# GROUND RULES FOR THE MANAGEMENT OF THE GreTai 50 Index

#### CHAPTER 1 INTRODUCTION

The constituents of the GreTai 50 Index are sorted by market value, after considering each company's free float and turnover, and come out these 50 constituents. The GreTai 50 index is calculated by market cap weighted and float-adjusted, where each stock's weight in the index is proportional to its float-adjusted market value. The GreTai 50 Index is designed to represent the performance of GreTai Market Securities(hereafter GTSM).

#### CHAPTER 2 MANAGEMENT RESPONSIBILITIES

# 2.1 The GreTai 50 Index Advisory Committee and its membership

- 2.1.1 The GreTai 50 Index Advisory Committee (hereafter Advisory Committee) is responsible for undertaking the review of the GreTai 50 Index, for approving changes of constituents and ground rules.
- 2.1.2 The Advisory Committee is formed by 3 internal members(which are appointed by GTSM) and 4 external members. GTSM appoints the Chairman. The Chairman will chair meetings of the Committee and will represent that Committee outside meetings.

# 2.2 Secretary to the Advisory Committee

- 2.2.1 A Secretary to the Advisory Committee is appointed by the GTSM to support the work of the Committee. The Secretary will maintain a record of constituent changes to the GreTai 50 Index and is responsible for the timely publication of all constituent changes.
- 2.2.2The Secretary will recommend for the approval of the Advisory Committee which companies, if any, should be inserted and deleted at the periodic review (see rule 5, 2).
- 2.2.3 Other than the periodic review, the Secretary will seek the approval of the Chairman of the Advisory Committee before deleting or inserting constituents of the GreTai 50 Index. The Chairman may request that a full meeting of the Committee be convened to consider a proposed change of constituent should any one of them consider it appropriate to do so. The Secretary will inform the Advisory Committee of all constituent changes as soon as possible after the change has been approved and he/she is responsible for the timely publication

of changes of constituents.

# 2.3 Index calculations method and management

- 2.3.1 GTSM is responsible for designation, calculation and dissemination of the GreTai 50 Index.
- 2.3.2 GTSM will carry out the quarterly review of the GreTai 50 Index and implement the resulting constituent changes as required by the Ground Rules.
- 2.3.3 GTSM will maintain records of the market capitalization of all constituents and reserve companies

#### CHAPTER 3 ELIGIBLE SECURITIES

# 3.1 Sampling scope

The stocks listed on GTSM are eligible to join GreTai 50 Index, except managed stocks, emerging stocks, and altered-trading-method stocks.

### 3.2 Qualification Criteria

#### 3.2.1 Market Value

All eligible securities to be the constituents of GreTai 50 Index will be ranked by full market capitalization(before the application of any free float restrictions).

# 3.2.2 Market Cap Weighted

- 3.2.2.1 The entire quoted equity capital of a constituent company is included in the calculation of its market capitalization, subject to the following free float restrictions:
  - (1) Shares held by directors, supervisors, managerial officers, including those held by their spouses, minor children and those held under the names of other parties.
  - (2) Shares held by shareholders holding more than ten percent of the total shares, including those held by their spouses, minor children and those held under the names of other parties.
  - (3) Shares have been imposed restrictions by Competent Authority and the restrictions have not yet been lifted.
- 3.2.2.2. The initial weighting of a constituent in the index will be applied in the following bands.

Free float(%)	Free float factor(f)
% ≤ 5%	ineligible
5% < % \le 15%	actual free float
$15\% < \% \le 20\%$	20%

Free float(%)	Free float factor(f)
$20\% < \% \le 30\%$	30%
30% < % ≤ 40%	40%
$40\% < \% \le 50\%$	50%
50% < % ≤ 75%	75%
75% < %	100%

- (1)Following the application of an initial free float restriction, a constituent's free float will only be changed if its actual free float is more than 5 percentage points above the minimum or 5 percentage points below the maximum of an adjacent band. This 5 percentage points threshold does not apply to those free float less than or equal to 15%.
- (2)A constituent's free float will also be reviewed and adjusted if necessary following a corporate event. If the corporate event includes a corporate action that affects the index, any change in free float will be implemented at the same time as the corporate action. If there is no corporate action, the change in free float will be applied as soon as practicable after the corporate event. See CHAPTER 7 CHANGES TO CONSTITUENT WEIGHTINGS
- (3)Foreign ownership limits, if any, will be applied after calculating the actual free float restriction, but before applying the bands detailed in Rule 3.2.2.1 above. If the foreign ownership limit is more restrictive than the free float restriction, the precise foreign ownership limit is applied. If the foreign ownership limit is less restrictive or equal to the free float restriction, the free float restriction is applied, subject to the bands in Rule 3.2.2.1 above.
- (4) The free float applying the bands detailed in Rule 3.2.2.1 of constituents ranked in 41st or below and non-constituents in reserve list chose according to Rule 5.3 should higher than 50%.
- 3.2.2.3The GreTai 50 Index uses the last trade prices from the automated trade matching system, when available.

# 3.2.3 Liquidity

- 3.2.3.1. Constituents of GreTai 50 Index will be reviewed annually in July for liquidity as follow:
- (1) Prospective constituents: Securities which do not turnover at least 1% of their shares in issue, after the application of any free float restrictions, per month for ten of the twelve months prior to the annual review in July by the Advisory Committee will not be eligible for inclusion in the GreTai 50 Index.
- (2) Existing constituent: An existing constituent failing to trade at least 1% of its shares in issue, after the application of any free float restrictions, per month for

more than four of the twelve months prior to the annual review will be deleted after close of the index calculation on the third Friday in July.

- 3.2.3.2 The candidates must turnover a minimum of 1% of their shares in issue, after the application of any free float restrictions, per month on a pro rata basis.
- 3.2.3.3 In exceptional market conditions, if trading volumes are very low, the Advisory Committee may reduce the percentage figure stated 3.2.3.1 above in order to avoid a large number of constituents being deleted from the GreTai 50 Index. This discretion may not be applied to individual securities. If the Advisory Committee intends to exercise this discretion, it must make a public statement to that effect at least two weeks prior to its quarterly review.
- 3.2.3.4 Liquidity test will be conducted in accordance to 3.2.3.1 in the initial review.

#### CHAPTER 4 INDEX CALCULATION METHOD

# 4.1 Calculation Frequency

- 4.1.1 GreTai 50 Index is calculated in real-time and published every 5 seconds Stock Market Trading Times.
- 4.1.2 The Total Return Index is based on ex dividend adjustments. Total Return Index is published at the end of each business day.

# 4.2 Index Algorithm

The index is calculated using the algorithm described below.

$$\sum_{i=1}^{50} \frac{\left(p_i \times s_i \times f_i\right)}{d}$$

i =The number of securities in the Index

p = The latest trade price of the constituent.

s = Shares in Issue.

f =Free Float Factor

d =Divisor

#### CHAPTER 5 REVIEW OF CONSTITUENTS

#### 5.1 Review Dates

5.1.1 The quarterly reviews of the GreTai 50 Index constituents take place in January, April, July and October. The meeting to review the constituents will be held on the Thursday after the first Friday of January, April, July and October using data from the close of the last business day in March, June, September and

- December. Any constituent changes will be implemented on the next business day following the third Friday of the same month of the review meeting.
- 5.1.2 The annual review will take place at the same time as the July quarterly review, where in addition to the standard review process liquidity will also be tested
- 5.1.3 Details of the outcome of the review and the dates on which any changes are to be implemented, will be published as soon as possible after the Advisory Committee meeting has concluded.

# 5.2 Rules for Insertion and Deletion at the Quarterly Review

- 5.2.1 The rules for inserting and deleting companies at the quarterly review are designed to provide stability in the selection of constituents of GreTai 50 Index while ensuring that the Index continues to be representative of the market by including or excluding those companies which have risen or fallen significantly.
- 5.2.2 A company will be inserted at the periodic review if its market value rises above  $40^{th}$  among the eligible securities.
- 5.2.3 A company will be deleted at the periodic review if its market value falls below 61<sup>st</sup> among the eligible securities.
- 5.2.4 A constant number of constituents will be maintained for the GreTai 50 Index. Where a greater number of companies qualify to be inserted in the Index than those qualifying to be deleted, the lowest ranking constituents presently included in the index will be deleted to ensure that an equal number of companies are inserted and deleted at the periodic review. Likewise, where a greater number of companies qualify to be deleted than those qualifying to be inserted, the securities of the highest ranking companies which are presently not included in the Index will be inserted to match the number of companies being deleted at the periodic review.

#### 5.3 Reserve Lists

- 5.3.1 The Secretary to the Advisory Committee is responsible for publishing the 15 highest-ranking non-constituents of GreTai 50 Index following each quarterly review. This Reserve List will be used in the event that one or more constituents is deleted from GreTai 50 Index (see CHAPTER 6) during the period up to the next quarterly review of the Index.
- 5.3.2 In the event that only 5 Reserve List stocks remain available for GreTai 50 Index, the Secretary will publish additional 3 or 5 Reserve List stocks.

#### CHAPTER 6 CHAGES TO CONSTITUENTS COMPANIES

# 6.1 Removal and Replacement

- 6.1.1 If a constituent is delisted, or is subject to a takeover or has, in the opinion of the Chairman and Deputy Chairman of the Advisory Committee (or their nominated deputies), ceased to be a viable constituent as defined by the Ground Rules, it will be deleted from the list of constituents and, in case of GreTai 50 Index, it will be replaced by the highest ranking company by full market capitalization eligible on the Reserve Lists at the close of the index calculation two days prior to the deletion.
- 6.1.2 The removal and replacement are effected simultaneously.
- 6.1.3 In the case of a takeover, the qualifying event is an announcement that the offer has been approved by any appropriate regulatory body, confirmation that at least 75% acceptance levels have been received and that any new shares of the bidding company (if applicable) are listed.
- 6.1.4 Constituents deleted in accordance with Rule 6.1, but which continue to trade thereafter will be considered for re-inclusion in the index at the next review, but at least 6 months has passed between deletion and the implementation date of the changes arising from the review.

# 6.2 Mergers, Takeovers and Splits

- 6.2.1 If the effect of a merger or takeover is that one constituent is absorbed by another constituent in GreTai 50 Index, the resulting company will remain a constituent of the Index and a vacancy will be created. This vacancy will be filled by selecting the highest ranking security by full market capitalization from the Reserve List as at the close of the index calculation two business days prior to the deletion.
- 6.2.2 If a constituent company in GreTai 50 Index is merged or acquired by a non-constituent company, if the company resulting from the takeover is eligible, it will replace the acquired company in the index. If the resulting company is not eligible, the acquired company will be replaced by the highest ranking company on the Reserve List as at the close of the index calculation two business days prior to the replacement.
- 6.2.3 If a constituent company is split so as to form two or more companies and carry out a capital reduction, should be adjusted in accordance with Rule 6.4.

#### 6.3 New Issues

6.3.1 If a new issue is so large that the effectiveness of the Index as the market indicator would be significantly and adversely affected by its omission, the Advisory Committee may decide to insert the new issue as a constituent of GreTai 50 Index. To qualify, the company must have a full market

capitalization which would ensure the company joins the GreTai 50 Index in 20<sup>th</sup> position or higher, before the application of individual constituent investability weightings. In such a case, the Advisory Committee will normally insert the company after the close of business on the fifth day of official trading and advance notification will be given accordingly. The Fast Entry stock is not required to have a minimum trading record or to pass a liquidity test. The security which is the lowest ranking constituent by full market capitalization of GreTai 50 index will be selected for removal.

- 6.3.2 New issues, which do not qualify as fast entrants to GreTai 50 Index as defined will become eligible for inclusion at the next quarterly review, providing they have a minimum trading record of at least 20 business days prior to the date of the review and turnover of a minimum of 1% per month of their shares in issue, after the application of any free float restrictions.
- 6.3.3 For the purpose of this Rule, a company which is resumed after suspension or is reorganized or which arises from a merger, takeover, or split with another company which is non-constituent, shall not be considered to be a new issue.

# 6.4 Suspension of Dealing

- 6.4.1 If a constituent from GreTai 50 Index is suspended on the GTSM, it may remain in the index for up to 10 business days. During this time, the Chairman and deputy Chairman of Advisory Committee may agree to delete the constituent immediately at its suspension price. If a constituent from GreTai 50 Index is suspended due to issuance of new replacement shares resulting from capital reduction or consolidation, it may remain in the index.
- 6.4.2 Where a suspension of a constituent lasts beyond the tenth business day, the constituent will normally be deleted from the index at its suspension price.
- 6.4.3 If the suspended company is deleted from the index, it will be replaced with the highest company on the Reserve List that ranked by full market capitalization as at the close of the index two business days prior to the replacement.

#### 6.5 Resuming of Suspended Constituents

6.5.1 A constituent which is deleted from GreTai 50 Index in accordance to 6.4 will become eligible for inclusion at the next quarterly review in case of resumption of the trading.

#### 6.6 Altered-Traded-Method Stocks

6.6.1 If GTSM placed a constituent under an Altered-Trading-Method method, that constituent will be deleted from GreTai 50 Index after close of the fifth business

day following the day when classified as an Altered-Trading-Method Stock. The highest-ranking reserve list company, by full market capitalization as of the close of the day when the constituent is classified as an Altered-Trading-Method Stock, will be selected to replace the deleted constituent. Where GTSM reinstate an Altered-Trading-Method Stock as a normal settlement trading stock, the company will be reviewed at the next Advisory Committee meeting, subject to being eligible for index inclusion.

#### CHAPTER 7 CHANGES TO CONSTITUENT WEIGHTINGS

- 7.1 If a corporate action is applied to an index constituent that involves a change in the number of shares in issue, the change in shares will be applied simultaneously with the corporate action.
- 7.2 Changes of shares in issue not arising from corporate actions, amounting to less than 10% of the number of shares in issue but more than 1% will be made quarterly after the close of business on the third Friday of March, June, September and December.
- 7.3 Changes of shares in issue not arising from corporate actions, amounting to 10% or more of the number of shares in issue will be implemented between quarters. A minimum of 4 business days notice will be given to users of the index.
- 7.4 All adjustments are made before the start of the index calculation on the day concerned, unless market conditions prevent this.

# CHAPTER 8 AMENDMENTS AND EXCEPTIONS TO THE GROUND RULES

- 8.1 In the event that the Advisory Committee or any of those responsible for the operation and administration of GreTai 50 Index consider that an exception should be made to any of the Ground Rules, the issue must be brought to the attention of the Chairman or Deputy Chairman of the Advisory Committee, who will normally put the matter to the full Advisory Committee for a decision. If, however, the matter is urgent, the Chairman is collectively empowered to authorize an exception on behalf of the Advisory Committee but must immediately notify, and subsequently refer the matter to, a meeting of the Advisory Committee.
- 8.2 Where an exception is granted to the Ground Rules, it shall not be deemed to create a precedent for future decisions of the Advisory Committee.
- 8.3 Material changes to the Ground Rules are announced after the Advisory Committee's quarterly meeting at which they are agreed, but will not come into effect until after they have been confirmed at the following quarterly meeting, in

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