FTSE Super Liquid Index Series
v3.2
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Section 1

Introduction

1.0 Introduction

1.1 This document sets out the Ground Rules for the construction and management of the FTSE Super Liquid Index Series. Copies of the Ground Rules are available from FTSE Russell.

1.2 The FTSE Super Liquid Index Series is designed to increase the ease of replication of global, regional and country based indexes while retaining the characteristics of the underlying index.

1.3 This methodology should be read in conjunction with the FTSE Global Equity Index Series, the FTSE EPRA Nareit Index Series, the FTSE UK Index Series and the FTSE ASFA Australia Index Series Ground Rules. These rules are available on www.ftserussell.com.

1.4 The Super Liquid Index Series does not take account of ESG factors in its index design.

1.5 The FTSE Super Liquid Index Series values are calculated in real-time and on an end of day basis.

1.6 Price, Net of Tax Total Return and Total Return Indexes are available.

1.7 The FTSE Super Liquid Index Series are calculated in EUR, GBP, USD, JPY and AUD.

1.8 FTSE Russell


1.9 FTSE Russell hereby notifies users of the index series that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation of, the index series and therefore, any financial contracts or other financial instruments that reference the index series or investment funds which use the index series to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series.

1.10 Index users who choose to follow this index series or to buy products that claim to follow this index series should assess the merits of the index's rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell for any losses, damages, claims and expenses suffered by any person as a result of:
• any reliance on these Ground Rules, and/or
• any errors or inaccuracies in these Ground Rules, and/or
• any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
• any errors or inaccuracies in the compilation of the Index or any constituent data.
Section 2
Management Responsibilities

2.0  Management Responsibilities

2.1  FTSE International Limited (FTSE)

2.1.1  FTSE is the benchmark administrator of the index series.¹

2.1.2  FTSE is responsible for the daily calculation, production and operation of the FTSE Super Liquid Index Series and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out the periodic index reviews of the FTSE Super Liquid Index Series and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the indexes.

2.1.3  FTSE is also responsible for monitoring the performance of the FTSE Super Liquid Index Series throughout the day and will determine whether the status of the index should be ‘firm’, ‘indicative’ or ‘held’.

2.2  Status of These Ground Rules

2.2.1  These Ground Rules set out the methodology and provide information about the publication of the FTSE Super Liquid Index Series.

2.3  Amendments to these Ground Rules

2.3.1  These Ground Rules shall be subject to regular review by FTSE Russell to ensure that they continue to best reflect the aims of the index series. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Product Governance Board before approval is granted.

¹ The term administrator is used in this document in the same sense as it is defined in Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the European Benchmark Regulation).
2.3.2 As provided for in the Statement of Principles for FTSE Russell Equity Indexes, where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the Statement of Principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Ground Rules should subsequently be updated to provide greater clarity.
Section 3

FTSE Russell Index Policies

3.0 FTSE Russell Index Policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed using the links below:

3.1 Corporate Actions and Events Guide

3.2 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Cap Weighted Indexes using the following link:

Corporate_Actions_and_Events_Guide_for_Non_Market_Cap_Weighted_Indices.pdf

3.3 Statement of Principles for FTSE Russell Equity Indexes (the Statement of Principles)

3.3.1 Indexes need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles which summarises 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 Product Governance Board.

The Statement of Principles can be accessed using the following link:


3.4 Queries, Complaints and Appeals

3.4.1 A constituent or prospective constituent company (or professional advisor acting on behalf of the company), a national organisation or a group of no fewer than ten users of the Indexes from different organisations acting in their professional capacity may appeal against decisions taken by FTSE Russell.

FTSE Russell’s complaints procedure can be accessed using the following link:

Benchmark_Determination_Complaints_Handling_Policy.pdf

FTSE Russell’s Appeal Process can be accessed using the following link:

Appeals_Against_Decisions.pdf
3.5 **Index Policy for Trading Halts and Market Closures**

3.5.1 Guidance for the treatment of index changes in the event of trading halts or market closures can be found using the following link:

[Index_Policy_for_Trading_Halts_and_Market_Closures.pdf](Index_Policy_for_Trading_Halts_and_Market_Closures.pdf)

3.6 **Index Policy in the Event Clients are Unable to Trade a Market**

3.6.1 Details of FTSE Russell’s treatment can be accessed using the following link:

[Index_Policy_in_the_Event_Clients_are_Unable_to_Trade_a_Market.pdf](Index_Policy_in_the_Event_Clients_are_Unable_to_Trade_a_Market.pdf)

3.7 **Recalculation Policy and Guidelines**

3.7.1 The FTSE Super Liquid Index Series is recalculated whenever errors or distortions occur that are deemed to be significant. Users of the FTSE Super Liquid Index Series are notified through appropriate media.

For further information please refer to the FTSE Russell Recalculation Policy and Guidelines document which is available on the FTSE Russell website using the link below or by contacting info@ftserussell.com.

[Recalculation_Policy_and_Guidelines_Equity_Indexes.pdf](Recalculation_Policy_and_Guidelines_Equity_Indexes.pdf)

3.8 **Policy for Benchmark Methodology Changes**

3.8.1 Details of FTSE Russell’s policy for making benchmark methodology changes can be accessed using the following link:

[Policy_for_Benchmark_Methodology_Changes.pdf](Policy_for_Benchmark_Methodology_Changes.pdf)
Section 4

Eligible Securities

4.0 Eligible Securities

4.1 The FTSE Super Liquid Index Series consists of indexes whose constituents are selected from the underlying indexes in the following table. Underlying indexes must contain a minimum of 50 constituents.2

<table>
<thead>
<tr>
<th>Underlying Index</th>
<th>FTSE Super Liquid Index</th>
<th>Base Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE 100 Index</td>
<td>FTSE UK Large Cap Super Liquid Index</td>
<td>GBP</td>
</tr>
<tr>
<td>FTSE 250 Index</td>
<td>FTSE UK Mid Cap Super Liquid Index</td>
<td>GBP</td>
</tr>
<tr>
<td>FTSE 350 Index</td>
<td>FTSE UK Large and Mid Cap Super Liquid Index</td>
<td>GBP</td>
</tr>
<tr>
<td>FTSE Developed Large Cap Index</td>
<td>FTSE Developed Large Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE Developed Europe Large Cap Index</td>
<td>FTSE Developed Europe Large Cap Super Liquid Index</td>
<td>EUR</td>
</tr>
<tr>
<td>FTSE Developed Europe ex UK Large Cap Index</td>
<td>FTSE Developed Europe ex UK Large Cap Super Liquid Index</td>
<td>EUR</td>
</tr>
<tr>
<td>FTSE Developed Eurozone Large Cap Index</td>
<td>FTSE Developed Eurozone Large Cap Super Liquid Index</td>
<td>EUR</td>
</tr>
<tr>
<td>FTSE USA Large Cap Index</td>
<td>FTSE USA Large Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE USA Small Cap Index</td>
<td>FTSE USA Small Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE Developed Asia Pacific Large Cap Index</td>
<td>FTSE Developed Asia Pacific Large Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE Japan Large Cap Index</td>
<td>FTSE Japan Large Cap Super Liquid Index</td>
<td>JPY</td>
</tr>
</tbody>
</table>

### Table

<table>
<thead>
<tr>
<th>Underlying Index</th>
<th>FTSE Super Liquid Index</th>
<th>Base Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE Developed Asia Pacific ex Japan Large Cap Index</td>
<td>FTSE Developed Asia Pacific ex Japan Large Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE Emerging Large Cap Index</td>
<td>FTSE Emerging Large Cap Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE ASFA Australia 200 Index</td>
<td>FTSE Australia Super Liquid Index</td>
<td>AUD</td>
</tr>
<tr>
<td>FTSE Spain All Cap Index</td>
<td>FTSE Spain Super Liquid Index</td>
<td>EUR</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Global Developed Index</td>
<td>FTSE EPRA Nareit Global Developed Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed REITs Index</td>
<td>FTSE EPRA Nareit Developed REITs Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed Europe Index</td>
<td>FTSE EPRA Nareit Developed Europe Super Liquid Index</td>
<td>EUR</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed Asia Pacific Index</td>
<td>FTSE EPRA Nareit Developed Asia Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE EPRA Nareit US Index</td>
<td>FTSE EPRA Nareit US Super Liquid Index</td>
<td>USD</td>
</tr>
<tr>
<td>FTSE Developed ex Fossil Fuels Index</td>
<td>FTSE Developed ex Fossil Fuels Super Liquid Index</td>
<td>USD</td>
</tr>
</tbody>
</table>

### 4.2 Construction

#### 4.2.1

The FTSE Super Liquid Index Series are constructed from the most liquid stocks in each industry of the underlying index. Liquidity information from the previous 252 trading days is used to select stocks. The index size is determined from the liquidity of the underlying index over the preceding three years, subject to a banding rule. Liquidity is measured using a combination of:

- **Traded Value** = Closing Price $\times$ Daily Volume
- **Price Impact Ratio** = $\frac{\text{Traded Value}}{\text{Local Absolute value of Daily Return}}$

#### 4.3

Traded Value is calculated in the base currency of the FTSE Super Liquid Index.
Section 5

**Periodic Review of Constituents**

5.0 **Periodic Review of Constituents**

5.1 The index universe for each FTSE Super Liquid Index is defined by the constituents of the relevant underlying index as described in Rule 5.1.

5.2 The review will have the following procedures:

A. A stock must have traded for at least 60 or more days to be considered for inclusion in a FTSE Super Liquid Index.

B. Median Traded Value – for each stock in the underlying index, calculate the traded value for the last 252 trading days including days on which a stock is suspended and take the median value.

C. Normalise the median Traded Values to lie between 0 and 1, higher values imply greater liquidity.

D. Price Impact Ratio – for each stock in the underlying index calculate the absolute market impact for the last 252 trading days including days on which a stock is suspended and take the median. Values will be ignored for days with no price change.

E. Normalise the list of median Price Impact Ratio values to lie between 0 and 1, higher values imply greater liquidity.

F. Combined Liquidity Measure (CLM) – combine the normalised traded value and normalised Price Impact Ratio: $\text{CLM} = \text{Traded Value (Rule 5.2C)} + \text{Price Impact Ratio (Rule 5.2E)}$.

G. Sort the CLM values into descending order.

5.3 Define the number of components in an index:

A. Calculate the Realised Basket Liquidity (RBL):

$$\text{RBL} = n \left(1 - \frac{\sum_{i=1}^{n} \text{CLM}_i}{\sum_{i=1}^{N} \text{CLM}_i}\right)$$

B. Where $\text{CLM}_i$ is the Combined Liquidity Measure of stock $i$, $n$ is the possible number of stocks in the index and $N$ is the total number of stocks in the underlying index. Here $n=1, 2 \ldots N$ and $\text{CLM}_1$ is the top ranked (most liquid) stock in the sorted list of CLM values from Rule 5.2G.

C. Determine $n$ which corresponds to the RBL maximum. This defines the number of stocks in the FTSE Super Liquid Index.

D. The minimum index size is 20. If $n$ is less than this then set $n=20$. 
If after initiation of the FTSE Super Liquid Index, the underlying index size falls below 20 then the FTSE Super Liquid Index size will be equal to the underlying index size, up to a minimum of 10 stocks.

5.4 Define the stock selection criteria:

5.4.1 For Global All Cap Index Series and UK Index Series Derived Super Liquid Indexes

A. Diversification – Determine the number of stocks in each of the ten industries from Industry Classification Benchmark (ICB). For example, suppose the underlying index has 100 stocks, Oil & Gas has 25 stocks and \( n = 35 \); then the equivalent contribution to Oil & Gas in the FTSE Super Liquid Index will be \( \text{ind}_{\text{no.}} = \frac{25}{100} \times 35 = 8.75 = 9 \) (rounding to the nearest integer) stocks.

B. Selection – In each industry select the highest ranked CLM stocks, subject to \( \text{ind}_{\text{no.}} \) for that industry.

C. If due to the rounding of the \( \text{ind}_{\text{no.}} \) there are less or more stocks than the desired \( n \), then add the next most liquid (according to their CLM) stocks available for selection or drop the least liquid stocks already selected, irrespective of industry, to ensure an index size of \( n \).

D. Weighting and capping – Determine the free-float market capitalisation weights. Each company in the FTSE Super Liquid Index is capped at 10% on a quarterly basis on the second Friday of the month.

E. If the underlying index is a global level index (e.g. the FTSE Developed Large Cap Index) then prior to the industrial selection (Rule 5.4.1A) the number of stocks in each region is determined. For example, if the underlying index contains 100 stocks and the Asia Pacific region contains 40 stocks and \( n=35 \); then the number of constituents in the Asia Pacific region of the FTSE Super Liquid Index will be \( nr = \frac{40}{100} \times 35 = 14 \) (rounding to the nearest integer). Diversification is then determined for the \( nr \) stocks of each region according to Rule 5.4.1A.

5.4.2 The FTSE UK Large Mid Cap Super Liquid Index constituents consist of the FTSE UK Large Cap Super Liquid Index and FTSE UK Mid Cap Super Liquid Index, constituents weighted and capped according to 6.4.1D.

5.4.3 FTSE EPRA Nareit Super Liquid Indexes

Super Liquid Indexes derived from the FTSE EPRA Nareit Index Series are diversified by region only.

A. Select the most liquid \( n \) stocks according to their CLM from the available stocks.

B. Weighting and capping – Determine the free-float market capitalisation weights. Each company in the FTSE Super Liquid Index is capped at 10% on a quarterly basis on the second Friday of the month.

C. If the underlying index is a global level index (e.g. the FTSE EPRA Nareit Developed Index) then prior to any stock selection (Rule 5.4.3.A) the number of stocks in each region is determined. For example, if the underlying index contains 100 stocks and the Asia-Pacific region contains 40 stocks and \( n=35 \); then the then the number of constituents in the Asia Pacific region of the FTSE Super Liquid Index will be \( nr = \frac{40}{100} \times 35 = 14 \) (rounding to the nearest integer). The \( nr \) stocks of each region are then selected according to Rule 5.4.3.A.

5.4.4 Weight and Capping

The calculation of the constituent capping factors \( (c) \) will be based on prices at close on the second Friday of the review month using shares in issue and investability weights as designated to take effect after close on the third Friday of the review month (i.e. taking effect on the review effective date).
The calculation will take into account any corporate actions/events that take effect after close on the second Friday of the review month up to and including the review effective date if they have been announced and confirmed by the second Friday of the review month.

Corporate actions / events announced after the second Friday of the review month that become effective up and including the review effective date will not result in any further adjustment.

5.5 **Review frequency**

5.5.1 The following table shows the review timetable:

<table>
<thead>
<tr>
<th>FTSE Super Liquid Index</th>
<th>FTSE Super Liquid Index Review Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE UK Large Cap Super Liquid Index</td>
<td>Annual / June (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE UK Mid Cap Super Liquid Index</td>
<td>Annual / June (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE UK Large and Mid Cap Super Liquid Index</td>
<td>Annual / June (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Europe Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Europe ex UK Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Eurozone Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE USA Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE USA Small Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Asia Pacific Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Japan Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Developed Asia Pacific ex Japan Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Emerging Large Cap Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Australia Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE Spain Super Liquid Index</td>
<td>Annual / September (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed Super Liquid Index</td>
<td>Annual / March (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed Europe Super Liquid Index</td>
<td>Annual / March (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed Asia Super Liquid Index</td>
<td>Annual / March (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>Index</td>
<td>Annual / March (cut-off date - close of Wednesday before 1st Friday)</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>FTSE EPRA Nareit US Super Liquid Index</td>
<td></td>
</tr>
<tr>
<td>FTSE EPRA Nareit Developed REITs Super Liquid Index</td>
<td></td>
</tr>
<tr>
<td>FTSE Developed ex Fossil Fuels Super Liquid Index</td>
<td></td>
</tr>
</tbody>
</table>

5.5.2 All indexes will be implemented after the close of business on the third Friday (i.e. effective Monday) of the review month, in line with the underlying index.
Section 6

Changes to Constituent Companies

6.0 Changes to Constituent Companies

6.1 Additions

6.1.1 New issues will be eligible for inclusion in the FTSE Super Liquid Index Series at the next relevant review.

6.2 Removal

6.2.1 For Super Liquid indexes derived from the FTSE Global All Cap Index Series, if a constituent is removed from the underlying index it will be removed from the relevant FTSE Super Liquid Index. The removal will be concurrent with its removal from the underlying index.

6.2.2 For Super Liquid indexes derived from the FTSE EPRA Nareit Index Series, if a constituent is removed from the underlying index it will be removed from the relevant FTSE Super Liquid Index. The removal will be concurrent with its removal from the underlying index.

6.2.3 For Super Liquid indexes derived from the FTSE UK Index Series, if a constituent is removed from the underlying index series it will be removed from the relevant FTSE Super Liquid Index. The removal will be concurrent with its removal from the underlying index series.

6.2.4 For Super Liquid indexes derived from the FTSE ASFA Australia Index Series, if a constituent is removed from the underlying index it will be removed from the relevant FTSE Super Liquid Index. The removal will be concurrent with its removal from the underlying index.
Section 7

Corporate Actions and Events

7.0 Corporate actions and events

7.1 If a constituent has a stock split, stock consolidation, rights issue, bonus issue, a change in the number of shares in issue or a change in free float, the constituent’s weighting in the FTSE Developed ex North America Diversified Factor Index will remain unchanged pre and post such an event.

7.2 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indexes using the following link:

Corporate_Actions_and_Events_Guide_for_Non_Market_Cap_Weighted_Indexes.pdf

A Corporate ‘Action’ is an action on shareholders with a prescribed ex date. The share price will be subject to an adjustment on the ex date. These include the following:

- Capital Repayments
- Rights Issues/Entitlement Offers
- Stock Conversion
- Splits (sub-division) / Reverse splits (consolidation)
- Scrip issues (Capitalisation or Bonus Issue)

A Corporate ‘Event’ is a reaction to company news (event) that may 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. Where an index adjustment is required FTSE Russell will provide notice advising of the timing of the change.

7.3 Suspension of Dealing

Suspension of Dealing rules can be found within the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indexes.

7.4 Takeovers, Mergers and Demergers

The treatment of takeovers, mergers and demergers can be found within the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indexes.

7.5 Mergers, restructuring and complex takeovers

7.5.1 If a FTSE Super Liquid Index constituent has a corporate action which involves a merger or takeover, the resulting company will be included in the FTSE Super Liquid Index Series if it remains a member
of the relevant underlying FTSE Global All Cap Index, the underlying FTSE EPRA Nareit Index or the FTSE UK Index Series.

7.5.2 If a FTSE Super Liquid Index constituent has a corporate action which involves a spin-off, the newly spun-off entity will be included in the FTSE Super Liquid Index Series. Where the spun-off entity is not a constituent of the underlying index in the FTSE Global All Cap Index Series, the FTSE EPRA Nareit Index Series, the FTSE UK Index Series or the FTSE ASFA Australia Index Series or it is the smaller of the parent and spun-off entities, it will remain in the FTSE Super Liquid Index Series for 2 trading days and then be deleted at market price or if no market price is available, at zero value.

7.6 Suspended Companies

7.6.1 FTSE Russell’s treatment can be found using the following link:

[Suspended_Companies_Rule.pdf](#)
Section 8

Changes to the Classification of Constituent Companies

8.0 Changes to the Classification of Constituent Companies

8.1 Classification structure

8.1.1 The FTSE Super Liquid Index Series constituents are classified into Industries, Supersectors, Sectors and Subsectors, as defined by the Industry Classification Benchmark (ICB).

8.1.2 Details of the Industry Classification Benchmark are available from FTSE Russell and published on the FTSE Russell website (www.ftserussell.com) and can be accessed using the following link:

Industry_Classification_Benchmark
9.0 Indexes algorithm and calculation methodology

9.1 Prices
9.1.1 The FTSE Super Liquid Index Series will use actual last trade prices, where available, for securities.
9.1.2 Thomson Reuters real-time exchange rates are used in the real-time index calculations.

9.2 Index calculation
9.2.1 The FTSE Super Liquid Index Series calculation formula is as follows:

\[
\sum_{i=1}^{N} \left( \frac{p_i \times e_i \times s_i \times f_i \times c_i}{d} \right)
\]

Where,

- \(i=1,2,\ldots,N\)
- \(N\) is the number of securities in the index.
- \(p_i\) is the latest trade price of the component security (or the price at the close of the index on the previous day).
- \(e_i\) is the exchange rate required to convert the security's currency into the index's base currency.
- \(s_i\) is the number of shares in issue used by FTSE Russell for the security, as defined in these Ground Rules.
- \(f_i\) is the Investability Weighting Factor to be applied to a security to allow amendments to its weighting, expressed as a number between 0 and 1, where 1 represents a 100% free float. This factor is published by FTSE Russell for each security in the underlying index.
- \(c_i\) is the Capping Factor to be applied to a security to correctly weight that security in the index. This factor maps the investable market capitalisation of each stock to a notional market capitalisation for inclusion in the index.
- \(d\) is the divisor, a figure that represents the total issued share capital of the index at the base date. The divisor can be adjusted to allow changes in the issued share capital of individual securities to be made without distorting the index.
## Appendix A: Indexes Opening and Closing Hours

<table>
<thead>
<tr>
<th>Index</th>
<th>Open</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE UK Large Cap Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE UK Mid Cap Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE UK Large and Mid Cap Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE Developed Large Cap World Super Liquid Index</td>
<td>00:30</td>
<td>21:10</td>
</tr>
<tr>
<td>FTSE Developed Large Cap Europe Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE Developed Large Cap Europe ex UK Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE Developed Eurozone Large Cap Super Liquid Index</td>
<td>08:00</td>
<td>16:30</td>
</tr>
<tr>
<td>FTSE USA Large Cap Super Liquid Index</td>
<td>14:30</td>
<td>21:10</td>
</tr>
<tr>
<td>FTSE USA Small Cap Super Liquid Index</td>
<td>14:30</td>
<td>21:10</td>
</tr>
<tr>
<td>FTSE Japan Large Cap Super Liquid Index</td>
<td>23:50</td>
<td>06:20</td>
</tr>
<tr>
<td>FTSE Emerging Super Liquid Index</td>
<td>00:30</td>
<td>21:10</td>
</tr>
<tr>
<td>FTSE All Cap Spain Super Liquid Index</td>
<td>08:00</td>
<td>16:40</td>
</tr>
<tr>
<td>FTSE EPRA Nareit North America Super Liquid Index</td>
<td>14:30</td>
<td>21:10</td>
</tr>
</tbody>
</table>

Timings are UK hours.
Appendix B: Status of Indexes

The FTSE Super Liquid Index Series are calculated in real-time and may exist in the following states:

A) Firm
   The index is being calculated using trade prices from the relevant local stock exchanges for all constituents during the hours of the Official Index Period.
   The Official Closing Index for the real time indexes is the last index value calculated at the end of the firm period.

B) Closed
   When the index has ceased all calculations for the day, the message 'CLOSED' is displayed against the index value.

C) Held
   During the firm period, the index has exceeded pre-set operating parameters and calculation has been suspended pending resolution of the problem. The message 'HELD' is displayed against the last index value calculated.

D) Indicative
   If there is a system problem or a situation in the market that is judged to be affecting the quality of the constituent prices at any time when the index is being calculated, the index will be declared indicative. The message 'IND' will be displayed against the index value.

The official opening and closing hours of the FTSE Super Liquid Index Series are set out in Appendix A. Variations to the official hours of the indexes will be published by FTSE Russell.
Appendix C: Further Information

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

Glossary.pdf

Further information on the FTSE Super Liquid Index Series is available from FTSE Russell.

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

Website: www.ftserussell.com