



**Index methodology guide LIMEYARD AIM Italia  
100 ex SPAC**  
September 2018

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## I. INDEX REFERENCE DATA

Name	Symbol	ISIN	RIC	Bloomberg ticker	Telekurs identifier
LIMEYARD Finnat AIM Italia 100 ex SPAC Price Return Index	LYAIM1EP	AT0000A23GM9	.LYAIM1EP	LYAIM1EP Index	
LIMEYARD Finnat AIM Italia 100 ex SPAC Gross Total Return Index	LYAIM1EG	AT0000A23GK3	.LYAIM1EG	LYAIM1EN Index	
LIMEYARD Finnat AIM Italia 100 ex SPAC Net Total Return Index	LYAIM1EN	AT0000A23GL1	.LYAIM1EN	LYAIM1EN Index	

Base value and date: 100 on 22-02-2013 for all index versions.

## II. INTRODUCTION

This document defines the rules for the composition, conception, calculation and index management of the LIMEYARD Finnat AIM Italia 100 ex SPAC Indices. Vienna Stock Exchange (WBAG) defines the rules regarding the composition, conception, calculation and the management of the LIMEYARD Finnat AIM Italia 100 ex SPAC Indices.

The LIMEYARD Finnat AIM Italia 100 ex SPAC Indices are calculated and distributed end-of-day by WBAG.

The LIMEYARD Finnat AIM Italia 100 ex SPAC consists of the 100 largest shares (by free float market capitalization) admitted to the AIM Italia, excluding special purpose acquisition companies (SPACs).

LIMEYARD and WBAG do not sponsor, endorse, sell, promote or manage any investment product that seeks to provide an investment return based on the performance of any index. LIMEYARD and WBAG make no assurance that investment products based on the market indices listed in this document will accurately track the performance of the index itself or return positive performance. Accordingly, past performance of the index is not necessarily indicative of results that the index may achieve in the future.

Any exceptions to the index calculation rules stated below are reviewed and approved by WBAG's Index Committee.

The LIMEYARD Finnat AIM Italia 100 ex SPAC Index is a free float market-cap-weighted. It is calculated according to a modification of the original Laspeyres index formula.

$$I_L = \frac{\sum_{k=1}^n (p_{k,t}) * (s_{k,t})}{Divisor} \quad (1)$$

The index divisor is adjusted to offset any change in market value of the index due to corporate actions that cause changes in the market value of the stocks in the index, changes in the composition of the index constituents, or changes in shares outstanding. Divisor adjustments are implemented after the close of trading.

### III. PRICE RETURN INDEX

The Price Return Index measures an index's market performance, including price performance and adjustments for corporate actions.

At the time  $t$  the Price Return Index is calculated by LIMEYARD using the following formula:

Price Return Index

$$PRI_t = \frac{\sum_{k=1}^n (p_{k,t} * s_{k,t} * ff_{k,t} * cf_{k,t} * F_{k,t})}{Index\ Divisor_t} = \frac{M_t}{Index\ Divisor_t}$$

Where:

$$M_t = \sum_{k=1}^n (p_{k,t} * s_{k,t} * ff_{k,t} * cf_{k,t} * F_{k,t})$$

$PRI_t$  = Price Return Index level at time  $t$

$M_t$  = Free-float market capitalization of the index at time  $t$

$Index\ Divisor_t$  = Divisor of the index at time  $t$

$t$  = Time of calculation of the index

$k$  = Number of constituent stocks

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$ff_{k,t}$  = Free float of the underlying stock  $k$  at time  $t$

$cf_{k,t}$  = Cap factor of the underlying stock  $k$  at time  $t$

$F_{k,t}$  = Foreign exchange rate from company's  $k$  local currency into the index currency at time  $t$

#### IV. NET TOTAL RETURN INDEX

The Net Total Return Index measures an index's whole market performance, including price performance and adjustments for corporate actions and dividend distributions.

At the time  $t$ , the Net Total Return Index is calculated by LIMEYARD using the following formula:

Net Total Return Index

$$NTRI_t = \frac{\sum_{k=1}^n ((p_{k,t} - D_{k,t}) * S_{k,t} * ff_{k,t} * cf_{k,t} * F_{k,t})}{Index\ Divisor_t} = \frac{M_t}{Index\ Divisor_t}$$

Where:

$$M_t = \sum_{k=1}^n ((p_{k,t} - D_{k,t}) * S_{k,t} * ff_{k,t} * cf_{k,t} * F_{k,t})$$

$NTRI_t$  = Net total return index level at time  $t$

$M_t$  = Free-float market capitalization of the index at time  $t$

$Index\ Divisor_t$  = Divisor of the index at time  $t$

$t$  = Time the index is calculated

$k$  = Number of companies

$D_{k,t}$  = Dividend distribution of the underlying stock  $k$  announced by the company for time  $t$  adjusted with the Withholding Tax Rate  $\tau_k$ . The withholding tax rate for Italy, as of August 2018, is 26.00%.

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$S_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$ff_{k,t}$  = Free float of the underlying stock  $k$  at time  $t$

$cf_{k,t}$  = Cap factor of the underlying stock  $k$  at time  $t$

$F_{k,t}$  = Foreign exchange rate from company's  $k$  local currency into the index currency at time  $t$

#### V. GROSS TOTAL RETURN INDEX

The Gross Total Return Index measures an index's whole market performance, including price performance and adjustments for corporate actions and dividend distributions.

It's calculation is akin to that of the Net Total Return Index, with the difference that withholding taxes are not subtracted from dividend amounts.

## I. INDEX DIVISOR

The index divisor captures the impact of corporate events and rebalancing changes. The adjustment to the index divisor is key to the index maintenance process. The index maintenance should not determine any change to the level of the index to the extent it reflects changes in shares outstanding, corporate actions, addition or deletion of stocks to the index.

Under most circumstances, the index divisor remains constant, although it can change when the index's underlying stocks are added or dropped from the index basket, or when corporate actions occur. Generally speaking, any change to the stocks in the index that makes changes to the total market value of the index while holding stock prices constant requires a divisor adjustment.

It is useful to make a distinction between changes in the divisor determined by the index-management process from those triggered by corporate actions of the index constituents. In the traditional index-management process, when a company is added to or deleted from the index, the net change in the market value of the index is calculated. Then, the net change in the market value is used to calculate the new divisor. The market values of stocks being added or deleted are based on the prices, shares outstanding, investable factors (IF, i.e. free-float adjustment) and any other share-count adjustments.

The table below lists the main corporate actions and index-management-related changes, with notes about the necessary changes and whether the divisor is adjusted.

Corporate action and index management-related changes	Description of corporate action and index management-related changes impact	Adjustment of divisor
Company addition/deletion	The stock is added/dropped from the index. The net change in market value determines the divisor adjustment.	Yes
Spin-off	A spin-off refers to the creation of a separate company through the sale or distribution of new shares of an existing business or division of a parent company. If the parent company decides to sell only a minority stake in the business, the divestiture is called a partial spin-off. Shareholders of the parent company would normally receive a proportionate number of shares in the new entity. On the ex-date of a spin-off, an adjustment factor calculated on the terms of the transaction and the market price of the spun-off security is applied to the price of the security of the parent company. The spun-off company is added to the index as of its first day of trading, based on the full company free float market capitalization of the spun-off entity as estimated by LIMEYARD prior to the spin-off being effective. The estimate is generally based on public information. If the spun-off company does not qualify for index inclusion, it is excluded after the first full day of trading.	Yes

<b>Corporate action and index management-related changes</b>	<b>Description of corporate action and index management-related changes impact</b>	<b>Adjustment of divisor</b>
Stock split and reverse split	Shares outstanding revised to reflect the new number of shares. No divisor adjustment is required.	No
Rights offering	In a rights issue, the company offers existing shareholders the right to purchase new shares, generally at a price below the current market price. Rights issues result in capital inflow, and increase both the number of shares and the free-float-adjusted market capitalization of a security. An adjustment factor is applied to the market price of the security on the ex-date of a rights issue to maintain the weight to be the same as the company had before the rights offering. At the same time, the number of shares is generally increased as of the close of the ex-date, except for rights issues that are offered at a premium to the market price and are not fully underwritten.	Yes
Changes in shares outstanding	As shares outstanding change as a result of secondary issuance, share repurchase or buy-back, the share count is revised to reflect the change. The divisor is then adjusted to keep the index weight the same.	Yes
Change in the free float factor (ff)	An increase (or decrease) in the ff increases (or decreases) the total market value of the index. The divisor is adjusted to sterilize the change in market value caused by the change to the IF.	Yes
Cash dividend	Cash distributions that are within the scope of the regular dividend policy or that the company defines as a regular distribution.	Yes
Stock dividend	A dividend payment is made in the form of additional shares, rather than a cash payout. This is also known as a "scrip dividend." Generally, shares issued following stock dividends/bonus issues are entitled to forthcoming cash dividends paid by the company. However, in rare cases, the shares issued are not entitled to the forthcoming cash dividend. In cases where the shares issued are not entitled to the forthcoming dividend, if the cash dividend amount is known before the ex-date of the stock dividend and if the impact of the cash dividend is deemed significant, the market price of the security is adjusted with an adjustment factor that takes into account the forthcoming cash dividend.	No
Stock dividend (from treasury stocks)	A dividend payment is made in the form of additional shares taken from treasury stocks, which are shares that were originally a part of the float and shares outstanding but were	Yes

Corporate action and index management-related changes	Description of corporate action and index management-related changes impact	Adjustment of divisor
	subsequently repurchased by the company and decommissioned. Depending on the size of the stock dividend distribution, the free float of the company may be reviewed following the event.	
Special cash dividend	A special cash dividend is an extraordinary cash distribution of cash made by a company to its shareholders, taking the funds from annual profits and/or reserves. The price of the stock making the special dividend payment is reduced by the per-share special dividend amount (net of withholding tax, if applicable) after the close of trading on the day before the ex-date. The divisor adjustment reflects the drop-in index market value attributable to the special cash.	Yes
Merger or acquisition	Mergers and acquisitions can result in a potential addition or deletion of an index constituent, as well as a change in price and/or number of shares in cases where stocks were used in the purchase. Changes to the index are made only once the merger or acquisition is declared unconditional and approved by the regulatory agencies and authorities. If the surviving company is already an index member, it is retained in the index. If the surviving company does not meet eligibility criteria, it is removed. To maintain the number of components constant at 100, a deleted stock is replaced by the highest-ranked non-component, if more than 100 equities are eligible for index inclusion.	Yes, if there is a removal
IPOs	Qualifying shares newly listed on AIM Italia are added to the index on their third day of trading if the index has less than 100 constituents. If the index has 100 components, qualifying IPOs will be considered for index inclusion at the next index review.	Yes

Divisor adjustments are made “after the close”, meaning that after the close of trading, the closing prices are used to calculate the new divisor based on whatever changes are being made. It is, then, possible to provide two complete descriptions of the index – one as it existed at the close of trading, and one as it will exist at the next opening of trading.

The index divisor for a given day  $t$  is defined as the ratio of the index market capitalization ( $t$ ) and the index level ( $t$ ).

$$Index\ Divisor_t = \frac{M_t}{I_t}$$

Where:

$Index\ Divisor_t$  = Divisor of the index at time  $t$

$M_t$  = Free-float market capitalization of the index at time  $t$

$I_t$  = Index level at time  $t$

Changes in weights due to corporate actions are distributed proportionally across all underlying stocks of the index basket. The new index divisor is calculated as follows:

$$Index\ Divisor_t = \frac{Index\ Divisor_{t-1} * \sum_{k=1}^n (p_{k,t} * s_{k,t} * ff_{k,t} * cf_{k,t} * F_{k,t}) \pm \Delta MC_t}{\sum_{k=1}^n (p_{k,t} * s_{k,t-1} * ff_{k,t-1} * cf_{k,t-1} * F_{k,t})}$$

Where:

$Index\ Divisor_t$  = divisor of the index at time  $t$

$Index\ Divisor_{t-1}$  = divisor of the index at time  $t-1$

$t$  = Time of the calculation of the index

$k$  = Number of companies

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$s_{k,t-1}$  = Number of shares of the underlying stock  $k$  at time  $t-1$

$ff_{k,t}$  = Free float of the underlying stock  $k$  at time  $t$

$ff_{k,t-1}$  = Free float of the underlying stock  $k$  at time  $t-1$

$cf_{k,t}$  = Cap factor of the underlying stock  $k$  at time  $t$

$cf_{k,t-1}$  = Cap factor of the underlying stock  $k$  at time  $t-1$

$F_{k,t}$  = Foreign exchange rate from company's  $k$  local currency into the index currency at time  $t$

$\Delta MC_t$  = The difference between the closing market capitalization of the index, and the adjusted closing market capitalization of the index.

The reference data source for FX is the WM/Reuters closing spot and forward rates calculated daily at 16:00 London time. These rates are available on Reuters pages "WMRSTOP01" and "WMRFORWARD01", Bloomberg page "WMCO" and Datastream. Thomson Reuters is the benchmark administrator for the WM/Reuters Rates and thus has primary responsibility for all aspects of the benchmark determination process. This includes the development, determination and dissemination, operation and governance of the spot, forward and non-deliverable forward rate services. Please refer to the WM/Reuters FX Benchmarks methodology guide for more information on the determination of spot, forward and non-deliverable forward benchmark rates.

## II. CORPORATE ACTIONS

Corporate actions affect the total market capitalization of the index basket.

Adjustments are made to the index divisor to eliminate the impact of these corporate actions.

All corporate actions are implemented at the ex-date of the events. Adjustments in the closing price of the underlying stock, as well as its share quantity, will be made according to the ratio details.

All corporate actions adjustments will be announced at least two trading days before the implementation, and implemented on the day the corporate actions come into effect. Conversely, changes resulting from corporate events that could not be implemented on or near the dates they come into effect, such as private placements and secondary offerings, and where no price adjustment is necessary, are implemented at the following scheduled index review date.

Below is the list of the corporate actions with the corresponding adjustment formula.

### 1. Dividend distributions

#### 1.1. Regular cash dividend

A regular cash dividend is defined as distribution made to holders of the underlying stocks, which is not considered a special dividend. The distribution date follows the timetable of the underlying stock dividend policy; also, the funds for dividend distribution come from operating income or retained earnings.

Only Total Return Indices are adjusted for regular cash dividends.

$$\text{adjusted } p_{k,t} = p_{k,t} - d_{k,t} * (1 - \tau_k)$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$d_{k,t}$  = Dividend distribution of the underlying stock  $k$  announced by the company for time  $t$

$\tau_k$  = Withholding tax rate

#### 1.2. Special cash dividend or return of capital

A special dividend payment happens outside of an underlying stock's regular pattern of dividend payments. They are distinct from regular dividends. Special dividends may be declared after exceptionally strong company earnings results or as a result of a corporate decision to implement changes to its financial structure or to spin off a subsidiary company to its shareholders.

Price Return and Total Return Indices are adjusted for special cash dividends.

$$\text{adjusted } p_{k,t} = p_{k,t} - d_{k,t} * (1 - \tau_k)$$

Where:

$p_{k,t}$  = Closing price of the underlying stock k at time t

$d_{k,t}$  = Dividend distribution of the underlying stock k announced by the company for time t

$\tau_k$  = Withholding tax rate. No withholding tax is applied to Gross Return and Price Return Indices.

## 2. Rights issue

A rights issue is defined as a corporate event where an underlying stock offers additional shares to existing shareholders. The shares are offered at a price different than the current market price, known as the subscription price. This corporate action impacts the price of the underlying stock as well as the shares outstanding.

### 2.1. Rights out of the money

If the subscription price equals or is superior to the underlying stock closing price on the day before the effective date, no adjustment is made.

### 2.2. Rights in the money

The subscription price is lower than the closing price on the day before the effective date.

The shareholder will receive B new shares for A old shares held at the  $Subs_{k,t}$  subscription price.

Price Return and Total Return Indices are adjusted accordingly on the ex-date based on the following formula:

$$\text{adjusted } p_{k,t} = [(p_{k,t} * A + Subs_{k,t} * B)] / (A + B)$$

$$\text{adjusted } s_{k,t} = s_{k,t} * (A+B) / A$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$Subs_{k,t}$  = Subscription price of the rights issue of the underlying stock  $k$  at time  $t$

Ratio of B new share for A shares held.

### 2.3. Rights issue with dividend disadvantage

A rights issue with dividend disadvantage occurs when the new listed shares are not eligible for the dividend distribution.

$$adjusted\ p_{k,t} = [(p_{k,t} * A + (Subs_{k,t} + d_{k,t} * (1 - \tau_k)) * B)] / (A + B)$$

$$adjusted\ s_{k,t} = s_{k,t} * (A+B) / A$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$Subs_{k,t}$  = Subscription price of the rights issue of the underlying stock  $k$  at time  $t$

$d_{k,t}$  = Dividend distribution of the underlying stock  $k$  announced by the company for time  $t$

$\tau_k$  = Withholding tax rate

Ratio of B new share for A shares held.

### 2.4. Rights issue exceptions

If the subscription price is not available, and/or the rights are not tradable on the market, no price adjustment will be made to the underlying stock at the ex-date, and the shares of the underlying stock will be updated once the shares are listed or at the rebalancing of the index basket.

For extremely dilutive rights issues, the underlying stock would be removed from the basket index two trading days before the effective date. If the time to remove the stock is too short and after approval of market investigations, the rights will be added to the index at the ex-date and removed at its first closing price.

As a general practice, LIMEYARD will announce the deletion of the company from all indices following the standard rules for index replacements if sufficient notice period can be given.

Sufficient notice period: LIMEYARD is able to make an announcement about index changes two trading days before the ex-date. The company may enter the indices again at the next periodic index review, but only after the new shares have been listed.

### 3. Stock split, reverse split or stock consolidation

A stock split refers to the corporate action in which a company divides its outstanding shares into multiple shares. The stock split does not add any real value to the company, given the total dollar value of the shares remains the same compared to the pre-split amount, despite the number of shares outstanding increases by a specific multiple. A stock split is also referred to as a scrip issue, bonus issue, capitalization issue, or free issue.

A reverse stock split is exactly the opposite of a stock split, and refers to the corporate action in which a company reduces its number of outstanding shares by a set multiple. As in a traditional stock split, given the share price also changes a reverse split determines no material change in the valuation of the company. However, some investors can be cashed out of their positions if they hold a small number of shares. These corporate actions do not change the market capitalization of the underlying stock.

We have a stock split ratio of B for A.

Price Return and Total Return Indices are adjusted on the ex-date based on the following formula:

$$\text{adjusted } p_{k,t} = p_{k,t} * A/B$$

$$\text{adjusted } s_{k,t} = s_{k,t} * B/A$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

### 4. Stock dividend

A stock dividend is defined as corporate event where the underlying stockholder will receive a number of stocks on a free basis.

#### 4.1. Regular stock dividend

The shareholder will receive B new shares for A old shares held.

Price Return and Total Return Indices are adjusted on the ex-date based on the following formula:

$$\text{adjusted } p_{k,t} = \left( \frac{p_{k,t} * A}{A+B} \right)$$

$$\text{adjusted } s_{k,t} = s_{k,t} * (A+B)/A$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

$S_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

Ratio of B new shares for A old shares held.

#### 4.2. Stock dividend of another company

The shareholder will receive B new shares of another company for A old shares held. It can be considered as an exceptional distribution. There is an adjustment price, but no share adjustment.

Price Return and Total Return Indices are adjusted on the ex-date based on the following formula:

$$\text{adjusted } p_{k,t} = \left( \frac{p_{k,t} * A - (\text{price of the other company} * B)}{A} \right)$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

Ratio of B new shares for A old shares held.

#### 4.3. Stock dividend from treasury stocks or distribution rights with cash equivalent

The shareholder will receive B new shares for A old shares held (where new shares are coming from the underlying stock treasury shares) or receive B rights for A shares held (or cash equivalent). These corporate events are considered as exceptional distributions. Stock dividends from treasury stocks will be adjusted as cash dividends.

Price adjustments occur without any share adjustments.

4.3.1. If the exceptional distribution is considered as a regular dividend distribution, only Total Return Indices are adjusted.

$$\text{adjusted } p_{k,t} = p_{k,t} - \frac{p_{k,t} * B}{A+B}$$

Where:

$p_{kt}$  = Closing price of the underlying stock  $k$  at time  $t$

Ratio of B new shares for A old shares held.

4.3.2. If the exceptional distribution is considered as a special dividend distribution. Price Return and Total Return Indices are adjusted at the ex-date based on the following formula:

$$\text{adjusted } p_{k,t} = p_{k,t} - \frac{p_{k,t} * B}{A+B}$$

Where:

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$

Ratio of  $B$  new shares for  $A$  old shares held.

## 5. Repurchase of shares

It is defined as when the company is repurchasing outstanding shares from the market in cash. Share repurchase are implemented only where they lead to a change in the free float market capitalization of the affected share by more than 10% on a given date.

The company tenders  $B$  shares at a tender price of  $P$ .

$$\text{adjusted } p_{k,t} = \left( \frac{(p_{k,t} * \text{Old number of shares}) - (P * B)}{\text{Old number of shares} - B} \right)$$

$$\text{adjusted } s_{k,t} = \text{Old number of shares} - B$$

Where:

$s_{k,t}$  = Number of shares of the underlying stock  $k$  at time  $t$

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$  before tender

$P$  = Tender price of the company

$B$  = Number of tendered shares

## 6. Spin-off

A spin-off is the corporate event where the underlying stock divests a subsidiary or division to set up a new and independent listed company.

On the ex-date of a spin-off, an adjustment factor calculated on the terms of the transaction and the market price of the spun-off security is applied to the price of the security of the parent company to avoid a drop in its free float-adjusted market capitalization. The shares of the divested company are distributed at a set ratio and estimated price. As this price is often an estimated price, each spun-off stock is temporarily added at the effective day to the affected indices until the spun-off security begins trading. Then it is removed the day after it starts to trade at its first closing price, if it does not qualify for index inclusion.

$$\text{adjusted } p_{k,t} = \left( \frac{p_{k,t} * A - \text{price of spun-off company} * B}{A} \right)$$

$p_{k,t}$  = Closing price of the underlying stock  $k$  at time  $t$   
Ratio of  $B$  shares for  $A$  old shares held.

## 7. Additions and deletions

In case of an addition to the list of constituents, i.e. when a company is added to the index, or a deletion from the list of constituents, i.e. a company is deleted from the index (because of quarterly review changes, corporate actions, or trading suspensions), no price adjustments are made.

Companies that are moved to a market segment or exchange other than AIM Italia, are removed from the index effective on the date of their delisting from AIM Italia.

If a SPAC integrates with a non-listed or already listed company in a way that changes the title's name or identifiers and which causes a transition from a non-eligible SPAC to an eligible title, then it is treated like an IPO.

## 8. Free float and shares change

The free float of a given company (the investable factor) refers to its shares quota that can be publicly traded. In order to be listed on certain stock exchanges, companies have to comply with particular free-float requirements established by the exchange. The requirements usually refer to a percentage of the total number of shares issued by the company and/or to a certain number of shares worth a certain amount. The free-float factor and outstanding shares are updated at the review index calendar using the latest available data. In between the reviews, if the change day-on-day in the free float and/or the outstanding shares is greater than  $\pm 10\%$ , an update of the free float and or shares will be affected immediately. The announcement of the change will be made at least two trading days before the implementation date. No price adjustment will be made.

## 9. Mergers and acquisitions

An acquisition or takeover is defined as a corporate event where a company buys control and ownership of another company. An acquisition occurs when a buying company obtains more than 50% ownership in a target company. Acquisitions can be paid for in cash, in the acquiring company's stock, or a combination of both.

Mergers and acquisitions can result in a potential addition or deletion of an index constituent, as well as a change in price and/or number of shares in cases where stock was used in the purchase.

If the surviving company is already an index member, it is retained in the index. If the surviving company does not meet eligibility criteria, it is removed. The change will be made once the merger or acquisition is declared unconditional and approved by the regulatory agencies and authorities.

The announcement of the change will be made at least two trading days before the implementation date.

## **10. Bankruptcy, suspension, illiquidity, and official delisting**

A bankruptcy is a corporate event referring to a legal status of an entity that cannot repay the debts it owes to creditors because of financial distress, and so becomes insolvent. In most jurisdictions, bankruptcy is imposed by a court order, often initiated by the debtor.

If the company has filed for bankruptcy without any indication of compensation to shareholders, the underlying stock will be removed from the index at a zero price (0.00001). Alternatively, the stock of the insolvent company will be deleted from the index based on either the traded stock price on its primary market, if available, or the OTC stock price.

If the constituent is suspended from trading for more than five days, or it is not being traded for ten consecutive days, it will be removed from LIMEYARD indices at a zero price (0.00001) if the quotation has not been resumed.

Changes are announced immediately, implemented two trading days later, and become effective the next trading day after implementation.

## **11. Corporate actions implementation order**

When several corporate actions are to occur on the same effective date, the order of the adjustments will follow the company corporate action order as it was announced.

## **12. Extraordinary corporate actions and extreme market conditions**

In case of far-reaching changes of the index methodology like changes of the characteristics of an index, the selection process of index members or the treatment of corporate actions, the Index Committee Members can have Market Queries conducted by the Index Management Team.

During a Market Query stakeholders affected by a possible change are invited to present their input, thoughts and concerns. The Index Committee Members define the time span of the Market Query.

Based on the result of the market consultation, the Index Committee will define the index adjustment and the criteria for the implementation to resolve the issue.

An anonymous summary of the answers received will be communicated to the stakeholders via e-mail

dissemination and the index portal <https://www.wienerbourse.at/en/indices/>

### III. INPUT DATA AND DATA PRECISION

Input data used:

- The opening price: the first traded price during the official trading hours of the stock's trading system; in case the opening price is not yet available, the previous day's closing/adjusted price is used.
- The intraday price: the currently traded price during the official trading hours of the stock's trading system. When the stock is not traded, the last available stock price is used; this can either be the last available intraday stock price (i.e. if the stock is temporarily suspended) or the last available closing/adjusted price (i.e. if the stock exchange is closed).
- The closing price: the last traded price or auction price during the official trading hours of the stock's trading system is used. If the stock has not traded throughout the trading session, then the previous day's closing/adjusted price is used.
- The adjusted price: the closing price is adjusted to reflect a stock's corporate action that will come into effect the next trading day.
- Stock prices in local currency are converted to the currency of denomination of the index using WM/Reuters FX rates.

The data precision for the following input variables of the index calculation is defined as (unless stated differently in the individual index methodologies):

- Adjusted prices calculated as a result of corporate actions: rounded to sixteen decimal places
- Number of shares calculated as a result of corporate actions: rounded to sixteen decimal places
- WM/Reuters currency rates: rounded to five decimal places
- Free float factors: rounded to four decimal places
- Index divisors and market capitalization: rounded to thirteen decimal places
- Index values: rounded to two decimal places for dissemination
- Input data (e.g. pricing) and other underlying data, as applicable in index calculation: rounded to thirteen decimal places
- Product of (number of shares \* free-float factor \* weighting-cap factor): rounded to thirteen decimal places
- Product of (weight factor \* weighting cap factor): rounded to thirteen decimal places
- Weights: expressed in percentage with thirteen decimals

#### **IV. FREE FLOAT FACTORS**

Free-float market capitalization takes into consideration only those shares issued by the company that are readily available for trading in the market.

Generally speaking, equity stakes that are larger than 5% of the equity capital in circulation and whose holding is of a long-term nature are excluded from the free-float adjusted index calculation. In particular, free-float factors generally exclude promoters' holding, strategic entities ownership, block ownership, government holdings, cross-ownership (i.e., stock owned either by the company itself, in the form of treasury shares, or owned by other companies); and other locked-in shares that are not readily available in the market for trading.

Block ownership is not applied to holdings of custodian nominees, fiduciary or trustees companies, mutual funds, investment companies with short-term investment strategies, pension funds and similar entities.

The free-float factors are reviewed on a quarterly basis. They are published on the quarterly announcement date and implemented on the quarterly review implementation date.

#### **V. WEIGHTING CAP FACTORS**

In order to ensure a sufficient level of diversification and avoid the dominance of a single stock, a weighting cap factor of 10% is applied. The cap factor of each constituent is calculated based on the close prices of the last Wednesday before each quarterly review date, and is implemented on the review implementation date.

The application of the fast exit rule (an index component is removed due to being delisted from AIM Italia) or fast entry rule (an IPO is added to the index intra-review if there are less than 100 components) triggers the resetting of the all cap factors. New cap factors are calculated based on close prices two days before the effective date of the triggering event, and become effective on effective date of the triggering event.

#### **VI. INDEX REVIEW**

The LIMEYARD AIM Italia 100 ex SPAC is reviewed on a regular basis to ensure the index composition accurately reflects the evolution of the underlying equity market and an up-to-date index basket of securities. The free float factors and outstanding number of shares are reviewed quarterly based on the most recent available data. The rebalancing is conducted on a quarterly basis after the market close every third Friday in March, June, September and December, to come into effect the next trading day.

If the day of the implementation of the rebalancing is a non-trading day then the rebalancing date is the next trading day.

The most recent free-float data as known to LIMEYARD are used for the component selection. The cut-off dates for free float data are on the 25th of February, May, August and November. Data arriving after the cut-off dates are implemented in the following quarterly review.

For the calculation of weightings and cap factors, the closing prices of the last Wednesday before the review implementation date are used.

**Universe:** The universe of eligible constituents consists of all shares admitted to the AIM Italia of Borsa Italiana, excluding companies categorized as SPAC. Former SPACs that are no longer classified as such are eligible for selection into the index.

The AIM index selects the top 100 companies in term of free-float market capitalization. In cases where there are fewer than 100 eligible assets fulfilling the inclusion criteria, the index will be calculated with fewer than 100 constituents.

**Weighting scheme:** The index is weighted according to free-float market capitalization (full market capitalization until 19-12-2014)

## **VII. INDEX METHODOLOGY REVIEW AND TRANSITION**

WBAG constantly monitors the execution of the index calculation in order to ensure the validity of the index methodology rules. As a result of these activities, WBAG may decide to introduce changes to the methodology.

Material changes to the methodology are notified to customers at least three months before their implementation in order to properly manage index users' transition to the revised rules. At the same time, those changes are updated in the Index Methodology Guide. All changes are tracked in a specific section of the Index Methodology Guide named "History of Changes to the Index Methodology Guide".

## **VIII. EXTREME MARKET CONDITIONS AND DISRUPTIONS, COMPANY EVENTS**

In case the investability and tradability of a given index are affected by market turmoil or company event or disruptions and considered significant by the WBAG's Index Committee, as defined in the benchmark governance section below, one of the following or a combination of the following actions are taken. For all such changes, a minimum notification period of two trading days will be given. The actions may include, but not be limited to, the followings:

- Change of weights of index constituents by adjusting the number of shares, free-float factors, liquidity or weighting cap-factors

- Adjustment of index compositions
- Application of expert judgment for index constituents' pricing data
- Adjustment of operational procedures
- Postponement of index adjustments

## **IX. CALCULATION ERRORS AND ERROR REPORTS**

All input data in the index calculation process are subject to a number of validation and cross checking.

In case a material error in input data or in a given index calculation occurs, and the impact of the error is greater or equal to 30 basis points (bps) on the index value, the index affected by 30 bps or more is restated. Advance notice of the restatement is given to customers and issuers of financial products pegged to the wrongly calculated index.

In certain circumstances, such as errors in the list of constituents or in the dividend amount after the dividend ex-date, WBAG reserves the right to restate the index values even if the impact is lower than the 30 basis points correction threshold. WBAG applies a 24-month correction period.

Errors on historical values older than 24 months are not revised. Action on dividend errors is taken only if the error is discovered within 12 months of the ex-date.

Intraday tick data are not corrected retroactively.

## **X. INDEX TERMINATION POLICY**

When it becomes evident from a number of circumstances that a given index no longer represents the underlying market/sectors/factors that it is intended to track, and the methodology cannot be adapted to the new conditions, the termination of the index may be required. Generally speaking, these circumstances, which are completely out of WBAG's control, may refer to regulatory changes; size and liquidity of the underlying market segment; lack of underlying eligible securities; significant changes to the underlying market structure; or geopolitical events. Additionally, low usage by customers or methodology convergence among indices may result in WBAG's proposal to terminate an index.

The Index Committee at WBAG, as detailed in the benchmark governance section below, is responsible for taking decisions in respect of termination of the index.

A market consultation with the involved clients will be initiated for the termination of an index or index family for which outstanding products are present in the market to the best of WBAG's knowledge.

The termination of a customised benchmark is always handled in consultation with the relevant client.

WBAG would announce the termination of the index with advance notice in order to manage clients' and involved parties' expectations. WBAG will endeavour to continue calculating the index for an announced period of time, before the effective termination date.

## **XI. BENCHMARK GOVERNANCE**

### The Index Committee

#### Tasks and responsibilities

The Index Committee is the sole decision-making body for the indices and acts as the supervisory authority. The members of the Committee are under an obligation to act impartially and protect the interests of investors. The members have the duty to keep confidential any information acquired as a result of their position as members of the Index Committee.

#### Composition and voting rights

The members of the Index Committee include representatives of the members of WBAG, representatives of LIMEYARD and FINNAT.

Membership in the Index Committee continues for an indefinite period of time. The Index Committee decides on the admittance of new members and the expulsion of existing members.

The voting members of the Committee include the head of the department market operations & surveillance of WBAG. Members from FINNAT and LIMEYARD are members from the related management body.

#### Index Committee Chair

All meetings of the Index Committee are chaired by the head of the department market operations & surveillance of WBAG (Chairperson). The Chairperson of the Index Committee is the only person authorized to represent the Committee in its external relations. The Chairperson of the Index Committee is in charge of contacting its members and convening Committee meetings. If neither the Chairperson nor his or her deputy are present at the venue of the stock exchange, the Chairperson of the Index Committee may temporarily entrust the management of the Committee to one of its members.

#### Rules of procedure of the Index Committee

Decisions by the Index Committee are taken by a simple majority of the votes cast. If the votes are equally divided, the Chairperson has the decisive vote. Voting members of the Index Committee do not have the right to be replaced by substitute members (except for a representative from the same institution). The transfer of voting rights by proxy to other members of the Index Committee is possible, provided the Chairperson is informed thereof in writing prior to the beginning of the meeting. The Index Committee has a quorum, if a minimum of three voting members are present or duly represented by proxy.

#### Index Committee meetings and Urgent Action Committee

The meetings of the Index Committee are held quarterly (March, June, September and December) at the beginning of the respective month.

Meetings are held by e-mail or telephone.

The Urgent Action Committee comprises the voting members of the Index Committee. As in the case of the regular Index Committee meetings, decisions are taken by a simple majority of the votes cast. If the votes

are equally divided, the Chairperson has the decisive vote. Information regarding decisions taken by the Urgent Action Committee and the time dates set for their implementation shall be disseminated without delay.

#### Decision areas

The Index Committee decides on the following issues:

Amendments to the rule book at hand. If deemed necessary, the Index Committee can have conducted market queries. In the event of extraordinary events not explicitly provided for in these Rules, the Index Committee is empowered to take the necessary decisions, always bearing the interests of the market and the intention of the index in mind or can have conducted market queries.

Changes of index compositions and calculation factors according to chapter VI.

#### Termination of indices.

Agreement on the effective date of the changes adopted.

Generally, the decisions taken by the Index Committee are implemented after the close of trading on the third Friday of the months of March, June, September and December after each Committee meeting. If this Friday is not an exchange trading day, then the preceding exchange trading day shall be the day on which the decisions taken by the Index Committee are implemented after trading closes.

#### Index Management

The Index Management team is responsible for the operational index management, which includes, among other things, monitoring the index calculation, the dissemination of information to all the information vendors linked to the system, and the dissemination of information on changes to the index composition. The Index Management is responsible for the administration of the master data and shall make all adjustments to the index programs.

## **XII. HISTORY OF CHANGES TO THE INDEX METHODOLOGY**

September 2018: Clarification on treatment of former SPACs

### **XIII. APPENDIX**

#### 1. Calculation calendar

The LIMEYARD AIM Italia 100 ex SPAC is not calculated on non trading days of Borsa Italiana (current trading calendar available [here](#)).

LIMEYARD's dissemination calendar applies.