Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1 Purpose of the guide</td>
<td>3</td>
</tr>
<tr>
<td>Section 2 Timing of corporate actions and events</td>
<td>4</td>
</tr>
<tr>
<td>Section 3 The use of dummy lines in FTSE Russell indices</td>
<td>6</td>
</tr>
<tr>
<td>Section 4 Treatment of index events</td>
<td>7</td>
</tr>
<tr>
<td>Section 5 Changes to shares outstanding and free float</td>
<td>24</td>
</tr>
<tr>
<td>Appendix A Further information</td>
<td>27</td>
</tr>
</tbody>
</table>

**FTSE Russell**

Section 1
Purpose of the guide

1. Purpose of the guide

1.1 This document sets out guidance for the treatment of corporate action and events and assumes the reader is already familiar with the basic concept of index calculation and treatment of share price adjustments caused by such developments. Because of the complexities involved in some cases, these guidelines should not be construed as definitive rules that will determine FTSE Russell’s actions in all circumstances. FTSE Russell reserves the right to determine the most appropriate method of implementation for any corporate event which is not covered here or which is of a complex nature.

FTSE Russell defines a corporate action as an action on shareholders with a prescribed ex date, e.g. rights issue, special dividend, stock split etc. The share price and indices in which the company is included will be subject to an adjustment on the ex date. This is a mandatory event.

FTSE Russell defines a corporate event as a reaction to company news (event) that might impact the index depending on the index rules. For example, a company announces a strategic shareholder is offering to sell their shares (secondary share offer) – this could result in a free float weighting change in the index. FTSE Russell will decide whether there is an index adjustment or not and the timing of the change.

FTSE Russell will determine the appropriate treatment by reference to the statement of principles which summarise the ethos underlying FTSE Russell’s approach to index construction. The statement of principles is reviewed annually and any changes proposed by FTSE Russell are presented to the FTSE Russell Policy Advisory Board for discussion before approval by the FTSE Russell Index Governance Board.

The statement of principles can be accessed using the following link:


1.2 This document should be read in conjunction with the Ground Rules or the methodology of those index series to which this guide applies.

1.3 This document will be subject to regular review (at least once a year) by FTSE Russell.

1.4 FTSE Russell indices are recalculated whenever inaccuracies occur that are deemed to be significant. Users of the indices are notified through appropriate media.

For further information, please refer to the FTSE Russell recalculation policy and guidelines document which can be accessed using the following link:

FTSE_Russell_Index_Recalculation_Policy_and_Guidelines.pdf
Section 2

Timing of corporate actions and events

2. Timing of corporate actions and events

2.1 FTSE Russell applies corporate actions and events to its indices on a daily basis, both to reflect the evolution of securities and to ensure that the indices remain highly representative of the global equity markets. A company's index membership and its weight in the index can be impacted by these corporate actions and events. FTSE Russell uses a variety of public sources to determine when an event is final, including a company's press releases and regulatory filings; local exchange notifications and official updates from other data providers. Prior to the completion of a corporate event, FTSE Russell estimates the effective date on the basis of the same above sources. As new information becomes available, FTSE Russell may revise the anticipated effective date and the terms of the corporate event, before confirming its effective date.

2.2 Depending upon the time an event is determined to be final, FTSE Russell either (1) applies the event before the open on the ex date or (2) applies the event providing appropriate notice if it is deemed to be "actionable" for passive index managers. The timing of when corporate actions and events are applied is critical for accurate market representation and how it impacts tracking for passive managers. FTSE Russell believes this methodology strikes the best balance between the two. The impact of the event and the effective date will be communicated to clients on a regular schedule, via the daily corporate actions and events deliverables.

2.3 If FTSE Russell has confirmed the completion of a corporate event, scheduled to become effective subsequent to a rebalance or index review, the event may be implemented in conjunction with the rebalance to limit turnover, providing appropriate notice can be given. For example: Company ABC is scheduled to be added or continue as an existing member at rebalance. A tender offer is confirmed to be completed two days following the rebalance effective date. FTSE Russell will provide appropriate notice of this index change per our normal procedures and will remove company ABC at the rebalance effective date.

2.4 The FTSE Russell indices recognize a minimum two day notice requirement for “actionable” corporate event implementation such as mergers and acquisitions. This provides an appropriate window for lobal managers to receive a notification of intended index treatment and consequently act upon it. An exception exists within the Russell 3000E as detailed below.

- If FTSE Russell is able to determine the status of the event to be final prior to 1:00 p.m. Eastern Standard Time: These events will be applied after the close of the current day. Deletes will be removed at the last traded price if an active market exists and the shares outstanding of the acquiring company will be adjusted simultaneously per the M&A terms when the transaction involves stock of an index member. If the target company has halted, the target will be removed from the index at a price based on the M&A terms at the close of that day;
If FTSE Russell is able to determine the status of the event to be final after 1:00 p.m. Eastern Standard Time: These events will be deemed a “delayed action” and will be applied after the close of the following day. A synthetic position of the company will remain in the index for one day and a calculated closing price for the acquired entity or merged entity will be established. The calculated price is determined by the terms of the action and based on the last traded price of the acquiring company. For real-time calculations, intra-day trading will reflect a stale price for the acquired entity. If the merger involves an election, the default terms will be used to calculate a synthetic position.

FTSE Russell determines primary sources for corporate actions and events updates. Sources are either provided directly by exchange or sourced by primary vendors. Because FTSE Russell ensures all tradable actions are provided with appropriate notice as detailed above, late announced changes to previously communicated corporate events may not be applied. As a point of clarification, if FTSE Russell can confirm changes, those changes will be applied if appropriate notice can be provided. If a tradable corporate event is applied to the index and the action is subsequently delayed (and not cancelled), previously communicated index changes will proceed and will not be reversed unless appropriate notice can be provided. When a tradable corporate event is cancelled or terms are updated, the previously communicated index changes will proceed unless appropriate notice can be provided. FTSE Russell will subsequently provide details on corrective update providing appropriate notice in line with index family rules.

2.5 For the timing of corporate actions and events in the event of a trading halt please refer to the FTSE Russell Index policy for trading halts and market closures document which can be accessed using the following link:

FTSE_Russell_Index_Policy_for_Trading_Halts_and_Market_Closures.pdf
Section 3

The use of dummy lines in FTSE Russell indices

3. The use of dummy lines in FTSE Russell indices

3.1 Dummy lines are non-tradable instruments which have been temporarily created by FTSE Russell in order to reflect a corporate event.

3.2 The use of dummy lines is normally determined on an ad hoc basis and typically results from complexities surrounding a corporate event.

3.3 Where the use of dummy lines is necessary FTSE Russell provides advance notification either via an informative notice published on the FTSE Russell website, or via the Russell Corporate Action Calendar. Dummy lines will also be visible within the standard corporate action deliverables when they are being utilized.

3.4 Dummy lines are generally used in order to ensure the index reflects the investor experience or in order to facilitate index replication by index funds.
Section 4

Treatment of index events

4. Treatment of index events

4.1 Splits (sub-division)/reverse splits (consolidation)

A pro-rata distribution of shares (split) or a pro-rata consolidation (reverse split) of shares held by existing shareholders. No company market capitalisation change. Shares and share price adjusted according to terms.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Index divisor adjustment</th>
<th>Adjustment factor</th>
<th>Timing of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split/Reverse Split</td>
<td>No</td>
<td>Number of shares held before issue ÷ Number of shares held after issue</td>
<td>Ex date</td>
</tr>
</tbody>
</table>

**Example 1: Split (sub-division)**

Terms: 1 into 5

Current price = USD 300  
Shares in issue = 100m  
Ex-split price = USD 60  
Ex-split shares in issue = 500m  
Adjustment factor = 100/500 = 0.2

**Example 2: Reverse split (consolidation)**

Terms: 5 into 1

Current price = USD 300  
Shares in issue = 100m  
Ex-reverse split price = USD 1500  
Ex-reverse split shares in issue = 20m  
Adjustment factor = 100/20 = 5

4.2 Ordinary dividends, special dividends and capital repayments

Regular cash dividends are those paid to shareholders out of a company's profits or reserves. These cash dividends impact the total return and are reinvested across the index on the dividend ex date. In addition to paying regular dividends, a company may at times pay special cash dividends. These are normally paid outside a company’s regular dividend schedule and can occur for a variety of reasons, such as a major litigation win, the sale of a business or liquidation of an investment. For special cash dividends, the price of the stock is adjusted to deduct the dividend amount before the open on the ex date. Special cash dividends are not included within the total return index calculation.

FTSE Russell deems a dividend to be special if the distributing company describes it as such. However, in cases where a company pays a special cash dividend in a recurring cycle (e.g. monthly, quarterly, semi-annually, or annually) on more than three consecutive occasions which are not deemed to be extraordinary, FTSE Russell will normally consider any further such cash distributions as ordinary dividends.

Capital repayments are paid to shareholders as a return of capital and are generally applied with a price adjustment unless company policy is such that regular dividends are reported in this way (common in Switzerland).
### Dividend type

<table>
<thead>
<tr>
<th>Dividend type</th>
<th>Capital Index divisor adjustment</th>
<th>Notes</th>
<th>Total return xd adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash – Ordinary</td>
<td>No</td>
<td>Reinvested on ex date</td>
<td>Yes</td>
</tr>
<tr>
<td>Cash – with scrip option</td>
<td>No. Same as Cash – ordinary</td>
<td>Any additional shares issued will be reviewed per the share update section of the applicable index series</td>
<td>Yes</td>
</tr>
<tr>
<td>Scrip – with a cash option</td>
<td>No. Same as Cash – ordinary</td>
<td>Any additional shares issued will be reviewed in line with the share update section (Section 5)</td>
<td>Yes</td>
</tr>
<tr>
<td>Stock – scrip only</td>
<td>No. Applied as ‘Scrip issue of same stock’ in 4.7</td>
<td>Example of price adjustment detailed below</td>
<td>No</td>
</tr>
<tr>
<td>Capital repayment</td>
<td>Yes</td>
<td>Example of price adjustment detailed below</td>
<td>No</td>
</tr>
<tr>
<td>Special – cash</td>
<td>Yes – unless recognised as ordinary</td>
<td>Example of price adjustment detailed below</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Example: Repayment of capital/special dividend

<table>
<thead>
<tr>
<th>Current price</th>
<th>USD 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares in issue</td>
<td>300m</td>
</tr>
<tr>
<td>Terms: USD 20 capital repayment per share</td>
<td></td>
</tr>
<tr>
<td>Ex-capital repayment price</td>
<td>USD 80</td>
</tr>
<tr>
<td>Ex-capital repayment shares in issue</td>
<td>300m</td>
</tr>
<tr>
<td>Adjustment factor</td>
<td>80/100 = 0.8</td>
</tr>
</tbody>
</table>

#### 4.3 Unknown and optional ordinary dividends and corrections

- If a company distributing an ordinary dividend subsequently announces a retraction (i.e. dividend is no longer being paid), FTSE Russell will apply a corrective negative adjustment with T+1 notice;
- Where dividends that have been confirmed or estimated by the company prior to the XD date, the confirmed or estimated value is applied on the XD date. For dividends that are confirmed or estimated by the company after the XD date, a further positive or negative XD adjustment will be applied on the next business day following the receipt of data;
- Where the dividend remains undetermined on the XD date, FTSE Russell will apply the dividend amount paid from the same period in the previous year (adjusted by any capital change) on the XD date. If there was no dividend paid from the same period in the previous year, a dividend value of zero will be used;
- If a company distributing an ordinary dividend subsequently announces that it will instead pay the dividend in shares, the distributed shares will be added on the pay date. Should the pay date fall in a week preceding a review, instead the distributed shares will be added on the review effective date. No further adjustment is made to the dividend or price of the company;
- Unless as otherwise stipulated within section 4.2, a company distributing a dividend for which holders have the option to take cash, repayment in capital or stock, the default election will be applied;
- Clarification for South Korean companies – for those South Korean companies that have not provided advanced notice of their ex-dividend date, FTSE Russell will assume that such companies will follow the general practice in South Korea of using an ex date of two business days prior to the fiscal year end (e.g. 28 December 2016). If no dividend has been confirmed four months after the ex date (typically the period of time up to the pay date), it is assumed that no dividend is being paid and a corrective negative adjustment is applied.
4.4 **Special dividends – tax adjustments**

Where the special dividend distribution (payable in cash and/or shares) is 10% or greater against the share price (measured against the cum price) and subject to FTSE Russell identifying that there are withholding tax implications, a compensating negative XD adjustment will be applied to provide the correct return net-of-tax. FTSE Russell withholding tax rates are used to calculate the adjustment. There is also an associated adjustment to the total return index to reflect the tax liability. Note: tax adjustments for special cash dividends are not implemented within the Russell 3000E Index Series and the FTSE/JSE Africa Index Series.

<table>
<thead>
<tr>
<th>Example – Special cash dividend of USD 61 (subject to 25% withholding tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital repayment</strong></td>
</tr>
<tr>
<td>– Current price = USD 112</td>
</tr>
<tr>
<td>– Shares in issue = 300m</td>
</tr>
<tr>
<td>– Ex-capital repayment price = 112 - 61 = USD 51</td>
</tr>
<tr>
<td>– Ex-capital repayment shares in issue = 300m</td>
</tr>
<tr>
<td>– Adjustment factor = 51/112 = 0.45</td>
</tr>
<tr>
<td><strong>Negative XD adjustment</strong></td>
</tr>
<tr>
<td>– Withholding tax = 25%</td>
</tr>
<tr>
<td>– Tax liability = 61 * 25% = USD 15.25</td>
</tr>
<tr>
<td>– Net special dividend = 61 - 15.25 = USD 45.75</td>
</tr>
<tr>
<td>– Compensating negative XD adjustment = [15.25/(1-0.25)] = USD 20.33</td>
</tr>
</tbody>
</table>

Underlying tax rate information and the FTSE Russell withholding tax guide are available from the FTSE Russell website (link below) or by contacting info@ftserussell.com.

[FTSE_Russell_Withholding_Tax_Guide.pdf](https://www.ftserussell.com)

4.5 **REIT conversions**

4.5.1 For US index constituents converting to a REIT structure, a capital repayment representing the value of the cash and stock distribution will be applied to the index constituent on the effective date of the distribution. Concurrently a separate stock distribution dummy line will be added to the same indices as the index constituent to reflect the value of the stock proportion of the distribution until the stock distribution ratio is confirmed. Subsequently, the dummy line will be deleted and the shares in issue of the index constituent will be increased by the stock distribution ratio.

4.6 **Non-ranking for dividend lines**

In the event that an existing index constituent issues new shares which do not rank for the next dividend, FTSE Russell may include these in the index on a separate temporary non-ranking for dividend line.

Where the non-ranking for dividend line ceases trading on or before the ex dividend date, the temporary line will be deleted from FTSE Russell indices **on the open** of the ex dividend date and the new shares consolidated into the main line. FTSE Russell will also make an adjustment to the declared dividend in order to reflect that only the existing shares were entitled to the dividend.

Where the non-ranking for dividend line ceases trading after the ex dividend date, the temporary line will be deleted from FTSE Russell indices **at close** of the ex dividend date and the new shares consolidated into the main line. As a result, no adjustment to the declared dividend is necessary.

4.7 **Scrip issues & stock distributions**

A scrip issue (also called a capitalisation or a bonus issue) and a stock distribution (also known as a dividend in specie) are the automatic distribution of shares (existing or newly issued) to existing shareholders at no charge, pro rata to existing holdings.
<table>
<thead>
<tr>
<th>Event type</th>
<th>Index divisor adjustment</th>
<th>Adjustment factor</th>
<th>Timing of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrip issue of same stock (See Example 1)</td>
<td>No (No change in market capitalisation)</td>
<td>Number of shares held before issue ÷ Number of shares held after issue</td>
<td>Ex date</td>
</tr>
<tr>
<td>Scrip issue of different eligible stock (See Example 2)</td>
<td>No</td>
<td>Price of company after deducting capital repayment ÷ Price of company before capital repayment</td>
<td>Ex date</td>
</tr>
<tr>
<td>Scrip issue of different ineligible* stock where a valuation is available (*this also applies when there are different index memberships of the companies involved)</td>
<td>No</td>
<td>Price of company after deducting capital repayment ÷ Price of company before capital repayment</td>
<td>Ex date. The ineligible stock will be temporarily added to the FTSE Russell indices and subsequently deleted at market price t+2 after settlement can reasonably be assumed to have occurred. Where the ineligible stock is listed, but a settlement date cannot be confirmed, the distribution will be reviewed every 20 business days. If settlement can be confirmed, or can reasonably be assumed to have occurred, the distribution shares will be removed from the index at market price. If settlement cannot be confirmed within 80 business days, the distribution shares will be removed from the index at zero value with t+2 notice</td>
</tr>
<tr>
<td>Scrip issue of different ineligible stock where no valuation is available and stock is timetabled to list after the ex date</td>
<td>No</td>
<td>No price adjustment is applied</td>
<td>Ex date. The ineligible stock will be temporarily added to the FTSE Russell indices at zero value and subsequently deleted at market price t+2 after settlement. If the settlement date remains unknown after 20 business days from the ex date, the ineligible stock will be removed from the index at zero value with t+2 notice</td>
</tr>
<tr>
<td>Scrip issue of different ineligible stock where no valuation is available and stock is expected to remain unlisted</td>
<td>No</td>
<td>No price adjustment is applied</td>
<td>No price adjustment will be applied and the ineligible stock will not be added to the FTSE Russell indices</td>
</tr>
<tr>
<td>Scrip issue of an asset for which there are significant barriers to trade (e.g distribution of digital asset, crypto currency w/barrier)</td>
<td>No</td>
<td>No price adjustment is applied</td>
<td>No price adjustment will be applied and the distribution will not be added to the FTSE Russell indices</td>
</tr>
</tbody>
</table>

Note: An adjustment to free float may be required when no newly issued shares are being distributed into another index constituent.

**Example 1: Scrip issue of same stock**
Terms: 1 for 1 (equivalent to 2 for 1 stock split)

<table>
<thead>
<tr>
<th>Current price</th>
<th>Shares in issue</th>
<th>Ex-scrip price</th>
<th>Ex-scrip shares in issue</th>
<th>Adjustment factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 300</td>
<td>300m</td>
<td>USD 150</td>
<td>600m</td>
<td>150/300 = 0.5</td>
</tr>
</tbody>
</table>

**Example 2: Scrip issue of different eligible stock**
Terms: 1 B share for 3 A shares

<table>
<thead>
<tr>
<th>Current price B</th>
<th>Shares in issue A</th>
<th>New B shares</th>
<th>Ex-scrip price</th>
<th>Ex-scrip shares in issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD 120</td>
<td>300m</td>
<td>100m</td>
<td>[(3x300)-(1x120)]/3</td>
<td>300m</td>
</tr>
</tbody>
</table>

Ex-scrip price =[(3x300)-(1x120)]/3 = USD 260
Ex-scrip shares in issue = 300m
4.8 Compulsory share buy backs

4.8.1 Compulsory partial share buy back

A compulsory partial tender/buy back of shares at a set ratio and price.

<table>
<thead>
<tr>
<th>Example 1: Partial tender of 51 out of every 100 shares at USD 140</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-tender</strong></td>
</tr>
<tr>
<td>Current price</td>
</tr>
<tr>
<td>Shares in issue</td>
</tr>
<tr>
<td>Market capitalisation</td>
</tr>
<tr>
<td>Shares tendered</td>
</tr>
<tr>
<td>Tender price</td>
</tr>
<tr>
<td>Market capitalisation</td>
</tr>
<tr>
<td><strong>Post-tender</strong></td>
</tr>
<tr>
<td>Adjusted Shares in issue</td>
</tr>
<tr>
<td>Market capitalisation</td>
</tr>
<tr>
<td>Adjusted price</td>
</tr>
</tbody>
</table>

4.8.2 Compulsory full share buy back

A compulsory tender/buy back of all outstanding shares at a set price.

The security is deleted from the index at the last traded price. In the event that trading in the security has halted at the time of index implementation, it will be deleted from the index at the redemption price.

4.9 Rights issues/entitlement offers

These are an entitlement issued to shareholders which give them the right to buy additional shares directly from the company in proportion to their existing holdings. FTSE Russell will only adjust the index to account for a right if the subscription price of the rights is at a discount to the market price of the stock. Provided FTSE Russell has been alerted to the rights offer prior to the ex date, a price adjustment and share increase proportionate to the terms of the offer will be implemented before the open on the ex date (Example 1). Exceptions to the standard treatment are detailed below:

4.9.1 Accelerated rights offers

In certain markets, most commonly in Australia, accelerated rights offerings (e.g. RAPIDs) have become more frequent. During an accelerated rights offer, the ex date is theoretical and typically not quoted by the exchange. Typically, the stock is halted on the theoretical ex date, at which time the company begins a two tranche offer to shareholders in the form of an Institutional Offer followed by a retail offer. Shares are increased and a price adjustment is applied according to the terms of the offer, before the open on the day the security resumes trade.

4.9.2 The subscription price is unknown prior to ex-date (Example 2)

Where the rights issue/entitlement offer subscription price remains unconfirmed on the ex date, an estimated price will be used. FTSE Russell will estimate the subscription price using the value being raised and the offer terms. Where there is a range of values the mid value will be used to estimate the subscription price. Where the value being raised and/or offer terms are unknown no adjustment will be made on the ex date. If those details are subsequently announced, a price adjustment and share increase will be applied with appropriate notice, provided that the rights are being offered at a discount to the prevailing market price and the subscription period is still open.
4.9.3 **Highly dilutive rights issues (Example 3)**

If the terms of a rights issue are greater than 10 for 1, FTSE Russell will consider this “highly dilutive”. To facilitate replication, FTSE Russell will include on the ex date: (1) a separate temporary line to track the market value of the rights and (2) a temporary line at a fixed value to reflect the subscription cash.

The temporary lines are included within the index calculation until the end of the rights subscription period at which point they will be deleted and the new shares consolidated into the existing share line. The temporary rights line will be deleted at its last traded price and the opening price of the ordinary line will be adjusted to ensure there is no divisor change as a result of the consolidation of the temporary lines into the ordinary line.

4.9.4 **New shares are not entitled to the next dividend (Example 4)**

Where the shares being issued are not entitled to the next dividend, FTSE Russell will deviate from the standard index treatment and include on the ex date: (1) a separate temporary line to track the market value of the rights and (2) a temporary line at a fixed value to reflect the subscription cash. The temporary lines will be deleted and the rights shares will be aggregated with the ordinary shares as described below:

- If the dividend ex date occurs prior to the end of the rights subscription period, the temporary lines will be deleted and the new shares assimilated into the ordinary line at the open on the dividend ex date;

- If the dividend ex date occurs after the expiration of the rights subscription period and cash lines will be deleted after the close on the last day of the rights subscription period and replaced by a temporary dummy line equal to the ordinary line close price minus the upcoming dividend. If an active non-ranking for dividend constituent exists, this will be temporarily included instead of a dummy line. On the open of the ex-dividend date, the dummy line (or NRD constituent) is deleted and the shares are aggregated with the ordinary line.

4.9.5 **Rights issue into another constituent**

When an index constituent distributes rights to buy discounted shares in another index constituent, a price adjustment will be applied to the company or companies distributing the rights and the shares will be increased in accordance with the terms of the rights offer.

4.9.6 **Rights issue into a non-constituent**

In the event that the rights issue involves a non-constituent (inclusive of non-equity) and where the value of the right cannot be determined, there will be no adjustment on the ex date. If the rights line is not scheduled to trade, there will be no further action. If the rights are scheduled to trade, a rights line will be added to the index at zero value on the ex date and will be deleted from the index at the market price when it commences trading, with notice. If the rights have not commenced trading within 20 business days of the ex date, they will be removed at zero value. No cash temporary line will be included as the index will not subscribe to the rights.

4.9.7 **Late notifications**

Where a company announces an open offer (typically in the UK) or a rights issue with an ex-entitlement date on the same day, FTSE Russell will apply an index adjustment either before the market-open on the ex-entitlement day or as an intra-day adjustment as soon as possible thereafter. The adjustment will be applied based on the previous day’s closing price with the new shares included in the index weighting at the offer price. The index may be temporarily held whilst the adjustment is being applied. FTSE Russell will issue an intra-day notice and affected products will be re-issued so that clients are informed of the action having taken place together with the amended index divisors. The same treatment would be followed where a company announces a rights issue after its ex date, provided that the subscription period is still open. The close price the day previous to the announcement would be used to calculate the adjustment, rather than the cum price prior to ex date.
4.9.8 Repair offerings

The equal treatment obligations for companies listed on the Oslo Bors require Norwegian companies to treat the holders of listed securities equally, unless differential treatment can be justified. To comply with the principle of equal treatment, it is fairly common for Norwegian companies to carry out a subsequent repair offering to all existing shareholders that were not invited to participate in an initial equity offering. FTSE Russell will implement repair offerings at the close of the subscription period, regardless of size, where the initial equity offering was implemented as a result of breaching the intra-quarter update thresholds, with the additional shares added at the index close price, therefore no price adjustment will be made. If FTSE Russell discovers the repair offering after the close of the subscription period, the shares will be reviewed for inclusion at the following quarterly review.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Index Divisor</th>
<th>Adjustment factor</th>
<th>Timing of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rights issue/entitlement offer – where subscription price is at a discount to the market price</td>
<td>Yes</td>
<td>Yes – shares and price adjusted in accordance with offer terms</td>
<td>Ex date</td>
</tr>
<tr>
<td>Rights issue/entitlement offer – where subscription price is equal to or at a premium to the market price</td>
<td>Yes – when shares are added</td>
<td>No adjustment or share increase on the ex date</td>
<td>Any additional shares will be reviewed for inclusion at the next quarterly review</td>
</tr>
<tr>
<td>Rights issue where offer is considered highly dilutive (terms are greater than 10 for 1)</td>
<td>Yes – on ex date open only</td>
<td>Yes – on ex date open to account for the rights offer and again when the temporary lines are deleted to ensure zero divisor change</td>
<td>Temporary lines added and PAF applied on the ex date. Temporary lines deleted and PAF applied at the expiration of the subscription period</td>
</tr>
<tr>
<td>Rights issue/entitlement offer – where subscription price is unknown before ex date</td>
<td>Yes</td>
<td>Yes – where the subscription price is unknown but a reasonable estimate can be calculated using the amount of cash to be raised relative to the offer terms</td>
<td>T+1 (applied at close of subscription price announcement date)</td>
</tr>
<tr>
<td>Rights issue/entitlement offer – cancelled after ex date</td>
<td>Yes</td>
<td>Subsequent adjustment by removing new rights shares from company's shares in issue at the subscription price on a T+1 basis</td>
<td></td>
</tr>
</tbody>
</table>

Example 1: Standard rights issue

| Current price | = | USD 300 |
| Shares in issue | = | 300m |
| Terms: | 1 for 4 at USD 260 |
| Ex-rights shares | = | 375m (300m x 1/4) |
| Theoretical ex-rights | = | ([4x300] + (1x260))/5 |
| = | USD 292 |
| Price adjustment factor | = | Ex-rights price/cum-rights price |
| = 292/300 |
| = 0.9733 |
### Example 2: Rights issue where subscription price is unknown and has been estimated

<table>
<thead>
<tr>
<th></th>
<th>Current price</th>
<th>Shares in issue</th>
<th>Terms:</th>
<th>Estimated price</th>
<th>Theoretical ex-rights</th>
<th>Ex-rights shares</th>
<th>Price adjustment factor</th>
<th>Ord line</th>
<th>Nil paid line</th>
<th>Call (dummy) line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current price</strong></td>
<td>USD 300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shares in issue</strong></td>
<td>300m</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Terms:</strong></td>
<td>1 for 4 at unknown price; USD 20bn being raised</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Estimated price</strong></td>
<td>(300m/4 = 75m) (USD 20bn/75m = USD 267)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Theoretical ex-rights</strong></td>
<td>(4×300) ÷ (1×267) = 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USD 293.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ex-rights shares</strong></td>
<td>375m (300m + (300m x 1/4))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Price adjustment factor</strong></td>
<td>Ex-rights price/cum-rights price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>293.3/300</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>0.9778</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ord line = 300m shares; USD 293.3 adjusted price
Nil paid line = 75m shares; USD 26.3 price (i.e. USD 293.3 - USD 267)

Following confirmation of the subscription price, the nil paid line will be deleted and the new shares will be added to the ordinary line at the subscription price T+1.

### Example 3: Highly dilutive rights issue (i.e. the terms are greater than 10 for 1)

<table>
<thead>
<tr>
<th></th>
<th>Current price</th>
<th>Shares in issue</th>
<th>Terms:</th>
<th>Theoretical ex-rights</th>
<th>Price adjustment factor</th>
<th>Ord line</th>
<th>Nil paid line</th>
<th>Call (dummy) line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current price</strong></td>
<td>USD 224</td>
<td></td>
<td></td>
<td>[(1×224) + (13×43)] ÷ 14</td>
<td>55.9/224 = 0.24968</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shares in issue</strong></td>
<td>100m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Terms:</strong></td>
<td>13 for 1 at USD 43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Theoretical ex-rights</strong></td>
<td>(1×224) + (13×43)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Price adjustment factor</strong></td>
<td>Ex-rights price/cum-rights price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USD 55.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ord line = 100m shares; USD 55.9 adjusted price
Nil paid line = 1,300m shares; USD 12.9 price (i.e. USD 55.9 - USD 43)
Call (dummy) line = 1,300m shares; USD 43 fixed subscription price

In order to include the newly enlarged capitalisation of the company (on a fully paid basis), it is necessary to include the new shares on a separate line (together with the value of the outstanding rights call price) until they trade on an equivalent basis to the existing ordinary line. This is expected to occur at the end of the subscription period, after which the nil paid line will be deleted (together with the fixed call) and consolidated into the ordinary line.

Please note: Where the nil paid line trades as a lot (e.g. each right representing 13 shares as opposed to each right representing 1 share) then the shares represented by the nil paid line will be adjusted accordingly. For illustration purposes, using the example above:

<table>
<thead>
<tr>
<th></th>
<th>Ord line</th>
<th>Nil paid line</th>
<th>Call (dummy) line</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ord line</strong></td>
<td>100m</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nil paid line</strong></td>
<td>1,300m</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Call (dummy) line</strong></td>
<td>1,300m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ord line = 100m shares; USD 55.9 adjusted price
Nil paid line = 100m shares; USD 167.7 price
Call (dummy) line = 1,300m shares; USD 43 fixed subscription price
### Example 4: Rights issue where new shares are not entitled to the next dividend

| Current price | USD 300 |
| Shares in issue | 300m |
| Next dividend | USD 16.5 |
| Terms: | 1 for 4 at USD 260 |

Theoretical ex-rights: \[
\frac{(4 \times 300) + (1 \times 260) + (1 \times 16.5)}{5} = USD 295.3
\]

Price adjustment factor: Ex-rights price/cum-rights price = 295.3/300 = 0.9843

Ord line = 300m shares; USD 295.3 adjusted price
Nil paid line = 75m shares; USD 18.8 price (i.e. USD 295.3 – USD 260 – USD 16.5)
Call (dummy) line = 75m shares; USD 260 subscription price

In order to include the newly enlarged capitalisation of the company (on a fully paid basis), it is necessary to include the new shares on a separate line (together with the value of the outstanding rights call price) until they trade on an equivalent basis to the existing ordinary line. This is expected to occur once the existing ordinary shares trade ex dividend, after which the nil paid will be deleted (together with the fixed call) and consolidated into the ordinary line.

### 4.10 Mergers, acquisitions and tender offers

Mergers and acquisitions (M&A) activity may result in changes to index membership as well as to the shares included within the index. Adjustments due to mergers and acquisitions are applied to the index after the action is determined to be final, typically after the close of the last trade date of the target company*, with provision of appropriate notice. To avoid unnecessary delays, FTSE Russell may consider merger & acquisition transactions ‘final’, prior to shareholder approval, prior to a delisting notice and when there are uncontested customary approvals outstanding (such as court sanction), if all substantive conditions have been achieved and an expected effective date (or expected last trade date for the target company) has been announced. FTSE Russell will consider prevailing shareholder sentiment, board/director recommendations, exchange notification, expected completion date and stock price versus offer value when making this decision. Additionally, in the absence of final or confirmed terms, FTSE Russell may use estimated deal terms in an effort to implement mergers and acquisitions on a timely basis**. Estimates will generally be based on either (1) company provided information, or (2) estimates calculated by FTSE Russell using publicly available information which can be used to calculate a reliable estimate.

*In the event that a constituent is being acquired for cash or delisted subsequent to an index review, it will be removed from the index concurrent with the index review assuming that the event can be considered “final” and a minimum of two days’ notice can be provided. For example, the last trade date of a constituent being acquired is confirmed for the day following the index review. The constituent will be removed from the index in conjunction with the index review, assuming that two days’ notice can be provided.

**For deals involving proration and elections, where an estimate has been used to communicate final index treatment and a confirmed rate is subsequently disclosed, a change will not be implemented at the time of the event and any updates will be reviewed during the next index review.

For deals without proration and elections (e.g. straight stock deals), where an estimate has been used to communicate final index treatment and a confirmed rate is subsequently disclosed, an update to previously communicated index treatment will be made if appropriate notice can be provided. Otherwise, the event will be implemented as previously communicated with any updates reviewed during the next index review.
In exceptional circumstances, should FTSE Russell become aware of a tender offer which is due to complete on or around the index review effective date, any review changes due to be effective for the companies involved may be retracted with advance notification. Exceptional circumstances may include undue price pressure being placed on the companies involved, or if proceeding with the changes would compromise the replicability of the index. For the avoidance of doubt, if implementing the review as normal would increase the turnover on the companies involved, no exceptional treatment would be warranted on that basis alone. Please note that it may be unavoidable for the retraction to be announced during the index review lock down period.

Tender offers are generally implemented immediately after all prerequisites (detailed below) have been achieved, with appropriate notice. Note: When non-tradable contingent value rights (CVRs) are included within the tender offer terms, FTSE Russell may consider a tender offer ‘final’ prior to the expiration date of the offer. Doing so minimises the risk of index implementation moving into “delayed” status and prevents managers who are passively investing in the index from receiving CVRs that do not carry a confirmed and realizable economic value. FTSE Russell will establish the likelihood of tender offer completion using confirmed tendered shares, board/director recommendations, exchange notifications, stock price versus deal value and any other available information.

4.10.1 Acquisition of an index constituent for cash

The target company is deleted from the index at the last traded price. In the event that trading in the target company has halted at the time of index implementation, it will be deleted from the index using the cash terms.

4.10.2 Merger between index constituents for stock

The target company is deleted from the index and the shares of the acquiring stock are increased, according to the offer terms. FTSE Russell effects the action after it has considered the transaction as final with the provision of a minimum two days notice. In the absence of an active market for the target company at the time of index implementation, the target company will be maintained and then deleted from the index using a synthetic price based on the offer terms.

4.10.3 Merger between index constituents for cash or stock, or a combination thereof

The target company is deleted from the index and the shares of the acquiring company are simultaneously increased per the merger terms.

When a merger involves elections, the following treatment applies:

- **Mix and match offer** (where the amounts of cash and shares offered by the bidder are fixed in advance and are capped): the shares of the acquirer will generally be increased in accordance with the offer terms.

  In the event that the default consideration is known prior to index implementation and using the default consideration results in a change to the acquirer of 3% (to index shares) or less versus using the mix and match consideration, the default option will be used (to limit small residual turnover for index users at the time of the event)

  If the default consideration is unknown prior to the effective date, the event will be implemented using the shares and cash being distributed;

- **Uncapped terms** (where the amounts of cash or shares offered by the bidder are not capped): the total shares of the acquirer will be increased in accordance with the election results, with the free float adjusted to account for the free float of the target. Where it can be determined that increasing the shares of the acquirer using the election results will result in a change to index shares of the acquirer of 3% or less versus the non-election consideration, the non-election terms will be used instead.
4.10.4 Constituent acquired by a non-constituent

Where a company has been acquired by a non-constituent for shares, or a combination of cash and shares, the acquiring company will be included in the target’s index provided it is eligible in all other respects at the time of the merger, regardless of previous eligibility screenings. Note, the merged company will also be assumed to inherit the target company’s liquidity and a previous liquidity screening “fail” will not be recognised. If the acquiring company has a different nationality assignment, it will be transferred to the appropriate country index, with suitable notice after the listing of the new shares. Only the shares received as a result of the acquisition will be included in the index on the effective date, any shares previously attributed to the non-constituent will be reviewed for inclusion at the next quarterly review in accordance with the shares and float update policy (see Section 5.0). The new company will be added to the index on the effective date using the offer terms (i.e. last close of the target company adjusted by the offer terms).

When a FTSE Russell Universe constituent acquires another FTSE Russell Universe constituent of a different index family (e.g. GEIS, UK Series, Russell US), the acquiring company will be added to the target company’s indices provided it is eligible for inclusion at the time of the merger. If the acquiring company has a different nationality assignment, it will be transferred to the appropriate country index, with suitable notice. The acquiring company will be included at the combined weight of the merged company and the event will be implemented using market prices (a synthetic price will be used based on the merger terms in the event that the target company has halted prior to index implementation).

4.10.5 Constituent acquires a non-constituent

Where a constituent company acquires a non-constituent for shares, or a combination of cash and shares, the shares of the constituent company will only be updated to reflect the merger when the acquired company is a FTSE Russell Universe member. Any share update will be made giving appropriate notice. Where the acquired company is not a FTSE Russell Universe member the shares in the acquiring constituent company will be reviewed at the next quarterly review.

4.11 Target company deletion

Tender offers: guidance on circumstances which will trigger a target company deletion or free float change.

The target company will normally be removed from the index with a minimum T+ 2 notice when either:

a. Offer acceptances reach 90% (initial, extension or subsequent) and
   - Shareholders have validly tendered and the shares have been irrevocably accepted for payment and
   - All pertinent offer conditions have been reasonably met and the acquirer has not explicitly stated that it does not intend to acquire or squeeze out the remaining shares, or

b. There is reason to believe that the remaining free float is under 5% based on information available at the time, or

c. Following completion of the offer the acquirer has stated intent to finalise the acquisition via a short-form merger, squeeze-out, top-up option or any other compulsory mechanism*.

The target company is deleted from the index at the last traded price. In the event that trading in the target company has halted at the time of index implementation, it will be deleted from the index at a price based on the offer terms contingent on either (1) a compulsory squeeze-out being confirmed or (2) shareholders remain able to tender their shares for the offer terms. Where the tender offer is closed without any compulsory mechanism and shareholders are unable to tender their holding with the target company suspended but expected to resume trade, FTSE Russell will generally wait until the resumption of trade prior to removing the company at market price.

In the event where a company has been deleted from the index but retains a listing with a float greater than 5%, it will be considered for index eligibility as a new issue following a period of 12 months.

(*) For constituents of the FTSE UK Index Series, the qualifying announcement is that the offer has been declared wholly unconditional.
4.12 **Target company free float change**

Where the conditions for index deletion are not met, FTSE Russell may implement a free float change based on the reported acceptance results at the expiration of the initial, subsequent, or final offer period where:

- The minimum acceptance level as stipulated by the acquirer has been met and
- Shareholders have validly tendered and the shares have been irrevocably accepted for payment and
- All pertinent offer conditions have been reasonably met;
- The change to the current float factor is greater than 3 percentage points.

FTSE Russell uses the published results of the offer to determine the new free float of the target company. If no information is published in conjunction with the results from which FTSE Russell can determine which shareholders have and have not tendered, the free float change will reflect the total shares now owned by the acquiring company. A minimum T+2 notice period of the change is generally provided. Any subsequent disclosure on the updated shareholder structure will be reviewed during the quarterly review cycle.

If the offer includes a stock consideration, the acquiring company’s shares will be increased proportionate to the free float change of the target company. If the target company’s free float change is greater than 3%, the associated change to the acquiring company’s shares will be implemented regardless of size. Additionally, if the change to the target company is less than 3%, then no change will be implemented to the target or the acquiring company at the time of the event, regardless of any change to the acquiring company’s shares.

The target company will then be deleted as a second-step, if the conditions for deletion are achieved at the expiration of a subsequent offer period.

4.12.1 **Replacing ordinary lines with tendered shares lines**

In the event that a tender offer results in an additional listed and active ‘tendered’ line prior to the tendered shares being accepted and exchanged for settlement, FTSE Russell will generally evaluate the following factors to determine whether to switch to the tendered line:

1. The objective of the offer is to fully acquire and delist the target company (and FTSE Russell is not aware of any obstacles designed to prevent this objective, e.g. there are no major shareholders who have publicly disclosed that they will not be tendering) and

2. The offer is deemed to be successful (i.e. the minimum acceptance threshold has been achieved) and

3. More than 50% of the shares subject to the offer have been tendered and

4. There is an additional tender offer period to provide a window for index users to tender into the tendered shares’ line and

5. There are outstanding regulatory or other substantive hurdles preventing the transaction completing immediately at the conclusion of the tender offer, with the results not expected to be known for some time.

Index implementation will generally occur immediately after the opening of the additional offer period (with the provision of appropriate notice) – with an informative notice published announcing the change, to supplement the information within the applicable tracker files.

In the event that the tendered line is halted prior to index implementation, its close price will be updated to reflect the deal terms until implementation.

In the event that the prerequisites for deletion are not achieved and the target company is retained within the index at a reduced weight, the tendered line will be removed at deal terms (if no active market) with the ordinary line being re-added at a reduced weight at its last close price.
4.12.2 Dividend implications

Where a company involved in an acquisition or merger is paying a dividend to its existing shareholders immediately ahead of or on completion of a merger, FTSE Russell will account for the dividend in one of the following ways:

- If the company in question has been suspended pending the acquisition or merger becoming effective, a synthetic ex-dividend adjustment (concurrent with the index application of the dividend) will be made to its last cum-price and that price will be maintained in the index until the new shares begin trading;

- If the company has not been suspended ahead of the acquisition or merger becoming effective and the newly issued shares have not been explicitly classed as non-ranking for dividend (NRD), FTSE Russell will create a synthetic dummy NRD line which will be included in the index on the effective date of the merger only and then merged with the ordinary line (now ex-div) effective for the next trading day;

- If the new merger shares are not entitled to the next dividend and an active non-ranking for dividend (NRD) line exists, this will be added to the index on the effective date of the merger per the offer terms and retained until the ordinary line trades ex-div; at which time the NRD line will be deleted and aggregated with the ordinary line.

Please note: the previous practice of applying pro-rata dividends has been discontinued except for certain headline indices as index families with different weighting schemes require different pro-ration.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Index treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constituent acquired for cash</td>
<td>Target company deleted from indices at last traded price (if trading) or at offer price (if not trading)</td>
</tr>
<tr>
<td>Constituent acquired by another constituent for shares or a combination of cash and shares</td>
<td>Target company deleted at last traded price (if trading) or at default offer terms (if not trading)</td>
</tr>
<tr>
<td>Constituent acquired by a quoted non-constituent for shares or a combination of cash and shares</td>
<td>Target company deleted at last traded price (if trading) or at default terms (if not trading)</td>
</tr>
</tbody>
</table>

4.13 Voluntary exchange offers (commonly known as “split-offs” in the U.S.)

A publicly traded company (parent) may offer to exchange or split-off some or all of its ownership in a separate publicly traded company (child). Shareholders are given the option to retain their shares, or to exchange them, in full or in part, for shares of the ‘split-off’ company. Once the offer expires, FTSE Russell will decrease the available shares in the offering company and increase the available shares of the ‘split-off’ company, based on the results of the offering. FTSE Russell will effect this change based on, but not limited to, preliminary results, company filings and exchange notices. Implementation will be contingent on the change to the parent or child FTSE Russell universe constituent being greater than 3% (to index shares). In those circumstances, any share change to the parent company will only be implemented if the impact to its index shares is 3% or greater. Exchange offers into non-index members will not result in the company being added to any indices at the time of the event.
4.14 **Spin-offs (including demergers)**

If a constituent company is split and forms two or more companies by issuing new equity to existing shareholders, then the resulting companies may be eligible to continue as constituents in the same FTSE Russell indices as their predecessor company (refer to index series ground rules for specific conditions). FTSE Russell recognises two distinct scenarios which will be implemented as follows:

4.14.1 **Spin-off of an eligible security**

The spin-off entity will be added to the same indices as the parent company, per the terms, on the ex date of the distribution. The spin-off entity will be retained in the same indices until the next quarterly review (FTSE) or annual reconstitution (Russell), where it will be re-ranked or deleted, if below the exit threshold (FTSE)/evaluated for inclusion (Russell). Where the spin-off entity has not commenced trading within 20 business days from the ex date of the distribution and no firm trading date has been announced, then it will normally be deleted at zero value with T+2 notice. Should a spin-off entity which has been removed in this way subsequently begin trading, the company will be treated as a new issue for the purposes of assessing eligibility at the following index review (it will not be subject to the twelve month exclusion rule).

Note: the ICB/RGS classifications and free float of the spun-off entity will initially mirror that of the parent. Any subsequent required ICB/RGS change to either the parent or the spun-off entity will be applied with a minimum T+2 notice period. The free float and actual shares outstanding of the spin-off company will be evaluated at the next quarterly review.

In the event of a demerger where FTSE Russell are aware that the parent company is retaining significant partial ownership of the demerged entity, the share number may be updated to reflect the total shares outstanding of the demerged entity. However, the index shares of the demerged entity will reflect the transaction terms only.

4.14.2 **Spin-off of an ineligible security**

The spin-off entity will be added to the same indices as the parent company, per the terms, on the ex date of the distribution. It will remain in the index until listing and settlement and then deleted at market price with notice. If the ineligible security does not trade on the ex date, it will remain in the index until it commences trading and then deleted after two business days at market price. Where the spin-off entity has not commenced trading within 20 business days from the ex date of the distribution and no firm trading date has been announced, then it will normally be deleted at zero value with T+2 notice.

4.14.3 **Nationality of spin-off security**

Where the spin-off company is determined to have the same nationality to that of the parent, the child company will be treated as an 'eligible security' within country (and regional if applicable) indices (provided it is eligible in all other respects). Where the spin-off company is determined to have a different nationality to that of the parent, the child company will be treated as an 'ineligible security' within country (and regional if applicable) indices. Within global indices, any nationality difference will generally not impact eligibility.

Note: the nationality of the spun-off entity will initially mirror that of the parent. Any subsequent nationality change to the spun-off entity, if required, will be applied post settlement with a minimum of two days’ notice. Should the nationality change result in the spin-off entity being included within a different region or different developed/emerging classification than the parent, the spun-off entity will also be placed within the appropriate regional index size segment (e.g. large, mid, small) based on its market capitalisation at market close on the first day of trading, measured against the published exclusion thresholds.

4.14.4 **Taxation of spin-offs**

In some spin-off transactions, the distributed stock can be subject to a withholding tax on the value of the distribution. Subject to FTSE Russell identifying that there are withholding tax implications and the distribution is valued at 10% or greater against the share price (measured against the cum price), FTSE Russell may implement an adjustment to the reflect the tax payable by applying a compensating negative XD adjustment to provide the correct return net-of-tax.
FTSE Russell withholding tax rates are used to calculate the adjustment. There is also an associated adjustment to the total return index to reflect the tax liability. Note: tax adjustments are not implemented within the Russell 3000E Index Series and the FTSE/JSE Africa Index Series.

4.14.5 Spin-off valuation

FTSE Russell will assign an estimated price to the spin-off company on the ex date open using the following valuation hierarchy, listed in order of preference:

- A ‘when-issued’ price will be used where available (child or parent);
- If no ‘when-issued’ price is available, a primary exchange estimate will be used;
- If a primary exchange estimate is unavailable, a company valuation will be used;
- If a company valuation is unavailable, a broker estimate will be used;
- If a broker estimate is unavailable, the terms of the action will be used to determine an arbitrary value for the spin-off company.

Providing an active market exists for both the parent and spin-off companies on the ex date, FTSE Russell will make no further adjustments, regardless of the actual trading price of the companies. If a valuation has been assigned per the valuation hierarchy and either the parent or spin-off has not traded on the ex date, the open positions on the ex date may be revised:

- If the spin-off company does not trade on ex date and its estimated valuation is incorrect by 10% as measured at the ex date open using the parent's drop in price;
- If the parent company does not trade on ex date and the estimated valuation of the spin-off is incorrect by 10% as measured at the ex date open comparing the price of the spin-off company against the adjustment made to the parent.

If the 10% threshold is triggered but the impact is deemed to be potentially insignificant, the basis point impact at headline index level will be evaluated per the recalculation guidelines.

If an arbitrary value has been assigned to the spin-off company and the opening price of the parent company does not drop on ex date, a revision may be made to show no price adjustment to the parent company. In these circumstances the spin-off company will remain in the index at nominal value. If the child does not trade, it will be reviewed under the suspended stocks’ rule.

If FTSE Russell can determine that the parent company in a spin-off is to consolidate its shares concurrently in order to maintain its pre spin-off market price, the terms of the action will be used to determine an accurate valuation of the child company. This is common practice in South Korea where each share of a parent company may be split proportionately between the parent and child companies. The pre spin-off price of the parent company is assigned to both the parent and the child on the ex date open.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Index divisor adjustment</th>
<th>Timing of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing constituent is split and forms two or more companies by issuing new equity to existing shareholders</td>
<td>No – A price adjustment will be applied to the parent company on the ex date by way of a capital repayment. Spun off entity is initially included in the same benchmarks as the parent company.</td>
<td>Ex date</td>
</tr>
</tbody>
</table>

4.15 Tracking stocks

A line of stock issued to “track” the fortunes of a particular division, business unit, subsidiary or group of assets of the issuing company (the “parent”) is generally referred to as a tracking stock. A distribution into a tracking stock that is scheduled to list will commonly be implemented in accordance with the spin-off guidelines within the FTSE Russell indices. A distribution into an already listed tracking stock will be implemented per the scrip issue guidelines detailed in Section 4.7.
4.16 Stock conversion

<table>
<thead>
<tr>
<th>Event type</th>
<th>Index treatment</th>
<th>Timing of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company mandatorily converts existing constituent share Class B into existing constituent share Class A</td>
<td>Shares of Class A are increased in accordance with the conversion ratio. Class B deleted at last traded price (if trading) or a synthetic price based on the conversion ratio (if not trading). No divisor adjustment only if Class B is deleted at the conversion terms Where only a proportion of a share class is being converted, shares of Class B will be reduced and shares of Class A will be increased proportionately in accordance with the conversion terms</td>
<td>Ex date</td>
</tr>
<tr>
<td>A non-constituent share class converting into a constituent share class</td>
<td>No change on the ex date. The shares of the constituent will be evaluated at the next quarterly review</td>
<td></td>
</tr>
<tr>
<td>A constituent share class converting into a non-constituent share class</td>
<td>If the non-constituent share class is eligible for index inclusion, it will replace the existing share class in accordance with the conversion ratio. Any additional shares previously attributed to the non-constituent will be evaluated at the next quarterly review</td>
<td>Ex date</td>
</tr>
</tbody>
</table>

Note: Where a Chinese company publicly announces its intention to mandatorily convert Class B shares into ineligible Class A shares, the Class B shares will be deleted with a minimum T+2 notice.

4.17 Deletions

A constituent will be deleted if it is delisted from all eligible exchanges. A constituent will be deleted if FTSE Russell becomes aware (in the country of its assigned nationality) that it has become bankrupt, has filed for bankruptcy protection, enters into administration or receivership, is insolvent or is liquidated (or local equivalents); or has filed for delisting and no regulatory or shareholder approvals are outstanding, converts into an ineligible corporate structure, or where evidence of a change in circumstances makes it ineligible for index inclusion. The stock will only be re-considered for index eligibility after a period of 12 months from its deletion. For the purposes of index eligibility, it will be treated as a new issue.

For example, if FTSE Russell becomes aware that a U.S. company has filed for Chapter 7 bankruptcy, Chapter 11 bankruptcy protection, a receiver is appointed, has filed for delisting under a Form 25 or a liquidation plan is filed, it will be removed from the FTSE Russell indices with notice. Similarly, if a UK company has moved into administration or has been declared insolvent, it will be removed with notice. If a constituent is being removed pursuant to rule 4.17 and is not trading and there is no express confirmation that shareholders will receive a fixed cash amount per share held, FTSE Russell will remove the stock at a nominal price of 0.0001. If a price on an ineligible market (e.g. OTC) is available, the constituent may be removed using this price.

Within the Russell US and derived indices, a company emerging from bankruptcy protection or insolvency will be re-considered for index inclusion at the next annual reconstitution (i.e. there will be no 12 month exclusion).

A constituent will be deleted if FTSE Russell becomes aware that the price of the constituent has reached its minimum permissible trade price. The constituent will be removed from the index in conjunction with the next index review subject to it still being at the minimum permissible trade price at the start of the quarterly review lock down period. As illustration, Indonesian constituents that have reached the minimum permissible trade price of IDR 50 per share are captured under this rule. The stock will only be re-considered for index eligibility after a period of 12 months from its deletion. For the purposes of index eligibility, it will be evaluated as a new issue.

4.18 Suspended companies*

If FTSE Russell becomes aware that a constituent is suspended, index treatment will be determined as follows:

- Unless the circumstances set out in Section 4.17 apply, the constituent will continue to be included in the index for a period of up to 20 business days at its last traded price;
If the constituent continues to be suspended at the end of that period (the suspension period), it will be subject to review. FTSE Russell will take into account the stated reasons for the suspension. These reasons may include announcements made by the company regarding a pending acquisition or restructuring and any stated intentions regarding a date for the resumption of trading. If following review, a decision is taken to remove the constituent, FTSE Russell will provide notice (via an informative notice for those index series which are supported by the index notice service*) of 20 business days (the notice period) that it intends to remove the constituent, at zero value, at the conclusion of the notice period**. If the security has not resumed trading at the conclusion of the notice period, it will be removed with two days’ notice.

*For the avoidance of doubt, constituents of those index series not supported by the index notice service will be removed at the conclusion of 40 business days, with two days’ notice.

**If during the notice period further details are disclosed as to the reason for a company’s suspension, those reasons (and any possible resumption of trade date) will be taken into account when determining if the company should remain on notice;

- If a suspended constituent resumes trading on or before the last business day of the notice period, the deletion notice will be rescinded and the constituent will be retained in the index. However, where the constituent resumes trading after the 40th business day of suspension, the constituent will continue to be removed from the index as previously announced but in these circumstances the deletion will instead be implemented at market value unless there are barriers that render a market value irreparable. In this event, the company will continue to be removed at zero;

- If the notice period expires in the week preceding an index review, the company will be removed in conjunction with the index review;

- In certain limited circumstances where the index weight of the constituent is significant and FTSE Russell determines that a market-related value can be established for the suspended constituent, for example because similar company securities continue to trade, deletion may take place at the market-related value instead. In such circumstances, FTSE Russell will set out its rationale for the proposed treatment of the constituent at the end of the suspension period. The company would then be removed at that value at the end of the notice period;

- If a constituent has been removed from the index and trading is subsequently restored, the constituent will only be re-considered for inclusion after a period of 12 months from its deletion. For the purposes of index eligibility, it will be treated as a new issue.
Section 5

Changes to shares outstanding and free float

5. Changes to shares outstanding and free float

To maintain representativeness and maximize the available investment opportunity for index managers, the FTSE Russell indices will be reviewed quarterly for updates to shares outstanding and to free floats used within the index calculation. The changes will be implemented quarterly, on the third Friday of the month (after the close), although the Russell index June reconstitution will continue to be implemented on the last Friday of June (unless the last Friday occurs on the 29th or 30th, when reconstitution will occur on the Friday prior).

In June the shares and free float updates will be implemented regardless of size (i.e. buffers will not be applied). The June updates will be implemented using data sourced primarily from company filings for all constituents and free floats will be rounded to 12 decimal places.

5.1 Quarterly updates

In March, September and December, shares outstanding and free float will be updated to reflect the following:

– Cumulative share changes greater than 1%;
– For constituents* with a free float of 5% and less, cumulative free float changes greater than 0.25 of a percentage point;
– For constituents with a free float greater than 5% but less than or equal to 15%, cumulative free float changes greater than 1 percentage point;
– For constituents with a free float greater than 15%, cumulative free float changes greater than 3 percentage points.

(*) Applies only to the FTSE Global Equity Index Series, FTSE China A Series and their derived indices.

The March, June, September and December review updates will be triggered by vendor changes and confirmed appropriately with the cut-off for new information occurring on the last business day of January, April, July and October, respectively.

Please note:

– Shares in issue is defined as the number of shares outstanding excluding shares held in treasury and unissued shares;
– Free float changes resulting from the expiry of a lock-up will be implemented at the next quarterly review subject to the lock-up expiry date occurring on or prior to the share and float change information cut-off date;
– Greenshoes (over allotment option) – those shares potentially to be offered as a greenshoe will not be included in the initial calculation of the free float of a company offering shares to the market. Following the offering, if the greenshoe option is exercised, any change to the free float will be applied at the next quarterly review.
5.2 Intra-quarter updates

Outside of the quarterly update cycle, shares and free float will be updated with at least two days’ notice if occasioned by primary or secondary offerings IF:

– There is a USD 1bn investable market cap change related to a primary/secondary offering measured by multiplying the change to index shares by the subscription price

OR

There is a resultant 5% change in index shares related to a primary or secondary offerings AND a USD 250m investable market cap change measured by multiplying the change to index shares by the subscription price. These changes will be implemented after the close on the day that the subscription period closes, assuming two days’ notice can be provided; if two days' notice cannot be provided prior to the end of the subscription period*, the change will still proceed with two days’ notice and will be implemented at the earliest opportunity.

*In exceptional circumstances, FTSE Russell may defer implementation until after the new shares are listed and with the provision of two days’ notice. An offering may be deemed exceptional if implementation prior to the listing of the new shares may cause undue price pressure on the company, or if proceeding with the changes may compromise the replicability of the index.

For example: Subscription close is Monday 4 April and discovery of the event is Friday 1 April. Therefore, implementation will occur with two days’ notice, effective on Wednesday 6 April (i.e. close of business Tuesday 5 April).

If discovery of the event occurs more than five business days after the close of the subscription period, the changes will be deferred until the next quarterly review cycle.

For example: Subscription close is Monday 4 April and discovery of the event is Monday 11 April. Therefore, implementation will occur with two days’ notice, effective on Thursday 14 April (i.e. close of business Wednesday 13 April). However, if discovery occurred after Monday 11 April, the update will be deferred until the next quarterly review.

In the absence of a disclosed subscription period, the pricing date will serve as the trigger for implementation, i.e. once FTSE Russell is aware that an offering has priced (confirmed via an appropriate publicly disclosed announcement or filing), the update will be implemented with two days’ notice from market close (contingent on the thresholds described above being triggered). If discovery of the pricing date occurs more than five business days after the pricing date, the update will be deferred until the next quarterly review.

For the avoidance of doubt, other than the circumstances detailed under ‘UK and Australian listed constituents’ below, any voluntary partial buy back or partial tender offer made by a company for a portion of their own shares will be applied as part of the quarterly review process.

UK and Australian listed constituents

Due to local regulatory requirements, UK listed companies that wish to buy more than 15% of their own shares are required to so via a tender offer buy back offered to all shareholders at a price typically at a premium to the market price. Additionally, Australian listed companies may, on occasion, offer all shareholders an equal opportunity to participate in a tender offer buy back. Under these circumstances, FTSE Russell will implement the change upon receipt of the tender offer buy back results subject to the above intra-quarter update thresholds being met (using the offer price to calculate size). Other types of buy backs (e.g. at market) will not be implemented at the time of the event.

Norwegian listed constituents

It is fairly common for Norwegian companies to carry out a subsequent repair offering to all existing shareholders that were not invited to participate in an initial equity offering. If the initial equity offering breaches the intra-quarter buffers, FTSE Russell will implement repair offerings at the close of the subscription period, regardless of size. For more information see ‘repair offerings’ above.
Please note:

a. Index shares is defined as the number of shares in issue x free float.

b. The share and free float change triggers are calculated from an international investor stance. In the event that an index constituent is represented both in a global and domestic index (e.g. FTSE UK Series and FTSE Global Equity Index Series), the update will only be implemented if the parameters are breached at global level. Such a situation may arise where a constituent is subject to a foreign ownership restriction in the global index.

c. For primary offerings and UK/AU tender offer buy backs: There will be no change to the free float with any potential updates being deferred to the next quarterly review. For example, in the event an existing restricted shareholder is diluted as a consequence of the primary offering, any change to free float will be made at the next quarterly update subject to a review of the shareholder structure at that time.

d. For secondary offerings: If the shares being offered were previously restricted, entirely or partially, the free float will be adjusted accordingly, otherwise there will be no change to the free float with any potential updates being deferred to the next quarterly review. Where all the previously restricted shares are solely being offered to another restricted holder then there will be no change to free float.

Secondary offerings are defined as share offerings of existing shares made directly by the company, by the company on behalf of selling shareholders or offerings by shareholders themselves if the appropriate filings have been submitted.

e. Share and free float changes resulting from activity such as private placements to restricted parties, exercise of warrants and expiry of lock-ups, will be deferred to the next quarterly review.

Free float and share changes resulting from corporate events will not be subject to the buffers as detailed above and will be implemented in line with the event. Please refer to the relevant section within the corporate action guide for further information.

To help address any further questions, please refer to the below FAQ in the first instance:

Shares_and_Free_Float_Maintenance_FAQ.pdf
Appendix A

Further information

A glossary of terms used in FTSE Russell’s Ground Rule documents can be found using the following link: Glossary.pdf

For contact details, please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

Website: www.lseg.com/en/ftse-russell/