)
Forward Rate	The forward rate (Underlying Index currency into Constituent currency) on current business day. For SOD files, the forward rate at close on the previous business day.	Varchar (23) – Numeric (including decimal point)
Forward Rate Rebalance	The forward rate at the close on the last business day (Trade Date Rebalance) in the previous month.	Varchar (23) – Numeric (including decimal point)
Forward Rate Reference	The forward rate at the close on the business day (Trade Date Reference) prior the last business day in the previous month (Trade Date Rebalance).	Varchar (23) – Numeric (including decimal point)

FIR	The forward interpolated rate (Underlying Index currency into Constituent Currency) on current business day (Trade Date). For SOD files, the FIR will be recalculated from the EOD at the previous business day by taking into the day/days closer to the last business day in the current month.	Varchar (23) – Numeric (including decimal point)
FIR Previous	The forward interpolated rate at close on the previous business day.	Varchar (23) – Numeric (including decimal point)

5.2 Unified File Format (UFF) Index Level Data

- **Start of Day Index Levels**
YYYYMMDD_INDEXSYMBOL_ **VSOD**_01.txt
- **End of Day Index Levels**
YYYYMMDD_INDEXSYMBOL_ **VEOD**_01.txt
- **End of Day Index Levels Entitlement Summary**
YYYYMMDD_TOKENID_ **VEOD**_01.txt
- **End of Day Historic Index Levels**
YYYYMMDD_INDEXSYMBOL_ **HEOD**_01.txt

Data Field	Description	Max Field Size / Attribution
Trade Date	YYYY/MM/DD	Numeric (10)
Index Symbol	The identifier or ticker symbol representing the index	Varchar (18) – Alphanumeric (including special characters)
Index Name	Index name as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
SOD/EOD	Data contained in the message represents the start-of-day or	Varchar (3) – Alphanumeric

	<p>end-of-day data. Allowable values:</p> <ul style="list-style-type: none"> • SOD – Start-of-day adjusted for overnight corporate actions • EOD – End-of-day positions for the given trade data 	
Index Type	<p>Price Return = PR Total return = TR Gross Return = GR Net Return = NR</p>	Varchar (3) – Alphanumeric
Current Index Value	<p>Calculated value: Index Market Value / Divisor</p>	Varchar (20) – Numeric (including decimal point)
Net Change	<p>Represents the difference between the current tick value and the prior day's closing tick value for a given index.</p> <p>Calculated value: Current Index Value - Prior day's closing index value –</p> <p>Note: This value will be 0 for Start of Day requests.</p>	Varchar (12) – Numeric (including decimal point)
High	<p>The highest calculated value for an index during the trading day.</p> <p>Note: This value will be 0 for Start of Day requests.</p>	Varchar (53) – Numeric (including decimal point)
Low	<p>The lowest calculated value for an index during the trading day.</p> <p>Note: This value will be 0 for Start of Day requests.</p>	Varchar (53) – Numeric (including decimal point)
Index Market Value	<p>Calculated value: Aggregate Market Value of all Index Securities</p>	Varchar (53) – Numeric (including decimal)
Total Index Shares	<p>Calculated value: Aggregate Index Shares of all Index Securities</p>	Varchar (53) – Numeric (including decimal)
Index Weight	<p>Represents the summation of the market percentage of all</p>	Varchar (15) – Numeric (including decimal point)

	component securities within the index.	
No Of Cons	Number of Constituents within the index	Varchar (5) – Numeric
Divisor	Calculated value: Index Market Value / Current Index Value The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index.	Numeric (38) – Numeric (including decimal point)
Index Dividend Point	Calculated value: Index Dividend Market Value / Divisor	Varchar (16) – Numeric (including decimal point)
Index Dividend Market Value	Calculated value: Aggregate dividend market value of all Index Securities	Varchar (53) – Numeric (including decimal)
Dividend Yield	Running Yield of an index Please Note: This value is not currently supported and will be implemented in the near future.	Numeric (25) including decimal point
Base Value	Index Value at inception.	Varchar (12) – Numeric (including decimal point)
Base Date	YYYY/MM/DD	Numeric (10)
Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (53)
Region	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Segment	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

Size	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

- **Start of Day Currency Hedged Index Levels**
YYYYMMDD_INDEXSYMBOL_VCHSOD_01.txt
- **End of Day Currency Hedged Index Levels**
YYYYMMDD_INDEXSYMBOL_VCHEOD_01.txt
- **End of Day Index Currency Hedged Levels Entitlement Summary**
YYYYMMDD_TOKENID_VCHEOD_01.txt
- **End of Day Historic Currency Hedged Index Levels**
YYYYMMDD_INDEXSYMBOL_HCHEOD_01.txt

Data Field	Description	Max Field Size / Attribution
Trade Date	Current business day	YYYY/MM/DD

Trade Date Reference	The business day prior the last business day in the previous month.	YYYY/MM/DD
Trade Date Rebalance	The last business day in the previous month.	YYYY/MM/DD
Trade Date Effective	The first business day in the current month which the current weights are used in the calculations.	YYYY/MM/DD
Trade Date Future Reference	The business day prior the last business day in the current month.	YYYY/MM/DD
Trade Date Future Rebalance	The last business day in the current month.	YYYY/MM/DD
Trade Date Future Effective	The first business day in next month which the new weights will be effective in the calculation.	YYYY/MM/DD
Underlying Index Symbol	The identifier or ticker symbol representing the underlying index	Varchar (18) – Alphanumeric (including special characters)
Hedged Index Symbol	The identifier or ticker symbol representing the Hedged index	Varchar (18) – Alphanumeric (including special characters)
Underlying Index Name	Index name representing the underlying index as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
Hedged Index Name	Index name representing the Hedged Index as defined by the Market of Origin. Due to dependencies on Market of Origin naming protocols and field size limit, index name may be abbreviated.	Varchar (100) – Alphanumeric (including special characters)
SOD/EOD	Data contained in the message represents the start-of-day or end-of-day data. Allowable values: <ul style="list-style-type: none"> • SOD – Start-of-day adjusted for overnight corporate actions 	Varchar (3) – Alphanumeric

	<ul style="list-style-type: none"> • EOD – End-of-day positions for the given trade data 	
Underlying Index Type	Price Return = PR Total return = TR Gross Return = GR Net Return = NR	Varchar (3) – Alphanumeric
Underlying Index Value	The index value on current business day (Trade Date) for the underlying index. Calculated value: $\text{Index Market Value} / \text{Divisor}$	Varchar (20) – Numeric (including decimal point)
Underlying Index Value Rebalance	The Index value for the underlying index at the close on the last business day in the previous month (Trade Date Rebalance). Calculated value: $\text{Index Market Value} / \text{Divisor}$	Varchar (20) – Numeric (including decimal point)
Underlying Index Reference	The Index value for the underlying index at the close one day prior (Trade Date Reference) the last business day in the previous month (Trade Date Rebalance). Calculated value: $\text{Index Market Value} / \text{Divisor}$	Varchar (20) – Numeric (including decimal point)
Hedged Index Value	The Index value for the hedged index on current business day (Trade Date) Calculated value: $\text{Hedged Index Value (Trade Date Rebalance)} * ((\text{Underlying Index Value (Trade Date)} / \text{Underlying Index Value (Trade Date Rebalance)} + \text{Hedge Impact \%}))$	Varchar (20) – Numeric (including decimal point)
Hedged Index Value Rebalance	The Index value for the hedged index at the close on the last business day in the previous month (Trade Date Rebalance).	Varchar (20) – Numeric (including decimal point)

	<p>Calculated value: $\text{Hedged Index Value (Trade Date Rebalance)} * ((\text{Underlying Index Value (Trade Date)} / \text{Underlying Index Value (Trade Date Rebalance)} + \text{Hedge Impact \%}))$</p>	
Hedged Index Value Reference	<p>The Index value for the hedged index at the close one day prior (Trade Date Reference) the last business day in the previous month (Trade Date Rebalance).</p> <p>Calculated value: $\text{Hedged Index Value (Trade Date Rebalance)} * ((\text{Underlying Index Value (Trade Date)} / \text{Underlying Index Value (Trade Date Rebalance)} + \text{Hedge Impact \%}))$</p>	Varchar (20) – Numeric (including decimal point)
Underlying Net Change	<p>Represents the difference between the current tick value and the prior day's closing tick value for a given index.</p> <p>Calculated value: Current Index Value - Prior day's closing index value</p> <p>Please Note: This value will be 0 for Start of Day requests.</p>	Varchar (12) – Numeric (including decimal point)
Hedged Net Change	<p>Represents the difference between the current tick value and the prior day's closing tick value for a given index.</p> <p>Calculated value: Prior day's closing index value – Current Index Value - Prior day's closing index value</p> <p>Please Note: This value will be 0 for Start of Day requests.</p>	Varchar (12) – Numeric (including decimal point)

Underlying High	The highest calculated value for the underlying index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Hedged High	The highest calculated value for the hedged index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Underlying Low	The lowest calculated value for the underlying index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Hedged Low	The lowest calculated value for the hedged index during the trading day. Please Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)
Underlying Index Market Value	Aggregate Market Value of all Index Securities on current business day (Trade Date) in the underlying index currency.	Varchar (53) – Numeric (including decimal)
Underlying Index Market Value Reference	Aggregate Market Value of all Index Securities one day prior (Trade Date Reference) the last business day in the previous month. (Trade Date Rebalance) in the underlying index currency.	Varchar (53) – Numeric (including decimal)
Underlying Index Market Value Future	Aggregate Market Value in the underlying index currency one business day prior (Trade Date Future Reference) the last business day (Trade Date Future Rebalance) in current month.	Varchar (53) – Numeric (including decimal)

	<p>Calculated value:</p> <p>Aggregate Market Value by all constituent currency in underlying index currency which includes all actions effective as of SOD on the first business day in next month (Trade Date Future Effective).</p> <p>Please Note: This field will only be populated (SOD and EOD) on the last business day in current month (Trade Date Future Rebalance).</p>	
Adjustment Factor	Adjustment factor value used in the calculation of the Hedge Impact calculation for Monthly or Daily Hedged Index.	Varchar (15) – Numeric (including decimal point)
Hedge Impact %	<p>Hedge impact value used in the calculation for Monthly and Daily Hedged index value.</p> <p>Note the differences in the calculation of an Hedge Impact % value depending either an Monthly or Daily Hedged index.</p>	Varchar (15) – Numeric (including decimal point)
Underlying Index Total Shares	<p>Calculated value:</p> <p>Aggregate Index Shares of all Index Securities</p>	Varchar (53) – Numeric (including decimal)
Underlying Index Weight	Represents the summation of the market percentage of all constituents within the underlying index.	Varchar (15) – Numeric (including decimal point)
Underlying Index No Of Cons	Represents the summation of the Number of Constituents within the underlying index.	Varchar (5) – Numeric
Underlying Index Divisor	<p>Underlying index divisor.</p> <p>Calculated value:</p>	Numeric (38) – Numeric (including decimal point)

	<p>Index Market Value / Current Index Value</p> <p>The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to ensure continuity of an index.</p>	
Underlying Index Dividend Point	<p>Underlying index dividend point.</p> <p>Calculated value:</p> $\text{Index Dividend Market Value} / \text{Divisor}$	Varchar (16) – Numeric (including decimal point)
Underlying Index Dividend Market Value	<p>Underlying index dividend market value in the underlying index currency.</p> <p>Calculated value:</p> <p>Aggregate dividend market value of all Index Securities</p>	Varchar (53) – Numeric (including decimal)
Underlying Index Dividend Yield	<p>Running Yield of an index</p> <p>Please Note: This value is not currently supported and will be implemented in the near future.</p>	Numeric (25) including decimal point
Underlying Index Base Value	Underlying Index Value at inception (base date).	Varchar (12) – Numeric (including decimal point)
Underlying Index Base Date	Underlying index base date.	YYYY/MM/DD
Underlying Index Currency	The currency in which the Index Market Value and Index Dividend Market Value are reported using ISO 4217.	Varchar (3) – Alphanumeric
Index Family	Family key provided to combine and help filter for Brand+ Series+ Strategy + Asset Type	Varchar (53)
Region	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

Segment	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Size	Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Underlying Index ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
Hedged ISIN	Please Note: This value is not currently supported and will be implemented in the near future. International Securities Identification Number (ISIN) uniquely identifies an index security. Its structure is defined in ISO 6166. The ISIN code is a 12-character alphanumeric code that does not contain information characterizing financial instruments but serves for uniform identification of an index security at trading and settlement.	Varchar (12) – Alphanumeric (including special characters)
Underlying Index Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric
Hedged Bloomberg ID	Identifier assigned by Bloomberg. Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (20) – Numeric

Underlying Index RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha
Hedged RIC Code	Reuters Unique Code Please Note: This value is not currently supported and will be implemented in the near future.	Varchar (25) – Alpha

6 Fixed Income Weighting Files

- **Start of Day Weighting**
YYYYMMDD_INDEXSYMBOL_**WFISOD**_01.txt
- **End of Day Weighting**
YYYYMMDD_INDEXSYMBOL_**WFIEOD**_01.txt

Header			
Data Field	Description	Max Field Size / Attribution	Notes
Parameter	Parameter of the query Example: QQQQ2010-03-12 EOD Example: QQQQ2010-03-12 SOD Example: QQQQ2010-03-12 PRO	Varchar (40) – Alphanumeric (including special characters)	

File Type	Indicates the report type requested. Allowable values are: <ul style="list-style-type: none"> • 'EOD' – End of Day • 'SOD' –Start of Day • 'PRO' – Pro Forma 	Varchar (3) – Alphanumeric	
Weightings Content			
Data Field	Description	Max Field Size / Attribution	Notes
Symbol	The identifier or ticker symbol of the index security.	Varchar (18) – Alphanumeric (including special characters)	
ISIN	ISIN for the security. ISIN is an unambiguous international identification of assets in accordance with ISO Standard 6166. ISIN stands for International Securities Identification Number.	Varchar(12) – Alphanumeric	Blank for certain securities
CUSIP	CUSIP for the security. CUSIP is a unique nine-character alphanumeric code appearing on the face of each stock or bond certificate that is assigned to a security by Standard & Poor's Corporation. CUSIP numbers are the property of the American Bankers Association (ABA) and are administered by Standard & Poor's. Please Note: CUSIP information is fee liable and is populated as a service for our clients. It is the client's responsibility to have proper approval from CUSIP authority prior to use or storage if this data.	Varchar(9) – Alphanumeric	Blank for certain securities

Issue Name	The name of the issue of the index security.	Varchar (100) – Alphanumeric (including special characters)	
Country	Country code is variable and is determined by the index calculation methodologies follows the ISO 3166-1 standard. Nasdaq may use one of the following country code classifications: Country of Domicile - represents the country of domicile. Country of Incorporation - identifies the country in which the company is incorporated or legally registered.	Varchar (2) – Alpha	Will not be supported for the NOMXCR index family
Exchange	The exchange from which the Local Closing Price of the index security is utilized. Nasdaq will support the ISO 10383 standard (MIC), an ISO standard specifies a universal method of identifying exchanges, trading platforms and regulated or nonregulated markets as sources of prices and related information in order to facilitate automated processing. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	Varchar (4) – Alphanumeric	Blank for certain securities
Coupon Adjustment	Coupon rate populated and used in the security and Index market value	Varchar(20) – Numeric (including decimal point)	

	<p>calculation when coupon adjustment is applied in accordance with the index methodology. For OMRX on the day when coupon fall and is adjusted in index by adding the coupon to the market cap calculation. For Credit SEK indexes by adding coupon payment rate from the day when coupon fall until the last day in current month. If no coupon adjustment applied then the field is populated as blank.</p>		
Bonds in Index	Number of index shares for the constituent within the index	Varchar(53) – Numeric(including decimal point)	
Previous Bonds in Index	Previous Number of index shares for the constituent within the index	Varchar(53) – Numeric(including decimal point)	
Yield to Maturity	<p>Constituent yield to maturity expressed in annual terms. This is the interest rate used in discounting all of the future cash flows of a bond to arrive at its current price.</p>	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Previous Yield to Maturity	Previous Day's Constituent yield to maturity expressed in annual terms.	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes

Yield	Constituent Yield. Coupon rate divided by the current price of the bond Value populated for NOMXCR spread indexes in Yield field is the Valuation Spread value.	Varchar(20) – Numeric (including decimal point and special characters)	Not populated for floaters in NOMXCR
Previous Yield	Previous Days Constituent Yield. Value populated for NOMXCR spread indexes in Yield field is the Valuation Spread value.	Varchar(20) – Numeric (including decimal point and special characters)	Not populated for floaters in NOMXCR
Dirty Price	Constituent Yield corresponding gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Previous Dirty Price	Start of day Constituent Yield corresponding gross price (clean price + accrued interest).	Varchar(18) – Numeric (including decimal point)	Divided by 100
Clean Price	Constituent Yield corresponding clean price.	Varchar(18) – Numeric (including decimal point).	Divided by 100
Previous Clean Price	Previous days Constituent Yield corresponding clean price.	Varchar(18) – (including decimal point)	Divided by 100
Accrued Interest	Constituent Accrued Interest.	Varchar(20) – Numeric (including decimal point and special characters)	
Duration	Constituent duration value calculated as Macaulay's duration.	Varchar(20) – Numeric (including decimal point)	
Mod. Duration	Constituent modified duration value.	Varchar(20) – Numeric (including decimal point)	
Convexity	Constituent convexity value.	Varchar(20) – Numeric (including decimal point)	

Price Risk	Constituent price risk measure which can be defined as the number of percent a bond will lose when the yield rise one percent.	Varchar(20) – Numeric. (including decimal point)	
Market Cap	Constituent market capitalization.	Varchar(53) – Numeric (including decimal point)	
Previous Market Cap	Previous days Constituent market capitalization.	Varchar(53) – Numeric. (including decimal point)	
Weight In Index	Constituent weight.	Varchar (15) – Numeric (including decimal point)	
Industry Sector	Tiered Industry Sector Classification (always Government in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemented in the near future.
Industry Group	Tiered Industry Group Classification (always Federal in this index).	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemented in the near future.
Industry Sub Group	Tiered Industry Sub Group Classification.	Varchar(50) – Alphanumeric (including special characters)	This value is not currently supported and will be implemented in the near future.
Day Count	Day count convention used in calculating accrued interest and present value.	Varchar(20) – Alphanumeric (including special characters)	Blank for NOMXCR

	Cod e	Descrip tion	Notes		
	1	Act/Act			
	2	Act/365			
	3	Act/360			
	4	30/360	US		
	5	30/360	Europe an		
	6	ACT_PR E			
	7	TBILL1			
	8	TBILL2			
	9	30/365			
Coupon Frequency	Number of coupon payments per year. Propose values 1 = annual, 2 = semi-annual, 3 =Quarterly.			Varchar (1) – Numeric	Blank for NOMXCR
Coupon Rate	Coupon interest rate stated at the bond at issue.			Varchar(20) – Numeric (including decimal point	Blank for NOMXCR.
Coupon Amount	Current coupon amount. Annual Coupon rate divided by Frequency			Varchar(20) – Numeric (including decimal point	Blank for NOMXCR
Coupon Type	Type of coupon payment A - Fixed B - Zero Coupon C - Payment-in-Kind (PIK) D - Stepped E - Floating F - Interest-at-Maturity G - Stepped Payment-in- Kind H - Variable Payment-in- Kind				This value is not currently supported and will be implemente d in the near future

	<p>I - Stepped Interest-at-Maturity</p> <p>J - Variable Interest-at-Maturity</p> <p>K - Credit Sensitive</p> <p>L - Short-Term Discount Rate</p> <p>M - Fixed rate of interest based on index-linked principal value</p> <p>N - Other situation</p>		
Inflation Index Factor	Inflation index adjustment factor applied to coupon for inflation linked bonds	Varchar(20) – Numeric (including decimal point and special characters)	This value is not currently supported and will be implemented in the near future.
Maturity Date	Date the bond will be redeemed by issuer if it is not called before (if applicable term for the security).	Varchar (10) – YYYYMMDD - Alphanumeric (including special characters)	Blank for NOMXCR
Rating	Average of vendor ratings.		This value will only be supported for LaddeRite and BulletShares Indexes
Yield to Worst	Yield to worst for the underlying constituent.	Varchar(20) – Numeric(including decimal point and special character)	This value will only be supported for LaddeRite and BulletShares Indexes
Effective Duration	Effective Duration for the underlying constituent.	Varchar(20) – Numeric(including decimal point)	This value will only be supported for

			LaddeRite and BulletShares Indexes
Duration to Worst	Duration to Worst for the underlying constituent.	Varchar(20) – Numeric(including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Bonds Outstanding	Bonds issued and outstanding on the bond (adjusted for strips, QE programs, and Fed holdings) Should be Bond TSO, Not Available.	Varchar(53) – Numeric	This value is not currently supported and will be implemented in the near future.
Previous Bonds Outstanding	Previous Days Constituent Nominal Amount.	Varchar(53) – Numeric	This value is not currently supported and will be implemented in the future
Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	VARCHAR (20) – Numeric	Internal Nasdaq ID and can be subject to change

6.1 Fixed Income Index Level File

- **Start of Day Index Level File**
YYYYMMDD_INDEXSYMBOL_VFISOD_01.txt
- **End of Day Index Level File**
YYYYMMDD_INDEXSYMBOL_VFIEOD_01.txt

Data Field	Description	Max Field Size / Attribution	Notes
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Trade Date	Date of the report. YYYY-MM-DD (2011-02-17)	Varchar (10) – Alphanumeric (including special characters)	
Index Symbol	The identifier or ticker symbol representing the index.	Varchar (18) – Alphanumeric (including special characters)	
Index Name	Index Name.	Varchar (100) – Alphanumeric (including special characters)	
Index Currency	The currency in which the Index Market Value is reported using ISO 4217.	Varchar (3) – Alphanumeric	
Index Value	This field reflects the final calculated value for a price level index for the defined trade date. Field will be blank for SOD and PRO file types.	Varchar(53) – Numeric (including decimal point)	
High	The highest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Low	The lowest calculated value for an index during the trading day. Note: This value will be 0 for Start of Day requests.	Varchar (53) – Numeric (including decimal point)	
Previous Index Value	This field reflects the previous days final calculated value for an index for the defined trade date.	Varchar(53) – Numeric (including decimal point)	
Divisor	Divisor for the Index, expressed in index base currency. The Divisor is a number that is adjusted periodically (due to component changes and corporate actions) to	Varchar(53) – Numeric (including-decimal point)	

	ensure continuity of an index. Field will be blank for SOD reports.		
Previous Divisor	Previous Day's Divisor.	Varchar(53) – Numeric(including decimal point)	
Index Market Value	Index market value for the current day. Field will be blank in SOD reports	Varchar(53) – Numeric	
Previous Index Market Value	Previous day's Index market value.	Varchar(53) – Numeric)	
Accrued Income	Aggregate of accrued interest across all index holdings.	Varchar(53) – Numeric	This value will only be supported for LaddeRite and BulletShares Indexes
Index Yield	Weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special characters)	
Index Previous Yield	Previous day's weighted average yield for the index.	Varchar(20) – Numeric (including decimal point and special characters)	
Index Weighted Avg Price	Weighted average price of index components.	Varchar(20) – Numeric(including decimal point)	This value is not currently supported and will be implemented in the near future.
Index Coupon	Weighted average coupon for the index.	Varchar(20) – Numeric (including decimal point))	Blank for NOMX CR
Index Yield to Maturity	Weighted average yield-to-maturity for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for LaddeRite, Ryan and

			BulletShares Indexes
Index Yield to Worst	Weighted average yield-to-worst for index	Varchar(20) – Numeric (including decimal point)	This value will only be supported for LaddeRite and BulletShares Indexes
Index Price Risk	Weighted average Price Risk for the index.	Varchar(20) – Numeric (including decimal point)	
Index Duration	Weighted average duration value calculated as Macaulay's duration for the index.	Varchar(20) – Numeric (including decimal point))	
Index Mod. Duration	Weighted average modified duration value calculated as Modified duration for the index.	Varchar(20) – Numeric (including decimal point)	
Index Duration to Worst	Weighted average duration to worst for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for Ladderite and BulletShare s Indexes
Index Effective Duration	Weighted average effective duration for index.	Varchar(20) – Numeric (including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Index Convexity	Weighted average Convexity for the index.	Varchar(20) – Numeric(including decimal point))	
Total Bonds In Index	Sum of Bonds in Index.	Varchar(53) – Numeric	
Previous Total Bonds In Index	Previous Sum of Bonds in Index.	Varchar(53) – Numeric	

Index Par Shares	The total number of shares of bonds (excluding the US Treasury constituent) within the index.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for LaddeRite and BulletShares Indexes
Average Index Maturity	The average maturity of constituents within the index, expressed in numerical decimal format.	Varchar(20) – Numeric(including decimal point))	This value will only be supported for Ladderite, Ryan and BulletShares Indexes
Index Term to Maturity	Market Value Weighted Years to Maturity (Effective Maturity).	Varchar(20) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Sector	Tiered Industry Sector Classification.	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
Industry Group	Tiered Industry Group Classification. In the case of US Treasury Fixed Income indexes, this value will always be "Federal".	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes
No. of Constituents	Accumulated number of active Security Constituents for the Index.	Varchar(6) – Numeric	
Constituents Added	Number of constituents added since previous day.	Varchar(6) – Numeric	
Constituents Removed	Number of constituents removed since previous day.	Varchar(6) – Numeric	
Weight of ten largest components	Sum of index weights of the top ten largest	Varchar (15) – Numeric (including decimal	This value will only be supported for

	components (by index weight).	point and special character)	Ladderite and BulletShare Indexes
ISIN	ISIN for index. ISIN is an unambiguous international identification of assets in accordance with ISO Standard 6166. ISIN stands for International Securities Identification Number.	Varchar(12) – Alphanumeric	Blank for certain Indexes
Rating	Index Rating	Varchar(50) – Alphanumeric (including special characters)	This value will only be supported for LaddeRite and BulletShares Indexes

7 Corporate Actions/Events Data service (CAUFF)

7.1 Summary

The Nasdaq UFF (Unified File Format) Corporate Actions/Events Data service (CAUFF) is an enhanced daily file designed to communicate the treatment of current and future changes in the Nasdaq Equity Indices in advance of their implementation.

The CAUFF file provides same-day and advance notification of Corporate Actions, Security Actions and Index actions which have an impact to a security constituent within an index. Each day the CAUFF file will include the current day's actions plus any actions which have been posted in advance for up to 5 business days in the future. Nasdaq provides the advance action information as part of a daily forecast which calculates with "best effort" the future position of a securities weight in the index. Forecast information can/will change nightly as the actions may change and each night closing price is used for the next forecast run.

In exceptional circumstances, some events may be announced during market hours for the next day implementation.

These exceptional circumstances are usually linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events.

Announcements made by Nasdaq during market hours will be communicated through the CAUFF File on the next business day (as long as the Action is scheduled to be effective within the next 5 business days).

7.2 Product Specification CAUFF Fields Definitions

- **Corporate Action file Unified File Format (CAUFF)**
YYYYMMDD_INDEXSYMBOL_CAUFF_01.txt
- Equity indexes only

Field Definitions:

Header			
No	Data Field	Description	Max Field Size / Attribution
	Parameter	Parameter of the query Example NDX 2014-01-01 - for the single index report or NQGI 2014-01-01 - for the family report.	Varchar (35) – Alphanumeric (including special characters)
Corporate Actions UFF Content			
	Data Field	Description	Max Field Size / Attribution
1	Effective Date	Indicative of when the corporate actions data is applicable. Also known as the “ex-date”.	Field Length (8) – Numeric represented as (YYYYMMDD)
2	Last Modified Date	The date when the last change was made to this record.	Field Length (8) – Numeric represented as (YYYYMMDD)
3	Original Publication Date	The date the event first appears in the file.	Field Length (8) – Numeric represented as (YYYYMMDD)
4	Status	States whether the entry is Pending (PE), Completed (CO), Updated (UP) or Cancelled (CX). The action will move to Completed on the day of the ex-date. Table 6.6 –Event Status	VARCHAR (20) – Alphanumeric
5	Index Name	Defines the index name that this stock is related to.	VARCHAR (50) – Alphanumeric (including special characters)
6	Index Symbol	Defines the index code that this stock is related to.	VARCHAR (50) – Alphanumeric (including special characters)
7	Index Marker	1) Index Symbol assigned to the single index report	VARCHAR (100)

		2) Underlying Index codes associated to the NQGI family report	– Alphanumeric (including special characters)
8	Index Currency	The 3-character ISO currency code for the currency in which the index level data is being reported in.	VARCHAR (3) – Alphanumeric
9	Action Type	The Action Type represents the action and information to follow. Allowable values are: Index Action (IA), Corporate Action (CA) and Security Action (SA). Order of priority shown in Table 7.7	VARCHAR (3) – Alphanumeric
10	Action	Multiple actions on the same Security with same effective date, the ordering in the file will show the action with highest priority first and ends with the action with lowest priority. Order of priority shown on Table 7.8	VARCHAR (20) – Alphanumeric
11	Action Description	The action description - Table 7.8	VARCHAR (100) – Alphanumeric
12	Issue Add/Delete	Indicates whether the Constituent was an Addition or a Deletion during Upload or Reconstitution of Index	VARCHAR (10)
13	Action ID	Assigned unique action identifier.	VARCHAR (50) – Alphanumeric
14	Issue Name	The name of the issue (constituent) of the index Issue.	VARCHAR (50) – Alphanumeric
15	New Issue Name	The new name of the issue (constituent) of the index Issue.	VARCHAR (50) – Alphanumeric
16	RIC	Constituent's Reuters Instrument Code, provided on best effort basis. RIC must contain exactly one period (".") and the second part must be 1 to 3 characters. Should be NULL	VARCHAR (7) – Alphanumeric
17	New RIC	Constituent's new Reuters Instrument Code as of the EFFECTIVE DATE, provided on best effort basis. RIC must contain exactly one period (".") and the second part must be 1 to 3 characters. Should be NULL	VARCHAR (7) – Alphanumeric
18	Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	VARCHAR (10) – Alphanumeric

19	New Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	VARCHAR (10) – Alphanumeric
20	Valor	Current SIX-TK Financial Valor number Should be NULL	(8) – Numeric
21	New Valor	New SIX-TK Financial Valor number. Should be NULL	(8) – Numeric
22	CUSIP	Constituent's 9-character CUSIP identifier, provided on best effort basis.	VARCHAR (9) – Alphanumeric (including special characters)
23	New CUSIP	Constituent's new 9-character CUSIP identifier as of the EFFECTIVE DATE, provided on best effort basis.	VARCHAR (9) – Alphanumeric (including special characters)
24	ISIN	Constituent's 12-character ISIN identifier, provided on best effort basis.	VARCHAR (12) – Alphanumeric
25	New ISIN	Constituent's new 12-character ISIN identifier as of the EFFECTIVE DATE, provided on best effort basis.	VARCHAR (12) – Alphanumeric
26	SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	VARCHAR (7) – Alphanumeric
27	New SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, indexes and shares. Please Note: SEDOL information is fee liable and is populated for those users entitled, by LSE, to	VARCHAR (7) – Alphanumeric

		receive SEDOL information. It is the client's responsibility to have proper approval from LSE prior to requesting SEDOL access.	
28	Issue Symbol	identifier of the index security Assigned by its Exchange or other marketplace.	VARCHAR (50) – Alphanumeric (including special characters)
29	New Issue Symbol	The new identifier or ticker symbol of the index Issue	VARCHAR (50) – Alphanumeric (including special characters)
30	Nasdaq Issue ID	The Unique identifier assigned by Nasdaq related to the constituent Issue within the index.	VARCHAR (20) – Numeric
31	ICB Subsector Code	Industry Classification Benchmark	VARCHAR (4) – Numeric VARCHAR (10) Numeric (from 2019)
32	New ICB Subsector Code	Industry Classification Benchmark	VARCHAR (4) – Numeric VARCHAR (10) Numeric (from 2019)
33	Exchange	The exchange from which the Local Closing Price of the index Issue is utilized. Nasdaq will support the ISO 10383	VARCHAR (4) – Alphanumeric
34	New Exchange	The exchange from which the Local Closing Price of the index Issue is utilized. Nasdaq will support the ISO 10383 standard, an ISO standard for "Codes for exchanges and market identification" (MIC): it defines codes for stock markets. This standard is updated frequently and the latest published standard is available at the maintenance organization of ISO 10383.	VARCHAR (4) – Alphanumeric
35	Domicile Country Code	Domicile Country Code follows the ISO 3166-1 standard and represents the country of domicile, headquarter or principal executive offices.	VARCHAR (2) – Alphanumeric

36	New Domicile Country Code	Domicile Country Code follows the ISO 3166-1 standard and represents the country of domicile, headquarter or principal executive offices.	VARCHAR (2) – Alphanumeric
37	Country Of Incorporation Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	VARCHAR (2) – Alphanumeric
38	New Country Of Incorporation Code	Incorporation Country Code follows the ISO 3166-1 standard and represents the country in which the company is incorporated or legally registered.	VARCHAR (2) – Alphanumeric
39	Country Of Listing	Country code is determined by the index calculation methodologies and follows the ISO 3166-1 standard. Country of Listing- represents the country where the component Issue is primarily listed.	VARCHAR (2) – Alphanumeric Check
40	Nasdaq Country Code	NQGI Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of NQGI methodology. The methodology can be accessed from the below link. https://indexes.nasdaqomx.com/docs/NQGIFamilyMethodology.pdf Note: The field only applies to securities currently a member of the NQGI Index Family.	VARCHAR (2) – Alphanumeric
41	New Nasdaq Country Code	NQGI Country Code follows the ISO 3166-1 standard and is assigned by Nasdaq based on a combination of Country of Domicile, Country of Incorporation and Country of Primary Listing. The detailed info on NQGI country assignment for index securities is available in section 3.2 of NQGI methodology. The methodology can be accessed from the below link. https://indexes.nasdaqomx.com/docs/NQGIFamilyMethodology.pdf	VARCHAR (2) – Alphanumeric

		Note: The field only applies to securities currently a member of the NQGI Index Family.	
42	Segment	NQGI index Methodology (Developed or Emerging)	Alphanumeric (50)
43	New Segment	NQGI index Methodology (Developed or Emerging)	Alphanumeric (50)
44	Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)
45	New Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)
46	Size	Constituent's size. Represents if the stock is a Large, Mid, Small or Mid/Small cap stock within the methodology of the index. It is possible for a stock to be classified differently in one index vs. others. For example classified as Large in index A and classified as Mid in index B.	VARCHAR (4) – Alphanumeric
47	New Size	Constituent's New size. Represents if the stock is a Large, Mid, Small or Mid/Small cap stock within the methodology of the index. It is possible for a stock to be classified differently in one index vs. others.	VARCHAR (4) – Alphanumeric
48	Currency	Local currency in which the underlying index Issue is traded on its Exchange, using ISO 4217	VARCHAR (3) – Alphanumeric
49	New Currency	New Currency.	VARCHAR (3) – Alphanumeric
50	FX Rate	Rate at which the Currency is converted into the Index Currency.	VARCHAR (23) – Numeric (including decimal point)
51	TSO	Represents the total shares outstanding for the issue.	VARCHAR (53) – Numeric (including decimal point)
52	NEW TSO	NEW total shares outstanding for the issue.	VARCHAR (53) – Numeric (including decimal point)
53	TSI	Represents the total Issuer shares.	VARCHAR (53) – Numeric (including decimal point)
54	NEW TSI	NEW total Issuer shares	VARCHAR (53) – Numeric (including decimal point)

55	Index Shares	The number of shares of a security in the index. Based on the specific index's Calculation and weighting Method.	VARCHAR (53) – Numeric (including decimal point)
56	New Index Shares	New Index shares.	VARCHAR (53) – Numeric (including decimal point)
57	Free Float Factor	Represents the adjustment applied to the Shares to represent availability/investability of shares to investors.	VARCHAR (12) – Numeric (including decimal point)
58	New Free Float Factor	Represents the adjustment applied to the Shares to represent availability/investability of shares to investors.	VARCHAR (12) – Numeric (including decimal point)
59	AWF	Additional Weight Factor (AWF) may be used for certain index methodologies such as SmartBeta types of methodologies). Field will be 1 for methodologies not using AWF.	Numeric (25) including decimal point
60	NEW AWF	Additional Weight Factor (AWF) may be used for certain index methodologies such as SmartBeta types of methodologies). Field will be 1 for methodologies not using AWF.	Numeric (25) including decimal point
61	Correction factor	Price correction factor available for the Nordic equity indexes	Numeric (25) including decimal point
62	New Correction Factor	New Price correction factor available for the Nordic equity indexes	Numeric (25) including decimal point
63	Growth	The growth weight factor associated with the stock, as of the EFFECTIVE DATE. Factor will always be a figure between 0 and 1 for style indices and 0 or 1 for pure style indices.	Numeric; Max. Length: 38; Max. Precision 14
64	Value	The value weight factor associated with the stock, as of the EFFECTIVE DATE. Factor will always be a figure between 0 and 1 for style indices and 0 or 1 for pure style indices. Also equivalent to 1 - GROWTH.	Numeric; Max. Length: 38; Max. Precision 14
65	Apply Cash Before Stock Flag	For stock splits with Special or Cash dividends this field indicates when the cash adjustment will be applied before the stock adjustment	VARCHAR (1) – Alphanumeric

66	Stock Factor QTY	Numeric factor by which a stock distribution will be applied	VARCHAR (28) – Numeric (including decimal point)
67	Subscription Price	Subscription price for the rights offering.	Numeric; Max. Length: 38; Max. Precision 14
68	Rights Expiration Date	Last day to exercise rights	Field Length (8) – Numeric represented as (YYYYMMDD)
69	Price Adjustment Amount	Only for special cash dividend, rights adjusted for previous close	VARCHAR (28) – Numeric (including decimal point)
70	Close Price	Latest available price prior to the effective date used for the Issue at the close of the index (EOD). Price method can vary; For example Last sale, Last official, Bid, Ask, VWAP, Fixed etc.	VARCHAR (53) – Numeric (including decimal point)
71	T1 Adjusted Close	Close Price and T1 Adjusted Close would be equal to each other unless there is a corporate action in accordance to the methodology which would adjust that Closing Price to the different T1 Adjusted Close.	VARCHAR (53) – Numeric (including decimal point)
72	Ordinary Dividend Amount	Cash Dividend (Ordinary) Per Share in the Dividend Currency	VARCHAR (53)– Numeric (including decimal point)
73	T1 Cash Adjusted Close	Close Price minus per share cash Dividend. If there is no ordinary cash amount, the field would be equal to the value in field 71	VARCHAR (53) – Numeric (including decimal point)
74	Dividend Currency	The dividend currency code using ISO 4217. The 3-character ISO currency code for the currency the dividend is paid in	VARCHAR (3) – Alphanumeric
75	Issue Dividend Market Value	Dividend amount (gross) as reported, as of the effective date. Dividend amount will be converted to the index currency if dividend differs from the index currency.	VARCHAR (53) – Numeric (including decimal point)

76	Net Issue Dividend Market Value	Dividend amount (net – after subtracting taxes and franking) as of the effective date. Tax and franking rates used are as of the ex.date. Dividend amount will be converted to the index currency if dividend differs from the index currency.	VARCHAR (53) – Numeric (including decimal point)
77	Tax Rate	Specific tax rate associated to the index	Numeric; Max. Length: 38; Max. Precision 14
78	New Tax Rate	New tax rate.	Numeric; Max. Length: 38; Max. Precision 14
79	Spin Off Issue Symbol	The identifier or ticker symbol of the index spin off Issue. Provided on best effort basis.	
80	Spin off Issue Name	The issue name of the index spin off Issue. Provided on best effort basis.	
81	Spin Off Cash Value	Cash value of the spinoff transaction, expressed on a per share basis	
82	Spin Off Per Share	Terms	
83	Comments	Free form space available for comments associated with the action.	VARCHAR(1000)

7.3 Blank Fields

Depending on the Status of the event, certain fields can be blank in the CAUFF File. In some other cases, if a security is being added to the Nasdaq Indices its "Current" fields can be blank, and its "New" fields will be populated. For additions, if the identifiers of the new security are not available at the time the event it will also be blank. Thus, certain fields included may not always be populated depending on the circumstances.

Current Blank fields

Data Field	Description	Max Field Size / Attribution	Description
RIC	Constituent's Reuters Instrument Code, provided on best effort basis. RIC must contain exactly one period (".") and the second part must be 1 to 3 characters. Should be NULL	VARCHAR (7) – Alphanumeric	Awaiting licensee agreement
New RIC	Constituent's new Reuters Instrument Code as of the EFFECTIVE DATE,	VARCHAR (7)	Awaiting licensee agreement

	provided on best effort basis. RIC must contain exactly one period (".") and the second part must be 1 to 3 characters. Should be NULL	– Alphanumeric	
Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	VARCHAR (10) – Alphanumeric	Awaiting licensee agreement
New Bloomberg ID	Bloomberg ticker, provided on best effort basis. Bloomberg ticker may contain exactly one space (" "). The first part must be 1 to 8 characters and the second part must be 1 to 2 characters.	VARCHAR (10) – Alphanumeric	Awaiting licensee agreement
Valor	Current SIX-TK Financial Valor number Should be NULL	(8) – Numeric	Awaiting licensee agreement
New Valor	New SIX-TK Financial Valor number. Should be NULL	(8) – Numeric	Awaiting licensee agreement
AWF	Additional Weight Factor (AWF) may be used for certain index methodologies such as SmartBeta types of methodologies). Field will be 1 for methodologies not using AWF.	Numeric (25) including decimal point	Awaiting New release
NEW AWF	Additional Weight Factor (AWF) may be used for certain index methodologies such as SmartBeta types of methodologies). Field will be 1 for methodologies not using AWF.	Numeric (25) including decimal point	Awaiting New release
Correction factor	Price correction factor available for the Nordic equity indexes	Numeric (25) including decimal point	Awaiting Nordic release November 2014
Growth	The growth weight factor associated with the stock, as of the EFFECTIVE DATE. Factor will always be a figure between 0	Numeric; Max. Length: 38; Max.	Awaiting New release

	and 1 for style indices and 0 or 1 for pure style indices.	Precision 14	
Value	The value weight factor associated with the stock, as of the EFFECTIVE DATE. Factor will always be a figure between 0 and 1 for style indices and 0 or 1 for pure style indices. Also equivalent to 1 - GROWTH.	Numeric; Max. Length: 38; Max. Precision 14	Awaiting New release
Segment	NQGI index Methodology (Developed or Emerging)	Alphanumeric (50)	Awaiting New release
Region	NQGI EMEA, Eurozone, BRIC, Asia Pacific, North America	Alphanumeric (50)	Awaiting New release

7.4 Footer

EOF will appear immediately following the data rows and can be used as an end-of-file indicator.

7.5 Ordering

The CAUFF shows index, and security events for a given index or group of indexes. Certain parameters impact the ordering and display of the information contained in the files. Please note that all sorting is in ascending order unless otherwise specified in the below tables.

7.6 CAUFF Events/Status

Status		Description
PE	Pending	First status shown on the CAUFF
CX	Cancelled	When an event is cancelled
UP	Updated	Updated to reflect new value in a pending event
CO	Completed	The day of the effective date

7.7 Action Type

Action Type	
Code	Description
CA	Corporate Action
IA	Index Action
SA	Security Action
IM	Index Maintenance Action

7.8 Action Code/Description

Action Type	Action Code	Action Description	Priority
Security Action	LI	Listing	1
Security Action	DE	Delisting	2

Action Type	Action Code	Action Description	Priority
Index Maintenance Action	CA	IM Constituent Activation based on Security IPOs with Trades	3
Security Action	MM	Market Move (with MIC change)	4
Security Action	MC	Market Class Change (with MIC Change)	5
Security Action	MS	MarketSegment Change	6
Security Action	TC	TSO Change	7
Security Action	FF	FreeFloatFactor Change	8
Security Action	QS	Quote Status Change	9
Security Action	SC	Symbol Change	10
Security Action	NC	Name/Cusip Change	11
Security Action	BT	BourseId/SEDOL/TradingCurrency Change	12
Security Action	VC	ValorId Change	13
Security Action	IC	ICBSubSector Change	14
Security Action	WW	WhenDistributed/WhenIssued Change	15
Security Action	IT	IssueType/SubIssueType Change	16
Security Action	IS	ISIN Change	17
Security Action	CC	CountryCode Change	18
Security Action	IN	IncorpCountryCode Change	19
Security Action	LIS	Listing of Spot Rate	20
Security Action	DIS	Delisting of Spot Rate	21
CorpAction	XC	Cash Dividend	22
CorpAction	CP	Stock Div. payable in another company	23
CorpAction	CS	Cash and Stock Dividend or Split	24
CorpAction	RS	Reverse Split	25
CorpAction	SO	Spin Off	26
CorpAction	XR	Ex-Rights	27
CorpAction	XS	Stock Dividend or Split	28
CorpAction	XW	Ex-Warrants	29
CorpAction	XX	Any Other Type	30
IndexAction	DA	Delete Action Request	31
IndexAction	AP	AddPopulation	32
IndexAction	MP	ModifyPopulation	33
IndexAction	DP	DeletePopulation	34
IndexAction	AFP	AddFinancialProduct	35
IndexAction	MFP	ModifyFinancialProduct	36
IndexAction	DFP	DeleteFinancialProduct	37
IndexAction	AFPO	AddFinancialProductOutput	38
IndexAction	MFPO	ModifyFinancialProductOutput	39
IndexAction	AWCO	Add WCO	40
IndexAction	MWCO	Modify WCO	41
IndexAction	DFPO	DeleteFinancialProductOutput	42
IndexAction	RRPC	Remove and Replace Population Constituent	43

Action Type	Action Code	Action Description	Priority
IndexAction	APC	AddPopulationConstituent	44
IndexAction	DPC	DeletePopulationConstituent	45
IndexAction	API	AddPopulationInclude	46
IndexAction	DPI	DeletePopulationInclude	47
IndexAction	APE	AddPopulationExclude	48
IndexAction	DPE	DeletePopulationExclude	49
IndexAction	ADPC	Add/Delete Population Constituent	50
IndexAction	MPUT	Modify PriceUntilTraded for Constituent	51
IndexAction	MOP	Modify OverridePrice for Constituent	52
IndexAction	MNOS	Modify NumberOfShares for Constituent	53
IndexAction	MTSO	Modify TSO for Constituent	54
IndexAction	MFFF	Modify FreeFloatFactor for Constituent	55
IndexAction	MST	Modify State for Constituent	56
IndexAction	MTAC	Modify T1AdjustedClose for Constituent	57
IndexAction	IWCA	IW Corporate Action	58
IndexAction	RRPI	Remove and Replace Population Constituent by issuer	59
IndexAction	MPR	ModifyPopulationRebuildDate	60
IndexAction	MFPR	ModifyFinancialProductRebuildDate	61
IndexAction	REFP	ReweightFinancialProduct	62
IndexAction	RBFP	RebaseFinancialProductOutput	63
IndexAction	CFP	Cap Financial Product	64
IndexAction	MDIV	Modify Divisor using SODIndexValue	65
Index Maintenance Action	RP	IM Reconstitute/Rebuild Population	66
Index Maintenance Action	RFP	IM Reconstitute/Rebuild Financial Product	67
Index Maintenance Action	PCFP	IM Perform Capping For Financial Product	68
Security Action	GC	GicCountryCode Change	69
Security Action	SF	Spin Off Security Add	70
IndexAction	MCSC	Market Cap Size Change	71
Index Maintenance Action	AUTOADPC		72
Security Action	RC	RIC Change	72
Security Action	TI	TSI Change	73
Security Action	LC	Listing Country Change	74
Security Action	BC	Bloomberg Id Change	75
Security Action	MSN	Market Segment Nordic Change	76
Security Action	PD	Pre Delisting request	77
Security Action	FTC	Force TSO	78
Security Action	FTI	Force TSI	79
Security Action	FFF	Force FreeFloat	80
Index Maintenance Action	RFPA	Reset fixed price action	81
CorpAction	FP	Fixed price action for T-1	82
IndexAction	AMTT	Add Modify Tax Table	83

Action Type	Action Code	Action Description	Priority
IndexAction	DTT	Delete Tax Table	84
IndexAction	BUTT	Bulk Upload Tax Table	85
IndexAction	UTT	Upload Tax Table	86
IndexAction	RCFP	Recomposition setting for Financial Product	87
IndexAction	BUFP	Bulk Upload Financial Product for Capping/Recomposition	88
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8 Contact Us

If you need assistance, our 24-Hour Global Index Client Services team is ready to assist you:

Asian & Americas Index Support

08.00 – 24.00 EST (U.S. and early Asia market hours)
+ 1 301 978 8284

EMEA Index Support

23.00 – 08.00 EST (Late Asia and EMEA market hours)
+ 46 8 405 6296

Index Calculation, Methodology, Corporate Actions and Daily File Delivery:

index@nasdaq.com

Technical Website Questions:

tradingservices@nasdaqomx.com

+1 212 231 5180, option 1

Contracts, Sales and Licensing:

IndexDataSales@nasdaqomx.com

+1 301 978 5307 or + 45 33 93 3366

Nasdaq Index Research:
R&D@nasdaqomx.com
+ 1 301 978 8288 or + 46 8 405 6494

Corporate Headquarters: [One Liberty Plaza](#), 165 Broadway, New York, NY 10006

Worldwide Offices: Bangalore Boston Brussels Chicago Copenhagen Denver
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Paris Philadelphia Riga Rockville San Francisco Shelton Singapore Stockholm
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9 Appendix A

Documentation Revision Control Log

October 1st, 2014 – GIFFD Draft Version 1.0

- Released Draft product specification, for pilot release

December 12th 2014 – GIFFD Office Version 1.0

- Updated in line with Nordic Equity release

October 1st 2015 - GIFFD Office Version 1.0

- Updated to include Hedged File reports

April 1st 2016 – GIFFD Office version 1.0

- Updated to include Fixed income Indexes
- Added Fixed Income delivery times

September 1st 2016 – GIFFD Office version 2.0

- Updated to include BulletShares & LadderRite

July 1st 2018 – GIFFD Office version 2.1

- Updated to remove TOKENID from file names
- Updated to add new GIFFD directory folder

February 11th 2019 – GIFFD Office Version 2.2

- Updated table 7.8 – CAUFF Action Code/Description

May 22nd 2019 – GIFFD Office Version 2.3

- Added new field – ICB Subsector Code