## DAX | qontigo

November 2022

## DAX FILES GUIDE

# Creating an Investment Intelligence Advantage 

## Qontigo.com

## DAX <br> QONTIGO):

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## 1. Introduction

The DAX Files Guide aims at providing an overview of the files structure produced for DAX Indices. It may facilitate the development of automated solution to retrieve data by DAX Customers.

The DAX Files guides should be read in conjunction with the DAX Index Methodology and Guides available on Resources - Qontigo (dax-indices.com).

For each file, the following information will be provided:

| Column ID | Column Number |
| :--- | :--- |
| Attribute | Column Name |
| Description | Description of data field |
| Data Type | Date Type: Text / Number / Date |
| Data Format | Data format of the field: Text (Length), Number (Decimals), Date (date format) |

For questions regarding the DAX Files Guide, please contact our STOXX Customer Support team:
> Phone: +41 434307272
> E-Mail: customersupport@stoxx.com

### 1.1. Naming Convention

The naming convention for the description of the file name in the DAX Files Guide is

| xxxxx - Index Name |
| :---: |
| YYYYMMDD - date at which report is generated |

### 1.2. Naming convention associated to Third-Party Data Licenses

## DAX

Files may be generated in multiple versions accordingly to the Third Party Data license the client is entitled to. The following table provides an overview of the different Components File name and the Third Party Data excluded.

The File name will contain 4 characters P\#\#\# to allow the identification of third party data being displayed:

> - FileName_P\#\#\#_xxxxx with P\#\#\# = Permissioned Third Party data,

Important Note: whenever a new 3rd-party license gets added into the system, the file names will change for clients who don't have the new 3rd-party license!

License Entitlements per Client: For demonstration, each entitlement below has got a different entitlement and hence access to a different version of the components file.

|  | 3rd-Party (SEDOL) | 3rd-Party <br> B licence | 3rd-Party <br> C licence | 3rd-Party <br> D licence | SUM | Entitlement to File | Active |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Value | 1 | 2 | 4 | 8 |  |  |  |
| Entitlement A | Y | Y | Y | Y | 0 | FileName_P000_XXXXX.csv | Yes |
| Entitlement B | N | Y | Y | Y | 1 | FileName_P001_XXXXX.csv | Yes |
| Entitlement C | Y | N | Y | Y | 2 | FileName_P002_XXXXX.csv | No |
| Entitlement D | N | N | Y | Y | 3 | FileName_P003_XXXXX.csv | No |
| Entitlement E | Y | Y | N | Y | 4 | FileName_P004_XXXXX.csv | No |
| Entitlement F | N | Y | N | Y | 5 | FileName_P005_XXXXX.csv | No |
| Entitlement G | Y | N | N | Y | 6 | FileName_P006_XXXXX.csv | No |
| Entitlement H | N | N | N | Y | 7 | FileName_P007_XXXXX.csv | No |
| Entitlement I | Y | Y | Y | N | 8 | FileName_P008_XXXXX.csv | No |
| Entitlement J | N | Y | Y | N | 9 | FileName_P009_XXXXX.csv | No |
| Entitlement K | Y | N | Y | N | 10 | FileName_P010_XXXXX.csv | No |
| Entitlement L | N | N | Y | N | 11 | FileName_P011_XXXXX.csv | No |
| Entitlement M | Y | Y | N | N | 12 | FileName_P012_XXXXX.csv | No |
| Entitlement N | N | Y | N | N | 13 | FileName_P013_XXXXX.csv | No |
| Entitlement O | Y | N | N | N | 14 | FileName_P014_XXXXX.csv | No |
| Entitlement P | N | N | N | N | 15 | FileName_P015_XXXXX.csv | No |

Files for which a Third-Party Data segregation is implemented have a reference to this section.

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## 2. Equity Index Files

### 2.1. Index Composition Report

### 2.1.1.Standard (x|s) format

This report contains both index and constituent information based on market closing values and indicators as of last rebalancing date. The file is publicly available on DAX Website and MD+S Interactive platform for licensed users.
> File name:
xxxxx_ICR.YYYYMMDD.xls
> File type: .xls
> File frequency: daily at COB
The report consists of three tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data - index and constituent closing data
3. Info - Displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tabs "Data".
Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 2 | Index Name | Index Name | Text | 255 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 4 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 5 | Instrument | Constituent Name | Text | 255 |
| 6 | ISIN | Constituent ISIN | Text | 12 |
| 7 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 8 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General <br> Standard" or "Scale" for constituents listed on Frankfurt Stock <br> Exchange; n/a otherwise) | Text | 16 |
| 9 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 10 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 11 | Index Settlement Value <br> (Future) | Index Future Settlement Value on report date | Number | 2 |
| 12 | Index Settlement Value <br> (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 13 | Index Settlement Value <br> (Option) | Index Option Settlement Value on report Date | Number | 2 |
| 14 | Constant A (last regular <br> rebalancing) (Index) | Index Base value to be used in conjunction with Fi factor on the last <br> rebalancing date | Number | 7 |

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| 15 | Kt (last regular rebalancing) (Index) | Index Chaining Factor on the last rebalancing date | Number | 7 |
| :---: | :---: | :---: | :---: | :---: |
| 16 | Market Cap. (in Mio.) (last regular rebalancing) (Index) | Index Market Capitalisation (in millions) on the last rebalancing date | Number | 2 |
| 17 | \# Constituents | Number of Index constituents | Number | 0 |
| 18 | Performance (1d) (Index) | 1-day Index performance | Number | 15 |
| 19 | Performance (1m) (Index) | 1-month Index performance | Number | 15 |
| 20 | Performance (12m) (Index) | 12-month Index performance | Number | 15 |
| 21 | Performance (ytd) (Index) | YTD Index performance | Number | 15 |
| 22 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 23 | Volatility (12m) (Index) | 12-month Index Volatility | Number | 15 |
| 24 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 15 |
| 25 | Sharpe Ratio (12m) (Index) | 12-month Index Sharpe Ratio | Number | 15 |
| 26 | pit | Closing price of constituent on report date | Number | 3 |
| 27 | pi0 (last regular rebalancing) | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 28 | qi0 (last regular rebalancing) | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 29 | qit (last regular rebalancing) | Number of shares of constituent on the last rebalancing date | Number | 0 |
| 30 | ffit (last regular rebalancing) | Free float factor of constituent on the last rebalancing date | Number | 4 |
| 31 | ci (last regular rebalancing) | Adjustment factor of the constituent on the last rebalancing date | Number | 6 |
| 32 | Market Cap. (in Mio.) (last regular rebalancing) | Constituent Market Capitalisation on the last rebalancing date (in millions) | Number | 2 |
| 33 | Weight (last regular rebalancing) | Weighting of the constituent in the index on the last rebalancing date | Number | 4 |
| 34 | Fi (last regular rebalancing) | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) on the last rebalancing date | Number | 15 |
| 35 | Fi (norm 1m EUR) (last regular rebalancing) | Normalized Fi factor, calculated as $\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{\mathrm{it}}{ }^{*} \mathrm{P}_{\mathrm{it}}\right)$ * 1000000 | Number | 15 |
| 36 | Fi (norm Index) (last regular rebalancing) | Normalized Fi factor, calculated as $\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right)$ * Index close value | Number | 15 |
| 37 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 38 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 39 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 40 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 41 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 42 | Volatility (1m) | 1-month Constituent Volatility | Number | 15 |
| 43 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 44 | Sharpe Ratio (1m) | 1-month Constituent Sharpe Ratio | Number | 15 |
| 45 | Sharpe Ratio (12m) | 12-month Constituent Sharpe Ratio | Number | 15 |
| 46 | Beta (1m) | 1-month Constituent Beta | Number | 15 |


| 47 | Beta $(12 \mathrm{~m})$ | 12 -months Constituent Beta | Number | 15 |
| :--- | :--- | :--- | :--- | :--- |
| 48 | Correlation $(1 \mathrm{~m})$ | 1 -month Constituent Correlation | Number | 15 |
| 49 | Correlation $(12 \mathrm{~m})$ | 12 -months Constituent Correlation | Number | 15 |

### 2.1.2.Composite (csv) format

This report contains both index and constituent information based on market closing values and indicators as of last rebalancing date. The file includes all indices per family. The file is publicly available on DAX Website and MD+S Interactive platform for licensed users.
> File name:
DBAGEquityIndices_All_ICR.YYYYMMDD.csv
DBAGEquityIndices_Germany_ICR.YYYYMMDD.csv
DBAGBlueChipEquity_Germany_ICR.YYYYMMDD.csv
> File type: .csv
> File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day | Report date | Date | mm/dd/yyyy |
| 2 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index Name | Index Name | Text | 255 |
| 4 | Index ISIN | Index ISIN | Text | 12 |
| 5 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 6 | Instrument | Constituent Name | Text | 255 |
| 7 | ISIN | Constituent ISIN | Text | 12 |
| 8 | Country | Market segment of the constituent (text "Prime Standard", "General <br> Standard" or "Scale" for constituents listed on Frankfurt Stock <br> Exchange; n/a otherwise) | Text | n/a |
| 9 | Transparency Level | 16 |  |  |
| 10 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 11 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 12 | Index Settlement Value <br> (Future) | Index Future Settlement Value on report date | Number | 2 |
| 13 | Index Settlement Value <br> (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 14 | Index Settlement Value <br> (Option) | Index Option Settlement Value on report Date | Number | 7 |
| 15 | Constant A (last regular <br> rebalancing) (Index) | Index Base value to be used in conjunction with Fi factor on the last <br> rebalancing date | Number | 7 |
| 16 | Kt (last regular <br> rebalancing) (Index) | Index Chaining Factor on the last rebalancing date | Number | 0 |
| 17 | Market Cap. (in Mio.) <br> (last regular <br> rebalancing) (Index) | Index Market Capitalisation (in millions) on the last rebalancing date | Number | 2 |
| 18 | \# Constituents | Number of Index constituents | Number |  |
| 19 | Performance (1d) <br> (Index) | 1-day Index performance | 15 |  |
| 20 | Performance (1m) <br> (Index) | 1-month Index performance | Number |  |


| 21 | Performance (12m) (Index) | 12-month Index performance | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 22 | Performance (ytd) (Index) | YTD Index performance | Number | 15 |
| 23 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 24 | Volatility (12m) (Index) | 12-month Index Volatility | Number | 15 |
| 25 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 15 |
| 26 | Sharpe Ratio (12m) (Index) | 12-month Index Sharpe Ratio | Number | 15 |
| 27 | pit | Closing price of constituent on report date | Number | 3 |
| 28 | pi0 (last regular rebalancing) | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 29 | qiO (last regular rebalancing) | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 30 | qit (last regular rebalancing) | Number of shares of constituent on the last rebalancing date | Number | 0 |
| 31 | ffit (last regular rebalancing) | Free float factor of constituent on the last rebalancing date | Number | 4 |
| 32 | ci (last regular rebalancing) | Adjustment factor of the constituent on the last rebalancing date | Number | 6 |
| 33 | Market Cap. (in Mio.) (last regular rebalancing) | Constituent Market Capitalisation on the last rebalancing date (in millions) | Number | 2 |
| 34 | Weight (last regular rebalancing) | Weighting of the constituent in the index on the last rebalancing date | Number | 4 |
| 35 | Fi (last regular rebalancing) | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) on the last rebalancing date | Number | 15 |
| 36 | Fi (norm 1m EUR) (last regular rebalancing) | Normalized Fi factor, calculated as Qit*FFit*Cit / SUM(Qit*FFit*Cit*Pit) * 1000000 | Number | 15 |
| 37 | Fi (norm Index) (last regular rebalancing) | Normalized Fi factor, calculated as Qit*FFit*Cit / SUM(Qit*FFit*Cit*Pit) * Index close value | Number | 15 |
| 38 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 39 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 40 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 41 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 42 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 43 | Volatility (1m) | 1-month Constituent Volatility | Number | 15 |
| 44 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 45 | Sharpe Ratio (1m) | 1-month Constituent Sharpe Ratio | Number | 15 |
| 46 | Sharpe Ratio (12m) | 12-month Constituent Sharpe Ratio | Number | 15 |
| 47 | Beta (1m) | 1-month Constituent Beta | Number | 15 |
| 48 | Beta (12m) | 12-months Constituent Beta | Number | 15 |
| 49 | Correlation (1m) | 1-month Constituent Correlation | Number | 15 |
| 50 | Correlation (12m) | 12-months Constituent Correlation | Number | 15 |

### 2.2. Index Report

This report contains index information based on market closing values as well as index statistical measures. The file is publicly available on DAX Website.
> File name:
DBAGEquityIndices_All_IR.YYYYMMDD.csv
DBAGEquityIndices_Germany_IR.YYYYMMDD.csv
DBAGBlueChipEquity_Germany_IR.YYYYMMDD.csv
$>$ File type: .csv
$>$ File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day | Report date | Date | mm/dd/yyy |
| 2 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index Name | Index Name | Text | 255 |
| 4 | Index ISIN | Index ISIN | Number | 12 |
| 5 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 6 | Index Settlement Value <br> (Future) | Index Future Settlement Value on report date | Number | 2 |
| 7 | Index Settlement Value <br> (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 8 | Index Settlement Value <br> (Option) | Index Option Settlement Value on report Date |  |  |
| 9 | Constant A (last regular <br> rebalancing) (Index) | Index Base value to be used in conjunction with Fi factor on the last <br> rebalancing date | Number | 7 |
| 10 | Kt (last regular <br> rebalancing) (Index) | Index Chaining Factor on the last rebalancing date | Number | 7 |
| 11 | Market Cap. (in Mio.) <br> (last regular <br> rebalancing) (Index) | Index Market Capitalisation (in millions) on the last rebalancing <br> date | Number | 2 |
| 12 | \# Constituents | Number of Index constituents | Number | 0 |
| 13 | Performance (1d) <br> (Index) | 1-day Index performance | Number | 15 |
| 14 | Performance (1m) <br> (Index) | 1-month Index performance | Number | 15 |
| 15 | Performance (12m) <br> (Index) | 12-month Index performance | Number | 15 |
| 16 | Performance (ytd) <br> (Index) | YTD Index performance | Number | 15 |
| 17 | Volatility (1m) (Index) | 1-month Index Volatility | 15 |  |
| 18 | Volatility (12m) (Index) | 12-month Index Volatility | 15 |  |
| 19 | Sharpe Ratio (1m) <br> (Index) | 1-month Index Sharpe Ratio | 15 |  |
| 20 | Sharpe Ratio (12m) <br> (Index) | 12-month Index Sharpe Ratio | Number |  |

### 2.3. Index Weightings File

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day. The file is available on MD+S Interactive platform for licensed users.
> File name:

## DAX | qontigo :

xxxxx_Weighting_File.YYYYMMDD.xls
> File type: .xIs
> File frequency: daily at COB
The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Data for today - index and constituent closing data
4. Data for next day - index and constituent data adjusted for the next dissemination day

The file specifications will cover tabs "Data for today" and "Data for next day".

### 2.3.1.DAX National Indices

Constituent related data starts at Row 8.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 3 | Reporting Instrument | Constituent Name | Text | 255 |
| 4 | ISIN | Constituent ISIN | Text | 12 |
| 5 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt <br> Stock Exchange; $n /$ ootherwise) | Text | 255 |
| 6 | pi0 | Opening price of constituent on the trading day before the first <br> inclusion in the index | Number | 3 |
| 7 | pit | Closing price of constituent on report date | Number | 3 |
| 8 | qio | Number of shares of constituent on the first inclusion in the index | Text | 0 |
| 9 | qit | Free float factor of constituent on report date | Number | 0 |
| 10 | ffit | Adjustment factor of the constituent - performance index | Number | 4 |
| 11 | ci | Market Capitalisation on report date (in millions) - performance <br> index | Number | 6 |
| 12 | Market Cap. (in Mio.) 2 |  |  |  |
| 13 | Fi | Weighting factor F of the constituent (provides information on the <br> number of shares required from each constituent to <br> track the underlying portfolio) - performance index | Number | 5 |
| 14 | Weight | Weighting of the constituent in the index - performance index | Number | 4 |
| 15 | Empty | Empty | N/A | N/A |
| 16 | ci | Adjustment factor of the constituent - price index | Number | 6 |
| 17 | Market Cap. (in Mio.) | Market Capitalisation on report date (in millions) - price index | Number | 2 |
| 18 | Fi | Weighting factor F of the constituent (provides information on the <br> number of shares required from each constituent to <br> track the underlying portfolio) - price index | Number | 5 |
| 19 | Weight | Weighting of the constituent in the index - price index | Number | 4 |

Index related data starts at Row $\mathbf{N}^{\mathbf{1}+11}$.

[^0]| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index | Index Name | Text | 255 |
| 4 | SIN | Index ISIN | Text | 12 |
| 5 | Market Cap. | Market Capitalisation on report date (in millions) | Number | 2 |
| 6 | Kt | Index Chaining Factor | Number | 7 |
| 7 | Constituents | Number of Index constituents | Number | 0 |
| 8 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 9 | Value | Index closing value | Number | 2 |

### 2.3.2.DAX International Indices

## Constituent related data starts at Row 9.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 3 | Reporting Instrument | Constituent Name | Text | 255 |
| 4 | ISIN | Constituent ISIN | Text | 12 |
| 5 | pi0 | Opening price of constituent on the trading day before the first <br> inclusion in the index | Number | 3 |
| 6 | pit | Closing price of constituent on report date | Number | 3 |
| 7 | qi0 | Number of shares of constituent on the first inclusion in the index | Text | 0 |
| 8 | qit | Number of shares of constituent on report date | Number | 0 |
| 9 | ffit | Adjustment factor of the constituent - performance index | Number | 4 |
| 10 | ci | Weighting factor F of the constituent (provides information on the <br> number of shares required from each constituent to <br> track the underlying portfolio) - performance index | Number | 6 |
| 11 | Fi | Weighting of the constituent in the index - performance index | 15 |  |
| 12 | Weight | Constituent exchange code | Number | 4 |
| 13 | Exchange | Constituent country | Text | 3 |
| 14 | Country/Sector | Empty | Text | 255 |
| 15 | Empty | Constituent Trading Symbol | N/A | N/A |
| 16 | Trading Symbol | Text | 4 |  |
| 17 | Reporting Instrument | Constituent Name | Text | 255 |
| 18 | ISIN | Constituent ISIN | Text | 12 |
| 19 | ci | Adjustment factor of the constituent - price index | Number | 6 |
| 20 | Fi | Weighting factor F of the constituent (provides information on the <br> number of shares required from each constituent to <br> track the underlying portfolio) - price index |  |  |
| 21 | Weight | Weighting of the constituent in the index - price index | Number | 4 |
| 22 | Country/Sector | Constituent country | Text | 255 |

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Index related data starts at Row $\mathbf{N}^{2}+12$.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index | Index Name | Text | 255 |
| 4 | SIN | Index ISIN | Text | 12 |
| 5 | Market Cap. | Market Capitalisation on report date (in millions) | Number | 2 |
| 6 | Kt | Index Chaining Factor | Number | 7 |
| 7 | Constituents | Number of Index constituents | Number | 0 |
| 8 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 9 | Value | Index closing value | Number | 2 |

### 2.3.3.DAX Dividend Point Indices

This report contains dividend points for each constituent in the index. The file is available on MD+S Interactive platform for licensed users.
> File name:
DAXDividendPoints_Weighting_File.YYYYMMMD.xIs
DivDAXDividendPoints_Weighting_File.YYYYMMDD.xls
> File type: .xIs
> File frequency: daily at COB

The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Data-dividend point

The file specifications will cover tab "Data".
Constituent related data starts at Row 8.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 2 | Reporting Instrument | Constituent Name | Text | 255 |
| 3 | ISIN | Constituent ISIN | Text | 12 |
| 4 | Dividend Points | Dividend points of the constituent | Number | 4 |

[^1]Part of
$\rightarrow$
DEUTSCHE BÖRSE GROUP

### 2.4. Index Weightings SEDOL

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day. The file is produced only for selected DAXglobal and DAXplus indices. The file is available on MD+S Interactive platform for licensed users.
$>$ File name:
xxxxx_ Weighting_File_ext.YYYYMMDD.xls
> File type: .xls
$>$ File frequency: daily at COB
The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Data for today - index and constituent closing data
4. Data for next day - index and constituent data adjusted for the next dissemination day

The file specifications will cover tabs "Data for today" and "Data for next day".
Constituent related data starts at Row 9.

| Column ID | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 3 | Reporting Instrument | Constituent Name | Text | 255 |
| 4 | ISIN | Constituent ISIN | Text | 12 |
| 5 | Sedol | Constituent SEDOL code | Text | 7 |
| 6 | pi0 (EUR) | Opening price (in EUR) of constituent on the trading day before the first inclusion in the index | Number | 5 |
| 7 | pit (EUR) | Closing price (in EUR) of constituent on report date | Number | 5 |
| 8 | Local Currency | Constituent ISO currency code | Text | 3 |
| 9 | Currency Rate | Constituent currency conversion rate (from local currency to EUR) | Number | 10 |
| 10 | pit (local) | Closing price (in local currency) of constituent on report date | Number | 3 |
| 11 | pit (US\$) | Closing price (in USD) of constituent on report date | Number | 10 |
| 12 | qio | Number of shares of constituent on the first inclusion in the index | Text | 0 |
| 13 | qit | Number of shares of constituent on report date | Number | 0 |
| 14 | ffit | Free float factor of constituent on report date | Number | 4 |
| 15 | ci | Adjustment factor of the constituent - performance index | Number | 6 |
| 16 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) - performance index | Number | 5 |
| 17 | Weight | Weighting of the constituent in the index - performance index | Number | 4 |
| 18 | Exchange | Constituent exchange code | Text | 3 |
| 19 | Country/Sector | Constituent country | Text | 255 |
| 20 | Empty | Empty | N/A | N/A |
| 21 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 22 | Reporting Instrument | Constituent Name | Text | 255 |
| 23 | ISIN | Constituent ISIN | Text | 12 |


| 24 | ci | Adjustment factor of the constituent - price index | Number | 6 |
| :---: | :--- | :--- | :--- | :--- |
| 25 | Fi | Weighting factor F of the constituent (provides information on the <br> number of shares required from each constituent to <br> track the underlying portfolio) - price index |  |  |
| 26 | Weight | Weighting of the constituent in the index - price index | Number | 4 |
| 27 | Country/Sector | Constituent country | Text | 255 |

Index related data starts in Row $\mathbf{N}^{\mathbf{3}+12}$.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Empty | Empty | N/A | N/A |
| 2 | Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index | Index Name | Text | 255 |
| 4 | ISIN | Index ISIN | Text | 12 |
| 5 | Market Cap. | Market Capitalisation on report date (in millions) | Number | 2 |
| 6 | Kt | Index Chaining Factor | Number | 7 |
| 7 | Constituents | Number of Index constituents | Number | 0 |
| 8 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 9 | Value | Index closing value | Number | 2 |

### 2.5. Index Weightings Basic

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day. The file is available on MD+S Interactive platform for licensed users.

### 2.5.1.Standard (x|s) format

The standard format includes both current day and next dissemination day data in the same file.
> File name:
xxxxx_IWB.YYYYMMDD.xls
> File type: .xls
> File frequency: daily at COB

The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data for today - index and constituent closing data
3. Data for next day - index and constituent data adjusted for the next dissemination day
4. Info - Displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tabs "Data for today" and "Data for next day".

[^2]
## Data starts at Row 6.

| $\begin{aligned} & \hline \text { Column } \\ & \text { ID } \end{aligned}$ | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 2 | Index Name | Index Name | Text | 255 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 4 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 5 | Instrument | Constituent Name | Text | 255 |
| 6 | ISIN | Constituent ISIN | Text | 12 |
| 7 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 8 | Subsector | Constituent Subsector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 9 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 10 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General Standard" or "Scale" for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 16 |
| 11 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 12 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 13 | Index Settlement Value (Future) | Index Future Settlement Value on report date | Number | 2 |
| 14 | Index Settlement Value (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 15 | Index Settlement Value (Option) | Index Option Settlement Value on report Date | Number | 2 |
| 16 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 17 | Kt | Index Chaining Factor | Number | 7 |
| 18 | Market Cap (in Mio.) (Index) | Index Market Capitalisation (in millions) | Number | 2 |
| 19 | \# Constituents | Number of Index constituents | Number | 0 |
| 20 | pit (close) | Closing price of constituent on report date | Number | 3 |
| 21 | pi0 | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 22 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 23 | qit | Number of shares of constituent on report date | Number | 0 |
| 24 | ffit | Free float factor of constituent on report date | Number | 4 |
| 25 | ci | Adjustment factor of the constituent | Number | 6 |
| 26 | Market Cap. (in Mio.) | Market Capitalisation on report date (in millions) | Number | 2 |
| 27 | Weight | Weighting of the constituent in the index | Number | 4 |
| 28 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) | Number | 15 |
| 29 | Fi (norm 1m EUR) | $\begin{aligned} & \text { Normalized Fi factor, calculated as } \mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right) \text { * } \\ & 1000000 \end{aligned}$ | Number | 15 |
| 30 | Fi (norm Index) | Normalized Fi factor, calculated as $\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right)$ * Index close value | Number | 15 |
| 31 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 32 | Performance (1d) (Index) | 1-day Index performance | Number | 15 |
| 33 | Performance (1m) (Index) | 1-month Index performance | Number | 15 |

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| 34 | Performance (12m) (Index) | 12-months Index performance | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 35 | Performance (ytd) (Index) | YTD Index performance | Number | 15 |
| 36 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 37 | Volatility (12m) (Index) | 12-months Index Volatility | Number | 15 |
| 38 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 15 |
| 39 | Sharpe Ratio (12m) (Index) | 12-months Index Sharpe Ratio | Number | 15 |
| 40 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 41 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 42 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 43 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 44 | Volatility (1m) | 1-month Constituent Volatility | Number | 15 |
| 45 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 46 | Beta (1m) | 1-month Constituent Beta | Number | 15 |
| 47 | Beta (12m) | 12-months Constituent Beta | Number | 15 |
| 48 | Correlation (1m) | 1-month Constituent Correlation | Number | 15 |
| 49 | Correlation (12m) | 12-months Constituent Correlation | Number | 15 |
| 50 | Sharpe Ratio (1m) | 1-month Constituent Sharpe Ratio | Number | 15 |
| 51 | Sharpe Ratio (12m) | 12-month Constituent Sharpe Ratio | Number | 15 |

### 2.5.2.CSV format

In this format, data for current day and next dissemination is displayed in two files. This file is produced only for selected indices.
> File name:
xxxxx_IWB_TD.YYYYMMDD.csv - current day
xxxxx_IWB_ND.YYYYMMDD.csv - next dissemination day
$>$ File type: .csv
$>$ File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day | Report date | Date | dd/mm/yyyy |
| 2 | Day Indicator | Text "Today" or "Next day" | Text | 8 |
| 3 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt <br> Stock Exchange; n/a otherwise) | Text | 255 |
| 10 | Subsector | Constituent Subsector (filled only for constituents listed on <br> Frankfurt Stock Exchange; n/a otherwise) | Text | 2255 |
| 11 | Country | Constituent Country (currently not maintained) | Text | n/a |


| 12 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General Standard" or "Scale" for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 16 |
| :---: | :---: | :---: | :---: | :---: |
| 13 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 14 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 15 | Index Settlement Value (Future) | Index Future Settlement Value on report date | Number | 2 |
| 16 | Index Settlement Value (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 17 | Index Settlement Value (Option) | Index Option Settlement Value on report Date | Number | 2 |
| 18 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 19 | Kt | Index Chaining Factor | Number | 7 |
| 20 | Market Cap (in Mio.) (Index) | Index Market Capitalisation (in millions) | Number | 2 |
| 21 | \# Constituents | Number of Index constituents | Number | 0 |
| 22 | pit (close) | Closing price of constituent on report date | Number | 3 |
| 23 | pi0 | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 24 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 25 | qit | Number of shares of constituent on report date | Number | 0 |
| 26 | ffit | Free float factor of constituent on report date | Number | 4 |
| 27 | ci | Adjustment factor of the constituent | Number | 6 |
| 28 | Market Cap. (in Mio.) | Market Capitalisation on report date (in millions) | Number | 2 |
| 29 | Weight | Weighting of the constituent in the index | Number | 4 |
| 30 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) | Number | 6 |
| 31 | Fi (norm 1m EUR) | Normalized Fi factor, calculated as Qit*FFit*Cit / SUM(Qit*FFit*Cit*Pit) * 1000000 | Number | 6 |
| 32 | Fi (norm Index) | Normalized Fi factor, calculated as Qit*FFit*Cit / SUM(Qit*FFit*Cit*Pit) * Index close value | Number | 6 |
| 33 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 34 | Performance (1d) (Index) | 1-day Index performance | Number | 4 |
| 35 | Performance (1m) (Index) | 1-month Index performance | Number | 4 |
| 36 | Performance (12m) (Index) | 12-months Index performance | Number | 4 |
| 37 | Performance (ytd) (Index) | YTD Index performance | Number | 4 |
| 38 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 4 |
| 39 | Volatility (12m) (Index) | 12-months Index Volatility | Number | 4 |
| 40 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 4 |
| 41 | Sharpe Ratio (12m) (Index) | 12-months Index Sharpe Ratio | Number | 4 |
| 42 | Performance (1d) | 1-day Constituent Performance | Number | 4 |
| 43 | Performance (1m) | 1-month Constituent Performance | Number | 4 |
| 44 | Performance (12m) | 12-month Constituent Performance | Number | 4 |
| 45 | Performance (ytd) | YTD Constituent Performance | Number | 4 |
| 46 | Volatility (1m) | 1-month Constituent Volatility | Number | 4 |
| 47 | Volatility (12m) | 12-month Constituent Volatility | Number | 4 |


| 48 | Beta $(1 \mathrm{~m})$ | 1 -month Constituent Beta | Number | 4 |
| :--- | :--- | :--- | :--- | :--- |
| 49 | Beta $(12 \mathrm{~m})$ | 12 -months Constituent Beta | Number | 4 |
| 50 | Correlation $(1 \mathrm{~m})$ | 1 -month Constituent Correlation | Number | 4 |
| 51 | Correlation $(12 \mathrm{~m})$ | 12 -months Constituent Correlation | Number | 4 |

### 2.6. Index Weightings Premium

### 2.6.1.Standard (x|s) format

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day. It also includes various statistical measures. The file is available on MD+S Interactive platform for licensed users and generated in multiple versions according to the Third-Party Data license the client is entitled to.
> File name:

$$
\begin{aligned}
& \text { - } \begin{array}{l}
\text { xxxxx_IWP.YYYYMMDD.xls } \\
\text { - } \\
\text { xxxxx_IWP_P001.YYYYMMDD.xls with P001 Permissioned Third-Party data as described in } \\
\text { section } 1.2 \text { of the DAX File Guide }
\end{array} \text {. }
\end{aligned}
$$

> File type: .xls
> File frequency: daily at COB
The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data for today - index and constituent closing data
3. Data for next day - index and constituent data adjusted for the next dissemination day
4. Info - Displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tabs "Data for today" and "Data for next day".

## Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 2 | Index Name | Index Name | Text | 255 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 4 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 5 | Instrument | Constituent Name | Text | 255 |
| 6 | ISIN | Constituent ISIN | Text | 12 |
| 7 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt <br> Stock Exchange; n/a otherwise) | Text | 255 |
| 8 | Subsector | Constituent Subsector (filled only for constituents listed on <br> Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 9 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 10 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General <br> Standard" or "Scale" for constituents listed on Frankfurt Stock <br> Exchange; $n / a$ otherwise) | Text | 16 |
| 11 | Sedol | Constituent SEDOL code (only displayed if licensed) | Text | 7 |

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| 12 | BB Ticker | Constituent Bloomberg Ticker | Text | 6 |
| :---: | :---: | :---: | :---: | :---: |
| 13 | Reuters RIC | Constituent Refinitiv Instrument Code | Text | 21 |
| 14 | Local Currency | Constituent ISO currency code | Text | 3 |
| 15 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 16 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 17 | Index Settlement Value (Future) | Index Future Settlement Value on report date | Number | 2 |
| 18 | Index Settlement Value (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 19 | Index Settlement Value (Option) | Index Option Settlement Value on report Date | Number | 2 |
| 20 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 21 | Kt | Index Chaining Factor | Number | 7 |
| 22 | Market Cap (in Mio.) (Index) | Index Market Capitalisation (in millions) | Number | 2 |
| 23 | \# Constituents | Number of Index constituents | Number | 0 |
| 24 | pit (close) | Closing price of constituent on report date | Number | 3 |
| 25 | pit (open) | Opening price of constituent on report date | Number | 3 |
| 26 | pit (high) | Highest price of constituent on report date | Number | 3 |
| 27 | pit (low) | Lowest price of constituent on report date | Number | 3 |
| 28 | pi0 | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 29 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 30 | qit | Number of shares of constituent on report date | Number | 0 |
| 31 | ffit | Free float factor of constituent on report date | Number | 4 |
| 32 | ci | Adjustment factor of the constituent | Number | 6 |
| 33 | Market Cap. (in Mio.) | Market Capitalisation on report date (in millions) | Number | 2 |
| 34 | Weight | Weighting of the constituent in the index | Number | 4 |
| 35 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) - performance index | Number | 15 |
| 36 | Fi (norm 1m EUR) | $\begin{aligned} & \begin{array}{l} \text { Normalized Fi factor, calculated as } \mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right) * \\ 1000000 \end{array} \end{aligned}$ | Number | 15 |
| 37 | Fi (norm Index) | Normalized Fi factor, calculated as $\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right)$ * Index close value | Number | 15 |
| 38 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 39 | Performance (1d) (Index) | 1-day Index performance | Number | 15 |
| 40 | Performance (1m) (Index) | 1-month Index performance | Number | 15 |
| 41 | Performance (12m) (Index) | 12-monthis Index performance | Number | 15 |
| 42 | Performance (ytd) (Index) | YTD Index performance | Number | 15 |
| 43 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 44 | Volatility (12m) (Index) | 12-months Index Volatility | Number | 15 |
| 45 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 15 |
| 46 | Sharpe Ratio (12m) (Index) | 12-months Index Sharpe Ratio | Number | 15 |
| 47 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 48 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 49 | Performance (3m) | 3-month Constituent Performance | Number | 15 |


| 50 | Performance (6m) | 6-month Constituent Performance | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 51 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 52 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 53 | Volatility (1m) | 1-mnth Constituent Volatility | Number | 15 |
| 54 | Volatility (3m) | 3-month Constituent Volatility | Number | 15 |
| 55 | Volatility (6m) | 6-month Constituent Volatility | Number | 15 |
| 56 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 57 | Volatility (ytd) | YTD Constituent Volatility | Number | 15 |
| 58 | Beta (1m) | 1-month Constituent Beta | Number | 15 |
| 59 | Beta (1m) to Prime All Share | 1-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 60 | Beta (1m) to General All Share | 1-month Constituent Beta to the General All Share Index | Number | 15 |
| 61 | Beta (1m) to Entry All Share | 1-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 62 | Beta (1m) to Classic All Share | 1-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 63 | Beta (1m) to Technology All Share | 1-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 64 | Beta (1m) to DAX | 1-month Constituent Beta to the DAX Index | Number | 15 |
| 65 | Beta (1m) to MDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 66 | Beta (1m) to SDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 67 | Beta (1m) to TecDAX | 1-month Constituent Beta to the TecDAX Index | Number | 15 |
| 68 | Beta (3m) | 3-month Constituent Beta | Number | 15 |
| 69 | Beta (3m) to Prime All Share | 3-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 70 | Beta (3m) to General All Share | 3-month Constituent Beta to the General All Share Index | Number | 15 |
| 71 | Beta (3m) to Entry All Share | 3-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 72 | Beta (3m) to Classic All Share | 3-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 73 | Beta (3m) to Technology All Share | 3-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 74 | Beta (3m) to DAX | 3-month Constituent Beta to the DAX Index | Number | 15 |
| 75 | Beta (3m) to MDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 76 | Beta (3m) to SDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 77 | Beta (3m) to TecDAX | 3-month Constituent Beta to the TecDAX Index | Number | 15 |
| 78 | Beta (6m) | 6-month Constituent Beta | Number | 15 |
| 79 | Beta (6m) to Prime All Share | 6-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 80 | Beta (6m) to General All Share | 6-month Constituent Beta to the General All Share Index | Number | 15 |
| 81 | Beta (6m) to Entry All Share | 6-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 82 | Beta (6m) to Classic All Share | 6-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 83 | Beta (6m) to Technology All Share | 6-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 84 | Beta (6m) to DAX | 6-month Constituent Beta to the DAX Index | Number | 15 |
| 85 | Beta (6m) to MDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 86 | Beta (6m) to SDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 87 | Beta (6m) to TecDAX | 6-month Constituent Beta to the TecDAX Index | Number | 15 |


| 88 | Beta (12m) | 12-month Constituent Beta | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 89 | Beta (12m) to Prime All Share | 12-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 90 | Beta (12m) to General All Share | 12-month Constituent Beta to the General All Share Index | Number | 15 |
| 91 | Beta (12m) to Entry All Share | 12-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 92 | Beta (12m) to Classic All Share | 12-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 93 | Beta (12m) to Technology All Share | 12-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 94 | Beta (12m) to DAX | 12-month Constituent Beta to the DAX Index | Number | 15 |
| 95 | Beta (12m) to MDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 96 | Beta (12m) to SDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 97 | Beta (12m) to TecDAX | 12-month Constituent Beta to the TecDAX Index | Number | 15 |
| 98 | Beta (ytd) | YTD Constituent Beta | Number | 15 |
| 99 | Beta (ytd) to Prime All Share | YTD Constituent Beta to the Prime All Share Index | Number | 15 |
| 100 | Beta (ytd) to General All Share | YTD Constituent Beta to the General All Share Index | Number | 15 |
| 101 | Beta (ytd) to Entry All Share | YTD Constituent Beta to the Entry All Share Index | Number | 15 |
| 102 | Beta (ytd) to Classic All Share | YTD Constituent Beta to the Classic All Share Index | Number | 15 |
| 103 | Beta (ytd) to Technology All Share | YTD Constituent Beta to the Technology All Share Index | Number | 15 |
| 104 | Beta (ytd) to DAX | YTD Constituent Beta to the DAX Index | Number | 15 |
| 105 | Beta (ytd) to MDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 106 | Beta (ytd) to SDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 107 | Beta (ytd) to TecDAX | YTD Constituent Beta to the TecDAX Index | Number | 15 |
| 108 | Correlation (1m) | 1-month constituent correlation | Number | 15 |
| 109 | Correlation (1m) to Prime All Share | 1-month correlation between constituent and Prime All Share Index | Number | 15 |
| 110 | Correlation (1m) to General All Share | 1-month correlation between constituent and General All Share Index | Number | 15 |
| 111 | Correlation (1m) to Entry All Share | 1-month correlation between constituent and Entry All Share Index | Number | 15 |
| 112 | Correlation (1m) to Classic All Share | 1-month correlation between constituent and Classic All Share Index | Number | 15 |
| 113 | Correlation (1m) to Technology All Share | 1-month correlation between constituent and Technology All Share Index | Number | 15 |
| 114 | Correlation (1m) to DAX | 1-month correlation between constituent and DAX Index | Number | 15 |
| 115 | Correlation (1m) to MDAX | 1-month correlation between constituent and MDAX Index | Number | 15 |
| 116 | Correlation (1m) to SDAX | 1-month correlation between constituent and SDAX Index | Number | 15 |
| 117 | Correlation (1m) to TecDAX | 1-month correlation between constituent and TecDAX Index | Number | 15 |
| 118 | Correlation (3m) | 3-month constituent correlation | Number | 15 |
| 119 | Correlation (3m) to Prime All Share | 3-month correlation between constituent and Prime All Share Index | Number | 15 |


| 120 | Correlation (3m) to General All Share | 3-month correlation between constituent and General All Share Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 121 | Correlation (3m) to Entry All Share | 3-month correlation between constituent and Entry All Share Index | Number | 15 |
| 122 | Correlation (3m) to Classic All Share | 3-month correlation between constituent and Classic All Share Index | Number | 15 |
| 123 | Correlation (3m) to Technology All Share | 3-month correlation between constituent and Technology All Share Index | Number | 15 |
| 124 | Correlation (3m) to DAX | 3-month correlation between constituent and DAX Index | Number | 15 |
| 125 | Correlation (3m) to MDAX | 3-month correlation between constituent and MDAX Index | Number | 15 |
| 126 | Correlation (3m) to SDAX | 3-month correlation between constituent and SDAX Index | Number | 15 |
| 127 | Correlation (3m) to TecDAX | 3-month correlation between constituent and TecDAX Index | Number | 15 |
| 128 | Correlation (6m) | 6-month constituent correlation | Number | 15 |
| 129 | Correlation (6m) to Prime All Share | 6-month correlation between constituent and Prime All Share Index | Number | 15 |
| 130 | Correlation (6m) to General All Share | 6-month correlation between constituent and General All Share Index | Number | 15 |
| 131 | Correlation (6m) to Entry All Share | 6-month correlation between constituent and Entry All Share Index | Number | 15 |
| 132 | Correlation (6m) to Classic All Share | 6-month correlation between constituent and Classic All Share Index | Number | 15 |
| 133 | Correlation (6m) to Technology All Share | 6-month correlation between constituent and Technology All Share Index | Number | 15 |
| 134 | Correlation (6m) to DAX | 6-month correlation between constituent and DAX Index | Number | 15 |
| 135 | Correlation (6m) to MDAX | 6-month correlation between constituent and MDAX Index | Number | 15 |
| 136 | Correlation (6m) to SDAX | 6-month correlation between constituent and SDAX Index | Number | 15 |
| 137 | Correlation (6m) to TecDAX | 6-month correlation between constituent and TecDAX Index | Number | 15 |
| 138 | Correlation (12m) | 12-month constituent correlation | Number | 15 |
| 139 | Correlation (12m) to Prime All Share | 12-month correlation between constituent and Prime All Share Index | Number | 15 |
| 140 | Correlation (12m) to General All Share | 12-month correlation between constituent and General All Share Index | Number | 15 |
| 141 | Correlation (12m) to Entry All Share | 12-month correlation between constituent and Entry All Share Index | Number | 15 |
| 142 | Correlation (12m) to Classic All Share | 12-month correlation between constituent and Classic All Share Index | Number | 15 |
| 143 | Correlation (12m) to Technology All Share | 12-month correlation between constituent and Technology All Share Index | Number | 15 |
| 144 | Correlation (12m) to DAX | 12-month correlation between constituent and DAX Index | Number | 15 |
| 145 | Correlation (12m) to MDAX | 12-month correlation between constituent and MDAX Index | Number | 15 |
| 146 | Correlation (12m) to SDAX | 12-month correlation between constituent and SDAX Index | Number | 15 |


| 147 | Correlation (12m) to <br> TecDAX | 12-month correlation between constituent and TecDAX Index | Number | 15 |
| :---: | :--- | :--- | :--- | :--- |
| 148 | Correlation (ytd) | YTD constituent correlation | Number | 15 |
| 149 | Correlation (ytd) to <br> Prime All Share | YTD correlation between constituent and Prime All Share Index | Number | 15 |
| 150 | Correlation (ytd) to <br> General All Share | YTD correlation between constituent and General All Share Index | Number | 115 |
| 151 | Correlation (ytd) to <br> Entry All Share | YTD correlation between constituent and Entry All Share Index | Number | 15 |
| 152 | Correlation (ytd) to <br> Classic All Share | YTD correlation between constituent and Classic All Share Index | Number | 115 |
| 153 | Correlation (ytd) to <br> Technology All Share | YTD correlation between constituent and Technology All Share <br> 154 | Correlation (ytd) to DAX | YTD correlation between constituent and DAX Index |

### 2.6.2.CSV format

In this format, data for current day and next dissemination is displayed in two files. This file is produced only for selected indices. The file is available on MD+S Interactive platform for licensed users and generated in multiple versions according to the Third-Party Data license the client is entitled to.
> File name:

- xxxxx_IWP_TD.YYYYMMDD.csv - current day
- xxxxx_IWP_ND.YYYYMMDD.csv - next dissemination day
- xxxxx_IWP_P001_TD.YYYYMMDD.csv - current day, with P001 Permissioned Third Party data as described in section 1.2 of the DAX File Guide
- xxxxx_IWP_P001_ND.YYYYMMDD.csv - next dissemination day, with P001 Permissioned Third Party data as described in section 1.2 of the DAX File Guide
> File type: .csv
> File specification: semicolon separated
$>$ File frequency: daily at COB

| Column ID | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Day | Report date | Date | dd/mm/yyyy |
| 2 | Day Indicator | Text "Today" or "Next day" | Text | 8 |
| 3 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 10 | Subsector | Constituent Subsector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 11 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 12 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General Standard" or "Scale" for constituents listed on Frankfurt Stock Exchange; $n / a$ otherwise) | Text | 16 |
| 13 | Sedol | Constituent SEDOL code (only displayed if licensed) | Text | 7 |
| 14 | BB Ticker | Constituent Bloomberg Ticker | Text | 6 |
| 15 | Reuters RIC | Constituent Refinitiv Instrument Code | Text | 21 |
| 16 | Local Currency | Constituent ISO currency code | Text | 3 |
| 17 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 18 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 19 | Index Settlement Value (Future) | Index Future Settlement Value on report date | Number | 2 |
| 20 | Index Settlement Value (Kassa) | Index Kassa Settlement Value on report date | Number | 2 |
| 21 | Index Settlement Value (Option) | Index Option Settlement Value on report Date | Number | 2 |
| 22 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 23 | Kt | Index Chaining Factor | Number | 7 |
| 24 | Market Cap (in Mio.) (Index) | Index Market Capitalisation (in millions) | Number | 2 |
| 25 | \# Constituents | Number of Index constituents | Number | 0 |
| 26 | pit (close) | Closing price of constituent on report date | Number | 3 |
| 27 | pit (open) | Opening price of constituent on report date | Number | 3 |
| 28 | pit (high) | Highest price of constituent on report date | Number | 3 |
| 29 | pit (low) | Lowest price of constituent on report date | Number | 3 |
| 30 | piO | Opening price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 31 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 32 | qit | Number of shares of constituent on report date | Number | 0 |


| 33 | ffit | Free float factor of constituent on report date | Number | 4 |
| :---: | :---: | :---: | :---: | :---: |
| 34 | ci | Adjustment factor of the constituent | Number | 6 |
| 35 | Market Cap. (in Mio.) | Market Capitalisation on report date (in millions) | Number | 2 |
| 36 | Weight | Weighting of the constituent in the index | Number | 4 |
| 37 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) - performance index | Number | 15 |
| 38 | Fi (norm 1m EUR) | Normalized Fi factor, calculated as $\mathrm{Q}_{\mathrm{it}}{ }^{*} \mathrm{FF}_{\mathrm{it}}{ }^{*} \mathrm{C}_{i t} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{i t} * \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right)$ * 1000000 | Number | 15 |
| 39 | Fi (norm Index) | Normalized Fi factor, calculated as $\mathrm{Q}_{i t} * \mathrm{FF}_{\mathrm{it}} * \mathrm{C}_{i t} / \mathrm{SUM}\left(\mathrm{Q}_{\mathrm{it}} * \mathrm{FF}_{i t} * \mathrm{C}_{\mathrm{it}} * \mathrm{P}_{\mathrm{it}}\right)$ * Index close value | Number | 15 |
| 40 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 41 | Performance (1d) (Index) | 1-day Index performance | Number | 15 |
| 42 | Performance (1m) (Index) | 1-month Index performance | Number | 15 |
| 43 | Performance (12m) (Index) | 12-monthis Index performance | Number | 15 |
| 44 | Performance (ytd) (Index) | YTD Index performance | Number | 15 |
| 45 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 46 | Volatility (12m) (Index) | 12-months Index Volatility | Number | 15 |
| 47 | Sharpe Ratio (1m) (Index) | 1-month Index Sharpe Ratio | Number | 15 |
| 48 | Sharpe Ratio (12m) (Index) | 12-months Index Sharpe Ratio | Number | 15 |
| 49 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 50 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 51 | Performance (3m) | 3-month Constituent Performance | Number | 15 |
| 52 | Performance (6m) | 6-month Constituent Performance | Number | 15 |
| 53 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 54 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 55 | Volatility (1m) | 1-mnth Constituent Volatility | Number | 15 |
| 56 | Volatility (3m) | 3-month Constituent Volatility | Number | 15 |
| 57 | Volatility (6m) | 6-month Constituent Volatility | Number | 15 |
| 58 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 59 | Volatility (ytd) | YTD Constituent Volatility | Number | 15 |
| 60 | Beta (1m) | 1-month Constituent Beta | Number | 15 |
| 61 | Beta (1m) to Prime All Share | 1-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 62 | Beta (1m) to General All Share | 1-month Constituent Beta to the General All Share Index | Number | 15 |
| 63 | Beta (1m) to Entry All Share | 1-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 64 | Beta (1m) to Classic All Share | 1-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 65 | Beta (1m) to Technology All Share | 1-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 66 | Beta (1m) to DAX | 1-month Constituent Beta to the DAX Index | Number | 15 |
| 67 | Beta (1m) to MDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 68 | Beta (1m) to SDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 69 | Beta (1m) to TecDAX | 1-month Constituent Beta to the TecDAX Index | Number | 15 |
| 70 | Beta (3m) | 3-month Constituent Beta | Number | 15 |


| 71 | Beta (3m) to Prime All Share | 3-month Constituent Beta to the Prime All Share Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 72 | Beta (3m) to General All Share | 3-month Constituent Beta to the General All Share Index | Number | 15 |
| 73 | Beta (3m) to Entry All Share | 3-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 74 | Beta (3m) to Classic All Share | 3-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 75 | Beta (3m) to <br> Technology All Share | 3-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 76 | Beta (3m) to DAX | 3-month Constituent Beta to the DAX Index | Number | 15 |
| 77 | Beta (3m) to MDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 78 | Beta (3m) to SDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 79 | Beta (3m) to TecDAX | 3-month Constituent Beta to the TecDAX Index | Number | 15 |
| 80 | Beta (6m) | 6-month Constituent Beta | Number | 15 |
| 81 | Beta (6m) to Prime All Share | 6-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 82 | Beta (6m) to General All Share | 6-month Constituent Beta to the General All Share Index | Number | 15 |
| 83 | Beta (6m) to Entry All Share | 6-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 84 | Beta (6m) to Classic All Share | 6-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 85 | Beta (6m) to Technology All Share | 6-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 86 | Beta (6m) to DAX | 6-month Constituent Beta to the DAX Index | Number | 15 |
| 87 | Beta (6m) to MDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 88 | Beta (6m) to SDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 89 | Beta (6m) to TecDAX | 6-month Constituent Beta to the TecDAX Index | Number | 15 |
| 90 | Beta (12m) | 12-month Constituent Beta | Number | 15 |
| 91 | Beta (12m) to Prime All Share | 12-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 92 | Beta (12m) to General All Share | 12-month Constituent Beta to the General All Share Index | Number | 15 |
| 93 | Beta (12m) to Entry All Share | 12-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 94 | Beta (12m) to Classic All Share | 12-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 95 | Beta (12m) to <br> Technology All Share | 12-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 96 | Beta (12m) to DAX | 12-month Constituent Beta to the DAX Index | Number | 15 |
| 97 | Beta (12m) to MDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 98 | Beta (12m) to SDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 99 | Beta (12m) to TecDAX | 12-month Constituent Beta to the TecDAX Index | Number | 15 |
| 100 | Beta (ytd) | YTD Constituent Beta | Number | 15 |
| 101 | Beta (ytd) to Prime All Share | YTD Constituent Beta to the Prime All Share Index | Number | 15 |
| 102 | Beta (ytd) to General All Share | YTD Constituent Beta to the General All Share Index | Number | 15 |
| 103 | Beta (ytd) to Entry All Share | YTD Constituent Beta to the Entry All Share Index | Number | 15 |
| 104 | Beta (ytd) to Classic All Share | YTD Constituent Beta to the Classic All Share Index | Number | 15 |


| 105 | Beta (ytd) to Technology All Share | YTD Constituent Beta to the Technology All Share Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 106 | Beta (ytd) to DAX | YTD Constituent Beta to the DAX Index | Number | 15 |
| 107 | Beta (ytd) to MDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 108 | Beta (ytd) to SDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 109 | Beta (ytd) to TecDAX | YTD Constituent Beta to the TecDAX Index | Number | 15 |
| 110 | Correlation (1m) | 1-month constituent correlation | Number | 15 |
| 111 | Correlation (1m) to Prime All Share | 1-month correlation between constituent and Prime All Share Index | Number | 15 |
| 112 | Correlation (1m) to General All Share | 1-month correlation between constituent and General All Share Index | Number | 15 |
| 113 | Correlation (1m) to Entry All Share | 1-month correlation between constituent and Entry All Share Index | Number | 15 |
| 114 | Correlation (1m) to Classic All Share | 1-month correlation between constituent and Classic All Share Index | Number | 15 |
| 115 | Correlation (1m) to Technology All Share | 1-month correlation between constituent and Technology All Share Index | Number | 15 |
| 116 | Correlation (1m) to DAX | 1-month correlation between constituent and DAX Index | Number | 15 |
| 117 | Correlation (1m) to MDAX | 1-month correlation between constituent and MDAX Index | Number | 15 |
| 118 | Correlation (1m) to SDAX | 1-month correlation between constituent and SDAX Index | Number | 15 |
| 119 | Correlation (1m) to TecDAX | 1-month correlation between constituent and TecDAX Index | Number | 15 |
| 120 | Correlation (3m) | 3-month constituent correlation | Number | 15 |
| 121 | Correlation (3m) to Prime All Share | 3-month correlation between constituent and Prime All Share Index | Number | 15 |
| 122 | Correlation (3m) to General All Share | 3-month correlation between constituent and General All Share Index | Number | 15 |
| 123 | Correlation (3m) to Entry All Share | 3-month correlation between constituent and Entry All Share Index | Number | 15 |
| 124 | Correlation (3m) to Classic All Share | 3-month correlation between constituent and Classic All Share Index | Number | 15 |
| 125 | Correlation (3m) to Technology All Share | 3-month correlation between constituent and Technology All Share Index | Number | 15 |
| 126 | Correlation (3m) to DAX | 3-month correlation between constituent and DAX Index | Number | 15 |
| 127 | Correlation (3m) to MDAX | 3-month correlation between constituent and MDAX Index | Number | 15 |
| 128 | Correlation (3m) to SDAX | 3-month correlation between constituent and SDAX Index | Number | 15 |
| 129 | Correlation (3m) to TecDAX | 3-month correlation between constituent and TecDAX Index | Number | 15 |
| 130 | Correlation (6m) | 6-month constituent correlation | Number | 15 |
| 131 | Correlation (6m) to Prime All Share | 6-month correlation between constituent and Prime All Share Index | Number | 15 |
| 132 | Correlation (6m) to General All Share | 6-month correlation between constituent and General All Share Index | Number | 15 |
| 133 | Correlation (6m) to Entry All Share | 6-month correlation between constituent and Entry All Share Index | Number | 15 |
| 134 | Correlation (6m) to Classic All Share | 6-month correlation between constituent and Classic All Share Index | Number | 15 |
| 135 | Correlation (6m) to Technology All Share | 6-month correlation between constituent and Technology All Share Index | Number | 15 |


| 136 | Correlation (6m) to DAX | 6-month correlation between constituent and DAX Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 137 | Correlation (6m) to MDAX | 6-month correlation between constituent and MDAX Index | Number | 15 |
| 138 | Correlation (6m) to SDAX | 6-month correlation between constituent and SDAX Index | Number | 15 |
| 139 | Correlation (6m) to TecDAX | 6-month correlation between constituent and TecDAX Index | Number | 15 |
| 140 | Correlation (12m) | 12-month constituent correlation | Number | 15 |
| 141 | Correlation (12m) to Prime All Share | 12-month correlation between constituent and Prime All Share Index | Number | 15 |
| 142 | Correlation (12m) to General All Share | 12-month correlation between constituent and General All Share Index | Number | 15 |
| 143 | Correlation (12m) to Entry All Share | 12-month correlation between constituent and Entry All Share Index | Number | 15 |
| 144 | Correlation (12m) to Classic All Share | 12-month correlation between constituent and Classic All Share Index | Number | 15 |
| 145 | Correlation (12m) to Technology All Share | 12-month correlation between constituent and Technology All Share Index | Number | 15 |
| 146 | $\begin{aligned} & \text { Correlation }(12 \mathrm{~m}) \text { to } \\ & \text { DAX } \\ & \hline \end{aligned}$ | 12-month correlation between constituent and DAX Index | Number | 15 |
| 147 | Correlation (12m) to MDAX | 12-month correlation between constituent and MDAX Index | Number | 15 |
| 148 | $\text { Correlation }(12 \mathrm{~m}) \text { to }$ SDAX | 12-month correlation between constituent and SDAX Index | Number | 15 |
| 149 | Correlation (12m) to TecDAX | 12-month correlation between constituent and TecDAX Index | Number | 15 |
| 150 | Correlation (ytd) | YTD constituent correlation | Number | 15 |
| 151 | Correlation (ytd) to Prime All Share | YTD correlation between constituent and Prime All Share Index | Number | 15 |
| 152 | Correlation (ytd) to General All Share | YTD correlation between constituent and General All Share Index | Number | 15 |
| 153 | Correlation (ytd) to Entry All Share | YTD correlation between constituent and Entry All Share Index | Number | 15 |
| 154 | Correlation (ytd) to Classic All Share | YTD correlation between constituent and Classic All Share Index | Number | 15 |
| 155 | Correlation (ytd) to Technology All Share | YTD correlation between constituent and Technology All Share Index | Number | 15 |
| 156 | Correlation (ytd) to DAX | YTD correlation between constituent and DAX Index | Number | 15 |
| 157 | Correlation (ytd) to MDAX | YTD correlation between constituent and MDAX Index | Number | 15 |
| 158 | Correlation (ytd) to SDAX | YTD correlation between constituent and SDAX Index | Number | 15 |
| 159 | Correlation (ytd) to TecDAX | YTD correlation between constituent and TecDAX Index | Number | 15 |
| 160 | Sharpe Ratio (1m) | 1-month constituent Sharpe Ratio | Number | 15 |
| 161 | Sharpe Ratio (3m) | 3-month constituent Sharpe Ratio | Number | 15 |
| 162 | Sharpe Ratio (6m) | 6-month constituent Sharpe Ratio | Number | 15 |
| 163 | Sharpe Ratio (12m) | 12-month constituent Sharpe Ratio | Number | 15 |
| 164 | Sharpe Ratio (ytd) | YTD constituent Sharpe Ratio | Number | 15 |
| 165 | Dividend Points (1d) | 1-day constituent Dividend Points | Number | 15 |
| 166 | Dividend Points (1m) | 1-month constituent Dividend Points | Number | 15 |
| 167 | Dividend Points (3m) | 3-month constituent Dividend Points | Number | 15 |
| 168 | Dividend Points (6m) | 6-month constituent Dividend Points | Number | 15 |

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| 169 | Dividend Points (12m) | 12-month constituent Dividend Points | Number | 15 |
| :---: | :--- | :--- | :--- | :--- |
| 170 | Dividend Points (ytd) | YTD constituent Dividend Points | Number | 15 |
| 171 | Performance <br> Contribution (1d) | 1-day constituent Performance Contribution | Number | 15 |
| 172 | Performance <br> Contribution (1m) | 1-month constituent Performance Contribution | Number | 15 |
| 173 | Performance <br> Contribution (3m) | 3-month constituent Performance Contribution | Number | 15 |
| 174 | Performance <br> Contribution (6m) | 6-month constituent Performance Contribution | Number | 15 |
| 175 | Performance <br> Contribution (12m) | 12-month constituent Performance Contribution | Number | 15 |
| 176 | Performance <br> Contribution (ytd) | YTD constituent Performance Contribution | Number | 15 |

### 2.7. Index Weightings Currency

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day for the currency versions of selected index. The file is available on MD+S Interactive platform for licensed users and generated in multiple versions according to the Third-Party Data license the client is entitled to.
> File name:

- xxxxx_IWC.YYYYMMDD.xls
- xxxxx_IWC_P001.YYYYMMDD.xIs with P001 Permissioned Third Party data as described in section 1.2 of the DAX File Guide
> File type: .xls
> File frequency: daily at COB

The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data for today - index and constituent closing data
3. Data for next day - index and constituent data adjusted for the next dissemination day
4. Info - Displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tabs "Data for today" and "Data for next day".
Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 2 | Index Name | Index Name | Text | 255 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 4 | Index Currency | Index Currency | Text | 3 |
| 5 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 6 | Instrument | Constituent Name | Text | 255 |
| 7 | ISIN | Constituent ISIN | Text | 12 |
| 8 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt Stock <br> Exchange; $n$ n/a otherwise) | Text | 225 |


| 9 | Subsector | Constituent Subsector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| :---: | :---: | :---: | :---: | :---: |
| 10 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 11 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General Standard" or "Scale" for constituents listed on Frankfurt Stock Exchange; $\mathrm{n} / \mathrm{a}$ otherwise) | Text | 16 |
| 12 | Sedol | Constituent SEDOL code (only displayed if licensed) | Text | 7 |
| 13 | BB Ticker | Constituent Bloomberg Ticker | Text | 6 |
| 14 | Reuters RIC | Constituent Refinitiv Instrument Code | Text | 21 |
| 15 | Local Currency | Constituent ISO currency code | Text | 3 |
| 16 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 17 | Index Value (close) | Index Close Value on report date | Number | 2 |
| 18 | Index Value (open) | Index Open value on report date | Number | 2 |
| 19 | Index Value (high) | Index High value on report date | Number | 2 |
| 20 | Index Value (low) | Index Low value on report date | Number | 2 |
| 21 | Constant A | Index Base value to be used in conjunction with Fi factor | Number | 7 |
| 22 | Currency base value (Euro to index currency) | Currency base value EUR to index currency | Number | 8 |
| 23 | Currency rate (Euro to index currency) | Currency exchange rate EUR to index currency | Number | 5 |
| 24 | Kt | Index Chaining Factor | Number | 7 |
| 25 | Market Cap (in Mio. index currency) (Index) | Index Market Capitalisation (in millions) | Number | 2 |
| 26 | \# Constituents | Number of Index Constituents | Number | 0 |
| 27 | pit (close) in index currency | Closing price of constituent on report date (in index currency) | Number | 3 |
| 28 | pit (local) | Closing price of constituent on report date (in local currency) | Number | 3 |
| 29 | Currency Rate (Local to Index Currency) | Currency exchange rate: Constituent currency to index currency | Number | 3 |
| 30 | pi0 (Euro) | Opening price of constituent on the trading day before the first inclusion in the index (in EUR) | Number | 3 |
| 31 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 32 | qit | Number of shares of constituent on report date | Number | 0 |
| 33 | ffit | Free float factor of constituent on report date | Number | 4 |
| 34 | ci | Adjustment factor of the constituent | Number | 6 |
| 35 | Market Cap. (in Mio. index currency) | Market Capitalisation on report date (in millions) | Number | 2 |
| 36 | Weight | Weighting of the constituent in the index | Number | 4 |
| 37 | Fi | Weighting factor F of the constituent (provides information on the number of shares required from each constituent to track the underlying portfolio) - performance index | Number | 5 |

### 2.8. Business Forecast

### 2.8.1.Standard format

This report displays future index composition and underlying data that will be implemented at the next chaining date for DAX and DAXglobal Indices. The file is available on MD+S Interactive platform for licensed users.
> File name:
xxxxx_BF.YYYYMMDD.xls, where YYYYMMDD is quarterly review effective date
> File type: .xls

## DAXI QONTIGO):

> File frequency: quarterly, one trading day (before 9 a.m. CET) before chaining date in March, June, September, December

The report consists of three tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data - displays index and constituent future data
3. Info - displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tab "Data".

## Data starts at Row 6.

| Column ID | Attribute | Description | Data <br> Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 2 | Index Name | Index Name | Text | 255 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 4 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 5 | Instrument | Constituent Name | Text | 255 |
| 6 | ISIN | Constituent ISIN | Text | 12 |
| 7 | Sector | Constituent Sector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 8 | Subsector | Constituent Subsector (filled only for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 255 |
| 9 | Country | Constituent Country (currently not maintained) | Text | n/a |
| 10 | Transparency Level | Market segment of the constituent (text "Prime Standard", "General Standard" or "Scale" for constituents listed on Frankfurt Stock Exchange; n/a otherwise) | Text | 16 |
| 11 | Instrument Exchange | Constituent Exchange | Text | 20 |
| 12 | Index Value (close) | Index Close Value on report date (two days before review implementation) | Number | 2 |
| 13 | Constant A | Index Base value to be used in conjunction with Fi factor (two days before review implementation) | Number | 7 |
| 14 | Market Cap (in Mio.) (Index) | Index Market capitalisation in index currency on report date (in millions) (two days before review implementation) | Number | 2 |
| 15 | \# Constituents | Number of Index constituents | Number | 0 |
| 16 | pi0 | Closing price of constituent on the trading day before the first inclusion in the index | Number | 3 |
| 17 | pit | Closing price of constituent on report date (two days before review implementation) | Number | 3 |
| 18 | qio | Number of shares of constituent on the first inclusion in the index | Number | 0 |
| 19 | qit | Number of shares of constituent to be effective after review implementation | Number | 0 |
| 20 | ffit | Free float factor of constituent to be effective after review implementation | Number | 4 |
| 21 | ci | Adjustment factor of the constituent | Number | 6 |
| 22 | Market Cap. (in Mio) | Market Capitalisation on report date (in millions) | Number | 4 |
| 23 | Weight | Weighting of the constituent in the index | Number | 4 |
| 24 | Capped Ind | Indicator whether constituent is capped ("Y" or "N") | Text | 1 |

### 2.8.2.DAXplus Maximum Dividend

This report displays future index composition and underlying data that will be implemented at the next chaining date for DAXplus Maximum Dividend Index. The file is available on MD+S Interactive platform for licensed users.
> File name:
DAXplusMaximumDividendIndices_BF.YYYYMMDD.csv, where YYYYMMDD is review effective date
> File type: .csv
> File specification: semicolon separated
> File frequency: semi-annual, one trading day (before 9 a.m. CET) before chaining date in May and November

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | FACT_DATE | Review cut-off date | Date | dd.mm.yyyy |
| 2 | ISIN | Constituent ISIN | Text |  |
| 3 | INSTRUMENT_NAME | Constituent name | Text | 255 |
| 4 | DIVIDEND_ <br> IN_EURO | Projected dividend amount to be paid in the next 6 months, in EUR | Number | 7 |
| 5 | PIT_CLOSE | Constituent closing price on cut-off date | Number | 3 |
| 6 | DIVIDEND_YIELD | Constituent projected dividend yield | Number | 9 |
| 7 | WEIGHT_UNCAPPED | Indicative weight in the future index composition (uncapped) | Number | 9 |
| 8 | WEIGHT_FINAL | Indicative weight in the future index composition (final) | Number | 9 |

### 2.9. Corporate Actions Forecast

This report displays upcoming dividends and corporate actions for the index constituents. The file is available on MD+S Interactive platform for licensed users.
> File name:
xxxxx_CA_Forecast.YYYYMMDD.xls
> File type: .xls
> File frequency: twice daily ( $\sim 09: 30$ CET and ~17:30 CET)

The report consists of two tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Corporate Action Forecast - displays constituent future corporate actions

The file specifications will cover tab "Corporate Action Forecast". The forecast is split into two section corporate actions effective on from $T$ (date of report production) to $T+3$, and corporate actions effective from $\mathrm{T}+4$ to $\mathrm{T}+10$. The first section starts at Row 14, the second section moves depending on how many corporate actions are in the first section.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | EX DATE | Ex-date of the corporate action | Date | dd.mm.yyyy |
| 2 | ISIN | Constituent ISIN | Text | 12 |
| 3 | REPORTING <br> INSTRUMENT | Constituent Name | Text | 255 |
| 4 | INDEX ISIN | Index ISIN | Text | 12 |
| 5 | INDEX NAME | Index Name | Text | 255 |
| 6 | CORPORATE ACTION <br> TYPE | Description of Corporate action ("regular dividend", "special <br> payment", "rights issue", "spinoff insertion", "spinoff ci-adjustment",", <br> "spinoff deletion", "bonus share", "ISIN change", "deletion", <br> "insertion", "parameter change") | Text | 255 |
| 7 | DIVIDEND AMOUNT | Amount of issued Dividend | Number | 2 |
| 8 | DIVIDEND CURRENCY | Currency of issued Dividend | Text | 3 |
| 9 | STRIKE PRICE | Subscription price (only rights issues) | Number | 3 |
| 10 | STRIKE PRICE <br> CURRENCY | Rights issue: subscription price currency | Text | 3 |
| 11 | NUMERATOR | Ratio old shares (rights issue, stock dividend, spin-off) | Number | 3 |
| 12 | DENUMERATOR | Ratio new shares (rights issue, stock dividend, spin-off) | Number | 3 |
| 13 | NEW ISIN | New ISIN of the constituent (if applicable, empty otherwise) | Text | 12 |
| 14 | EXCHANGE | Constituent exchange code | Text | 3 |
| 15 | COUNTRY/SECTOR | Currently not maintained | N/A | N/A |
| 16 | CI EFFECT | Adjustment factor effect for dividend payment of constituent <br> ("increase in ci" or "no change") | Text | 14 |
| 17 | DIVISOR EFFECT | Chaining factor effect ("Change in Divisor" or "none") | Text | 17 |
| 18 | INDEX EFFECT | Currently not maintained (text "none") | Text | 4 |
| 19 | CONSOLIDATION <br> STATUS | Source of corporate action (text "FINAL CONSOLIDATION" or "MD <br> OPERATIONS" | Text | 19 |
| 20 | CHANGE | Corporate Action change since the last report ("NEW", <br> "NO_CHANGE") | Text | 9 |
| 21 | COMMENTS | Additional Comments or Empty | Text | 255 |

### 2.10. Index Ranking - Core

Core ranking lists are produced for selection indices (DAX, MDAX, SDAX, TecDAX, DAX ex Financials 30 and DAX 50 ESG) in order to determine replacements for any stock deleted from the indices due to a corporate action and are publicly available. The template differs for main selection indices and Scale 30 . The file is publicly available on DAX Website and MD+S Interactive platform for licensed users.

### 2.10.1. Selection indices - CSV format

> File name: $x_{x x x x}$ SL.YYYYMMDD.csv, where YYYYMMDD is the ranking creation date
$>\quad$ File type: .csv
$>\quad$ File specification: semicolon separated
$>\quad$ File frequency: monthly (exact time depends on index methodology)

| Column <br> ID | Attribute | Description | Data Type | Data Format |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Date | Date at which the file is generated | Date | DD.MM.YYYY |
| 2 | Cut-off Date | Ranking list cut-off date | Date | DD.MM.YYY |
| 3 | Index Trading Symbol | Index Trading Symbol or Alpha code if Index Trading Symbol is <br> unavailable | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | Current Index <br> Membership | Constituent Index Membership | Text | 6 |
| 10 | Rank MarketCap | Current month constituent ranking by Market Capitalization | Number | 0 |
| 11 | ESG Rank | Current month constituent ranking by ESG score - only display for <br> ESG indices | Number | 0 |
| 12 | Index Membership <br> Possible | Indicator whether constituent is eligible to enter the index ("No" or <br> blank) | Text | 2 |
| 13 | Comment | Additional Comments or Empty ("Other share type in selection <br> index", "Other share type is ranked", "Exclusion List", "30 days rule, <br> "No VWAP", "ESG criteria not fulfilled", "No ESG score available" or <br> blank) | Text | 2255 |

The comments are displayed in the following order taking into account if a security is a component or not of a selection index

| Comment | Order |
| :--- | ---: |
| Other share type in selection index | 1 |
| Other share type is ranked | 2 |
| Exclusion List | 3 |
| 30 days rule | 4 |
| No VWAP | 5 |
| blank | 6 |

In case the ranking is prepared for the DAX 50 ESG, only the following two comments are displayed:

| Comment | Order |
| :--- | ---: |
| No ESG score available | 1 |
| ESG criteria not fulfilled | 2 |

### 2.10.2. Scale 30 - CSV format

> File name: Scale30EUR_SL.YYYYMMDD.csv, where YYYYMMDD is the ranking list creation date
> File type: .csv
> File specification: semicolon separated
> File frequency: monthly (exact time depends on index methodology)

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Date at which the file is generated | Date | DD.MM.YYYY |
| 2 | Cut-off Date | Ranking list cut-off date | Date | DD.MM.YYYY |
| 3 | Index Trading Symbol | Index Trading Symbol or Alpha code if Index Trading Symbol is <br> unavailable | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | Current Index <br> Membership | Constituent Index Membership | Text | 7 |
| 10 | Rank Turnover 12 <br> Month | Current month constituent ranking by 12-month turnover | Number | 0 |
| 11 | Comment | Additional Comments or Empty ("Not traded on Xetra", <br> " 30 Days Rule" or blank) | Text | 255 |

### 2.11. Index Ranking

### 2.11.1. Selection indices - CSV format

The file may be generated in multiple versions accordingly to the Third Party Data license the clients is entitled to. The following table provides an overview of the different Components File name and the Third Party Data excluded.
> File name:

- Xxxxx_rkP\#\#\#.YYYYMMDD.csv, where YYYYMMDD is the ranking creation date
- xxxxx_rkP\#\#\#.YYYYMMDD with P\#\#\# = with P\#\#\# = Permissioned Third Party data as described in section 1.2 of the DAX File Guide
> File type: .csv
$>$ File specification: semicolon separated
$>$ File frequency: monthly (exact time depends on index methodology)

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Date at which the file is generated | Date | DD.MM.YYY |
| 2 | Cut-off Date | Ranking list cut-off date | Date | DD.MM.YYYY |
| 3 | Index Trading <br> Symbol | Index Trading Symbol or Alpha code if Index Trading Symbol is <br> unavailable | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |


| 8 | ISIN | Constituent ISIN | Text | 12 |
| :---: | :---: | :---: | :---: | :---: |
| 9 | SEDOL | Constituent SEDOL identifier (only displayed if licensed) | Text | 7 |
| 10 | Current Index Membership | Constituent Index Membership | Text | 6 |
| 11 | Freefloat Factor | Constituent Freefloat Factor (ff) | Number | 4 |
| 12 | Number of Shares | Constituent number of shares | Number | 0 |
| 13 | Rank MarketCap | Current constituent ranking by Market Capitalization | Number | 0 |
| 14 | Rank MarketCap Previous Month | Previous month constituent ranking by Market Capitalization | Number | 0 |
| 15 | MarketCap in Mio Euro | Constituent Market Capitalization | Number | 8 |
| 16 | Turnover Rate (12 Month) | Annual turnover rate | Number | 2 |
| 17 | Absolute <br> Turnover in Mio <br> Euro (12 Month) | Absolute 12-month turnover in million EUR | Number | 8 |
| 18 | ESG Rank | Current constituent ranking by ESG score. Only displayed for DAX50 ESG, otherwise blank. | Number | 0 |
| 19 | ESG Rank <br> Previous Month | Previous months constituent ranking by ESG score. Only displayed for DAX 50 ESG, otherwise blank. | Number | 0 |
| 20 | Legal Domicile in Germany | Consistent Legal Domicile in Germany ("YES" or "NO") | Text | 3 |
| 21 | Operative <br> Headquarters in Germany | Operational Headquarters domiciled in Germany ("YES", "NO" or blank) | Text | 3 |
| 22 | Legal Domicile in EU or EFTA | Consistent Legal Domicile in EU or EFTA ("NO" or blank) | Text | 2 |
| 23 | Index <br> Membership Possible | Indicator whether constituent is eligible to enter the index ("NO" or blank) | Text | 2 |
| 24 | Audit Committee | Indicator whether the requirement of the Audit Committee existence is met ("NO", "Grandfathering Rule" or blank) | Text | 19 |
| 25 | Reporting Period End | Date of the end of the reporting period | Date | DD.MM |
| 26 | Annual Financial Report | Indicator about the publication of the annual audited financial report ("Over 90 days", "Over 4 months" or blank) | Text | 13 |
| 27 | Half -yearly Financial Report | Indicator about the publication of the half-yearly financial report ("Over 45 days", "Over 3 months" or blank) | Text | 13 |
| 28 | Quarterly Financial Report | Indicator about the publication of the quarterly financial report ("Over 45 days", "Over 75 days" or blank) | Text | 12 |
| 29 | EBITDA Criteria | Indicator if EBITDA was positive in the two most recent fiscal years ("NO" or blank) | Text | 2 |
| 30 | Comment | Additional Comments or Empty ("Other share type in selection index", "Other share type is ranked", "Exclusion List", "30 days rule, "No VWAP", "ESG criteria not fulfilled", "No ESG score available" or blank | Text | 255 |

The comments are displayed in the following order taking into account if a security is a component or not of a selection index
Comment Priority

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Other share type in selection index ..... 1
Other share type is ranked ..... 2
Exclusion List ..... 3
30 days rule ..... 4
No VWAP ..... 5
blank ..... 6

In case the ranking is prepared for the DAX 50 ESG, only the following two comments are displayed:

| Comment | Order |
| :--- | ---: |
| No ESG score available | 1 |
| ESG criteria not fulfilled | 2 |

### 2.11.2. Scale 30 - CSV format

The file may be generated in multiple versions accordingly to the Third Party Data license the clients is entitled to. The following table provides an overview of the different Components File name and the Third Party Data excluded.
> File name:

- xxxxx_rkP\#\#\#.YYYYMMDD.csv, where YYYYMMDD is the ranking creation date
- xxxxx_rkP\#\#\#.YYYYMMDD with P\#\#\# = with P\#\#\# = Permissioned Third Party data as described in section 1.2 of the DAX File Guide
> File type: .csv
> File specification: semicolon separated
$>$ File frequency: monthly (exact time depends on index methodology)

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Date at which the file is generated | Date | DD.MM.YYYY |
| 2 | Cut-off Date | Ranking list cut-off date | Date | DD.MM.YYYY |
| 3 | Index Trading Symbol | Index Trading Symbol or Alpha code if Index Trading Symbol is <br> unavailable | Text | 4 |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | SEDOL | Constituent SEDOL identifier (only displayed if licensed) | Text | 7 |
| 10 | Current Index <br> Membership | Constituent Index Membership | Text | 7 |
| 11 | Freefloat Factor | Constituent Freefloat Factor (ff) | Number | 4 |
| 12 | Number of Shares | Constituent number of shares | Number | 0 |


| 13 | MarketCap in Mio Euro | Constituent Market Capitalization | Number | 2 |
| :---: | :--- | :--- | :--- | :--- |
| 14 | Rank Turnover 12 <br> Month | Current constituent ranking by 12-month turnover | Number | 0 |
| 15 | Rank Turnover 12 <br> Month Previous Month | Previous month constituent ranking by 12-month turnover | Number | 0 |
| 16 | Turnover in Mio Euro <br> (12 Month) | 12 -month turnover in million EUR | Number | 2 |
| 17 | Comment | Additional Comments or Empty ("Not traded on Xetra", <br> "30 Days Rule" or blank) | Text | 255 |

### 2.11.3. DAXplus Maximum Dividend

> File name:
DAXplusMaximumDividendIndices_RK.YYYYMMDD.csv, where YYYYMMDD is the ranking list cut-off date
> File type: .csv
> File specification: semicolon separated
> File frequency: semi-annual

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | ISIN | Constituent ISIN | Text | 12 |
| 2 | INSTRUMENT_NAME | Constituent name | Text | 255 |
| 3 | MASTER_INDEX | Constituent index membership | Text | 4 |
| 4 | THREE_MONTH_TURNOVER | 3-month turnover | Number | 0 |
| 5 | FREEFLOAT_FACTOR | Constituent Freefloat Factor (ff) | Number | 4 |
| 6 | NUMBER_OF_SHARES | Constituent number of shares | Number | 0 |
| 7 | MARKETCAP | Constituent Market Capitalization | Number | 0 |
| 8 | PRICE_MOMENTUM | Cumulative return over the last 12 months excluding the most <br> recent month | Number | 9 |
| 9 | DIVIDEND_IN_EURO | Projected dividend amount to be paid in the next 6 months, in EUR | Number | 7 |
| 10 | PIT_CLOSE | Constituent closing price on cut-off date | Number | 3 |
| 11 | DIVIDEND_YIELD | Constituent projected dividend yield | Number | 9 |
| 12 | RANK | Current constituent ranking by dividend yield | Number | 0 |
| 13 | DIVIDEND_YIELD_PREV_PERIOD | Previous ranking list constituent dividend yield | Number | 9 |
| 14 | RANK_DESCRIPTION | Text "No dividend within next chaining period / dividend yield last <br> period / rank value = minimum dividend yield next period" or blank | Text | 118 |
| 15 | EXCLUSION_REASON | Text "ADTV and/or Free-Float Market Cap and/or Price Momentum <br> below limit" or blank | Text | 67 |
| 16 | WEIGHT_UNCAPPED | Indicative weight in the future index composition (uncapped) | Number | 9 |
| 17 | WEIGHT_FINAL | Indicative weight in the future index composition (final) | Number | 9 |

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### 2.12. Statistical reporting

### 2.12.1. Analytical data report

This report contains both index and constituent statistical measures and performance indicators. The file is available on MD+S Interactive platform for licensed users.
> File name:
xxxxx_BMA.YYYYMMDD.xls
> File type: .xls
> File frequency: daily at COB
The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Data for today - index and constituent closing data
3. Data for next day - index and constituent data adjusted for the next dissemination day
4. Info - Displays Customer Support contact details and a legend of measures used in calculation

The file specifications will cover tabs "Data for today" and "Data for next day".

Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index Trading Symbol | Index Trading Symbol | Text | 4 |
| 3 | Index ISIN | Index ISIN | Text | 12 |
| 5 | Instrument | Constituent Name | Text | 255 |
| 6 | ISIN | Constituent ISIN | Text | 12 |
| 7 | Quintil | Quintile rank of the constituent by weight | Number | 0 |
| 8 | Performance (1d) <br> (Index) | 1-day Index performance | Number | 15 |
| 9 | Performance (1m) <br> (Index) | 1-month Index performance | Number | 15 |
| 10 | Performance (3m) <br> (Index) | 3-month Index performance | 15 |  |
| 11 | Performance (6m) <br> (Index) | 6-month Index performance | Number | 15 |
| 12 | Performance (12m) <br> (Index) | 12-month Index performance | Number | 15 |
| 13 | Performance (ytd) <br> (Index) | YTD Index performance | Number | 15 |
| 14 | Volatility (1m) (Index) | 1-month Index Volatility | Number | 15 |
| 15 | Volatility (3m) (Index) | 6-month Index Volatility | Number | 15 |
| 16 | Volatility (6m) (Index) | 6-month Index Volatility | Number | 15 |
| 17 | Volatility (12m) (Index) | 12-months Index Volatility | Number | 15 |
| 18 | Volatility (ytd) (Index) | YTD Index Volatility | Number | 15 |
| 19 | Sharpe Ratio (1m) <br> (Index) | 1-month Index Sharpe Ratio |  |  |


| 20 | Sharpe Ratio (3m) (Index) | 3-month Index Sharpe Ratio | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 21 | Sharpe Ratio (6m) (Index) | 6-month Index Sharpe Ratio | Number | 15 |
| 22 | Sharpe Ratio (12m) (Index) | 12-month Index Sharpe Ratio | Number | 15 |
| 23 | Sharpe Ratio (ytd) (Index) | YTD Index Sharpe Ratio | Number | 15 |
| 24 | Dividend Yield (1d) (Index) | 1-day Index Dividend Yield | Number | 15 |
| 25 | Dividend Yield (1m) (Index) | 1-month Index Dividend Yield | Number | 15 |
| 26 | Dividend Yield (3m) (Index) | 3-month Index Dividend Yield | Number | 15 |
| 27 | Dividend Yield (6m) (Index) | 6-month Index Dividend Yield | Number | 15 |
| 28 | Dividend Yield (12m) (Index) | 12-month Index Dividend Yield | Number | 15 |
| 29 | Dividend Yield (ytd) (Index) | YTD Index Dividend Yield | Number | 15 |
| 30 | Dividend Points (1d) (Index) | 1-day Index Dividend Points | Number | 15 |
| 31 | Dividend Points (1m) (Index) | 1-month Index Dividend Points | Number | 15 |
| 32 | Dividend Points (3m) (Index) | 3-month Index Dividend Points | Number | 15 |
| 33 | Dividend Points (6m) (Index) | 6-month Index Dividend Points | Number | 15 |
| 34 | Dividend Points (12m) (Index) | 12-month Index Dividend Points | Number | 15 |
| 35 | Dividend Points (ytd) (Index) | YTD month Index Dividend Points | Number | 15 |
| 36 | Performance (1d) | 1-day Constituent Performance | Number | 15 |
| 37 | Performance (1m) | 1-month Constituent Performance | Number | 15 |
| 38 | Performance (3m) | 3-month Constituent Performance | Number | 15 |
| 39 | Performance (6m) | 6-month Constituent Performance | Number | 15 |
| 40 | Performance (12m) | 12-month Constituent Performance | Number | 15 |
| 41 | Performance (ytd) | YTD Constituent Performance | Number | 15 |
| 42 | Volatility (1m) | 1-mnth Constituent Volatility | Number | 15 |
| 43 | Volatility (3m) | 3-month Constituent Volatility | Number | 15 |
| 44 | Volatility (6m) | 6-month Constituent Volatility | Number | 15 |
| 45 | Volatility (12m) | 12-month Constituent Volatility | Number | 15 |
| 46 | Volatility (ytd) | YTD Constituent Volatility | Number | 15 |
| 47 | Beta (1m) | 1-month Constituent Beta | Number | 15 |
| 48 | Beta (1m) to Prime All Share | 1-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 49 | Beta (1m) to General All Share | 1-month Constituent Beta to the General All Share Index | Number | 15 |
| 50 | Beta (1m) to Entry All Share | 1-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 51 | Beta (1m) to Classic All Share | 1-month Constituent Beta to the Classic All Share Index | Number | 15 |


| 52 | Beta (1m) to Technology All Share | 1-month Constituent Beta to the Technology All Share Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 53 | Beta (1m) to DAX | 1-month Constituent Beta to the DAX Index | Number | 15 |
| 54 | Beta (1m) to MDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 55 | Beta (1m) to SDAX | 1-month Constituent Beta to the MDAX Index | Number | 15 |
| 56 | Beta (1m) to TecDAX | 1-month Constituent Beta to the TecDAX Index | Number | 15 |
| 57 | Beta (3m) | 3-month Constituent Beta | Number | 15 |
| 58 | Beta (3m) to Prime All Share | 3-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 59 | Beta (3m) to General All Share | 3-month Constituent Beta to the General All Share Index | Number | 15 |
| 60 | Beta (3m) to Entry All Share | 3-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 61 | Beta (3m) to Classic All Share | 3-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 62 | Beta (3m) to Technology All Share | 3-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 63 | Beta (3m) to DAX | 3-month Constituent Beta to the DAX Index | Number | 15 |
| 64 | Beta (3m) to MDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 65 | Beta (3m) to SDAX | 3-month Constituent Beta to the MDAX Index | Number | 15 |
| 66 | Beta (3m) to TecDAX | 3-month Constituent Beta to the TecDAX Index | Number | 15 |
| 67 | Beta (6m) | 6-month Constituent Beta | Number | 15 |
| 68 | Beta (6m) to Prime All Share | 6-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 69 | Beta (6m) to General All Share | 6-month Constituent Beta to the General All Share Index | Number | 15 |
| 70 | Beta (6m) to Entry All Share | 6-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 71 | Beta (6m) to Classic All Share | 6-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 72 | Beta (6m) to <br> Technology All Share | 6-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 73 | Beta (6m) to DAX | 6-month Constituent Beta to the DAX Index | Number | 15 |
| 74 | Beta (6m) to MDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 75 | Beta (6m) to SDAX | 6-month Constituent Beta to the MDAX Index | Number | 15 |
| 76 | Beta (6m) to TecDAX | 6-month Constituent Beta to the TecDAX Index | Number | 15 |
| 77 | Beta (12m) | 12-month Constituent Beta | Number | 15 |
| 78 | Beta (12m) to Prime All Share | 12-month Constituent Beta to the Prime All Share Index | Number | 15 |
| 79 | Beta (12m) to General All Share | 12-month Constituent Beta to the General All Share Index | Number | 15 |
| 80 | Beta (12m) to Entry All Share | 12-month Constituent Beta to the Entry All Share Index | Number | 15 |
| 81 | Beta (12m) to Classic All Share | 12-month Constituent Beta to the Classic All Share Index | Number | 15 |
| 82 | Beta (12m) to <br> Technology All Share | 12-month Constituent Beta to the Technology All Share Index | Number | 15 |
| 83 | Beta (12m) to DAX | 12-month Constituent Beta to the DAX Index | Number | 15 |
| 84 | Beta (12m) to MDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 85 | Beta (12m) to SDAX | 12-month Constituent Beta to the MDAX Index | Number | 15 |
| 86 | Beta (12m) to TecDAX | 12-month Constituent Beta to the TecDAX Index | Number | 15 |
| 87 | Beta (ytd) | YTD Constituent Beta | Number | 15 |


| 88 | Beta (ytd) to Prime All Share | YTD Constituent Beta to the Prime All Share Index | Number | 15 |
| :---: | :---: | :---: | :---: | :---: |
| 89 | Beta (ytd) to General All Share | YTD Constituent Beta to the General All Share Index | Number | 15 |
| 90 | Beta (ytd) to Entry All Share | YTD Constituent Beta to the Entry All Share Index | Number | 15 |
| 91 | Beta (ytd) to Classic All Share | YTD Constituent Beta to the Classic All Share Index | Number | 15 |
| 92 | Beta (ytd) to <br> Technology All Share | YTD Constituent Beta to the Technology All Share Index | Number | 15 |
| 93 | Beta (ytd) to DAX | YTD Constituent Beta to the DAX Index | Number | 15 |
| 94 | Beta (ytd) to MDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 95 | Beta (ytd) to SDAX | YTD Constituent Beta to the MDAX Index | Number | 15 |
| 96 | Beta (ytd) to TecDAX | YTD Constituent Beta to the TecDAX Index | Number | 15 |
| 97 | Correlation (1m) | 1-month constituent correlation | Number | 15 |
| 98 | Correlation (1m) to Prime All Share | 1-month correlation between constituent and Prime All Share Index | Number | 15 |
| 99 | Correlation (1m) to General All Share | 1-month correlation between constituent and General All Share Index | Number | 15 |
| 100 | Correlation (1m) to Entry All Share | 1-month correlation between constituent and Entry All Share Index | Number | 15 |
| 101 | Correlation (1m) to Classic All Share | 1-month correlation between constituent and Classic All Share Index | Number | 15 |
| 102 | Correlation (1m) to Technology All Share | 1-month correlation between constituent and Technology All Share Index | Number | 15 |
| 103 | Correlation (1m) to DAX | 1-month correlation between constituent and DAX Index | Number | 15 |
| 104 | Correlation (1m) to MDAX | 1-month correlation between constituent and MDAX Index | Number | 15 |
| 105 | Correlation (1m) to SDAX | 1-month correlation between constituent and SDAX Index | Number | 15 |
| 106 | Correlation (1m) to TecDAX | 1-month correlation between constituent and TecDAX Index | Number | 15 |
| 107 | Correlation (3m) | 3-month constituent correlation | Number | 15 |
| 108 | Correlation (3m) to Prime All Share | 3-month correlation between constituent and Prime All Share Index | Number | 15 |
| 109 | Correlation (3m) to General All Share | 3-month correlation between constituent and General All Share Index | Number | 15 |
| 110 | Correlation (3m) to Entry All Share | 3-month correlation between constituent and Entry All Share Index | Number | 15 |
| 111 | Correlation (3m) to Classic All Share | 3-month correlation between constituent and Classic All Share Index | Number | 15 |
| 112 | Correlation (3m) to Technology All Share | 3-month correlation between constituent and Technology All Share Index | Number | 15 |
| 113 | Correlation (3m) to DAX | 3-month correlation between constituent and DAX Index | Number | 15 |
| 114 | Correlation (3m) to MDAX | 3-month correlation between constituent and MDAX Index | Number | 15 |
| 115 | Correlation (3m) to SDAX | 3-month correlation between constituent and SDAX Index | Number | 15 |
| 116 | Correlation (3m) to TecDAX | 3-month correlation between constituent and TecDAX Index | Number | 15 |
| 117 | Correlation (6m) | 6-month constituent correlation | Number | 15 |
| 118 | Correlation (6m) to Prime All Share | 6-month correlation between constituent and Prime All Share Index | Number | 15 |


| 119 | Correlation (6m) to <br> General All Share | 6-month correlation between constituent and General All Share <br> Index | Number | 15 |
| :---: | :--- | :--- | :--- | :--- |
| 120 | Correlation (6m) to <br> Entry All Share | 6-month correlation between constituent and Entry All Share Index | Number | 15 |
| 121 | Correlation (6m) to <br> Classic All Share | 6-month correlation between constituent and Classic All Share <br> Index | Number | 115 |
| 122 | Correlation (6m) to <br> Technology All Share | 6-month correlation between constituent and Technology All Share <br> Index | Number | 15 |
| 123 | Correlation (6m) to DAX | 6-month correlation between constituent and DAX Index | Number | 15 |
| 124 | Correlation (6m) to <br> MDAX | Correlation (6m) to <br> SDAX | 6-month correlation between constituent and MDAX Index | Number |
| 145 | Correlation (6m) to <br> TecDAX | Correlation (ytd) to <br> SDAX | TecDAX <br> S-month correlation between constituent and SDAX Index | Num |


| 148 | Sharpe Ratio (3m) | 3-month constituent Sharpe Ratio | Number | 15 |
| :---: | :--- | :--- | :--- | :--- |
| 149 | Sharpe Ratio (6m) | 6-month constituent Sharpe Ratio | Number | 15 |
| 150 | Sharpe Ratio (12m) | 12-month constituent Sharpe Ratio | Number | 15 |
| 151 | Sharpe Ratio (ytd) | YTD constituent Sharpe Ratio | Number | 15 |
| 152 | Dividend Points (1d) | 1-day constituent Dividend Points | Number | 15 |
| 153 | Dividend Points (1m) | 1-month constituent Dividend Points | Number | 15 |
| 154 | Dividend Points (3m) | 3-month constituent Dividend Points | Number | 15 |
| 155 | Dividend Points (6m) | 6-month constituent Dividend Points | Number | 15 |
| 156 | Dividend Points (12m) | 12-month constituent Dividend Points | Number | 15 |
| 157 | Dividend Points (ytd) | YTD constituent Dividend Points | Number | 15 |
| 158 | Performance <br> Contribution (1d) | 1-day constituent Performance Contribution | Number | 15 |
| 159 | Performance <br> Contribution (1m) | 1-month constituent Performance Contribution | Number | 15 |
| 160 | Performance <br> Contribution (3m) | 3-month constituent Performance Contribution | Number | 15 |
| 161 | Performance <br> Contribution (6m) | 6-month constituent Performance Contribution | Number | 15 |
| 162 | Performance <br> Contribution (12m) | 12-month constituent Performance Contribution | Number | 15 |
| 163 | Performance <br> Contribution (ytd) | YTD constituent Performance Contribution | Number | 15 |

### 2.12.2. Roundtrip CSV

This report contains the Xetra Liquidity Measure (XLM) for 10,000 EUR and 25,000 EUR roundtrips (simultaneous purchase and sale of a position) for a given order volume for companies in the Prime, General Standard and Scale. The file is available on MD+S Interactive platform for licensed users.

This file publication will take place per index on a monthly basis (close of 3rd trading day) for the following indices: DAX, SDAX, MDAX, TECDAX, DAX EX-FIN 30, DAX 50 ESG and Scale 30
> File name:
xxxxx_roundtrip.YYYYMMDD.csv
$>$ File type: .csv
$>$ File specification: semicolon separated
$>$ File frequency: monthly

| Column ID | Attribute | Description | Data <br> Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Date | Date at which the file is generated | Date | DD.MM.YYYY |
| 2 | Cut-off Date | Ranking list cut-off date | Date | DD.MM.YYYY |
| 4 | Index Name | Index Name | Text | 255 |
| 5 | Index ISIN | Index ISIN | Text | 12 |
| 6 | Trading Symbol | Constituent Trading Symbol | Text | 4 |
| 7 | Instrument | Constituent Name | Text | 255 |
| 8 | ISIN | Constituent ISIN | Text | 12 |
| 9 | Current Index Membership | Constituent Index Membership | Text | 7 |
| 10 | XLM Round Trip Costs 10k | Xetra liquidity measure for 10,000 EUR roundtrip | Number | 2 |


| 11 | XLM Round Trip Costs 25k | Xetra liquidity measure for 25,000 EUR roundtrip | Number | 2 |
| :---: | :---: | :---: | :---: | :---: |

### 2.12.3. ESG Reporting

The aim of the file is to provide the consolidated ESG data for DAX ESG/Climate indices in order to meet regulatory requirements. All calculated measures are based on closing data of quarterly review effective date. The file is publicly available on DAX Website.
> File Name: ESG_Report_IndexISIN
> File Type: .csv
$>$ File specification: semicolon separated
$>$ File Frequency: Quarterly (after review implementation)

| $\begin{gathered} \text { Row } \\ \text { ID } \end{gathered}$ | Attribute | Description | Data <br> Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Item1_BM_Administrator | Index administrator (text "STOXX Ltd.") | Text | 10 |
| 2 | Item2_Asset_Class | Asset class of the index (currently "Equity") | Text | 6 |
| 3 | Item3_Benchmark_Name | Index Name | Text | 255 |
| 4 | Item3_Benchmark_ISIN | Index ISIN | Text | 12 |
| 5 | Item3_Benchmark_Symbol | Index Symbol | Text | 8 |
| 6 | Item3_Benchmark_Family_Name | Benchmark family of the index | Text | 255 |
| 7 | Item4_ESG_in_Portfolio | "Yes" if here are any indices administered by STOXX which follow ESG objectives | Text | 3 |
| 8 | Item5_ESG_objectives | "Yes" for indices that have ESG objectives; "No" otherwise | Text | 3 |
| 9 | Item6a_Consolidated_ ESG_Rating_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 10 | Item6a_ESG_ratings_ top_ten_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 11 | Item6b_Consolidated_ <br> Environmental_Rating_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only | Number | 2 |


|  |  | benchmarks with a value is included in the <br> calculation of the simple average. |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 12 | This value is reported only if the benchmark is a <br> part of the ESG families (DAX Environmental Social <br> \& Governance Index Family). This field is the simple <br> average of the values of all the benchmarks in the <br> family. If None of the benchmarks in the family has <br> any value, then the field value is NA. Only <br> benchmarks with a value is included in the <br> calculation of the simple average. |  |  |  |
| 13 | Item6b_Green_Revenues_ <br> or_Green_Capex_Family_Level | Item6b_Climate_Related_ <br> Physical_Risks_Family_Level | Data is not available to report this value |  |
| 14 | This value is reported only if the benchmark is a <br> part of the ESG families (DAX Environmental Social <br> \& Governance Index Family). This field is the simple |  | Number | 2 |


|  |  | \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 20 | Item6c_Sources_for_ Controversial_Weapon_ Definition_Family_Level | Text "Refer to Data and Standards" and the link | Text |  |
| 21 | Item6c_Controversial_ Weapons_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 22 | Item6c_Tobacco_ Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 23 | Item6c_Social_Violations_ Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 24 | Item6c_Exposure_to_Companies_ with_no_Due_Diligence_Policies_ on_ILO_conventions_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 25 | Item6c_Gender_Pay_Gap_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 26 | Item6c_Female_Male_ <br> Board_Member_Ratio_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has | Number | 2 |


|  |  | any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 27 | Item6c_Ratio_of_Accidents_ Injuries_Fatalities_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 28 | Item6c_Convictions_for_Violations_ of_AntiBribery_and_AntiCorruption_ Laws_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 29 | Item6d_Consolidated_ <br> Governance_Rating_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 30 | Item6d_Percentage_of_ Independent_Board_ Members_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 31 | Item6d_Percentage_of_Female_Board_ Members_Family_Level | This value is reported only if the benchmark is a part of the ESG families (DAX Environmental Social \& Governance Index Family). This field is the simple average of the values of all the benchmarks in the family. If None of the benchmarks in the family has any value, then the field value is NA. Only benchmarks with a value is included in the calculation of the simple average. | Number | 2 |
| 32 | Item7a_Consolidated_ESG_Rating | Sum of constituent weights multiplied by constituent total ESG score | Number | 2 |
| 33 | Item7a_ESG_ratings_top_ten | Sum of top 10 constituent weights multiplied by total ESG score | Number | 2 |
| 34 | Item7b_Consolidated_ Environmental_Rating | Sum of constituent weights multiplied by Environmental score | Number | 2 |
| 35 | Item7b_Green_Revenues_ or_Green_Capex | Sum of constituent weights multiplied by (Renewable Energy Overall-Revenue Percentage) divided by 100 | Number | 2 |
| 36 | Item7b_Climate_Related_Physical_Risks | Data is not available to report this value | Number | 2 |


| 37 | Item7b_Exposure_NACE_Sections | Sum of constituent weights listed in NACE sections A-H, L | Number | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 38 | Item7b_GHG_intensity | Sum of constituent weights multiplied by emmision intensity | Number | 2 |
| 39 | Item7b_GHG_reported_vs_estimated | Sum of constituent weights that have CDP reported data | Number | 2 |
| 40 | Item7b_Exposure_NACE_Divisions | Sum of constituent weights listed in NACE divisions 05-09, 19, 20 | Number | 2 |
| 41 | Item7b_Exposure_to_ <br> Environmental_Goods_and_Services | Sum of constituent weights multiplied by (Pollution Prevention \& Reduction Materials, Technologies \& Services-Revenue Percentage + Pollution Prevention \& Reduction Treatment \& Remediation Services-Revenue Percentage) | Number | 2 |
| 42 | Item7c_Consolidated_Social_Rating | Sum of constituent weights multiplied by Social score | Number | 2 |
| 43 | Item7c_Sources_for_ Controversial_Weapon_Definition | Text "Refer to Data and Standards" and the link | Text | 255 |
| 44 | Item7c_Controversial_ Weapons | Sum of constituent weights that are involved in Controversial Weapons | Number | 2 |
| 45 | Item7c_Tobacco | Sum of constituent weights that are involved in Tobacco production | Number | 2 |
| 46 | Item7c_Social_Violations | Constituents with category 5 in any of the Social KPIs (number of constituents in the index : share of constituents in the index) | Number | 2 |
| 47 | Item7c_Exposure_to_ <br> Companies_with_no_Due_Diligence_ <br> Policies_on_ILO_conventions | Sum of weights of constituents having value 0 in at least one of the fields Freedom of Association Policy-Raw Score-RR, Discrimination Policy-Raw Score-RR, Scope of Social Supplier Standards-Raw Score-RR, Supply Chain Management-Raw ScoreRR) | Number | 2 |
| 48 | Item7c_Gender_Pay_Gap | Sum of constituent weights multiplied by (100TR.GenderPayGapPctage). The latest available year's value is used in calculation if there is no data available for the current year. (Value 0 means equal gender pay. A positive value means men are paid more than women. A negative value means men are paid less than women.) | Number | 2 |
| 49 | Item7c_Female_Male_ <br> Board_Member_Ratio | Sum of constituent weights multiplied by TR.AnalyticBoardFemale/(1- <br> TR.AnalyticBoardFemale). The latest available year's value is used in calculation if there is no data available for the current year. (Value 1 means women are equal representation in the board. A value greater than 1 means women have more representation than men. A value less than 1 means women have less representation than men.) | Number | 2 |
| 50 | Item7c_Ratio_of_ Accidents_Injuries_Fatalities | Sum of constituent weights multiplied by TR.TIRTotal. The latest available year's value is used in calculation if there is no data available for the current year. | Number | 2 |
| 51 | Item7c_Convictions_for_ Violations_of_AntiBribery_ and_AntiCorruption_Laws | Number of constituents having a value of 5 in Bribery and Corruption-Answer category. | Number | 2 |


| 52 | Item7d_Consolidated_Governance_Rating | Sum of constituent weights multiplied by Governance score | Number | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 53 | Item7d_Percentage_of_ Independent_Board_Members | Sum of constituent weights multiplied by TR.AnalyticIndepBoard. The latest available year's value is used in calculation if there is no data available for the current year. (Value 0 means no independent board members. Value 100 means all board members are independent.) | Number | 2 |
| 54 | Item7d_Percentage_of_Female_Board_ Members | Sum of constituent weights multiplied by TR.AnalyticBoardFemale. The latest available year's value is used in calculation if there is no data available for the current year. (Value $50 \%$ means women are equal representation in the board. A value greater than $50 \%$ means women have more representation than men. A value less than $50 \%$ means women have less representation than men.) | Number | 2 |
| 55 | Item8a_Data_Sources | Text "Refer to Data and Standards" and the link | Text | 255 |
| 56 | Item8b_Reference_Standards | Text "Refer to Data and Standards" and the link | Text | 255 |
| 57 | Item9a_Year_on_Year_ Decarbonisation_Trajectory | This value is reported only if the benchmark is a PAB or CTB index. The value is extracted from the index methodology document. | Number | 2 |
| 58 | Item9b_IPCC_Decarbonisation_Trajectory | This value is reported only if the benchmark is a PAB or CTB index. It is the average based on yearly GHG intensity reduction. It is going to be reported starting from the first quarter of 2021. | Number | 2 |
| 59 | Item9c_Overlap_between_ Benchmarks_and_their_ Investable_Universe | This value is reported only if the benchmark is a PAB or CTB index. It shows the overlap of PAB or CTB index with its parent universe. | Number | 2 |
| 60 | Item10a_Carbon_Emission_Reduction_or_ Paris_Agreement_Alignment | This value is reported only if the benchmark is a PAB or CTB index. "Yes" for CTB/PAB, else "No" | Text | 255 |
| 61 | Item10b_Temperature_Scenario | This value is reported only if the benchmark is a PAB or CTB index. The value is extracted from the index methodology document. | Text | 255 |
| 62 | Item10c_Temperature_Scenario_Provider | This value is reported only if the benchmark is a PAB or CTB index. "IEA module by ISS ESG" for CTB/PAB indices | Text | 255 |
| 63 | Item10d_Temperature Scenario_Methodology | This value is reported only if the benchmark is a PAB or CTB index. "Sectoral Decarbonization Approach" for CTB/PAB indices. | Text | 255 |
| 64 | Item10e_Link_to_Temperature_Scenario | This value is reported only if the benchmark is a PAB or СTB index. <br> "https://www.iea.org/reports/world-energy-model/sustainable-development-scenario" for CTB/PAB indices. | Text | 255 |
| 65 | Share_of_Benchmark_in_Investable_ Universe_Free_Float_Market_Capitalizatio n | This value is reported only if the benchmark is a PAB or CTB index. It shows the share of the free float market cap of PAB/CTB benchmark index in the free float market cap of parent index. | Number | 2 |
| 66 | Update_Date | Date when report is produced and the update reason ("Update due to regular index review"). | Text | 255 |

## DAX | qontigo):

## 3. Bond Index Files

## 3.1. eb.rexx Bond Indices

### 3.1.1. Future Constituent List

This report displays future index composition and underlying data that will be implemented at the next chaining date. The file is available on MD+S Interactive platform for licensed users.

### 3.1.1.1. XLS format

> File name: ebrexx _BCR.YYYYMMDD.xIs, where YYYYMMDD is review effective date
> File type: .xls
$>$ File frequency: monthly
The report consists of five tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Constituents - index and constituent future composition data
4. Insertions - additions to the eb.rexx indices at the review effective date
5. Deletions - deletions from the eb.rexx indices at the review effective date

The file specifications will cover tabs "Data for today" and "Data for next day".

## Sheet "Constituents"

Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | ISIN_CPi | Price index ISIN | Text | 12 |
| 3 | SIN_TRi | Index return index ISIN | Text | 12 |
| 4 | Index | Bond ISIN | Text | 255 |
| 5 | ISIN | Bond issuer name | Text | 12 |
| 6 | Issuer Name | Bond issuer country | Text | 255 |
| 7 | Issuer Country | Bond coupon value | Text | 255 |
| 8 | Coupon | Bond maturity date | Number | 3 |
| 9 | Maturity | Bond coupon frequency | Date | yyyy-mm-dd |
| 10 | Coupon Frequency | Number | 2 |  |
| 11 | Day Count Method | Day count convention | Text | 7 |
| 12 | Index Price | Bond price used in calculation | Number | 3 |
| 13 | Accrued Interest | Accrued bond interest | Number | 15 |
| 14 | Notional Amount | Notional amount outstanding | Number | 0 |
| 15 | Notional Amount <br> Previous Month | Notional amount outstanding previous month | Number | 0 |


| 16 | Years to Maturity | Time to maturity, in years | Number | 10 |
| :---: | :--- | :--- | :--- | :--- |
| 17 | Liquidity Criteria <br> Matched Previous <br> Month | Indicator whether the liquidity criteria is matching the previous <br> month (Text " $Y$ " or " $N$ ") | Text | 1 |

## Sheet "Additions"

Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index | Index name | Text | 255 |
| 2 | ISIN | Bond ISIN | Text | 12 |
| 3 | Issuer Name | Bond issuer name | Text | 255 |
| 4 | Issuer Country | Bond issuer country | Text | 255 |
| 5 | Coupon | Bond coupon value | Number | 3 |
| 6 | Maturity | Bond maturity date | Date | yyyy-mm-dd |
| 7 | Notional Amount | Notional amount outstanding | Number | 0 |
| 8 | Years to Maturity | Time to maturity, in years | Number | 10 |

## Sheet "Deletions"

Data starts at Row 6.

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index | Index name | Text | 255 |
| 2 | ISIN | Bond ISIN | Text | 12 |
| 3 | Issuer Name | Bond issuer name | Text | 255 |
| 4 | Issuer Country | Bond issuer country | Text | 255 |
| 5 | Coupon | Bond coupon value | Number | 3 |
| 6 | Maturity | Bond maturity date | Date | yyyy-mm- <br> dd |
| 7 | Notional Amount | Notional amount outstanding | Number | 0 |

### 3.1.1.2. CSV format

> File name:
ebrexx _BCR.YYYYMMDD.csv, where YYYYMMDD is review effective date
> File type: .csv
> File specification: comma separated
$>$ File frequency: monthly

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | ISIN_CPi | Price index ISIN | Total return index ISIN | 12 |
| 3 | ISIN_TRi | Index name | Text | 12 |
| 4 | Index | Bond ISIN | Text | 255 |
| 5 | ISIN | Bond issuer name | Text | 12 |
| 6 | Issuer Name | Text | 255 |  |


| 7 | Issuer Country | Bond issuer country | Text | 255 |
| :---: | :--- | :--- | :--- | :--- |
| 8 | Coupon | Bond coupon value | Number | 3 |
| 9 | Maturity | Bond maturity date | Date | yyyy-mm-dd |
| 10 | Coupon Frequency | Bond coupon frequency | Number | 2 |
| 11 | Day Count Method | Day count convention | Text |  |
| 12 | Index Price | Bond price used in calculation | 7 |  |
| 13 | Accrued Interest | Accrued bond interest | Number | 3 |
| 14 | Notional Amount | Notional amount outstanding | Number | 15 |
| 15 | Notional Amount <br> Previous Month | Notional amount outstanding previous month | Number | 0 |
| 16 | Years to Maturity | Time to maturity, in years | Number | 0 |
| 17 | Liquidity Criteria <br> Matched Previous <br> Month | Indicator whether the liquidity criteria is matching the previous <br> month (Text "Y" or "N") | Text | 1 |

### 3.1.2.Bond Weightings Premium

This report contains both index and constituent information based on market closing values as well as index and constituent adjustments to be effective the next index dissemination day. It also includes various statistical measures. The file is available on MD+S Interactive platform for licensed users.

### 3.1.2.1. XLS format

> File name:
ebrexx_1300_BWP.YYYYMMDD.xls
ebrexx_eod_BWP. YYYYMMDD.xls
> File type: xls
> File frequency: daily at COB
The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Index Values - index closing data
4. Underlyings - index constituent closing data

## Sheet "Index Values"

Data starts at Row 13.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index | Index Name | Text | 255 |
| 2 | Price Index | Price index closing value on report date | Number | 4 |
| 3 | Price Index - Yesterday | Price index closing value on previous calculation day | Number | 4 |
| 4 | Price Index - Change | Percentage change in price index closing value | Number | 2 |
| 5 | Total Return Index | Total return index closing value on report date | Number | 4 |
| 6 | Total Return Index - <br> Yesterday | Total return index closing value on previous calculation day | Number | 4 |


| 7 | Total Return Index - <br> Change | Percentage change in Total return index closing value | Number | 2 |
| :--- | :--- | :--- | :--- | :--- |

Sheet "Underlyings"

## Data starts at Row 11.

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index | Index name | Text | 255 |
| 2 | ISIN | Bond ISIN | Text | 12 |
| 3 | Issuer Name | Bond issuer name coupon value | Text | 255 |
| 4 | Coupon | Bond maturity date | Number | 3 |
| 5 | Maturity | Notional amount outstanding | Date | yyyy-mm-dd |
| 6 | Notional Amount | Number | 0 |  |
| 7 | Index Price | Bond price | Number | 4 |
| 8 | Accrued Interest | Accrued interest of the bond constituent | Number | 15 |
| 9 | Coupon Payment | Coupon value in case a coupon was paid between rebalancing <br> dates, 0 otherwise | Number | 13 |
| 10 | Years to Maturity | Time to maturity, in years | Number | 13 |
| 11 | Yield | Yield of the bond | Number | 10 |
| 12 | Duration | Duration of the bond | Number | 10 |
| 13 | Modified Duration | Modified duration of the bond | Number | 10 |
| 14 | Convexity | Convexity of the bond | Number | 10 |
| 15 | Base Market Value | Market Value of the bond as at the base date | Number | 4 |
| 16 | Market Value | Market Value of the bond as at time $t$ | Number | 4 |
| 17 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon <br> was paid between rebalancing dates, 0 otherwise | Number | 8 |
| 18 | Daily Return | Daily Return of the bond | Number | 13 |
| 19 | Weight Price Index | Weight of the bond in price index version | Number | 16 |
| 20 | Weight Performance <br> Index | Weight of the bond in total return index version | Number | 16 |

### 3.1.2.2. CSV Format

### 3.1.2.2.1. Indices

> File name:
ebrexx_1300_indices_BWP.YYYYMMDD.csv
ebrexx_eod_indices_BWP. YYYYMMDD.csv
> File type: csv
> File specification: comma separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | SIN_CPi | Price index ISIN | Text | 12 |
| 3 | ISIN_TRi | Total return index ISIN | Text | 12 |
| 4 | CODE_CPi | Price index Alpha code | Text | 4 |
| 5 | CODE_TRi | Total return index Alpha code | Text | 4 |

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| 6 | Index | Index name | Text | 255 |
| :---: | :--- | :--- | :--- | :--- |
| 7 | CPi | Price index closing value | Number | 12 |
| 8 | TRi | Total return index closing value | Number | 12 |
| 9 | Duration | Duration of the index | Number | 10 |
| 10 | Yield | Average annual yield of the index | Number | 15 |
| 11 | Modified Duration | Modified duration of the index | Number | 10 |
| 12 | Convexity | Convexity of the index | Number | 10 |
| 13 | Years to Maturity | Index average time to maturity, in years | Number | 10 |
| 14 | Coupon Payment | Average coupon payment | Number | 10 |
| 15 | Base Market Value | Market Value of the index as at the base date | Number | 2 |
| 16 | Market Value | Market Value of the index as at time t | Number | 2 |
| 17 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon <br> was paid between rebalancing dates, 0 otherwise | Number | 6 |
| 18 | Daily Return | Daily Return of the index | Number | 18 |
| 19 | Month-to-date Return | Month-to-date return of the index | Number | 8 |

### 3.1.2.2.2. Underlyings

> File name:
ebrexx_1300_underlyings_BWP. YYYYMMDD.csv
ebrexx_eod_underlyings_BWP.YYYYMMDD.csv
> File type: csv
> File specification: comma separated
> File frequency: daily at COB

| Column ID | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | ISIN_CPi | Price index ISIN | Text | 12 |
| 3 | ISIN_TRi | Total return index ISIN | Text | 12 |
| 4 | Index | Index name | Text | 255 |
| 5 | ISIN | Bond ISIN | Text | 12 |
| 6 | Issuer Name | Bond issuer name | Text | 255 |
| 7 | Coupon | Bond coupon value | Number | 3 |
| 8 | Maturity | Bond maturity date | Date | yyyy-mm-dd |
| 9 | Coupon Frequency | Bond coupon frequency | Number | 2 |
| 10 | Notional Amount | Notional amount outstanding | Number | 0 |
| 11 | Years to Maturity | Time to maturity, in years | Number | 13 |
| 12 | Index Price | Bond price | Number | 4 |
| 13 | Accrued Interest | Accrued interest of the bond constituent | Number | 15 |
| 14 | Coupon Payment | Coupon value in case a coupon was paid between rebalancing dates, 0 otherwise | Number | 13 |
| 15 | Yield | Yield of the bond | Number | 10 |
| 16 | Duration | Duration of the bond | Number | 10 |
| 17 | Modified Duration | Modified duration of the bond | Number | 10 |
| 18 | Convexity | Convexity of the bond | Number | 10 |
| 19 | Base Market Value | Market Value of the bond as at the base date | Number | 4 |
| 20 | Market Value | Market Value of the bond as at time t | Number | 4 |
| 21 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon was paid between rebalancing dates, 0 otherwise | Number | 8 |
| 22 | Daily Return | Daily Return of the bond | Number | 13 |


| 23 | Month-to-date Return | Month-to-date return of the bond | Number | 13 |
| :--- | :--- | :--- | :--- | :--- |
| 24 | Weight CPi | Weight of the bond in price index version | Number | 16 |
| 25 | Weight TRi | Weight of the bond in total return index version | Number | 16 |

### 3.2. Eurogov Bond Indices

### 3.2.1.Future Constituent List

> File name:
Eurogov Germany: eurogov_BCR.YYYYMMDD.csv, where YYYYMMDD is review effective date Eurogov France: Eurogov_intl_BCR.YYYYMMDD.csv, where YYYYMMDD is review effective date
$>$ File type: .csv
$>$ File specification: comma separated
> File frequency: monthly

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date |  |
| 2 | ISIN_CPi | Price index ISIN | yyyy-mm-dd |  |
| 3 | ISIN_TRi | Total return index ISIN | Text |  |
| 4 | Index | Index name | Text |  |
| 5 | ISIN | Bond ISIN | Text |  |
| 6 | Issuer Name | Tissuer name | Text |  |
| 7 | Issuer Country | Bond issuer country | Text |  |
| 8 | Coupon | Bond coupon value | Text |  |
| 9 | Maturity | Bond maturity date | Number | 25 |
| 10 | Coupon Frequency | Bond coupon frequency | Date |  |
| 11 | Day Count Method | Day count convention | Number | yyyy-mm-dd |
| 12 | Index Price | Bond price used in calculation | Text |  |
| 13 | Accrued Interest | Accrued bond interest | Number | 3 |
| 14 | Notional Amount | Notional amount outstanding | Number | 15 |
| 15 | Notional Amount <br> Previous Month | Notional amount outstanding previous month | Number | 0 |
| 16 | Years to Maturity | Time to maturity, in years | Number | 0 |

### 3.2.2.Bond Weightings Premium

### 3.2.2.1. Indices

> File name:
eurogov_1300_indices_BWP.YYYYMMDD
eurogov_eod_indices_BWP. YYYYMMDD
eurogov_intl_1300_indices_BWP. YYYYMMDD
eurogov_intl_eod_indices_BWP. YYYYMMDD
> File type: csv
> File specification: comma separated
> File frequency: daily at COB

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| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyy-mm-dd |
| 2 | ISIN_CPi | Price index ISIN | Text | 12 |
| 3 | ISIN_TRi | Total return index ISIN | Text | 12 |
| 4 | CODE_CPi | Price index Alpha code | Text | 4 |
| 5 | CODE_TRi | Index return index Alpha code | Text | 4 |
| 6 | Index | Price index closing value | Text | 255 |
| 7 | CPi | Total return index closing value | Number | 12 |
| 8 | TRi | Duration of the index | Number | 12 |
| 9 | Duration | Average annual yield of the index | Number | 10 |
| 10 | Yield | Codified duration of the index | Number | 15 |
| 11 | Modified Duration | Index average time to maturity, in years | Number | 10 |
| 12 | Convexity | Average coupon payment | 10 |  |
| 13 | Years to Maturity | Number | 10 |  |
| 14 | Coupon Payment | Number | 10 |  |
| 15 | Base Market Value | Market Value of the index as at the base date | Number | 2 |
| 16 | Market Value | Market Value of the index as at time t | Number | 2 |
| 17 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon <br> was paid between rebalancing dates, 0 otherwise | Number | 6 |
| 18 | Daily Return | Daily Return of the index | Number | 18 |
| 19 | Month-to-date Return | Month-to-date return of the index | Number | 8 |
| 20 | Cost_CPi | Cost value of the price version | Number | 15 |
| 21 | Cost_TRi | Cost value of the total return version | Number | 15 |
| 22 | Cash_CPi | Cash value of the price version | Number | 0 |
| 23 | Cash_TRi | Cash value of the total return version | Number | 0 |
| 24 | Cash_Accrued | Accrual value of cash position | Number | 14 |
| 25 | Interest_Rate | Interest rate | Number | 3 |

### 3.2.2.2. Underlyings

> File name:
eurogov_1300_underlyings_BWP.YYYYMMDD
eurogov_eod_ underlyings _BWP. YYYYMMDD
eurogov_intl_1300_underlyings _BWP. YYYYMMDD
eurogov_intl_eod_underlyings _BWP. YYYYMMDD
> File type: csv
> File specification: comma separated
$>$ File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyy--mm-dd |
| 2 | ISIN_CPi | Price index ISIN | Text | 12 |
| 3 | ISIN_TRi | Total return index ISIN | Text | 12 |
| 4 | Index | Bond ISIN | Text | 255 |
| 5 | ISIN | Bond issuer name | Text | 12 |
| 6 | Issuer Name | Bond coupon value | Text | 255 |
| 7 | Coupon | Bond maturity date | Number | 3 |
| 8 | Maturity | Bond coupon frequency | Date | yyyy-mm-dd |
| 9 | Coupon Frequency | Number | 2 |  |


| 10 | Notional Amount | Notional amount outstanding | Number | 0 |
| :--- | :--- | :--- | :--- | :--- |
| 11 | Years to Maturity | Time to maturity, in years | Number | 13 |
| 12 | Index Price | Bond price | Number | 4 |
| 13 | Accrued Interest | Accrued interest of the bond constituent | Number | 15 |
| 14 | Coupon Payment | Coupon value in case a coupon was paid between rebalancing <br> dates, 0 otherwise | Number | 13 |
| 15 | Yield | Yield of the bond | Number | 10 |
| 16 | Duration | Duration of the bond | Number | 10 |
| 17 | Modified Duration | Modified duration of the bond | Number | 10 |
| 18 | Convexity | Convexity of the bond | Number | 10 |
| 19 | Base Market Value | Market Value of the bond as at the base date | Number | 4 |
| 20 | Market Value | Market Value of the bond as at time t | Number | 4 |
| 21 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon <br> was paid between rebalancing dates, 0 otherwise | Number | 8 |
| 22 | Daily Return | Daily Return of the bond | Number | 13 |
| 23 | Month-to-date Return | Month-to-date return of the bond | Number | 13 |
| 24 | Weight CPi | Weight of the bond in price index version | Number | 16 |
| 25 | Weight TRi | Weight of the bond in total return index version | Number | 16 |

### 3.3. Xetra Corporate Bond

### 3.3.1.Indices

> File name:
Xetra_Corp_Bond_Indices_1300_indices_BWP.YYYYMMDD
Xetra_Corp_Bond_Indices_eod_indices_BWP. YYYYMMDD
> File type: csv
$>$ File specification: comma separated
$>$ File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data Type | Data <br> Forma1300t |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | ISIN_Cpi | Price index ISIN | Text | 12 |
| 3 | ISIN_Tri | Potal return index ISIN | Text | 12 |
| 4 | CODE_Cpi | Total return index Alpha code | Text | 4 |
| 5 | CODE_Tri | Index name | Text | 4 |
| 6 | Index | Price index closing value | Text | 255 |
| 7 | Cpi | Total return index closing value | Number | 12 |
| 8 | Tri | Duration of the index | Number | 12 |
| 9 | Duration | Average annual yield of the index | Number | 10 |
| 10 | Yield | Modified duration of the index | Number | 15 |
| 11 | Modified Duration | Number | 10 |  |
| 12 | Convexity | Convexity of the index | Number | 10 |
| 13 | Years to Maturity | Index average time to maturity, in years | Number | 10 |
| 14 | Coupon Payment | Average coupon payment | Number | 10 |
| 15 | Base Market Value | Market Value of the index as at the base date | Number | 2 |
| 16 | Market Value | Market Value of the index as at time t | Number | 2 |
| 17 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon <br> was paid between rebalancing dates, 0 otherwise | Number | 6 |


| 18 | Daily Return | Daily Return of the index | Number | 18 |
| :--- | :--- | :--- | :--- | :--- |
| 19 | Month-to-date Return | Month-to-date return of the index | Number | 8 |

### 3.3.2.Underlyings

> File name:
Xetra_Corp_Bond_Indices_1300_underlyings_BWP.YYYYMMDD
Xetra_Corp_Bond_Indices_eod_underlyings_BWP. YYYYMMDD
> File type: csv
> File specification: comma separated
> File frequency: daily at COB

| column <br> ID | Attribute |  | Description | Data Type |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Depata Format |  |  |
| 2 | SIN_Cpi | Price index ISIN | Date | yyyy-mm-dd |
| 3 | SIN_Tri | Total return index ISIN | Text | 12 |
| 4 | Index | Index name | Text | 12 |
| 5 | ISIN | Bond ISIN | Text | 255 |
| 6 | Issuer Name | Bond coupon value | Text | 12 |
| 7 | Coupon | Bond maturity date | Text | 255 |
| 8 | Maturity | Bond coupon frequency | Number | 3 |
| 9 | Coupon Frequency | Number | yyy-mm-dd |  |
| 10 | Notional Amount | Notional amount outstanding | Number | 0 |
| 11 | Years to Maturity | Time to maturity, in years | Number | 13 |
| 12 | Index Price | Bond price | Number | 4 |
| 13 | Accrued Interest | Accrued interest of the bond constituent | Number | 15 |
| 14 | Coupon Payment | Coupon value in case a coupon was paid between rebalancing dates, 0 <br> otherwise | Number | 13 |
| 15 | Yield | Yield of the bond | Number | 10 |
| 16 | Duration | Duration of the bond | Number | 10 |
| 17 | Modified Duration | Modified duration of the bond | Number | 10 |
| 18 | Convexity | Convexity of the bond | Number | 10 |
| 19 | Base Market Value | Market Value of the bond as at the base date | Number | 4 |
| 20 | Market Value | Market Value of the bond as at time t | Number | 4 |
| 21 | Cash Payment | Coupon rate multiplied by the notional amount in case a coupon was <br> paid between rebalancing dates, 0 otherwise | Number | 8 |
| 22 | Daily Return | Daily Return of the bond | Number | 13 |
| 23 | Month-to-date Return | Month-to-date return of the bond | Number | 13 |
| 24 | Weight Cpi | Weight of the bond in price index version | Number | 16 |
| 25 | Weight Tri | Weight of the bond in total return index version | Number | 16 |

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### 3.4. REX indices

> File name: rex_BKF.YYYYMMDD
> File type: .xls
> File frequency: daily
The report consists of five tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. REX Indices - REX® index as well as its respective sub-indices
4. Regression Coefficients
5. Weighting Matrix

## Sheet "REX Indices"

Table format:

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Index | REX® index and its respective sub-indices | Text | 255 |
| 2 | Total Return Index | Numeric value of index or respective sub-index | Number | next table |
| 3 | Price Index | Numeric value of index or respective sub-index | Number | next table |
| 4 | Yield | Numeric value of index or respective sub-index | Number | next table |
| 5 | Duration | Numeric value of index or respective sub-index | Number | next table |
| 6 | Modified Duration | Numeric value of index or respective sub-index | Number | next table |
| 7 | Convexity | Numeric value of index or respective sub-index | Number | next table |

Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | REX GESAMT | 4 |
| 12 | REX 1-JAEHRIGE | 4 |
| 13 | REX 2-JAEHRIGE | 4 |
| 14 | REX 3-JAEHRIGE | 4 |
| 15 | REX 4-JAEHRIGE | 4 |
| 16 | REX 5-JAEHRIGE | 4 |
| 17 | REX 6-JAEHRIGE | 4 |
| 18 | REX 7-JAEHRIGE | 4 |
| 19 | REX 8-JAEHRIGE | 4 |
| 20 | REX 9-JAEHRIGE | 4 |
| 21 | REX 10-JAEHRIGE | 4 |
| 22 | REX 6 PROZENT | 4 |
| 23 | REX 7,5 PROZENT | 4 |
| 24 | REX 9 PROZENT | 4 |

## Sheet "Regression Coefficients"

Table format:

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| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Regression Coefficient | Regression coefficients on report date | Text | 2 |
| 2 | Values | Values of regression coefficient | Number | next table |

Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | B1 | 4 |
| 12 | B2 | 4 |
| 13 | B3 | 4 |
| 14 | B4 | 4 |
| 15 | B5 | 4 |
| 16 | B6 | 4 |
| 17 | B7 | 4 |

## Sheet "Weighting Matrix"

Table format:

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Maturity | Years | Text | 255 |
| 2 | $6 \%$ | Coupon | Coupon | Number |
| next table |  |  |  |  |
| 3 | $7.5 \%$ | Coupon | Number | next table |
| 4 | $9 \%$ | Coupon | Number | next table |
| 5 | Sum | Coupon | Number | next table |
| 6 | Weighted Coupon | Number | next table |  |

## Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | 1 Year | 2 |
| 12 | 2 Year | 2 |
| 13 | 3 Year | 2 |
| 14 | 4 Year | 2 |
| 15 | 5 Year | 2 |
| 16 | 6 Year | 2 |
| 17 | 7 Year | 2 |
| 18 | 8 Year | 2 |
| 19 | 9 Year | 2 |
| 20 | 10 Year | 2 |
| 21 | OVERALL | 2 |

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## 4. Strategy Index Files

### 4.1. Short / Leveraged Indices

The IWB report for short / leveraged indices displays index closing values and measures used in calculation. Each report has a slightly different format based on calculation formula. Each file will be described separately in the following section.
> File type: xls
> File frequency: daily at COB

The report consists of four tabs:

1. Cover - displays file and index name, report date and Customer Support contact details
2. Index - navigation page to switch between tabs
3. Data sheet - index closing data
4. Legend - legend of measures used in calculation

The file specifications will cover tab "Data sheet".

### 4.1.1.DAX daily leveraged

> File name: LevDAX_IWB.YYYYMMDD
Table format:

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day Calendar | Date | Date | dd-mm- <br> yyyy |
| 2 | Constituent | Description of constituent | Abbreviation of constituent | Text |
| 3 | Abbreviation | Numeric value of constituent | Text | 12 |
| 4 | Value | Number | next table |  |

Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | DAX Kurs Index value on previous date | 2 |
| 12 | DAX Performance Index value on previous date | 2 |
| 13 | ESTER value on previous date | 3 |
| 14 | DAX Kurs Index value on report date | 2 |
| 15 | DAX Performance Index value on report date | 2 |
| 16 | ESTER value on report date | 3 |
| 17 | Liquidity spread on report date | 5 |
| 18 | Number of days between rebalancing and report date | 0 |
| 19 | Liquidity spread for the next calculation date | 5 |


| 20 | Empty | N/A |
| :--- | :--- | :--- |
| 21 | Empty | N/A |
| 22 | Closing values of indices in the family (on previous date and report date) | 2 |

### 4.1.2.DAX Monthly Leveraged

> File name: LevDAXMonthly_IWB.YYYYMMDD
Table format:

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day Calendar | Date | Date | dd-mm- <br> yyyy |
| 2 | Constituent | Description of constituent | Abbreviation of constituent | Text |
| 3 | Abbreviation | Numeric value of constituent | Text | 12 |
| 4 | Value | Number | next table |  |

## Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | DAX Performance Index value on rebalancing date | 2 |
| 12 | EURIBOR value on rebalancing date | 3 |
| 13 | DAX Performance Index value on report date | 2 |
| 14 | EURIBOR value on report date date | 3 |
| 15 | Number of days between rebalancing and report date | 0 |
| 16 | Effective daily leverage for the next calculation date | 9 |
| 17 | Empty | $\mathrm{N} / \mathrm{A}$ |
| 18 | Empty | $\mathrm{N} / \mathrm{A}$ |
| 19 | Closing values of indices in the family (on rebalancing date and report date) | 2 |

### 4.1.3.DAX Short

> File name: ShortDAX_IWB.YYYYMMDD
Table format:

| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Day Calendar | Date | Date | dd-mm-yyyy |
| 2 | Constituent | Description of constituent | Text | 32 |
| 3 | Abbreviation | Abbreviation of constituent | Text | 14 |
| 4 | Value | Numeric value of constituent | Number | next table |

## Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :---: | :---: |
| 11 | DAX Kurs Index value on previous date | 2 |


| 12 | DAX Performance Index value on previous date | 2 |
| :--- | :--- | :--- |
| 13 | ESTER value on previous date | 3 |
| 14 | Cost to borrow (Kurs index) on report date | 7 |
| 15 | Cost to borrow (Performance index) on report date | 7 |
| 16 | DAX Kurs Index value on report date | 2 |
| 17 | DAX Performance Index value on report date | 2 |
| 18 | ESTER value on report date | 3 |
| 19 | Number of days between rebalancing and report date | 0 |
| 20 | Cost to borrow (Kurs index) for next calculation date | 7 |
| 21 | Cost to borrow (Performance index) for next calculation date | 7 |
| 22 | Empty | N/A |
| 23 | Empty | N/A |
| 24 | Closing values of indices in the family (on previous date and report date) | 2 |

### 4.1.4.DAX Monthly Short

> File name: ShortDAXMonthly_IWB. YYYYMMDD
Table format:

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day Calendar | Date | Date | dd-mm- <br> yyyy |
| 2 | Constituent | Description of constituent | Text | 30 |
| 3 | Abbreviation | Abbreviation of constituent | Text | 12 |
| 4 | Value | Numeric value of constituent | Number | next table |

Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | DAX Performance Index value on rebalancing date | 2 |
| 12 | EURIBOR value on rebalancing date | 3 |
| 13 | Cost to borrow on report date | 2 |
| 14 | DAX Performance Index value on report date | 3 |
| 15 | EURIBOR value on report date date | 0 |
| 16 | Number of days between rebalancing and report date | 9 |
| 17 | Effective daily leverage for the next calculation date | N/A |
| 18 | Empty | N/A |
| 19 | Empty | 2 |
| 20 | Closing values of indices in the family (on rebalancing date and report date) |  |

### 4.1.5.TecDAX Short

> File name: ShortTecDAX_IWB.YYYYMMMDD
Table format:

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| Column <br> ID | Attribute | Description | Data Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Day Calendar | Date | Date | dd-mm-yyyy |
| 2 | Constituent | Description of constituent | Text | 31 |
| 3 | Abbreviation | Abbreviation of constituent | Text | 13 |
| 4 | Value | Numeric value of constituent | Number | next table |

## Data format:

| Row ID | Description | Value <br> rounding |
| :---: | :--- | :--- |
| 11 | ESTER value on previous date | 3 |
| 12 | TecDAX Kurs Index value on previous date | 2 |
| 13 | TecDAX Performance Index value on previous date | 2 |
| 14 | Cost to borrow (Kurs index) on report date | 7 |
| 15 | Cost to borrow (Performance index) on report date | 7 |
| 16 | ESTER value on report date | 3 |
| 17 | Number of days between rebalancing and report date | 0 |
| 18 | TecDAX Kurs Index value on report date | 2 |
| 19 | TecDAX Performance Index value on report date | 2 |
| 20 | Cost to borrow (Kurs index) for next calculation date | 7 |
| 21 | Cost to borrow (Performance index) for next calculation date | 7 |
| 22 | Empty | N/A |
| 23 | Empty | N/A |
| 24 | Closing values of indices in the family (on previous date and report date) | 2 |

## 4.2. idDAX Leveraged/Short NC Indices

### 4.2.1.Leveraged NC

The closing data for idDAX Leveraged / Short NC indices is displayed in two files for current day and next dissemination day.
> File name:
idDAX\#xLevNCTREUR_IWB_TD.YYYYMMDD.csv - current day
idDAX\#xLevNCTREUR_IWB_ND.YYYYMMDD.csv - next dissemination day
where \# is the leverage factor (2 to 15)
> File type: .csv
$>$ File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | dd.mm.yyyy |
| 2 | Index Close Value | Index closing value | Number | 2 |
| 3 | Underlying Index | Underlying index closing value | Number | 2 |
| 4 | DF | Dividend factor | Number | 6 |
| 5 | VDAX-NEW | VDAX closing value | Number | 13 |


| 6 | VDAX-NEW_1m_avg | VDAX 1-month average value | Number | 13 |
| :---: | :---: | :---: | :---: | :---: |
| 7 | VDAX-NEW_6m_avg | VDAX 6-month average value | Number | 13 |
| 8 | GF | Gap Risk Factor | Number | 10 |
| 9 | Interest Rate | Interest rate | Number | 3 |
| 10 | Liquidity Spread | Liquidity spread | Number | 5 |
| 11 | EURIBOR (12M)_T-1 | 12-month EURIBOR rate on the day before rebalancing | Number | 3 |
| 12 | 1Y ESTER Swap Rate_T-1 | 1-year EONIA swap rate on the day before rebalancing | Number | 4 |
| 13 | EURIBOR (12M)_T-2 | 12-month EURIBOR rate on the $2^{\text {nd }}$ day before rebalancing | Number | 3 |
| 14 | 1Y ESTER Swap Rate_T-2 | 1 -year EONIA swap rate on the $2^{\text {nd }}$ day before rebalancing | Number | 4 |
| 15 | EURIBOR (12M)_T-3 | 12-month EURIBOR rate on the $3^{\text {rd }}$ day before rebalancing | Number | 3 |
| 16 | 1Y ESTER Swap Rate_T-3 | 1 -year EONIA swap rate on the $3^{\text {rd }}$ day before rebalancing | Number | 4 |
| 17 | EURIBOR (12M)_T-4 | 12-month EURIBOR rate on the $4^{\text {th }}$ day before rebalancing | Number | 3 |
| 18 | 1Y ESTER Swap Rate_T-4 | 1-year EONIA swap rate on the $4^{\text {th }}$ day before rebalancing | Number | 4 |
| 19 | EURIBOR (12M)_T-5 | 12-month EURIBOR rate on the $5^{\text {th }}$ day before rebalancing | Number | 3 |
| 20 | 1Y ESTER Swap Rate_T-5 | 1 -year EONIA swap rate on the $5^{\text {th }}$ day before rebalancing | Number | 4 |

### 4.2.2.Short NC

> File name:
idDAX\#xShortNCTREUR_IWB_TD.YYYYMMDD.csv - current day idDAX\#xShortNCTREUR_IWB_ND.YYYYMMDD.csv - next dissemination day
where \# is the short factor (2 to 15)
$>$ File type: .csv
> File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | dd.mm.yyyy |
| 2 | Index Close Value | Index closing value | Number | 2 |
| 3 | Underlying Index | Underlying index closing value | Number | 2 |
| 4 | VDAX-NEW | VDAX closing value | Number | 4 |
| 5 | VDAX-NEW_1m_avg | VDAX 1-month average value | Number | 13 |
| 6 | VDAX-NEW_6m_avg | VDAX 6-month average value | Number | 13 |
| 7 | GF | Gap Risk Factor | Number | 10 |
| 8 | Interest Rate | Interest rate | Number | 3 |
| 9 | CTB | Cost to borrow | Number | 7 |

### 4.3. Hedged

The report for hedged indices (daily and monthly) displays hedged and underlying index values.
> File name:
DAX_PR_CUR_HEDGED_IV.YYYYMMDD.csv
DAX_TR_CUR_HEDGED_IV.YYYYMMDD.csv
DAX_NR_CUR_HEDGED_IV.YYYYMMDD.csv

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where CUR refers to the hedging currency, and PR, NR and TR stand for price, net and total return versions respectively
$>$ File type: .csv
$>$ File specification: semicolon separated
$>$ File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | yyyy-mm-dd |
| 2 | DAX PR ${ }^{4}$ _CUR | DAX index closing value for the selected return version / currency | Number | 2 |
| 3 | DAX DAILY ${ }^{5}$ HEDGED <br> PR CUR | DAX daily hedged index value | Number | 2 |
| 4 | Hedge Return | Index Hedge Return | Number | 10 |

### 4.4. Risk Control

There are two reports produced for the DAX Risk Control Indices - IV format, which contains index closing values, and IWB format, which includes underlying data such as interest date and underlying index values.

### 4.4.1. Index Values

### 4.4.1.1. Total Return

> File name:
DAXRiskControlRVTR_IV.YYYYMMDD.csv
> File type: .csv
> File specification: semicolon separated
> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | dd.mm.yyyy |
| 2 | DE000A0Z3LC2 | DAX Risk Control 5\% RV (Gross Return) EUR closing value | Number | 5 |
| 3 | DE000A0Z3LG3 | DAX Risk Control 10\% RV (Gross Return) EUR closing value | Number | 5 |
| 4 | DE000A0Z3MC0 | DAX Risk Control 12\% RV (Total Return) EUR closing value | Number | 5 |
| 5 | DE000AOZ3LJ7 | DAX Risk Control 15\% RV (Gross Return) EUR closing value | Number | 5 |
| 6 | DE000A0Z3LL3 | DAX Risk Control 20\% RV (Gross Return) EUR closing value | Number | 5 |

### 4.4.1.2. Excess Return

> File name:
DAXRiskControIRVER_IV.YYYYMMDD.csv
> File type: .csv
$>$ File specification: semicolon separated

[^3]> File frequency: daily at COB

| Column <br> ID | Attribute | Description | Data <br> Type | Data <br> Format |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Date | Report date | Date | dd.mm.yyyy |
| 2 | DEO00AOZ3LB4 | DAX Risk Control 5\% RV (Excess Return) EUR closing value | Number | 5 |
| 3 | DEO00A0Z3LF5 | DAX Risk Control 10\% RV (Excess Return) EUR closing value | Number | 5 |
| 4 | DEO00A0Z3MB2 | DAX Risk Control 12\% RV (Excess Return) EUR closing value | Number | 5 |
| 5 | DE000A0Z3LH1 | DAX Risk Control 15\% RV (Excess Return) EUR closing value | Number | 5 |
| 6 | DE000A0Z3LK5 | DAX Risk Control 20\% RV (Excess Return) EUR closing value | Number | 5 |

### 4.4.2.Underlying values

### 4.4.2.1. Total Return

> File name:
DAXRiskControIRVTR_IWB.YYYYMMDD.csv
$>$ File type: .csv
> File specification: semicolon separated
> File frequency: daily at COB

| Column ID | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Date | Report date | Date | dd.mm.yyyy |
| 2 | DE0008469008 | DAX Performance Index value | Number | 2 |
| 3 | Interest Rate | Interest Rate value | Number | 9 |
| 4 | Day Count Fraction | Number of days between t and t -1, divided by 360 | Number | 17 |
| 5 | VOLA(20) | Realized volatility over 20 days | Number | 16 |
| 6 | VOLA(60) | Realized volatility over 60 days | Number | 16 |
| 7 | Tgtw(t) | Target weight for index DE000A0Z3LC2 | Number | 13 |
| 8 | w(t) | Equity index weight for index DE000A0Z3LC2 | Number | 13 |
| 9 | DE000A0Z3LC2 | DAX Risk Control 5\% RV (Gross Return) EUR closing value | Number | 5 |
| 10 | Tgtw(t) | Target weight for index DE000A0Z3LG3 | Number | 13 |
| 11 | w(t) | Equity index weight for index DE000A0Z3LG3 | Number | 13 |
| 12 | DE000AOZ3LG3 | DAX Risk Control 10\% RV (Gross Return) EUR closing value | Number | 5 |
| 13 | Tgtw(t) | Target weight for index DE000A0Z3MC0 | Number | 13 |
| 14 | w(t) | Equity index weight for index DE000AOZ3MC0 | Number | 13 |
| 15 | DE000AOZ3MC0 | DAX Risk Control 12\% RV (Total Return) EUR closing value | Number | 5 |
| 16 | Tgtw(t) | Target weight for index DE000A0Z3LJ7 | Number | 13 |
| 17 | w(t) | Equity index weight for index DE000A0Z3LJ7 | Number | 13 |
| 18 | DE000A0Z3LJ7 | DAX Risk Control 15\% RV (Gross Return) EUR closing value | Number | 5 |
| 19 | Tgtw(t) | Target weight for index DE000A0Z3LL3 | Number | 13 |
| 20 | w(t) | Equity index weight for index DEO00A0Z3LL3 | Number | 13 |

### 4.4.2.2. Excess Return

> File name:
DAXRiskControIRVER_IWB.YYYYMMDD.csv
> File type: .csv
> File specification: semicolon separated

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> File frequency: daily at COB

| Column ID | Attribute | Description | Data Type | Data Format |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Date | Report date | Date | dd.mm.yyy |
| 2 | DE0008469008 | DAX Performance Index value | Number | 2 |
| 3 | Interest Rate | Interest Rate value | Number | 9 |
| 4 | Day Count Fraction | Number of days between t and $\mathrm{t}-1$, divided by 360 | Number | 17 |
| 5 | VOLA(20) | Realized volatility over 20 days | Number | 16 |
| 6 | VOLA(60) | Realized volatility over 60 days | Number | 16 |
| 7 | Tgtw(t) | Target weight for index DE000AOZ3LB4 | Number | 13 |
| 8 | w(t) | Equity index weight for index DE000AOZ3LB4 | Number | 13 |
| 9 | DE000A0Z3LB4 | DAX Risk Control 5\% RV (Excess Return) EUR closing value | Number | 5 |
| 10 | Tgtw(t) | Target weight for index DE000AOZ3LF5 | Number | 13 |
| 11 | w(t) | Equity index weight for index DE000A0Z3LF5 | Number | 13 |
| 12 | DE000A0Z3LF5 | DAX Risk Control 10\% RV (Excess Return) EUR closing value | Number | 5 |
| 13 | Tgtw(t) | Target weight for index DE000A0Z3MB2 | Number | 13 |
| 14 | w(t) | Equity index weight for index DE000AOZ3MB2 | Number | 13 |
| 15 | DE000AOZ3MB2 | DAX Risk Control 12\% RV (Excess Return) EUR closing value | Number | 5 |
| 16 | Tgtw(t) | Target weight for index DE000AOZ3LH1 | Number | 13 |
| 17 | w(t) | Equity index weight for index DE000AOZ3LH1 | Number | 13 |
| 18 | DE000A0Z3LH1 | DAX Risk Control 15\% RV (Excess Return) EUR closing value | Number | 5 |
| 19 | Tgtw(t) | Target weight for index DE000AOZ3LK5 | Number | 13 |
| 20 | w(t) | Equity index weight for index DE000A0Z3LK5 | Number | 13 |

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## 5. Changes to the Files Guide

May 2020: Publication of the DAX Files Guide - all existing files specifications regrouped in a single guide.
November 2020: Addition of chapters 2.3.3. DAX Dividend Point Indices, 3. Bond Index Files, 4. Strategy Index Files.

January 2021: Addition of subchapters 2.12.1. Analytical Data report, 2.12.2. Roundtrip csv and 2.12.3. ESG Reporting.

March 2021: Changes of files name, sections 2.10.1 and 2.10.2

July 2021: Update of attributes and descriptions for 2.12.3 ESG Reporting.

July 2021: Update of filename and descriptions for 2.12.3 ESG Reporting.

August 2021: Clarification description column 20 for 2.11.1 Selection indices - CSV format.

September 2021: All decommissioned file structures were moved to Dax Decommissioned Files Guide. Clarification of the 2.12.2 Roundtrip CSV.

October 2021: Addition attribute
Share_of_Benchmark_in_Investable_Universe_Free_Float_Market_Capitalization 2.12.3 ESG Reporting.

October 2021: Naming updates due to EONIA transition and Risk-Free-Rate transition.

January 2022: Addition filenames for Permissioned Third Party data (P001) in 2.6 Index Weightings Premium and 2.7 Index Weightings Currency

April 2022: Addition of chapter 3.4 REX indices

November 2022: Update of 2.11.3 DAXplus Maximum Dividend. Adding column for PRICE_MOMENTUM, renaming DIVIDEND_YIELD_PREV_PERIOD and updating fields for MASTER_INDEX, RANK_DESCRIPTION and EXCLUSION_REASON


[^0]:    ${ }^{1}$ Where N is the number of components in the index

[^1]:    ${ }^{2}$ Where N is the number of components in the index

[^2]:    ${ }^{3}$ Where N is the number of components in the index

[^3]:    ${ }^{4}$ «PR», «NR» or «TR» based on the selected index version
    5 "DAILY" or "MONTHLY"

