



# Rules for the Euronext IEIF REIT Europe index

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## 1 - Composition of the Euronext IEIF REIT Europe index

### 1.1 Definition of the Euronext IEIF REIT Europe Index

The Euronext IEIF REIT Europe index is an index weighted by free-float capitalization<sup>1</sup> that measures the evolution of the performance of property companies listed on European regulated markets which have opted for a tax-transparency regime.

### 1.2 Purpose of the Euronext IEIF REIT Europe Index

The Euronext IEIF REIT Europe index aims at reflecting the trend of European property companies that have opted for a tax-transparency regime. This index is a suitable underlying asset for derivative products and a relevant benchmark for portfolio management.

### 1.3 Universe

Constituents are selected among property companies listed on European regulated markets that have opted for tax-transparency ; whose market capitalization is over 500 million euros, with a minimum free-float of 20%, and with an average daily trade of at least 100 000 euros over a period of 12 months.

### 1.4 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.

#### 1.5.1 Maximum weighting of percentage

The weight of a company in the Euronext IEIF REIT Europe index is capped at 15% of the index's free-float market capitalization. See rules 3.6.3. and 3.6.4.

#### 1.5.2 Shares

A quarterly adjustment scheme is applied for amendments to the numbers of shares. The number of shares to be used after the quarterly review for each constituent will be based on the number of shares listed on the market. The number of shares may be modified exceptionally in between the quarterly updates.

1. Free-float market capitalization is obtained by multiplying the number of issued shares by the share price, and then multiplying the result by the free float (see below).

## 2 - Calculation and publication of the Euronext IEIF REIT Europe index

### 2.1 Calculation of the index

The Euronext IEIF REIT Europe index is calculated using the following formula:

$$I_t = 1000 \times \frac{\sum_{i=1}^N Q_{i,t} F_{i,t} f_{i,t} C_{i,t} X_{i,t}}{k_t \sum_{i=1}^N Q_{i,0} F_{i,0} C_{i,0}}$$

Where :

$t$	instant of calculation
$N$	number of constituent equities in index
$Q_{i,t}$	number of shares of equity $i$ at instant $t$
$F_{i,t}$	free float of equity $i$ at instant $t$
$f_{i,t}$	capping factor of equity $i$ at instant $t$
$C_{i,t}$	price of equity $i$ at instant $t$
$X_{i,t}$	exchange rate in euros at instant $t$ of the currency in which the value is written.
$Q_{i,0}$	number of shares of equity $i$ on index base date
$F_{i,0}$	free float of equity $i$ on index base date
$C_{i,0}$	price of equity $i$ on index base date
$k_t$	adjustment coefficient for base capitalization at instant $t$

The base date for the Euronext IEIF REIT Europe index is 31 December 2002 and the base market capitalization was 8,893,957 euros.

### 2.2 Share prices

If no price has been established for a constituent's share on the trading day concerned, either the last known price established during regular daytime trading in officially listed shares on regulated markets for traded stocks or the last adjusted price resulting from the adjustment of the closing price due to a corporate action, will be used.

For constituents that have non-traded, halted or suspended status, the previous day reference prices or estimated prices (for IPOs, buyouts and swap offers) are used, instead.

### 2.3 Cancellation of prices

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

### 2.4 Publication frequency

The level of the Euronext IEIF REIT Europe index is in principle published every 15 seconds.

### 2.5 Calculation period

The Euronext IEIF REIT Europe index is calculated between 9 am CET et 5:35 pm CET.

### 2.6 Opening and pre opening

#### 2.6.1 Session Forerunner

If for any reason, share prices are not available for all constituents after the opening of regular daytime tradings, a forerunner will be disseminated until the two conditions set forth in article (2.6.2) are met. This forerunner is calculated on the basis of the available share prices traded. It gives then an indication of the first percentage change of the index.

This forerunner is defined as the variation percentage between the total free float market capitalization of stocks traded and the most recent closing market capitalization of the same stocks.

## 2.6.2 Opening level / Opening criteria

The opening level is calculated using the opening 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 reflects the opening prices of the index constituents.

The opening index level is disseminated at the same time as the first index level, and it might not be equal to the first index level, which is disseminated as soon as the following conditions are met:

1. The total weight of stocks traded, halted or suspended equal 100% of the total free float market capitalization of the Euronext IEIF REIT Europe index.
2. The weight of stocks traded is superior or equal to 65% of the total free float market capitalization of the Euronext IEIF REIT Europe index

If after the market opens the Euronext IEIF REIT Europe index remains in forerunner as defined in the article (2.6.1), during the entire trading session, the closing level of the Euronext IEIF REIT Europe index will be calculated on the basis of the most recent traded prices, or the most recent reference price (possibly adjusted to account for corporate actions).

During the session, the forerunner can be substituted for the index on an exceptional basis in the event that 35% of the market capitalization of the index may not be traded. The calculation and dissemination of the index levels resumes five minutes after the weight of stocks traded is superior or equal to 65% of the free float market capitalization of the index.

## 2.7 Closing level

The following indices are disseminated after the market close.

1. The reference closing level, which is calculated on the basis of all closing prices derived from the closing auction.
2. The reference opening price, which is calculated on the basis of the opening shares prices.

In both cases, for constituents that have non-traded, halted or suspended status, the previous day reference prices or estimated prices (for IPOs, buyouts and swap offers) are used, instead.

## 2.8 Intervention in publication by Compiler

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

## 2.9 Return index

A net<sup>2</sup> total return index, which is obtained by reinvesting the net dividends, is calculated and disseminated at the same frequency as the Euronext IEIF REIT Europe (price index).

2. Since the tax credit has been cancelled in January 2005, the percentage changes in the levels of the gross total return index which included the net dividend and the tax credit are equal to the percentage changes in the levels of the net total return index.

## 3 - 3. Rules for the periodical review of the Euronext IEIF REIT Europe index

### 3.1 Responsibility for composition

The management of the composition of the Euronext IEIF REIT Europe index is the responsibility of the Conseil Scientifique. The Conseil Scientifique meets during the second half of February, May, August and November. Its decisions are effective on the third Friday<sup>3</sup> of March, June, September and December, after the market close, and are published at least two weeks before.

### 3.2 General Aim quarterly review

The general aim of the Conseil Scientifique, when making the quarterly review of the Euronext IEIF REIT Europe index, is to ensure that the selection of the constituents continue to meet the principles set out in section 1, to exclude the constituents that do not meet the criteria anymore and introduce the constituents that meet them for the first time.

### 3.3 Publication of new selection

The decisions of the Conseil Scientifique are published at least two weeks before their effective entrance in the index. The decisions become effective, after the market close, the third Friday of March, June, September and December.

The new selection of the Euronext IEIF REIT Europe index constituent, their free float factors, number of shares and capping factors will be reminded through an official notice two trading days before the effective date.

### 3.4 Quarterly review of the composition

#### 3.4.1 Integration of new constituents

The constituents that meet the criteria of section 1 for the first time automatically integrate the index.

#### 3.4.2. Exit of constituents

If, during two consecutive quarters, a constituent is under 400 million euros in market capitalization, or has a free-float under 10%, or is under 80 000 euros in daily trade over a period of 12 months, it automatically exits the index..

### 3.5 Quarterly adjustment of the weighting of constituents

A quarterly adjustment scheme, managed by the index compiler, is applied for amendments to the numbers of shares. The number of shares to be used after the quarterly review for each constituent is based on the number of shares listed on the regular markets on that date. The quarterly updates are carried out after the market close, on the third Friday of March, June, September and December.

The new numbers of shares are published by official notice, where possible at least two trading days in advance of the effective date.

### 3.6 Annual review of free floats and capping factors

#### 3.6.1 Free Float

The index compiler is in charge of calculating the free-float rates based on available information.

The free-float factors used for the calculation of the Euronext IEIF REIT Europe index are reviewed once a year. It is rounded to the next 5% bracket.

3. If the third Friday of the month is not a working day, modifications are effective on the previous Thursday.

The free float factors are determined on the basis of the information available on the second half of August, and are published at least two weeks before the index update. The annual review of the free float factors comes into effect, after the market close, on the 3rd Friday of September at the same time as the quarterly updates of the number of shares.

### **3.6.2. Free float change**

In exceptional cases, where the change in free float is equal to or greater than 5% in absolute value, the free-float factor may be reviewed.

These exceptional reviews are published by Euronext notice and come into effect two trading days after they are published.

### **3.6.3. Capping**

A weighting limit of 15% is applied to Euronext IEIF REIT Europe index constituents. If the weight of a given stock exceeds this limit it is scaled down by a coefficient called “capping factor”.

The capping factors are reviewed annually. Alike the free float factors, the capping factors are reviewed on the 3rd Friday of September at the same time as the quarterly updates of the free float and the number of shares.

### **3.6.4. Capping factor change**

The Conseil Scientifique may decide to review exceptionally the capping factor in response to a substantial change in the shareholding structure of the companies concerned, or if extraordinary corporate events significantly change the weighing in the index.

## **3.7. Fast integration of constituents**

The Conseil Scientifique can decide exceptionally to allow a constituent in the index between two reviews. The integration of a constituent is effective at least two weeks after being published.

## 4 - Corporate events

### 4.1 General

#### 4.1.1. Corporate events affecting the composition

The Conseil Scientifique of the Euronext IEIF REIT Europe index may decide to change the composition of the index due to events, which affect one or more of its constituents.

#### 4.1.2. Corporate events affecting weighting of constituents

The treatment of corporate events initiated by the Euronext IEIF REIT Europe index constituents necessitates that the compiler carries out some adjustment so that they can be reflected in the sample, while the continuity of the index is still maintained.

### 4.2 Treatment

The treatment of the corporate events will generally be similar to that of the companies Stock Exchange, if not the rules of Euronext indices are applied. If the interpretation of rules is questioned, the Conseil Scientifique takes the final decision.

## 5 - Governance and final provisions

### 5.1 Supervisor

The Conseil Scientifique acts as Supervisor of the Euronext IEIF REIT Europe index. The Conseil Scientifique consists of finance professionals. The Supervisor is responsible for monitoring the selection of constituents for the Euronext IEIF REIT Europe index and ensuring that the index offers a reliable and representative view of the market.

The Conseil Scientifique brings the index a three-fold guarantee:

- recognized expertise through the participation of well known financial experts and statisticians;
- independence, since the decisions to modify the composition of the index are totally impartial;
- transparency, since changes in the sample are announced immediately after the Conseil Scientifique meetings.

### 5.2 Compiler

Euronext Indices B.V. is the Compiler of the Euronext IEIF REIT Europe index. The Compiler is responsible for the day-to-day management of the Euronext IEIF REIT Europe index and is also responsible for decisions regarding the interpretation of these rules.

### 5.3 Cases not covered in rules

In cases not covered by these rules the Compiler submits a proposal to the Conseil Scientifique for approval.

### 5.4 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 Euronext IEIF REIT Europe index is compiled or calculated or affect the Euronext IEIF REIT Europe index in another way.

The Compiler will submit all decisions regarding supplementing, amending, revising or withdrawing these rules to the Conseil Scientifique for recommendations and approval.

All decisions will be published immediately. Barring exception, a period of at least one month should pass between the date a proposed change is published and the date this comes into effect. Euronext N.V., its subsidiaries, the Compiler nor the Conseil Scientifique are liable for any losses resulting from supplementing, amending, revising or withdrawing the Rules for the Euronext IEIF REIT Europe index.

### 5.5 Liability

The Compiler will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the Euronext IEIF REIT Europe index in accordance with relevant rules. However, nor Euronext N.V., nor the Compiler nor the Conseil Scientifique of the Euronext IEIF REIT Europe index are liable for any inaccuracy in share prices, calculations and the publication of the index, the information used for making adjustments to the index and the actual adjustments.

Furthermore, Euronext N.V., its subsidiaries, the Compiler of the Euronext IEIF REIT Europe index and the Conseil Scientifique of the Euronext IEIF REIT Europe index do not guarantee nor the continuity of the composition of the Euronext IEIF REIT Europe index, nor the continuity of the calculation of the Euronext IEIF REIT Europe index, nor the continuity of the dissemination of the Euronext IEIF REIT Europe index levels, nor the continuity of the calculation of the Euronext IEIF REIT Europe index.

### 5.6 Ownership and trademarks

IEIF and Euronext Indices B.V. are joint owners of all intellectual and other property rights to the Euronext IEIF REIT Europe index, including the name, the composition and the calculation of the Euronext IEIF REIT Europe index.

## 6 - Definitions

### Capping factor

The Conseil Scientifique has decided to limit the maximum weight of securities in the Euronext IEIF REIT Europe index to 15%. The 15% limit is reached by applying a coefficient called capping factor. When the index components are not capped, their capping factor is equal to 1. As with the free float, these factors are reviewed once a year except in case of significant changes in the market capitalization of the capped securities.

### Free float

Free float is the portion of the capital that is available to the public.

### Free float market capitalization

The free float market capitalization is the product of the number of shares times the price and times the free float factor.

### Price index

The price index or the naked index is the “classic” Euronext IEIF REIT Europe price index calculated continuously every 15s.

### Return index

A return index takes into account the reinvestment of net dividends. It is calculated and disseminated at the same frequency as the price index.

### REIT

The REIT (Real estate Investment Trust) are listed property companies enjoying a tax-transparency regime. The consideration is that they have to distribute almost all of their revenue.



Euronext, the first pan-European exchange, results from the September 2000 merger of equity and derivatives markets in Amsterdam, Brussels and Paris. BVLP, the Portuguese exchange and LIFFE, the international derivatives exchange, joined Euronext in 2002. Euronext offers services that include listing of financial instruments, trading in securities and derivatives, data dissemination and IT support. Measured by value and number of trades processed through its central order book, Euronext is the largest cash equity market in Europe. Euronext.liffe, the derivatives business of Euronext, is Europe's second largest derivatives exchange by volume and the value of listing.



Institut de l'Épargne Immobilière et Foncière (Institute for Real-Estate and Land Investment, IEIF) is an independent economic-intelligence unit combining expertise in property and finance that has worked since 1988 to produce information and indices for the real-estate segment of the stock market. IEIF is also a forum for discussion for professionals in real estate and finance.

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