INDEX RULE BOOK

Euronext Vigeo® Family

Euronext Vigeo World 120,
Euronext Vigeo Europe 120,
Euronext Vigeo Eurozone 120,
Euronext Vigeo US 50,
Euronext Vigeo France 20,
Euronext Vigeo United Kingdom 20,
Euronext Vigeo Benelux 20,

Version 17-02
Effective from 1 July 2017
indices.euronext.com
Index

1. Index Summary 1

2. Governance and Disclaimer 2
   2.1 Indices 2
   2.2 Supervisor 2
   2.3 Compiler 2
   2.4 Cases not covered in rules 2
   2.5 Rule book changes 2
   2.6 Liability 2
   2.7 Ownership and trademarks 3

3. Publication 4
   3.1 Dissemination of index values 4
   3.2 Exceptional market conditions and corrections 4
   3.3 Announcement policy 4

4. Calculation 5
   4.1 Calculation of the price index 5
   4.2 Currency conversion 5
   4.3 Total return index calculation 5

5. Index reviews 6
   5.1 General aim and frequency of reviews 6
   5.2 Index universe and selection principle 6
   5.3 Periodical update of weighting 8

6. Corporate Actions 9
   6.1 General 9
   6.2 Removal of constituent 9
   6.3 Split up / spin-off 9
   6.4 Early inclusion of non-constituents 10
   6.5 Dividends 10
   6.6 Rights Issues and Other Rights 10
   6.7 Bonus Issues, Stock Splits and Reverse Stock Splits 10
   6.8 Changes in Number of Shares or Free Float 10

7. Index Calculation Formulas 11
# 1. INDEX SUMMARY

## Factsheet: Euronext Vigeo® Family

<table>
<thead>
<tr>
<th><strong>Index names</strong></th>
<th>Euronext Vigeo® World 120, Euronext Vigeo® Europe 120, Euronext Vigeo® Eurozone 120, Euronext Vigeo® US 50, Euronext Vigeo® France 20, Euronext Vigeo® United Kingdom 20, Euronext Vigeo® Benelux 20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Index type</strong></td>
<td>Price index; Net return index and Gross return index versions are also available.</td>
</tr>
</tbody>
</table>
| **Index governance structure** | Euronext acts as the compiler of the index. The Compiler is responsible for the day-to-day management of the index and is also responsible for decisions regarding the interpretation of these rules.  
Euronext acts as supervisor of the index (“Supervisor”). The Supervisor is responsible for monitoring the selection of constituents for the index and ensuring that the index offers a reliable and representative view of the market.  
Vigeo-Eiris acts as the Constituent Agent. Vigeo-Eiris is responsible for the periodical selection and reweighting of constituents for the index. |
| **Eligible stocks to the index** | All companies included in the related Euronext Vigeo universe. |
| **Selection** | Euronext Vigeo indices are composed of the highest-ranking listed companies as evaluated by the Vigeo-Eiris agency in term of their performance in corporate responsibility.  
Companies are excluded if:  
- Their level of commitment is insufficient with regard to their overall score or their score in one of six key areas reviewed by Vigeo-EIRIS in the Equitics methodology.  
- They are subject to serious, proved, or recurrent controversies; seriously implicated in recent allegations which remain unresolved; or, face recent condemnation to which the company fails to provide corrective measures, or adopts an attitude of denial. |
| **Number of constituents** | As given in the names |
| **Weighting** | Companies weights are calculated accordingly to their respective Equitics scores. The weighting of each component at the review date reflects the score of the company divided by the total sum of the scores of all components. |
| **Capping** | 10% |
| **Review of composition** | Semi-annually, implemented on last trading day of May and November (after the close) |
| **Base Currency** | USD for Euronext Vigeo® World 120 and Euronext Vigeo® US 50  
EUR for Euronext Vigeo® Europe 120, Euronext Vigeo® Eurozone 120, Euronext Vigeo® France 20 and Euronext Vigeo® Benelux 20  
GBP for Euronext Vigeo® UK 20 |

Note: the factsheet is a summary of the rule book for information purposes only. The text of the rulebook is leading.
2. GOVERNANCE AND DISCLAIMER

2.1 INDICES
This rule book applies to the following indices (hereinafter “index”) owned by Euronext N.V. or its subsidiaries (hereinafter jointly “Euronext”):

• Euronext Vigeo World 120,
• Euronext Vigeo US 50,
• Euronext Vigeo Europe 120,
• Euronext Vigeo Eurozone 120,
• Euronext Vigeo France 20,
• Euronext Vigeo United Kingdom 20,
• Euronext Vigeo Benelux 20

2.2 SUPERVISOR
Euronext acts as supervisor of the index (“Supervisor”). The Supervisor is responsible for monitoring the selection of constituents for the index and ensuring that the index offers a reliable and representative view of the market.

Vigeo-Eiris acts as the Constituent Agent. Vigeo-Eiris is responsible for the periodical selection and reweighting of constituents for the index.

2.3 COMPILER
Euronext acts as the compiler of the index. The Compiler is responsible for the day-to-day management of the index and is also responsible for decisions regarding the interpretation of these rules.

2.4 CASES NOT COVERED IN RULES
In cases which are not expressly covered in these rules, operational adjustments will take place along the lines of the aim of the index. Operational adjustments may also take place if, in the opinion of the Compiler, it is desirable to do so to maintain a fair and orderly market in derivatives on this index and/or this is in the best interests of the investors in products based on the index and/or the proper functioning of the markets. The Compiler will report to the Supervisor if it took a decision about a case which is not specifically covered in the rules for comments and review.

2.5 RULE BOOK CHANGES
These rules may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the index is compiled or calculated or affect the index in another way. The Compiler will submit all decisions regarding supplementing, amending, revising or withdrawing these rules to the Supervisor for recommendations or approval.

2.6 LIABILITY
Euronext, the Compiler and the Supervisor are not liable for any losses resulting from supplementing, amending, revising or withdrawing the rules for the index.

The Compiler will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the index in accordance with relevant rules. However, neither Euronext, nor the Compiler, nor the Supervisor are liable for any inaccuracy in index composition, share prices, calculations and the publication of the index, the information used for making adjustments to the index and the actual adjustments. Furthermore, Euronext, the Compiler and the Supervisor do not guarantee the continuity of the composition of the index, the continuity of the method of calculation of the index, the continuity of the dissemination of the index levels, and the continuity of the calculation of the index.
2.7 OWNERSHIP AND TRADEMARKS
Euronext owns all intellectual and other property rights to the index, including the name, the composition and the calculation of the index. Vigeo-Eiris is the owner of the intellectual property rights of the methodology and model. Euronext Vigeo® is a registered trademark of Euronext.
3. **PUBLICATION**

3.1 **DISSEMINATION OF INDEX VALUES**

3.1.1 **Opening**

The opening level is calculated using the last known prices of traded constituents or in the case of constituents that have non-traded, halted or suspended status, the previous day reference prices or estimated prices (for IPOs, buyouts and swap offers).

The opening index level is disseminated at the same time as the first index level.

3.1.2 **Calculation and dissemination**

The index is calculated based on the most recent prices of transactions concluded on the relevant markets. The level of the index is in principle published every 15 seconds.

The Europe, Euro, UK, Benelux and French indices are calculated from 09.00 hours until 18.35 (CET).

The Euronext Vigeo World 120 and Euronext Vigeo US 50 are calculated from 05.30 to 1.15 (CET).

3.1.3 **Closing level**

The closing level is the last level disseminated on the trading day.

3.2 **EXCEPTIONAL MARKET CONDITIONS AND CORRECTIONS**

The Compiler retains the right to delay the publication of the opening level of the index. Furthermore, the Compiler retains the right to suspend the publication of the level of the index to mark the level of the index indicative if it believes that circumstances prevent the proper calculation of the index.

If prices are cancelled, the index will not be recalculated unless the Compiler decides otherwise.

3.3 **ANNOUNCEMENT POLICY**

The announcement policy is described in the Euronext Indices Announcement policy document that is available on indices.euronext.com/index-rules.
4. Calculation

4.1 Calculation of the Price Index
The index is calculated on a price return basis. The divisor was determined on the initial capitalization base of the index and the base level. The divisor is adapted as a result of corporate actions and composition changes.

4.2 Currency Conversion
Euronext Vigeo World 120: The base currency of the index is USD (“Base Currency”).
Euronext Vigeo US 50: The base currency of the index is USD (“Base Currency”).
Euronext Vigeo Eurozone 120: The base currency of the index is Euro (“Base Currency”).
Euronext Vigeo Europe 120: The base currency of the index is Euro (“Base Currency”).
Euronext Vigeo France 20: The base currency of the index is Euro (“Base Currency”).
Euronext Vigeo Benelux 20: The base currency of the index is Euro (“Base Currency”).
Euronext Vigeo United Kingdom 20: The base currency of the index is GBP (“Base Currency”).

Share prices that are quoted in other currencies than the Base Currency will be converted to the Base Currency using the last known exchange rate observed on Reuters. Closing prices will be converted based on the most recent WM/Reuters spot rates, which are published each business day around 17:00 CET.

4.3 Total Return Index Calculation

4.3.1 Return indices
A net total return index as well as a gross total return index, is calculated and disseminated at the same frequency as the price index. The return indices are obtained by reinvesting the net and gross dividends respectively.

4.3.2 Withholding tax rate
The net dividend is calculated as the gross dividend minus the applicable withholding tax. A table detailing the percentages that are applied is available on the website of Euronext.

4.3.3 Ordinary dividends in shares
If a dividend is distributed in the form of shares only and if this is regarded as ordinary dividend, the return index will be reinvesting a cash equivalent of the dividend. If shareholders may choose between cash or shares the amount which is reinvested will be based on the cash option.

4.3.4 Conversion of dividends declared in other currencies
If a dividend for a constituent is declared in another currency than the Base Currency of the index, then the Compiler will in first instance use the Base Currency amount if investors have the option to be paid in that currency. If the dividend amount is available only in currencies that deviate from the Base Currency, the Compiler will convert the dividend amount using the reference rate for the cum-day (the business day prior to the ex-date). In principle the reference rate will be based on the foreign exchange reference rates as published daily by the ECB.
5. INDEX REVIEWS

5.1 GENERAL AIM AND FREQUENCY OF REVIEWS

5.1.1 General aim of the periodical review
The general aim of the periodical review of the index is to ensure that the selection and weighting of the constituents continues to reflect the underlying market or market segment it represents. Companies are selected according to the Equitics methodology.

5.1.2 Effective date of reviews
The Index will be reviewed semi-annually in May and November using the Equitics ratings as at the close of business on the last day in April and October.

The Review Effective Date is the date on which, after the market close, the changes relating to the periodical review are being effectuated in the index portfolio. This Review Effective date is the last trading day of May and November.

5.2 INDEX UNIVERSE AND SELECTION PRINCIPLE

5.2.1 Index universe
Euronext Vigeo World 120: All companies included in the World Equitics Universe – covering the 1500 issuers amongst the largest free-float market capitalizations in North American, Asia-Pacific and Europe.

Euronext Vigeo US 50: All companies included in the US Equitics Universe – covering the 500 issuers amongst the largest free-float market capitalizations in the US.

Euronext Vigeo Europe 120: All companies included in the European Equitics Universe – covering the 500 issuers amongst the largest free-float market capitalizations in Europe.

Euronext Vigeo Eurozone 120: All companies included in the Eurozone Equitics Universe – covering the 500 issuers amongst the largest free-float market capitalizations in the Eurozone.

Euronext Vigeo France 20: All companies included in the French Equitics Universe – covering the major largest free-float market capitalizations in France.

Euronext Vigeo Benelux 20: All companies included in the Benelux Equitics Universe – covering the major largest free-float market capitalizations in the Benelux zone.

Euronext Vigeo United Kingdom 20: All companies included in the UK Equitics Universe – covering the major largest free-float market capitalizations in UK.

5.2.2 Exclusion of constituents
Vigeo-Eiris may exclude companies if:
- Their level of commitment is insufficient with regard to their overall score or their score in one of six key areas reviewed in the Equitics methodology (please refer to “Step 2” for detail).
- They are subject to serious, proved, or recurrent controversies; seriously implicated in recent allegations which remain unresolved; or, face recent condemnation to which the company fails to provide corrective measures, or adopts an attitude of denial.
These indices do not exclude companies on the basis of values or ethical based assessment, unless a company has a product or activity which is prohibited by law or international conventions.

5.2.3 Selection principle

Step 1:

Vigeo-Eiris assesses and rates the performances of companies according the Equitics® methodology based on 38 criteria, divided in to six key areas of corporate environmental, social and governance responsibility, namely:

- **Environment**: Protection, safeguard, prevention of attacks on the environment, implementation of an adequate managerial strategy, ecodesign, protection of biodiversity and reasonable control of environmental impacts on the overall life cycle of products and services.
- **Human Rights**: Respect of trade unions’ freedom and promotion of collective negotiation, non-discrimination and promotion of equality, eradication of banned working practices, and prevention of inhumane or humiliating treatments.
- **Human Resources**: Constant improvement of industrial relations, career development, as well as quality of working conditions.
- **Community Involvement**: Contribution to economic and social development of the territories of establishment and their human communities, concrete commitment in favor of the control of societal impacts of products and services, transparent and participative contribution to causes of general interest.
- **Business Behaviour**: Taking into account clients’ rights and interests, integration of social and environmental standards both in the process of selection of suppliers and in the overall supplying chain, efficient prevention of corruption, and respect of competition laws.
- **Corporate Governance**: Efficiency and integrity, insurance of both independence and effectiveness of the Board of Directors, effectiveness and efficiency of audit and control systems, and in particular inclusion of social responsibility risks, respect of shareholders’ rights and most of all of the minorities, transparency and moderation in executive remuneration.

Step 2 – Overall score

Each issuer is assigned an overall score out of 100 which is a weighted and consolidated score of all sustainability factors in a given sector.

This score is used as a reference to calculate the weighting of the index.

5.2.4 Selection of constituents at the semi-annual reviews

All stocks in the Equitics universe of the geographical zones in question are ranked in terms of their score at the cut-off date to produce the review list:

- **Euronext Vigeo World 120** is composed of the 120 highest-ranking listed companies as evaluated by the Vigeo-Eiris agency in terms of their performance in corporate responsibility and reflecting the same regional weighting distribution as Equitics methodology coverage.
- **Euronext Vigeo US 50** is composed of 50 highest-ranking listed companies in the US Equitics Universe
- **Euronext Vigeo Europe 120** is composed of 120 highest-ranking listed companies in the European Equitics Universe
- **Euronext Vigeo Eurozone 120** is composed of 120 highest-ranking listed companies in the Eurozone Equitics Universe
• Euronext Vigeo France 20 is composed of 20 highest-ranking listed companies in the French Equitics Universe
• Euronext Vigeo UK 20 is composed of 20 highest-ranking listed companies in the UK Equitics Universe
• Euronext Vigeo Benelux 20 is composed of 20 highest-ranking listed companies in the Benelux Equitics Universe

5.2.5 Selected line
As only one listing – the most active one - is permitted per company, the listing representing the company’s ordinary shares is generally used.

5.3 PERIODICAL UPDATE OF WEIGHTING
5.3.1 Update of number of shares
At semi-annual reviews, the stocks weights will be updated accordingly to their respective Equitics scores. The weighting of each component at the review date reflects the score of the company divided by the total sum of the scores of all components.

5.3.2 Capping
A maximum weighting of 10% is applied to each index constituent at the semi-annual review.
6. CORPORATE ACTIONS

6.1 GENERAL
The index may be adjusted in order to maintain the continuity of the index level and the composition. The underlying aim is that the index continues to reflect as closely as possible the value of the underlying portfolio.

Adjustments take place in reaction to events that occur with constituents in order to mitigate or eliminate the effect of that event on the index.

6.2 REMOVAL OF CONSTITUENT
A constituent will be removed from the index if it has appeared that the liquid trading will be significantly affected due to a takeover, merger, bankruptcy or has ceased to be a viable constituent as defined by the rules. The constituent in question will be removed and not replaced in the index till the next review.

If a company is removed from the index, the divisor will be adapted to maintain the index level.

6.2.1 Mergers and acquisitions
In the event of a bid in cash or a merger, acquisition or similar situation where the bid is made in the form of shares, the target company will be removed from the index.

The removal will take place after the close of the first (full) business day after the offer is declared unconditional or successful. The constituent in question will not be replaced in the index till the next review.

The Compiler reserves the right to apply a specific treatment in non-standard situations including but not limited to:

• Competing bids with differing closing dates or structures;
• Offers made without the intention to gain full control.

A separate announcement detailing the specific treatment will be issued timely to the market.

6.2.2 Delistings, suspensions and company distress
If a constituent is suspended, the Compiler will consider whether the constituent should be removed on the understanding that a transitional period with a maximum of three months may be observed. When a constituent is removed following suspension, it will be removed at its suspension price unless otherwise decided by the Compiler.

If a constituent will be delisted, it will be removed from the index as soon as possible and on a day announced by the Compiler.

The company will be deleted from the index based on either the last known price established during regular daytime trading or else a price determined by the Compiler, whereby the company may also be deleted at EUR 0.

6.2.3 Pricing sources
In the event that the trading in shares is suspended, the last known price established during regular daytime trading will be used.

6.3 SPLIT UP / SPIN-OFF
In the event that a company included in the index is split up, the companies resulting from the split, including the original company where appropriate will continue to be included in the index providing they still qualify as an eligible company to the index in their own right. The Supervisor will decide whether each of the resulting companies qualify. The index may then temporarily consist of fewer than, or more than the standard number of constituents until the next periodical review takes place.

For the purposes of these rules a split up is taken to mean a legal demerger, a spin-off or another situation which the Compiler deems to be similar.
In case the shareholder of the company which was originally included in the index does not automatically receive shares in a company which is created as a result of the split up, this company is considered to be a newly listed company.

The removal of any non-qualifying company resulting from a split up will take place after the close of the first day of trading in the shares of that company. If all companies resulting from the split are to be removed, the removal will take place at the close of the last trading day before the split.

6.4 EARLY INCLUSION OF NON-CONSTITUENTS
As a rule newly listed companies are considered for inclusion in the index at the time of the periodical index rebalancing.

6.5 DIVIDENDS
6.5.1 Distinction ordinary and special dividend
The price index will be adjusted for dividends that are special.

The following criteria will be applied to decide whether a dividend should be considered a special dividend:
   a) The declaration of a company of a dividend additional to those dividends declared as part of the company’s normal results and dividend reporting cycle; merely an adjustment to the timing of the declaration of a company’s expected dividend would not be considered as a special dividend circumstance; or
   b) The identification of an element of a dividend paid in line with a company’s normal results and dividend reporting cycle as an element that is unambiguously additional to the company’s normal payment.

For the purpose of clarification, no adjustment will be made for the following situations:
   1. Payment of ordinary dividends, irrespective of how they are financed;
   2. Issue of redeemable shares or any other entitlement in lieu of an ordinary dividend; or
   3. Unexpected increase or decrease, resumption or cessation, or change in frequency to an ordinary dividend.

6.5.2 Adjustment for special dividend
The adjustment of the index takes place by a reduction of the closing price of the share in question. Subsequently the divisor will be adapted in order to maintain the index level. The adjustments will be based on gross amounts.

6.6 RIGHTS ISSUES AND OTHER RIGHTS
In the event of a rights issue the index is adjusted based on the value of the rights only. The divisor will be adapted in such a way that the level of the index remains the same.

The index will be adjusted only if the rights represent a positive value.

The index will also be adjusted if a value can be attributed to a subscription right for convertible bonds, bonds with warrants or warrants with preferential rights for shareholders or similar situations

6.7 BONUS ISSUES, STOCK SPLITS AND REVERSE STOCK SPLITS
For bonus issues, stock splits and reverse stock splits, the number of shares included in the index will be adjusted in accordance with the ratio given in the corporate action. The divisor will not be changed because of this. The Compiler may regard a bonus issue as the issue of an entitlement in lieu of an ordinary dividend and therefore treat this in accordance with 6.5.1.

6.8 CHANGES IN NUMBER OF SHARES OR FREE FLOAT
Not applicable for this index.
7. **INDEX CALCULATION FORMULAS**

The general formula for the *price index* is:

\[
I_t = \frac{\sum_{i=1}^{N} Q_{i,t} f_{i,t} C_{i,t} X_{i,t}}{d_t}
\]

Where:
- \(t\) Time of calculation
- \(N\) Number of constituent equities in index
- \(Q_{i,t}\) Number of shares of equity \(i\) included in the index on day \(t\) (based on the Equitics score)
- \(f_{i,t}\) Capping factor of equity \(i\)
- \(C_{i,t}\) Price of equity \(i\) on \(t\)
- \(X_{i,t}\) Current exchange rate on \(t\)
- \(d_t\) Divisor of the index on day \(t\)

The *total return index* calculation takes two steps: the first step is to transpose the announced dividend payment into index points. This is called the XD adjustment. This uses the following formula:

\[
\text{XD adjustment} = \sum_{i=1}^{N} g_i \cdot w_i \cdot \frac{d}{d}
\]

Where:
- \(N\) Number of constituent equities in index
- \(g_i\) The announced dividend per share of the \(i\)th component stock (for net return index withholding tax is deducted from this dividend);
- \(w_i\) The weighting of the \(i\)th component stock in the index, based on number of shares included in the index, Free Float factor, capping factor and exchange rate;
- \(d\) Divisor of the index.

The second step of the calculation uses the figures calculated in step one (XD adjustment). The dividend is assumed to be reinvested at the close of the ex-date.

\[
\text{TR}_t = \text{TR}_{t-1} \left( \frac{IV_t + XD}{IV_{t-1}} \right)
\]

Where:
- \(\text{TR}_{t-1}\): Total return index value yesterday;
- \(\text{TR}_t\): Total return index value on \(t\);
- \(IV_{t-1}\): Underlying price index yesterday;
- \(IV_t\): Underlying price index on \(t\);