



Baltic Exchange

Air Freight Index

Powered by TAC data™

Baltic Air Freight Guide

Version 1.0 – November 2020

Published by

Baltic Exchange Information Services Ltd

Document History

Version	Action <i>(Amendment/update/ new release)</i>	Author & Title <i>(Name of person responsible for action)</i>	Date <i>(Date of action)</i>	Comment
1.0	New Release	D. Lad Compliance	Nov- 20	Original Version released

Preface

The Baltic Air Freight Guide makes clear that a great deal of due care is taken to ensure the weekly air freight shipment data (reference prices) provides an accurate and fair reflection of the air cargo market.

It is the aim for BEISL BAI (air freight benchmarks)¹ to be used by a variety of market participants whether as a Carrier, Shipper, Freight Forwarder, General Sales Agents and those involved in the air cargo supply chain, but also by economists, journalists, market analysts and others who may wish to monitor trends in the air cargo market.

The Baltic builds on its established reputation for shipping benchmarking and extensive shipping portfolio to apply its expertise in benchmark administration activity alongside TAC. TAC specialises in the compilation and determination of industry reference price data using specialist software technology. As a leading administrator of shipping freight indices for regulated and IOSCO compliant benchmarks, the Baltic shall be the Administrator of the air cargo benchmarks contained within the Air Freight Guide.

The Air Freight Guide, where possible, ensures compliance with 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 and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (the **BMR**).

The Air Freight Guide has been produced and designed in order to ensure compliance with Title II of the BMR requirements set out therein, alongside the IOSCO Principles for Financial Benchmarks (IOSCO PFBs) the latter being treated as a framework of standards for recommended practice.

¹ Please note for the present purposes, the reference to benchmarks in the air freight guide is regarded as an 'index' as defined by Article 3(1)(1) of the BMR.

Contents

Section Page

1	Introduction to the Air Freight Guide	2
2	Governance Structure	3
3	Independence of the Administration of BEISL Benchmarks	9
4	Overview of Benchmark Methodology	11
5	Benchmark Changes and Cessation.....	13
6	Data Provider Code of Conduct	18
7	Data Providers.....	21
8	The BEISL Assessor	24
9	Calculating Agent	26
10	Audits and Quality Control	30
11	Conflicts of Interest.....	32
12	Complaints	44
13	Whistleblowing	47
14	Prevention of market abuse and reporting of infringements	53
15	Confidentiality and Transparency.....	56
16	Operational Risks	57
17	Compliance	59
	APPENDIX 1 Region and Index Specification Guide.....	61
	APPENDIX 2	62
	APPENDIX 3 Density-Based Spatial Clustering of Applications with Noise (“DBSCAN”)	64
	APPENDIX 4 Waterfall Method for Data Density	66
	APPENDIX 5 Benchmark Business Continuity and Disaster Recovery Plan	67
	APPENDIX 6 Glossary	73

1 Introduction to the Air Freight Guide

1.1 About the Baltic Exchange Limited

1.1.1 The Baltic Exchange Ltd (the **Baltic**) is a wholly owned subsidiary of the Singapore Exchange Ltd (SGX). It operates as a membership organisation within the international shipping marketplace and currently has around 600 member companies worldwide. Its revenues derive principally from membership subscriptions and payments by members to its subsidiary company, Baltic Exchange Information Services Ltd (**BEISL**), for access to its freight market information as well as from property. The Baltic also derives revenues from licences for access to its information from clearing houses operating in the freight derivatives market and from information vendors and software application providers active in the financial markets.

1.1.2 BEISL publishes a wide range of shipping market reports, fixture lists and market rate indicators on a daily and (in some cases) weekly or quarterly basis. For this purpose, BEISL licences from the Baltic the rights to make use of its brand name in the production and publication of the data. The Baltic is not directly involved in the production, management or distribution of the data and it is BEISL which is herein documenting its processes. References to the Baltic refer to the Baltic Exchange Limited and all its subsidiaries, including BEISL.

1.1.3 BEISL outsources to the Calculating Agent the provision of benchmarks related to:

- (i) collecting, analysing or processing Relevant Data for the purpose of determining a benchmark; and
- (ii) determining a benchmark through the application of a formula or other method of calculation or by an assessment of Input Data provided for that purpose.

1.2 About the Air Freight Guide

1.2.1 BEISL air freight benchmarks are produced in a brand partnership with TAC Index Limited. BEISL as the benchmark administrator shall retain all primary responsibility for discharging all administrator obligations whilst benchmark determination shall be outsourced to TAC Index alongside the delegation of any relevant responsibilities as the Calculating Agent.

1.2.2 The Air Freight Guide documents the process for the definition, determination and management of the air freight benchmarks calculated by TAC Index and administered by BEISL.

1.2.3 The Air Freight Guide will be updated as required to reflect necessary changes to practice, including any regulatory changes.

2 Governance Structure

2.1 Overview of governance arrangements

2.1.1 BEISL maintains robust and transparent governance arrangements for the provision of its benchmarks. The management body for the administrator is the BEISL Board of Directors (BEISL Board). The benchmark determination process is carried out by the Calculating Agent but managed by BEISL with approval to the determined air freight indices carried out by BEISL employees. BEISL ensures that all its employees and other persons whose services are placed at BEISL's disposal and who are directly involved in the provision of benchmarks have the necessary skills, knowledge and experience that correspond to their duties. The oversight function for benchmarks provided by BEISL is exercised by the BEISL Oversight Function.

2.2 The BEISL Board

Role and responsibilities

2.2.1 The overall responsibility for the administration of the benchmarks belongs to the BEISL Board, which is the key management body responsible for establishing credible and transparent governance, oversight and accountability procedures for the benchmarks. The BEISL Board is assisted by the Baltic Air Index Council (BAIC) in respect of all air freight benchmarks provided by BEISL, as described in Section 2.3 below.

2.2.2 In particular, it is the responsibility of the BEISL Board to:

- (1) Set the strategy, objective and overall direction of BEISL as benchmark administrator;
- (2) Oversee BEISL management decision-making;
- (3) Govern the appointment of new members to the BAIC, taking into account the recommendations of the BAIC;
- (4) Implement BEISL's control framework, including by:
 - (i) Ensuring the integrity of the benchmark determination process; and
 - (ii) Putting in place effective systems, arrangements and procedures for the implementation of such a control framework;
- (5) Monitor and govern adherence to the Air Freight Guide by BEISL employees (including Assessors) and third parties involved in the provision of benchmarks, and, if and when appropriate, make decisions about any remedial actions required, taking into account the recommendations of the BEISL Oversight Function;
- (6) Monitor and govern adherence to the Air Freight Guide by Data Providers and, if and when appropriate, make decisions about any remedial actions required, taking into account the recommendations of the BAIC
- (7) Monitor and ensure the Calculating Agent's compliance with the Air Freight Guide, with the BMR and any other applicable legislation
- (8) Monitor and ensure BEISL's compliance with the Air Freight Guide, with the BMR and any other applicable legislation;
- (9) Govern the changes to the Air Freight Guide, including in relation to:
 - (i) Benchmark changes, by:

- (a) Implementing changes to existing benchmarks;
 - (b) Governing development of new benchmarks, by taking into account input from the BAIC; and
 - (c) Implementing cessation of benchmarks.
- (ii) Other changes to the Air Freight Guide, by:
- (a) Governing changes to the Air Freight Guide relating to BEISL benchmark methodology taking into account input from the BAIC;
 - (b) Governing other changes to the Air Freight Guide, not relating to BEISL benchmark methodology, taking into account input from the BAIC; and
 - (c) Conducting reviews of BEISL benchmark methodologies at least annually or as market conditions require.
- (10) Implement the relevant policies and procedures preventing conflicts of interests in the determination of BEISL's benchmarks; and
- (11) Investigate and manage cases of complaints and appeals concerning BEISL, its benchmarks or benchmark methodologies.

Composition and decision-making

2.2.3 The BEISL Board is composed of up to four (4) directors. Its decision-making, rules of proceedings and procedures for appointment are set in the BEISL's Articles of Association.

2.3 The Baltic Air Index Council²

2.3.1 The BAIC assists the BEISL Board in administration of BEISL benchmarks by providing input to the BEISL Board as described in the following section.

2.3.2 In particular, it is the responsibility of the BAIC to:

- (1) Provide input to the BEISL Board on the appointment of new members to the BAIC, including:
 - (i) Conducting suitable vetting processes on candidates; and
 - (ii) Providing recommendations to the BEISL Board for their final review and appointment.
- (2) Provide input to the BEISL Board and BEISL Oversight Function on adherence to the Air Freight Guide by Data Providers, including by:
 - (i) Receiving periodic reports from the Compliance Department about:
 - (a) The Data Provider's adherence to the Air Freight Guide; and
 - (b) The quality of Input Data contributed by the Data Provider's.
 - (ii) Review the reports and, if and when appropriate:

² Please note, the BAIC is not presently operational and for the interim, all BAIC roles and responsibilities are governed by the BEISL Board in its capacity as the key management body for BEISL.

- (a) Formulate suitable recommendations to the BEISL Board; and/or
 - (b) Submit reports to the BEISL Oversight Function.
- (3) Provide input to the BEISL Board and BEISL Oversight Function on adherence to the Air Freight Guide by the Calculating Agent, including by:
 - (i) Receiving periodic reports from the Compliance Department about the Calculating Agent's adherence to the Air Freight Guide; and
 - (ii) Review the reports and, if and when appropriate:
 - (a) Formulate suitable recommendations to the BEISL Board; and/or
 - (b) Submit reports to the BEISL Oversight Function
- (4) Assist the BEISL Board on governing changes to the Air Freight Guide, including in relation to:
 - (i) Benchmark changes, by:
 - (a) Monitoring the market representativeness of existing benchmarks and providing input for changes to existing benchmarks, by putting forward specific recommendations to the BEISL Board;
 - (b) Providing input to the BEISL Board on development of new benchmarks;
 - (c) Providing input for cessation of benchmarks by putting forward specific recommendations to the BEISL Board;
 - (ii) Other changes to the Air Freight Guide, by:
 - (a) Providing input for changes to the Air Freight Guide relating to BEISL benchmark methodology by putting forward specific recommendations to the BEISL Board;
 - (b) Providing input to the BEISL Board on other changes to the Air Freight Guide, not relating to BEISL benchmark methodology, including justifications thereof stemming from market developments.
- (5) Submit regular annual reports to the BEISL Board on the relevant developments in air freight markets.

Composition

- 2.3.3 The BAIC shall comprise of three (3) persons, including a Chairman, who are senior market practitioners;
- 2.3.4 Detailed provisions regarding the BAIC membership selection criteria and appointment procedure are set out in the Terms of Reference of the Baltic Air Index Council ("The BAIC Terms of Reference"). Also included in the BAIC Terms of Reference are organisational rules and procedures applicable to the BAIC.

2.4 **BEISL Oversight Function**

Role and responsibilities

2.4.1 BEISL is obliged by law to establish an oversight function. Such a function for BEISL air freight benchmarks is performed by the BEISL Oversight Function. The BEISL Oversight Function is responsible for providing oversight of the overall functioning of the BEISL benchmark administration business.

2.4.2 In particular, it is the responsibility of the BEISL Oversight Function to:

- (1) Oversee the implementation of BEISL's control framework, including by overseeing:
 - (i) The management and operation of benchmarks administered by BEISL;
 - (ii) The code of conduct for Data Providers;
 - (iii) BEISL's adherence to the published benchmark methodologies; and
 - (iv) The Calculating Agent's adherence to the published benchmark methodologies;
- (2) Oversee adherence to the Air Freight Guide by BEISL employees (including Assessors) and third parties involved in the provision of benchmarks, including by:
 - (i) Conducting annual reviews of BEISL's arrangements with third parties, including providers of outsourced functions;
 - (ii) Receiving periodic reports from the Assessors regarding their compliance with the Air Freight Guide and formulating recommendations to the BEISL Board if and when any remedial action is deemed necessary;
- (3) Oversee adherence to the Air Freight Guide by Data Providers, including by:
 - (i) Receiving periodic reports from the BAIC about:
 - (a) The Data Provider's adherence to the Air Freight Guide; and
 - (b) The quality of Input Data contributed by Data Providers; and
 - (ii) Review the reports and, if and when appropriate:
 - (a) Taking effective measures in respect of any breaches of the Air Freight Guide by the Data Providers by putting forward specific recommendations to the BEISL Board; and/or
 - (b) Reviewing actions of BEISL in challenging or validating contributions of Input Data.
- (4) Oversee adherence to the Air Freight Guide by the Calculating Agent, including by:
 - (i) Receiving periodic reports from the BAIC about the Calculating Agent's adherence to the Air Freight Guide; and
 - (ii) Review the reports and, if and when appropriate taking effective measures in respect of
 - (a) Any breaches to the Air Freight Guide by the Calculating Agent by putting forward specific recommendations to the BEISL Board; and/or

- (b) Reviewing the actions of the Calculating Agent in challenging or validating contribution of Input Data;
- (5) Assess internal and external audits and reviews, and monitor the implementation of remedial actions, if identified.
- (6) Report to the Financial Conduct Authority any misconduct by the Calculating Agent, Data Providers, Assessors or BEISL, of which the BEISL Oversight Function becomes aware, and any anomalous or suspicious Input Data, unless such report has already been submitted by the Compliance Department.
- (7) Oversee changes to the Air Freight Guide, including in relation to:
 - (i) Benchmark changes, by:
 - (a) Reviewing and approving procedures for making changes to existing benchmarks;
 - (b) Reviewing and approving procedures for development of new benchmarks; and
 - (c) Reviewing and approving procedures for cessation of benchmarks; and
 - (d) Reviewing BEISL Board's adherence with the Air Freight Guide in implementing changes to, and cessation of, existing benchmarks.
 - (ii) Changes to benchmark methodologies, by:
 - (a) Overseeing proposed changes to the Air Freight Guide relating to BEISL methodology and, if and as required, request the BEISL Board to consult the market on such changes;
 - (b) Conducting reviews of the definition and methodologies of benchmarks administered by BEISL at least annually or as market conditions require.

Composition

2.4.3 The composition of the BEISL Oversight Function shall be independent from the composition of the BEISL Board and the BAIC. Members of the BEISL Oversight Function cannot be involved in the provision of a benchmark subject to oversight and/or any governance arrangements concerning that benchmark.

2.4.4 The BEISL Oversight Function shall be organised in a form of a committee, composed of at least three (3) voting members that meet the selection criteria as set out in the BEISL Oversight Function Terms of Reference.

2.5 Outsourcing arrangements

2.5.1 For the purpose of the benchmark determination process BEISL outsources certain limited benchmark determination and technology functions to external service providers. The relevant outsourcing arrangements allow BEISL to maintain ultimate control over the provision of benchmarks. BEISL remains solely responsible for discharging all its responsibilities and regulatory obligations as an administrator. In particular, BEISL ensures that the service providers it engages with have the ability, capacity, and if relevant, any authorisation required by law, to perform the outsourced functions, services or activities in a reliable and professional manner.

2.5.2 For the purpose of outsourcing of BEISL's technology provisions details governing the outsourcing arrangements are set out in the *Oversight of the Outsourcing Arrangements* policy.

3 Independence of the Administration of BEISL Benchmarks

3.1 Independence of benchmark governance

- 3.1.1 The methodology for the calculation of air freight benchmarks determined by the Calculating Agent and administered by BEISL is more fully set out in Section 4 (*Overview of Benchmark Methodology*) of this document. This Section 3 focuses on the independence of the governance and supervisory process.
- 3.1.2 Neither the Baltic nor any of its operating companies invests in or trades physical or financial air freight assets or rates. Likewise, neither the Calculating Agent nor any of its operating companies invest in or trade physical or financial air freight assets or rates for which it is the Calculating Agent.
- 3.1.3 Conflicts of interests are managed in accordance with the Baltic's conflicts of interest policy set out in Section 11 (*Conflicts of Interest*) of this Air Freight Guide. They are also minimised by the establishment of the BAIC which has responsibility for assisting the BEISL Board in the administration of the air freight benchmarks. Furthermore, the diversity of interests represented on the BAIC strengthens the independence of the air freight benchmarks.
- 3.1.4 The BAIC is not involved in the day-to-day index determination process. BAIC members may be employed by Data Provider companies. Relevant Data submission shall be a fully automated process with Relevant Data being transaction data only.
- 3.1.5 All Relevant Data received from the Data Providers is treated in the strictest of confidence by BEISL. Access to Input Data by the BAIC members is not permitted except on a historic basis for forensic and audit purposes where the data will be anonymised to preserve confidentiality. The circumstances where such Input Data may not be anonymised are: (i) in the context of assisting the BEISL Board on governing changes to the Air Freight Guide in relation to providing input to the BEISL Board on development of new benchmarks; or (ii) in order to comply with the BMR.
- 3.1.6 The Senior Assessor reports directly to the CEO of the Baltic. He or she may raise any matters concerning the benchmarks in confidence with the Chairman of the Baltic, the Compliance Department, the BAIC, or BEISL Oversight Function, if he or she wishes.

3.2 Employees dealing restrictions

- 3.2.1 Employees of the Baltic and any of its subsidiaries are not permitted to invest in or trade freight derivatives. They are also not permitted to invest in private air freight companies or indirect investment companies such as hedge funds and private equity firms which specifically target the air freight market. Investments managed at arms' length by a third party are not restricted by this section. Should an employee be in any doubt as to the acceptability of an investment then they are required to raise it with the CEO.
- 3.2.2 Investment by employees in the shares of listed shipping companies, either directly or via collective investment vehicles (mutual funds) is acceptable as part of a long-term investment process. Day trading or short-term investment is not appropriate nor is the use of spread betting or similar products where they relate to the air freight market.
- 3.2.3 All employee policies are contained within the Baltic Group Staff Handbook, a copy of which is provided to personnel when their employment commences. Amendments to the Group Staff Handbook are also distributed to employees as required.
- 3.2.4 The Senior Assessor, Assessors and all other employees are required to declare their compliance with Baltic's dealing restrictions annually.

3.3 **Remuneration**

- 3.3.1 The Baltic's staff remuneration policy ensures that there is no link between the performance of any of the benchmarks administered by BEISL and remuneration of employees and/or contractors involved in the provision of the benchmarks.

4 Overview of Benchmark Methodology

- 4.1.1 BEISL air freight benchmarks are calculated using confirmed transactions as its primary price capturing mechanism sourced from Data Providers (Freight Forwarders).
- 4.1.2 For the avoidance of doubt, Data Providers are regarded as 'Contributors' as defined by Article 3(1)(9) of the BMR. As such, BEISL's benchmarks are based on Contributions of Input Data.
- 4.1.3 BEISL adopts a standardised transaction driven methodology and where an active market exists, pricing information shall be sourced based on confirmed transactional and shipment data. Transactional data is sourced on a weekly basis together with shipment evidence throughout the previous week. In conducting the benchmark determination process, raw transactional data provided by the Data Providers is assessed and categorised through a pre-defined set of parameters. This process ensures Input Data used in the determination process can be corroborated, traceable and verifiable.

4.2 Relevant Data and Input Data

- 4.2.1 On a weekly basis, every Monday, Data Providers upload to the Calculating Agent their cargo shipments for the preceding week, Monday to Sunday. The Relevant Data consists of Master Airwaybills (MAWB) and the House Airwaybills (HAWB) data.
- 4.2.2 MAWB and HAWB data is matched by the Calculating Agent and verified, non-matching Relevant Data is excluded from the Input Data, which is subsequently used to determine the benchmarks.
- 4.2.3 Transactions are grouped into routes defined by pairs of the origin port and destination port (OD pairs). Distributions of the prices and weights within the data are statistically analysed and compared against historical distributions of these against other time periods. Any discrepancies are investigated, traced back to the Data Providers, and non-validated Relevant Data is excluded from the Input Data.
- 4.2.4 Outliers in the Relevant Data are excluded from the Input Data using a density-based, data clustering algorithm, marking outliers that lie in low density regions.³ The parameters applied in terms of cluster size and distance of clusters are determined from the Relevant Data according to the DBSCAN algorithm.
- 4.2.5 Input Data is based on the Actual Net Price per Kilo (ANP) for each transaction, being the total cost on the MAWB divided by the total actual weight on the MAWB.

$$ANP = \frac{MAWB\text{Cost}}{MAWB\text{Weight}}$$

4.3 Route Parameters and Calculation

- 4.3.1 Routes are calculated from the Input Data based on the applicable origin port and the destination ports listed in the Destination Region⁴.
- 4.3.2 Data Providers are ranked for each route both for total weight shipped (largest) and number of shipments (volume). If a Data Provider has more than 40% of the volume their ranking will be capped at 40% and the balance allocated on a prorate basis.

³ A 'Density-Based Spatial Clustering of Applications with Noise ("DBSCAN") see Appendix 4

⁴ Countries are grouped into Destination Regions according to IATA definitions - see Appendix 1

Data Density

4.3.3 BEISL will not usually publish a route unless the following criteria⁵ are met:

- (i) Minimum of three Data Providers
- (ii) Minimum of 20 shipments over three destination ports
- (iii) The weight threshold is greater than 20mt when

$$\text{WeightThreshold} = \text{TotalWeightShipped} - \text{WeightShippedLargestDataProvider}$$

4.3.4 If any data criteria has not been met on a route, Relevant Data will be re-analysed to determine whether any transactions have been misclassified. Where a cluster classified as containing outliers but contains transactions replicated by multiple carriers it indicates that it has been misclassified and the data within that cluster is representative of the market.

4.3.5 Should the data criteria still not be met after re-analysing the Relevant Data then additional data points will contribute following the waterfall methodology⁶.

Route Calculation

4.3.6 For each Data Provider an average ANP value is calculated for the route.

4.3.7 A weighted ANP average by Data Provider is then calculated for the route; the weighting reflecting each Data Provider's volume ranking on that route.

4.3.8 Transactions for a route R reported on by Data Providers D1, D2, ..., Dn in descending order of volume ranking for the route V1, V2, ..., Vn and given Average (R, Di, ..., Dj) being the average ANP value for Di, ..., Dj on the route R, then the value for route R is calculated as:

$$\frac{\sum_{i=1}^n (\text{Average}(R, Di) \times Vi)}{\sum_{i=1}^n Vi}$$

4.3.9 The result is rounded to two decimal points.

⁵ Threshold criteria is reviewed annually

⁶ Waterfall methodology – See Appendix 4

5 Benchmark Changes and Cessation

5.1 Overview of benchmark changes and cessation

- 5.1.1 As a Benchmark Administrator BEISL is under an obligation to ensure integrity of the benchmarks it provides. In doing so, it needs to take into the account the characteristics of the air freight market. It is a characteristic of the air freight marketplace that trade patterns change over time, all of which need to be reflected in the benchmark methodologies.
- 5.1.2 BEISL's index methodologies are subject to regular review to ensure that they continue to meet the requirements for index users and to set a high standard in its benchmarking activities.
- 5.1.3 While BEISL seeks to ensure that all relevant characteristics of the air freight market are reflected in the benchmark methodologies, it is possible that certain factors will necessitate changes to, or cessation of, one or more of the benchmarks administered by BEISL. These circumstances may be due to external factors beyond the control of BEISL, internal strategic decisions or voluntary discontinuations.
- 5.1.4 Benchmark cessation shall be the permanent discontinuation of the determination and administration of a benchmark.

5.2 Potential reasons for benchmark change and cessation

- 5.2.1 This section applies to instances in which it might become necessary or appropriate to change or cease any of the benchmark calculation, definition or publication due to circumstances, including but not limited to:
- (i) Legislative or regulatory change that would deem further provision of a benchmark impossible or otherwise unsustainable;
 - (ii) Changes in the underlying market which result in a benchmark becoming no longer representative of the economic reality it intends to measure, due to factors including (but not limited to) lack of sufficient data and/or developments in physical air freight markets;
 - (iii) Request from an applicable regulatory body requiring BEISL to change or cease the benchmark methodology;
 - (iv) A prolonged implementation of a contingency measure where remediation is not possible or achievable;
 - (v) BEISL becoming unable to continue to determine the benchmark in a reliable fashion;
 - (vi) A benchmark provision becoming economically unsustainable;
 - (vii) Limited or no use of a benchmark as a reference in financial instruments;
 - (viii) Change in economic reality, market demand or product strategies affecting BEISL's benchmark administration activities;
 - (ix) On the recommendation of the BEISL Board or BEISL Oversight Function; and
 - (x) Issues raised by stakeholders including users and subscribers of a benchmark
- 5.2.2 To this end, BEISL shall keep under review:
- (i) The representativeness of the market;
 - (ii) The users of a benchmark and the use to which they apply the benchmark; and

(iii) The structure and liquidity of the market underlying each benchmark

5.2.3 In its review of the above, BEISL may take the view that a benchmark is no longer representative of its intended interest, and that this cannot be remedied by a corrective change to the benchmark.

5.3 **General Principles**

5.3.1 BEISL shall have regard to the following general principles when considering or executing a proposed material change to or a cessation of its benchmarks listed in this Air Freight Guide:

- (i) Consideration to be given to a potential impact on stability of the financial market;
- (ii) Consideration to be given to the potential economic and financial impact;
- (iii) Recognition that for the physical air freight marketplace, trade patterns change over time which shall be reflected in BEISL's benchmark methodology;
- (iv) Recognition that in respect of derivatives market, consideration to be given to outstanding open interest as well as the usage made of long-term physical deals;;
- (v) Consideration of any applicable regulatory and/or financial implications that may result from contracts and financial instruments that reference the benchmarks; and
- (vi) The practicality of maintaining parallel benchmarks (where feasible) in order to accommodate an orderly transition to a new benchmark

5.4 **Benchmark change or cessation plan**

5.4.1 When BEISL determines a proposed material change to or cessation of its benchmarks, BEISL will proceed with the execution of a change or cessation plan in accordance with the table set out in Section 5.6 below. To this end, BEISL will give due consideration to the following:

- (i) **Consultations-** BEISL shall conduct necessary consultations with the Data Providers, Baltic members and other stakeholder groups, as appropriate.
- (ii) **Provision of adequate notice-** Where possible BEISL shall inform the market with as much notice as practical after the consultation process. Such notice shall be given by way of circulars that are directly distributed to members of the Baltic Exchange and also published on the Baltic website or any third-party platforms. BEISL may also communicate through the Baltic Advisory Councils, forums and newsletters.
- (iii) **Provision of interim arrangements-** If deemed appropriate, BEISL shall develop interim procedures and practices to ensure that the determination and administration of BEISL benchmarks is continued over set period of time in order to permit existing contracts to migrate where necessary.
- (iv) **Relevant third parties and stakeholders-** Where appropriate, relevant third parties should be incorporated into the planning, design, and implementation phases that may reduce transition risks

5.5 **Benchmark methodology change: materiality**

5.5.1 BEISL shall, if deemed necessary, seek the recommendations from the BEISL Oversight Function in making a determination as to materiality.

5.5.2 In determining a material change, BEISL shall have regard to:

- (i) Any fundamental change to the definition or determination process of a benchmark methodology;
 - (ii) A significant change related to a potential cessation of a benchmark, including interim arrangements to a new benchmark;
 - (iii) A change to the maturities in which a benchmark is published; or
 - (iv) Any other change deemed material as determined on a case-by-case basis
- 5.5.3 Changes to document formatting shall not constitute a material change to benchmark methodology and shall not be subject to the roles and responsibilities outlined in Section 5.6.2 below.
- 5.5.4 If BEISL determines that a proposed change is appropriate to the quality and representativeness of the benchmark with regards to the underlying market and economic reality but does not constitute a material change to the benchmark methodology, BEISL shall amend and publish the benchmark methodology.
- 5.5.5 If BEISL determines that a proposed change is appropriate to the quality and representativeness of the benchmark with regards to the underlying market and economic reality and does not constitute a material change to the benchmark methodology, BEISL shall execute the steps outlined in Section 5.6.2 below.
- 5.6 Allocation of responsibilities and benchmark change or cessation procedure**
- Roles and responsibilities*
- 5.6.1 Upon encountering circumstances for a proposed material change to or cessation of its benchmarks, BEISL shall execute its responsibilities as outlined in Section 5.6.2 below.
- 5.6.2 The following table provides an overview of the roles and responsibilities to be executed in the event of a proposed material change to or cessation of a benchmark:

Role	Responsibilities
BEISL (Senior Managers/ Compliance Department and Senior Assessor)	<p><u>Analysis and investigation</u></p> <p>BEISL shall carry out an analysis and consider the benchmark usage, liquidity in the underlying markets and availability of data sourced from Data Providers, contracts and financial instruments that reference the benchmark, and the impact on economic and financial stability that might result from a material change to or cessation of the benchmark.</p> <p><u>Consultations</u></p> <p>Upon completing the analysis, BEISL shall carry out its consultations as set out in Section 5.4.1(i) above.</p> <p><u>Detailed benchmark change or cessation plan</u></p> <p>BEISL shall prepare a detailed benchmark change or cessation plan ("Plan"), including timelines and process for consulting relevant stakeholders, and submit it for approval to the BEISL Board.</p>
BEISL Board	<p>Inform BEISL Oversight Function and the BAIC without undue delay about the circumstances justifying the proposed material change or cessation of a benchmark.</p> <p>Review and approve the Plan prepared by BEISL and submit the Plan without undue delay to the BAIC for comments.</p> <p>Implement the proposed material change or cessation of the benchmark in accordance with the agreed Plan and in coordination with the BAIC.</p>
Baltic Air Index Council (BAIC)	<p>Provide comments and recommendations to the BEISL Board on the Plan.</p> <p>Assist the BEISL Board in implementing the Plan by governing the benchmark change or cessation process.</p> <p>In accordance with Section 3 of the BAIC Terms of Reference, put forward recommendations to the BEISL Board in relation to implementation of the benchmark change or cessation process.</p>
BEISL Oversight Function	<p>Review the material benchmark change or cessation of the benchmark in accordance with this document and the Plan submitted by BEISL to the BEISL Board.</p>

5.7 Emergency benchmark change, benchmark cessation or suspension (Force Majeure)

- 5.7.1 It is possible that in extreme circumstances beyond the control of BEISL, it becomes necessary to change, cease or even suspend a benchmark with little notice and consultation. This may include (but is not limited to) a sudden change in circumstances or markets resulting in it being impossible to produce a viable benchmark, and impossible to source alternative remedial action.
- 5.7.2 Under these extreme circumstances, BEISL will ensure that all relevant information including back-up plans, and where possible and appropriate, information on alternative benchmarks is published for users and stakeholders as soon as practically possible. BEISL will also ensure that updates are given promptly as circumstances evolve.

5.8 **Timing and notice**

5.8.1 Any proposed timing and notice by BEISL shall take into account the following:

- (i) If the change or cessation of a benchmark is a regulatory requirement or the effect of any regulatory, legal or other provisions;
- (ii) The urgency, if any, of changing, ceasing or where appropriate, suspending a benchmark;
- (iii) The extent and impact, if any, of IT and operational issues;
- (iv) The duration of any consultations;
- (v) The amount of notice to be given to the marketplace in order to allow them to take appropriate action; and
- (vi) To the extent a third-party service provider is involved, the extent and impact, if any, on the services provided.

5.9 **External Engagement**

5.9.1 In the process of implementing a benchmark change or cessation procedure, BEISL shall take all reasonable steps to maintain open and transparent communication with all relevant stakeholders, including benchmark users and Baltic members.

5.9.2 BEISL shall also provide prompt notifications to the Financial Conduct Authority including information about (1) initiation of the benchmark material changes or cessation procedures and (2) conclusion of the benchmark changes or cessation procedures and any phase out periods, if applicable.

5.10 **Record Keeping**

BEISL shall maintain relevant records if it intends to implement a material change or cease a benchmark. In particular (but not limited to), records relating to the reason for a material change, cessation, relevant discussions, meeting minutes, key communications and consultation points shall be retained for a minimum of five years.

5.11 **Document review and approval**

BEISL shall review this document on an annual basis or whenever a material change or cessation of a benchmark is undertaken.

6 Data Provider Code of Conduct

6.1 Purpose

6.1.1 In accordance with Article 15 BMR, BEISL is required to develop a code of conduct for benchmarks that are based on contribution of Input Data from Contributors. For the purpose of the air freight benchmarks determination, Data Providers are deemed “Contributors” within the meaning of Article 3(1)(9) BMR. Consequently, the following section of this Air Freight Guide sets out the Code of Conduct for Data Providers. It should be read in conjunction with the other sections of this Air Freight Guide. In order to ensure reliability, accuracy and robustness of the air freight benchmarks, it is important that Data Providers adhere to this Code of Conduct at all times. In order to protect the integrity of air freight benchmarks, BEISL may not accept Input Data from Data Providers who do not adhere to this Code of Conduct.

6.2 Input Data Requirements

6.2.1 The Data Provider shall ensure that all Relevant Data that it contributes meets the relevant Input Data description as set out in Section 4 (*Overview of Benchmark Methodology*) of this Air Freight Guide. This includes requirements in respect of the type of Input Data that can be provided, the required standards of quality and accuracy of the Input Data, the minimum quantity of Input Data and order of priority in which Input Data is to be provided as well as the frequency and timing of submissions.

6.2.2 The Data Provider shall have in place the appropriate policies and procedures to allow timely adjustments to and standardisation of the Relevant Data. At a minimum, the Data Provider shall comply with the technical requirements for data upload – including Relevant Data upload format – as set out in the onboarding documentation provided.

6.2.3 The Data Provider shall establish and maintain appropriate policies and procedures regarding reporting of regulatory infringements as well as measures for monitoring, detecting and reporting suspected or actual market abuse.

6.3 Relevant Data Submission

6.3.1 Data Providers shall use a designated software, approved by the Calculating Agent, for the purpose of Relevant Data submission. Accordingly, Relevant Data submission shall be a fully automated process, parameters of which – including the relevant IT requirements – shall be established at the point of the Data Provider onboarding by the Calculating Agent.

6.3.2 Data Providers shall upload all available data to the electronic data collection platform maintained by the Calculating Agent. All Relevant Data shall be transaction data only (i.e., actual cargo transactions carried out by Data Providers) and reflecting the relevant time-periods and routes, as set out in the Methodology. For the purpose of air freight benchmark calculation, transaction data means all MAWB and HAWB as issued by the Data Provider.

6.3.3 With the Relevant Data submission process being fully automated, Data Providers shall have no discretion in selecting or otherwise amending the scope and/or content of the data sets uploaded to the Calculating Agent’s electronic data collection platform. Use of expert judgment is not permitted at any stages of contributing Relevant Data.

6.4 Control of Relevant Data

6.4.1 The Data Provider is required to establish appropriate systems and controls to include processing checks to ensure Relevant Data is in the right format and in compliance with the technical specifications set out in the Data Upload Manual. The Data Provider shall monitor effectiveness of its systems and controls in respect of its IT infrastructure and security in relation to the Relevant Data upload. Should any shortcomings be identified, it should seek to remedy them without delay with the assistance and support from the Calculating Agent. In addition, the

Data Provider shall review its systems and controls in relation to Relevant Data upload on a regular basis and at least annually.

6.4.2 Data Providers use automated systems and controls for the purpose of contribution of Relevant Data. When using automated systems and controls, the Data Provider shall ensure that it can monitor the system's functioning on a continuous basis, and it undertakes its regular checks (including following implementation of software updates).

6.4.3 Data Provider's automated systems and controls in respect of Relevant Data shall include:

- (i) Procedures for contributing Relevant Data: the Data Provider should be able to specify whether Relevant Data conforms to the requirements set out in this Air Freight Guide;
- (ii) Validation for successful Relevant Data upload: the Data Provider shall have internal mechanisms for automated validation of a successful Relevant Data upload;
- (iii) Notification: Data Provider's systems and procedures shall allow prompt notification of any detected errors in the Relevant Data upload process to the Calculating Agent;
- (iv) Correction: Data Provider's systems and procedures should allow application of corrections or remedial action to any failed automated process; and
- (v) Re-submission: if appropriate, Data Provider's systems and procedures should allow for re-submission of corrected Relevant Data to the Calculating Agent; such process shall be duly documented in accordance with the applicable record keeping requirements as set out in section 6.7 below.

6.5 Record Keeping

6.5.1 The Data Provider shall establish record-keeping policies and arrangements that ensure that it keeps all relevant information necessary to check the Data Provider's adherence to this Code of Conduct. Such record-keeping policies and arrangements should cover at least the following:

- (i) Data Provider's obligation to establish – in coordination with the Calculating Agent – a log of any changes to its IT systems used for the purpose of Relevant Data submission in accordance with the automated procedure set out in point 6.3 above;
- (ii) Data Provider's record (log) of each individual data set of MAWB and HAWB uploaded to the Calculating Agent's electronic data collection platform.
- (iii) The register of the conflicts of interests as described at Section 6.7 (*Management of Conflicts of Interests by Data Providers*) below;
- (iv) Any disciplinary action taken against any of Data Provider's staff or persons whose services are placed at its disposal and who are engaged in Relevant Data submission processes;

6.5.2 Data Providers shall make appropriate arrangements to ensure that the relevant information is kept for at least five (5) years, or three (3) years where the records are of telephone conversations or electronic communications. Data Providers shall ensure that all data is kept on a durable medium that allows the information to be accessible for future reference.

6.6 Suspicious Relevant Data

6.6.1 Data Providers shall only submit transaction data as reflected in the issued and executed MAWB and HAWB. With no discretion or other human intervention permitted at either step of the Relevant Data submission process, the risk of data manipulation is very low. Notwithstanding and as set out in Section 8.4 (*Monitoring of Relevant Data*) below, all Relevant Data submitted

is subject to rigorous verification checks by the BEISL Assessor, including for any anomalies or suspicious elements of configuration thereof.

6.7 Management of Conflict of Interests by Data Providers

6.7.1 Data Providers should establish appropriate systems and controls concerning the management of conflicts of interest. Such systems and controls should include an internal conflict of interest policy, conflict of interests register and measures ensuring appropriate and regular training for Data Provider's staff and persons whose services are placed at its disposal for the purpose of Input Data contribution. Notwithstanding that the Input Data shall be a fully automated process, including all transaction data and with no discretion allowed at any step thereof, such mandatory training must cover all policies, procedures and controls relating to the identification, prevention and management of conflict of interests that may from time to time arise in the context of the Input Data submission.

6.7.2 To this end, Data Provider's conflict of interests policy – as may be applicable to the Data Provider's general commercial activities and as such are not limited to Relevant Data submission – shall cover the following:

- (i) The process for identifying and managing conflicts of interest, including any internal escalation of conflicts of interest;
- (ii) Steps to prevent, or minimise the risk of, conflicts of interest in the process for recruiting personnel involved in managing Relevant Data, including the relevant technical specialists;
- (iii) Steps to prevent, or minimise the risk of, conflicts of interest in the remuneration policies for Data Provider's staff and persons whose services are placed at its disposal for the purpose of Relevant Data contribution. In particular, Data Provider's remuneration policy shall ensure that there is no direct or indirect link between the remuneration of a Data Provider's employees involved in contribution of Relevant Data and the value of the air freight benchmark, the value of specific submissions made, or the performance of any activity carried on by Data Provider that might give rise to a conflict of interest related to the contribution of Relevant Data to the benchmark;
- (iv) Steps to prevent, or minimise the risk of, conflicts of interest arising from Data Provider's management structure;
- (v) If appropriate, rules and measures to address any financial exposure that the Data Provider may have to a financial instrument or financial contract which references the benchmark to which Data Provider contributes Relevant Data;
- (vi) If applicable, a procedure for the identification and disclosure to the compliance functions of the Calculating Agent and of the Benchmark Administrator of actual or potential conflicts of interest concerning any of Data Provider's front office function staff who are involved in the Relevant Data contribution process;
- (vii) If applicable, effective controls over the exchange of information between front office function staff and other staff of the Data Provider involved in activities that may create a risk of conflicts of interest, insofar as the information being exchanged is information that may affect the Relevant Data contributed; and
- (viii) The taking of measures to prevent any person from exercising inappropriate influence over the way in which front office function staff involved in contributing Relevant Data carry out their activities.

7 Data Providers

7.1 Role of Data Providers

7.1.1 A Data Provider is considered a “contributor” within the meaning of Article 3(1)(9) BMR. In this capacity, Data Providers contribute Relevant Data that is then used to derive Input Data for the purpose of determination of air freight benchmarks, which is not otherwise available to the Calculating Agent and/or to the Benchmark Administrator. The integrity and accuracy of the air freight benchmarks depends on the integrity and accuracy of the Input Data contributed by the Data Providers. It is therefore important that the Data Providers meet certain qualification criteria, as set out in this Air Freight Guide.

7.1.2 The provisions of this and the preceding section of this Air Freight Guide apply to Data Providers who are non-authorised persons in accordance with the relevant national laws governing the provision of investment services or performing investment activities.

7.2 Eligibility and Selection Criteria

7.2.1 Data Providers must be competitive air freight forwarders able to provide transaction reports at the shipment level for both HAWB and MAWB. In order to be accepted as Data Provider, an air freight forwarder must meet all of the following criteria:

- (i) The main business of the Data Provider must be air freight forwarding;
- (ii) The Data Provider must be recognised in the market as a competent and professional firm;
- (iii) The Data Provider must be active in the market it seeks to report;
- (iv) The Data Provider has signed the Air Cargo Indices Data Provider Agreement with the Calculating Agent;
- (v) Prior to onboarding, the Data Provider must be able to demonstrate two years of historic data on a specific OD pair;
- (vi) Successfully pass a trial period during which the Calculating Agent monitors the weekly submissions of data to assess what percentage thereof meets the quality criteria for the purpose of the air freight benchmarks calculation.

7.3 Terms of appointment

7.3.1 Following a verification of the candidate Data Provider by the Calculating Agent and in accordance with the criteria set out in section 7.2 above, the appointment and removal of Data Providers is a joint responsibility of the Benchmark Administrator and of the Calculating Agent.

7.3.2 Following entry into an Air Cargo Indices Data Provider Agreement, the Data Provider performs its role for an indefinite period of time and until termination of the agreement by any of the parties in accordance with the provisions of and within the timeframes set out therein.

7.3.3 A Data Provider who deliberately and consistently does not adhere to the Code of Conduct can be removed from this function by the Benchmark Administrator or by the Calculating Agent.

7.4 Adherence to the Code of Conduct

7.4.1 The Benchmark Administrator and the Calculating Agent shall only accept Relevant Data from Data Providers who adhere to the Code of Conduct and comply with the applicable standards concerning Relevant Data. If and when required, a Data Provider shall provide representations to the Benchmark Administrator and to the Calculating Agent about its adherence to the Code

of Conduct. The Data Provider shall also issue an annual declaration of compliance with the Code of Conduct, in a form as set out by the Benchmark Administrator. The Data Provider shall also comply with the provisions concerning audits and quality controls as set out under Section 10 below (*Audits and Quality Control*).

7.5 Internal oversight and verification procedures for Data Providers

7.5.1 The Data Provider shall establish and maintain appropriate internal oversight policies and procedures that are proportionate to the nature, scale and complexity of its activities. Such internal oversight policies and procedures shall be focused on verifications whether no changes had been made to the automated data set script as generated for the purpose of Relevant Data submission. This includes, without limitation, any potential changes introduced – intentionally or not – by a Data Provider’s employee(s).

7.5.2 To this end, the Data Provider shall establish a dedicated internal function that will serve as a control for the purpose of the contribution of the Relevant Data. Such internal control function shall be performed by one or more employees with an appropriate level of seniority in the hierarchy of its organisation and whose skills, knowledge and experience allow him or her to perform such function without further supervision. Responsibilities of the internal control function shall include:

- (i) Undertaking an effective check prior to Relevant Data contribution, including validation that, no alternations to a generated data sets of both MAWB and HAWB had been made prior to uploading to the Calculating Agent’s electronic data collection platform;
- (ii) Ensuring that access to the automated controls surrounding Relevant Data upload is restricted only to persons involved in the contribution process, except when access is necessary for audit, investigations or other purposes required by law;
- (iii) Conducting verification of the export code following each Relevant Data upload, in order to confirm that no errors occurred in the contribution process;
- (iv) Establishing and maintaining an appropriate whistle-blowing procedure that includes appropriate safeguards for whistle-blowers;
- (v) Establishing and maintaining procedures for the internal reporting of any attempted or actual manipulation of the Relevant Data, for any failure to comply with a Data Provider’s own benchmark-related policies and for the investigation of such events as soon as they become apparent;
- (vi) Establishing and maintaining internal reporting procedures for reporting any operational problems in the contribution process as soon as they arise;
- (vii) If applicable, maintaining oversight of relevant communications between front office function staff directly involved in contributing Relevant Data and also of relevant communications between such staff and other internal functions or external bodies; and
- (viii) Establishing, maintaining and operating a conflict of interest policy, in line with the guidance set out in point 6.7 of Section 6 (*Data Providers’ Code of Conduct*) of this Air Freight Guide.

7.5.3 The dedicated internal department of a Data Provider shall exercise the overall oversight over the functioning of the internal control function. Typically, such function shall be performed by an IT / technology department. Alternatively, such oversight might be performed by senior management. In order to facilitate internal oversight, individuals performing internal control functions shall report regularly, and at least monthly, to the dedicated internal department or senior management of the Data Provider on the duties carried out by the internal control function. Records of such reports shall be kept by the Data Providers in accordance with the

applicable record keeping requirements as set out in Section 6.7 (*Management of Conflict of Interests by Data Providers*) of this Air Freight Guide.

8 The BEISL Assessor

8.1 The role of the BEISL Assessor

8.1.1 The primary responsibilities of the BEISL Assessor includes monitoring Input Data received from the Calculating Agent (both prior and post-publication of the benchmark), evaluating Input Data according to the prescribed quality and accuracy standards, as well as validating Input Data after publication to identify errors and anomalies.

8.1.2 As such, BEISL Assessors perform a control function, which is critical for the day-to-day determination process of the air freight benchmarks to ensure their accuracy and reliability. It is therefore vital that, together with their expert knowledge and skills, BEISL Assessors are expected to uphold the exercise the highest standards of professional integrity.

8.2 Selection criteria

8.2.1 An individual can only be appointed to the role of an Assessor if he or she meets the following qualification criteria:

- (i) Has received training by virtue of their employment as an Assessor encompassing all BEISL's market segments, reported routes, benchmark determination process, benchmark methodology and bespoke web application; and
- (ii) Possess the necessary skills, knowledge and experience to enable him or her to undertake his or her responsibilities and obligations in relation to the calculation of BEISL's benchmarks.

8.3 Governance requirements

8.3.1 The Benchmark Administrator shall ensure that their Assessors are:

- (i) Subject to effective day-to-day management and supervision, including clear reporting lines, and well-developed sign-off procedures;
- (ii) Not subject to undue influence or any conflict of interest;
- (iii) Not remunerated in a way, or subject to performance evaluation, that would create conflicts of interest or otherwise impinge upon the integrity of the air freight benchmark determination process;
- (iv) Not in possession of any interest, or business relationship, that could compromise the activities of the Administrator;
- (v) Subject to effective procedures to control the exchange of information with other employees of the Administrator and the Calculating Agent involved in determination of the air freight benchmarks, which may create a risk of conflicts of interest, or with third parties where that information may affect the air freight benchmark; and
- (vi) Subject to specific internal control procedures to ensure their integrity and reliability, and including procedures concerning the sign-off by management before dissemination of a benchmark.

8.4 Monitoring of Relevant Data

8.4.1 In order to ensure the appropriate monitoring of Input Data, BEISL Assessors shall undertake regular checks of the following:

- (i) Ensure that the data is received according to the schedule as defined in Appendix 2.

- (ii) Verify that the data does not contain any obvious errors and/or omissions and does not fall outside a predetermined tolerance range and/or varies significantly from other corroborative sources of data, or is otherwise suspicious.

8.5 Validation of Input Data

- 8.5.1 Should the BEISL Assessor determine that the Input Data does contain an error and/or omission, or is significantly different from other corroborative sources, or is otherwise suspicious, he or she shall immediately contact the Calculating Agent to request a clarification and/or correction. In either outcome, the BEISL Assessor is to ensure that a complete record is maintained;
- 8.5.2 In order to determine Input Data and to ensure the integrity and accuracy of Input Data prior to its inclusion in the air freight benchmark publication, the Assessor shall check Input Data received against other available indicators or data. To this end, the Assessor shall use his or her knowledge of the relevant air freight market, as well as publicly available information, reports and data.

8.6 Benchmark publication

- 8.6.1 Only following satisfactory validation of Input Data, may the Assessor allow its use in the publication of the relevant benchmark.
- 8.6.2 Publication of the air freight benchmark must be authorised by an Assessor, and only when he or she is satisfied that the Input Data used for the purpose of benchmark calculation meets all relevant standards and criteria as set out in this Air Freight Guide.
- 8.6.3 A Senior Assessor shall verify and sign off validation of the air freight benchmark and authorise transmission for publication.

9 Calculating Agent

9.1 Outsourcing

9.1.1 In line with the outsourcing arrangement approach as described in Section 2.5 (*Outsourcing arrangements*) of this Air Freight Guide, BEISL outsources certain air freight determination functions and processes to the Calculating Agent. The structure of BEISL's arrangements with the Calculating Agent, as set out in the relevant bilateral contractual documentation and this Air Freight Guide, ensures that BEISL maintains ultimate control over the provision of the air freight benchmark. In its capacity as the Administrator, BEISL is therefore solely responsible for discharging all of its responsibilities and regulatory obligations in respect of the air freight benchmarks.

9.2 Role of the Calculating Agent

9.2.1 The Calculating Agent is responsible for the collection of Relevant Data from Data Providers, its subsequent analysis, evaluation and verification for the purposes of ensuring its quality, accuracy and integrity. The Calculating Agent maintains day-to-day liaison with the Data Providers. The Calculating Agent is also responsible for processing the Relevant Data for the purpose of calculation of air freight benchmarks, in accordance with the methodology set out in Section 4 (*Overview of Benchmark Methodology*) of this Air Freight Guide. Finally, the Calculating Agent is responsible for transmitting the calculated benchmark to BEISL for validation, publication and dissemination in accordance with the methodology.

9.3 Calculating Agent selection criteria

9.3.1 As an authorised Benchmarks Administrator, BEISL adheres to the highest quality, compliance and due diligence standards concerning the benchmark determination processes. This is reflected in the operation of its own systems, controls, policies and procedures, as well as the selection of services providers who perform certain functions relating to the provision of BEISL benchmarks. TAC Index is a market leader in the provision of air freight indices, which are broadly used by the aviation sector worldwide.

9.3.2 Therefore, as a minimum, a Calculating Agent must:

- (i) Have the ability, capacity and authorisation required by law, to perform the Calculating Agent service reliably and professionally;
- (ii) Possess the necessary skills, knowledge and experience to enable him or her to undertake his or her responsibilities and obligations in relation to the calculation of the air freight benchmarks;
- (iii) Ensure that its employees and/or persons whose services are placed at its disposal for the purpose of the collection of Relevant Data and calculation of the air freight benchmarks, are not subject to undue influence or conflict of interest;
- (iv) Adhere to the Code of Obligations alongside the Air Freight Guide and as such, shall not create conflicts of interest or otherwise impinge upon the integrity of the benchmark's determination process; and
- (v) Not have any business interests or business connections that would compromise the activities of BEISL as the Benchmark Administrator (see also provisions on dealing restrictions applicable to all Baltic Employees and set out in Section 3.2 (*Employees dealing restrictions*) of this Air Freight Guide.

9.4 **Data Scientists**

Role of Data Scientists

- 9.4.1 The Calculating Agent shall employ Data Scientists to perform relevant functions in respect of the calculating of air freight benchmarks. The main responsibility of the Data Scientists is to conduct monitoring and checks of Relevant Data received from the Data Providers. While detailed verification checks are being done automatically by the software system deployed by the Calculating Agent, Data Scientists nonetheless perform first line of control and assess, among other, completeness of Input Data contributed and its conformity with the relevant quality criteria.

Supervision and Governance

- 9.4.2 The Calculating Agent shall ensure that the Data Scientists are subject to the ongoing supervision and appropriate governance arrangements. To this end, the Calculating Agent shall ensure that the Data Scientists:
- (i) Are subject to effective day-to-day management and supervision, including clear reporting lines and sign-off procedures;
 - (ii) Are not subject to undue influence or conflicts of interest;
 - (iii) Are not remunerated in a way, or subject to performance evaluation, that would create conflicts of interest or otherwise impinge upon the integrity of the air freight benchmark determination process;
 - (iv) Do not have any interest or business connections that could compromise the activities of the Administrator and of the Calculating Agent;
 - (v) Are subject to effective procedures to control the exchange of information with other employees of the Administrator and the Calculating Agent involved in determination of the air freight benchmarks and that may create a risk of conflicts of interest, or with third parties where that information may affect the air freight benchmark; and
 - (vi) Are subject to specific internal control procedures to ensure their integrity and reliability, and including procedures concerning the sign-off by management before dissemination of a benchmark.

9.5 **Monitoring of Relevant Data**

- 9.5.1 In order to ensure appropriate monitoring of Relevant Data, the Calculating Agent shall undertake regular, and at least monthly, checks of the Relevant Data. These monitoring procedures shall be automated to the extent possible, supported by software deployed by the Calculating Agent, and shall ensure verification of the following:
- (i) The Relevant Data is exclusively contributed by an authorised Data Provider, and that identity of individual(s) performing an internal control function within the Data Provider's organisational structure has been duly notified to the Calculating Agent and to the Benchmark Administrator. The Calculating Agent shall reject any Relevant Data that is contributed by a non-authorised Data Provider;
 - (ii) The Relevant Data is contributed by the Data Providers within the timeframes specified in the Methodology as set out in point 4.2 of this Air Freight Guide;
 - (iii) The Relevant Data is contributed in a format specified by the Calculating Agent and by the Benchmark Administrator;

- (iv) The Relevant Data is reliable and consists of transaction data only;
- (v) The Relevant Data meets the requirements set out in the Methodology of the air freight benchmarks as included in Section 4 of this Air Freight Guide; and
- (vi) Any relevant thresholds for the quantity of the Input Data and any relevant standards for the quality of the Input Data are met in accordance with the Methodology of the air freight benchmarks.

9.5.2 Following each check undertaken, the Calculating Agent shall submit a written report summarising its outcome to the compliance department of the Benchmark Administrator. Generation of such report shall be automated to the extent possible. The report shall flag any issues with Input Data identified in the course of regular checks and to provide error free rate.

9.5.3 Should the Calculating Agent consider that Input Data contributed is no longer representative of the market or the economic reality that the air freight benchmark intends to measure, it shall raise this in writing and without undue delay to the compliance department of the Benchmark Administrator.

9.5.4 Following receipt of a written report from the Calculating Agent that the Input Data contributed is no longer representative of the market or the economic reality that the air freight benchmark intends to measure, BEISL can decide whether to change Data Provider(s), change benchmark methodology or to cease providing a benchmark.

9.6 Evaluation of Relevant Data

9.6.1 Upon each receipt of Relevant Data from the Data Provider, the Calculating Agent shall conduct – by applying an automated process – the following verification steps:

- (i) That Relevant Data has been provided within the prescribed timeframes, as set out in the Methodology;
- (ii) That Relevant Data has been submitted by an authorised Data Provider;
- (iii) That Relevant Data does not contain any obvious errors, is significantly out of line with other contributed Relevant or is otherwise suspicious;
- (iv) Should the Calculating Agent determine that Relevant Data does contain any errors, is significantly out of line with other contributed Relevant Data or is otherwise suspicious, he or she shall immediately contact the Data Provider concerned and request clarifications and/or corrections;
- (v) Should the Data Provider fail to provide satisfactory clarification and/or corrections as required, the Calculating Agent shall disregard such Relevant Data for the purpose of the air freight benchmark calculation.

9.7 Validation of Input Data

9.7.1 In order to ensure the integrity and accuracy of Input Data prior to its inclusion in the air freight benchmark calculation, the Calculating Agent shall check Input Data against other available indicators or data. To this end, the Calculating Agent shall use his or her knowledge of the relevant air freight market, as well as publicly available information, reports and data.

9.7.2 Only following satisfactory validation of Input Data, may the Calculating Agent accept its use in the calculation of the relevant air freight benchmark.

9.8 The Benchmark Administrator's oversight

- 9.8.1 In order to ensure uninterrupted provision of the air freight benchmarks, the Benchmark Administrator shall maintain the general oversight over all of the Calculating Agent's activities concerning the collection of Relevant Data and calculation of the air freight benchmarks. The Benchmark Administrator can, from time to time and as it considers reasonable, provide directions to the Calculating Agent.

10 Audits and Quality Control

10.1 Communications between the Benchmark Administrator and the Calculating Agent

10.1.1 The Administrator and the Calculating Agent shall establish efficient day-to-day communication measures. This includes regular exchange of information, reporting, and where necessary, escalation procedures for the Calculating Agent in respect of all matters concerning the collection of Relevant Data and calculation of the air freight benchmarks.

10.2 Audit: the Calculating Agent

10.2.1 In addition to the day-to-day control exercised by the Benchmark Administrator over the provision of the air freight benchmarks, the Calculating Agent shall be subject to annual audit undertaken by the Benchmark Administrator. The Benchmark Administrator shall keep details of such annual audit of the Calculating Agent, including information about any remedial actions undertaken, in accordance with the record keeping requirements set out in Section 10.4 (*Record Keeping: The Benchmark Administrator and the Calculating Agent*) below.

10.3 Audit: The Data Providers

10.3.1 The Data Providers shall be subject to annual audit reviews undertaken by the Calculating Agent to carry out a comprehensive assessment of the Data Provider's adherence to the Code of Conduct and standards applicable to the Relevant Data contribution, including review of all relevant systems, policies and procedures. In particular, the annual audit review shall focus on review of the Data Provider's IT systems, including IT system security controls, data security and the Data Provider's compliance with the relevant requirements concerning Relevant Data contribution.

10.3.2 Following completion of each individual audit of Data Providers, the Calculating Agent shall prepare a report for the Benchmark Administrator, detailing the activities undertaken, the findings of the audit – and in particular any issues identified with the Data Provider's non-compliance with any of the elements of the Code of Conduct – and, if relevant, any remedial actions recommended and timeline for their execution.

10.3.3 The Benchmark Administrator and the Calculating Agent shall keep details of such annual audits of the Data Provider in accordance with the record keeping requirements set out in Section 10.4 (*Record Keeping: The Benchmark Administrator and the Calculating Agent*) below.

10.3.4 If, in a result of such annual review, an issue is identified that requires a remedial action by the Data Provider, the Data Provider shall act upon the directions provided by the Benchmark Administrator or the Calculating Agent.

10.4 Record Keeping: The Benchmark Administrator and the Calculating Agent

10.4.1 The Benchmark Administrator and the Calculating Agent shall maintain complete records of all aspects relating to the determination and provision of the air freight benchmarks. The Calculating Agent shall put in place appropriate record keeping arrangements and share with the Benchmark Administrator, if and when required, any relevant information pertaining to air freight benchmarks in order to allow the administrator to discharge all its responsibilities stemming from provision of benchmarks. If and when applicable, the Calculating Agent shall obtain Data Provider's consent to keep the relevant information, including for data protection purposes.

10.4.2 Principles governing record keeping by the Benchmark Administrator and by the Calculating Agent shall include:

- (i) Maintaining complete and transparent records of all aspects relating to the governance, methodology, and benchmark determination process;

- (ii) Ensuring that each participant involved in the provision of benchmark and its determination process, including but not limited to each Data Provider, Benchmark Administrator and Calculating Agent shall retain all records relevant to their responsibilities within the benchmark process;
- (iii) Maintaining records in a readily accessible medium and format for future reference. Records shall be provided to authorised personnel, external auditors, the Financial Conduct Authority or any other supervisory authority in a timely manner should they be requested;
- (iv) Maintaining records in a medium that complies with BEISL's confidentiality requirements;
- (v) Ensuring appropriate and effective security measures are in place so that records cannot be altered or manipulated, including endeavour to retain information and records within an environment that is secure and monitored regularly;
- (vi) Ensuring that appropriate and effective back-up arrangements are in place and operational should any records need to be recovered if, for instance, the Benchmark Administrator's and/or the Calculating Agent's primary databases fail or are breached in any way;
- (vii) Ensuring physical and electronic records shall be kept for at least five years. Records of telephone conversations or electronic communications shall be kept for a period of at least three years. The Benchmark Administrator shall consider and exercise discretion to extend such period of retention having regard to instances such as (but not limited to) anticipated litigation and/or agreements with other parties;
- (viii) Holding any third-party agents that maintain records on behalf of the Benchmark Administrator and/or the Calculating Agent subject to the above principles.

11 Conflicts of Interest

11.1 Definition of conflicts of interest

BEISL adopts the following definition of conflicts of interest:

- 11.1.1 An actual conflict of interest refers to a situation where the impartiality and objectivity of a decision, opinion, action or recommendation of a person or a body is compromised or improperly influenced by the private interest of that person or body, whether a commercial or personal business relationship or an interest between such a person or its affiliates, its personnel, its clients, any market participants or any persons connected with them.
- 11.1.2 A perceived conflict of interest refers to a situation where the impartiality and objectivity of a decision, opinion, action, or recommendation of a person or a body might be perceived as being compromised or improperly influenced by the private interest of that person or body, whether a commercial or personal business relationship or an interest between such person or its affiliates, its personnel, its clients, any market participants or any persons connected with them.
- 11.1.3 A potential conflict of interest refers to a situation where the impartiality and objectivity of a decision, opinion, action, or recommendation of a person or a body might potentially be compromised or improperly influenced by the private interest of that person or body, whether a commercial or personal business relationship or an interest between such person or its affiliates, its personnel, its clients, any market participants or any person connected with them.
- 11.1.4 In the context of the above definitions, “private interest” is not limited to financial or pecuniary interest, or those interests which generate a direct personal benefit to the individual. A conflict of interest may involve otherwise legitimate private-capacity activity, personal affiliations and associations and family interests, if those interests could compromise or improperly influence the individual’s performance of his or her duty in the benchmark determination process or benchmark administration process for BEISL.

11.2 Scope

- 11.2.1 Section 11 of this Air Freight Guide shall apply to each entity contributing to the determination, calculation and dissemination of the benchmarks, namely Data Providers and the Calculating Agent.
- 11.2.2 Data Providers and the Calculating Agent shall adopt their own internal policy on conflicts of interest.

11.3 Identification of conflicts of interest

For the purposes of identifying the types of conflicts of interest that arise, or may arise, the following should be taken into account:

- 11.3.1 BEISL is part of the wider SGX group and actual, perceived or potential conflicts may therefore arise through its ownership. However, BEISL shall disclose to any relevant stakeholder as soon as it becomes aware of a conflict of interest arising from the ownership of BEISL by SGX or otherwise by virtue of its membership of the wider SGX group;
- 11.3.2 BEISL may be party to confidential information in their activities related to the benchmark administration and benchmark determination process and as such a potential conflict of interest may arise in the use of that confidential information; and
- 11.3.3 The BAIC assists the BEISL Board in certain governance functions. The BAIC’s membership includes representation from benchmark users and market participants who may face a conflict between their duty to have regard to the interests of benchmark users or their employer organisation or of that particular class of benchmark on the one hand, and the interests of BEISL

as an Administrator and in the course of the benchmark determination process on the other hand.

BEISL outsources certain functions linked with the determination of air freight benchmarks to the Calculating Agent, responsibilities of which include – among other – collection of Relevant Data from Data Providers, all being active freight forwarders and potentially interested in the outcome of air freight benchmark determinations. To the extent that any of the circumstances above represent an actual, perceived or potential conflict of interest for BEISL or for any individuals connected with BEISL, such conflict shall be managed adequately through the application of measures and internal controls and corporate governance structures implemented by BEISL.

11.4 Baltic Employees directly involved in the benchmark determination and administration process

11.4.1 The Baltic's Staff Handbook deals with conflicts of interest and applies to all Baltic Employees. The Baltic shall organise regular training for employees in respect of BEISL's procedures for identifying, managing and escalating conflicts. All employees are made fully aware of BEISL's conflicts of interest policy relevant to BEISL as benchmark administrator.

11.4.2 Conflicts of interest may arise as a result of employment with BEISL or they may be influenced by external factors such as personal relations of an employee. The employees or any other natural person whose services are placed at BEISL's disposal and who are directly involved in the provision of benchmark shall:

11.4.3 Not be subject to a remuneration and performance evaluation that would create conflicts of interest affecting the integrity of the benchmark process;

11.4.4 Be required to declare that they do not have any interests or business connections that may compromise BEISL as an Administrator and to disclose in their declaration of interest, any personal financial interest that may reference BEISL's benchmarks; and

11.4.5 Be prohibited from contributing to a benchmark determination by way of engaging in bids, offers and trades on a personal basis or on behalf of market participants.

11.5 The BAIC

11.5.1 Members of the BAIC are expected to act independently when serving on the BAIC. All voting members of the BAIC shall not seek or take instructions from public bodies, companies or any other body. Collectively, all members of the BAIC shall operate with high standards of integrity and in the absence of conflicts of interest. It is noted that the BAIC could face a conflict of interest such as, for example:

- (1) If a BAIC member chose to serve on another company board during their appointment on the BAIC; or
- (2) BAIC members may be party to confidential information which may be of interest or useful to their employer company.

11.5.2 Contained within the letter of appointment to the BAIC, an individual agrees that they will:

- (1) Declare to the Chairman and/or secretariat of the BAIC any conflicts of interest in their position as a council member at the time of appointment together with any conflicts of interest that arise during the term of their appointment; and
- (2) Not release any confidential information either during or following the term of their appointment, to third parties without prior clearance from BEISL.

11.5.3 The following table provides an overview of responsibilities in respect of managing conflict of interests in respect of the BAIC:

Role	Responsibilities
Senior Manager/ Compliance Department	<ol style="list-style-type: none"> 1 Request and review of the declaration of adherence by the BAIC members at the appointment/renewal of their mandate. 2 Review the declaration of interest disclosed by BAIC members. 3 Identification and monitoring of conflicts of interest in case the BAIC or a member of the BAIC is required to provide advice or consider a market competitor of the organisation he or she may be affiliated to. 4 Analysis and review surrounding the identification and management of actual or potential conflicts of interest surrounding BAIC members. Individual responsibilities remain for BAIC members to identify conflicts of interest situation and to disclose the conflict pursuant to Section 11.7 (Management and disclosure of conflicts of interest) and to recuse themselves of any decisions making and/or advice pertaining to the identified conflict. 5 Provide advice to BAIC members and/or the CEO on the identification of situations that may generate an actual, perceived or potential conflict of interest. 6 Analysis and review surrounding specific issues upon request from the BAIC or the CEO.

11.6 Conflicts of interest concerning the administration of BEISL benchmarks

Role	Responsibilities
Data Providers	Conflicts of interest to which any Data Provider is party to should be identified by internal controls and procedures implemented by each Data Provider company. These controls and procedures are subject to review during the annual review conducted by BEISL.
Calculating Agent	Conflicts of interest to which the Calculating Agent is a party to should be identified by internal controls and procedures implemented by the Calculating Agent. These controls and procedures are subject to review during the annual review conducted by BEISL.
Senior Manager/ Compliance Department	<p>General</p> <ol style="list-style-type: none"> 1 Review operational and policy decisions made especially as they relate to the provision of benchmarks with a view towards assessing the potential for conflicts of interest. 2 Perform yearly assessments of Baltic Employees, Calculating Agent, Data Providers, the BEISL Board and the BAIC with a view to identifying and considering any potential for conflicts of interest.

Role	Responsibilities
	3 Considering communications, Complaints or other representations made by Whistleblowers through the Baltic Complaints handling and Whistleblowing policies.
	<p>In respect of a Data Provider</p> <p>Identification of conflicts of interest to which a Data Provider is party shall be carried out on an on-going basis with respect to the following areas of focus and against the management, control and resolution of the conflicts of interest pursuant to Section 11.7 (<i>Management and disclosure of conflicts of interest</i>):</p> <ol style="list-style-type: none"> 1 The roles and responsibilities of Data Providers, especially as they relate to the business relationship with the Baltic. Checks shall be performed whenever roles and responsibilities are updated or amended and/or when new Data Providers are asked to join. 2 Annual review of Data Providers and declaration of adherence to the Air Freight Guide. <p>In respect of the Calculating Agent</p> <p>Identification of conflicts of interest to which the Calculating Agent is party shall be carried out on an on-going basis with respect to the following areas of focus and against the management, control and resolution of the conflicts of interest pursuant to Section 11.7 (<i>Management and disclosure of conflicts of interest</i>):</p> <ol style="list-style-type: none"> 1 The roles and responsibilities of the Calculating Agent, especially as they relate to the provision of benchmarks and to the business relationship with the Baltic. Checks shall be performed whenever roles and responsibilities are updated or amended. 2 Annual review of the Calculating Agent and declaration of adherence to the Air Freight Guide. <p>In respect of the BEISL Board</p> <p>Identification of conflicts of interest to which a member of the BEISL Board is party shall be carried out on an on-going basis with respect to the following areas of focus and against the management, control and resolution of the conflicts of interest pursuant to Section 11.7 (<i>Management and disclosure of conflicts of interest</i>):</p> <ol style="list-style-type: none"> 1 Providing advice on the identification and monitoring of situations that may generate an actual, perceived or potential conflict of interest. 2 Reviewing the declarations of interest provided by members of the BEISL Board to identify actual, or potential conflict of interest.

Role	Responsibilities
	<p>In respect of the BAIC</p> <p>Identification of conflicts of interest within the BAIC shall be carried out on an on-going basis with respect to the following areas of focus and against the management, control and resolution of the conflicts of interest pursuant to Section 11.7 (<i>Management and disclosure of conflicts of interest</i>):</p> <ol style="list-style-type: none"> 1 The roles and responsibilities of BAIC members, especially as they relate to the activities in assisting the BEISL Board for the provision of benchmarks. Checks shall be performed whenever new members are appointed onto the BAIC. 2 Providing advice on the identification and monitoring of situations that may generate an actual, perceived or potential conflict of interest. 3 Reviewing the declarations of conflicts of interest by BAIC members. <p>In case any such conflicts of interest are identified by BEISL, they are addressed according to the procedure described in Section 11.7 (<i>Management and disclosure of conflicts of interest</i>).</p>
The BEISL Board	<p>Implementation of all policies and procedures relating to management of conflict of interest relating to the determination and administration of BEISL benchmarks. This includes:</p> <ol style="list-style-type: none"> 1 Providing advice to BEISL employees and third parties involved in benchmark-setting processes on the identification of situations that may generate actual, perceived or potential conflicts of interest. 2 Reviewing declarations of interests provided by the Calculating Agent to identify actual, perceived or potential conflicts of interest. 3 Reviewing declarations of interests provided by the members of the BAIC to identify actual, perceived or potential conflicts of interest. 4 Reviewing declarations of interests of the Data Provider to identify actual, perceived or potential conflicts of interest <p>Discussing specific issues upon request from the BEISL Oversight Function and/or the BAIC.</p>

11.7 Management and disclosure of conflicts of interest

Obligations in respect of management of conflicts of interest

11.7.1 BEISL shall take all reasonable steps to identify conflicts of interest issues and in doing so shall consider:

- (i) The level of risk that such a conflict may constitute or give rise to a material risk of damage to BEISL and its benchmarks;
- (ii) The nature, scale and complexity of the business; and

(iii) The nature and range of BEISL's benchmarks.

11.7.2 In the event an actual, perceived or potential conflict of interest is identified, BEISL shall execute the following procedure in point 11.7 3 below (*Internal management, control and resolution of conflicts of interest*) to ensure that the identified conflict is managed and monitored. BEISL shall ensure the confidentiality of information relating to the identification, management and mitigation of any such actual, perceived or potential conflict of interests, subject to disclosure and transparency obligations dictated by BMR and/or any applicable law or regulation.

11.7.1 Types of preventative measures undertaken by BEISL to preserve the integrity of benchmark calculations:

Measure	Description
Control of information	<p>Measures taken to prevent or control the exchange of information between parties that are conflicted. Such measures shall include establishing a Chinese wall. BEISL ensures that staff members involved in the benchmark determination process are physically separated from the operations of the Baltic and other business functions within the Baltic.</p> <p>Access to BEISL's offices is restricted to authorised personnel through use of a swipe card entry system.</p>
Contractual Arrangements	<p>Terms incorporated into contractual arrangements shall be a measure undertaken by BEISL in avoiding conflicts of interest. There may be certain types of conflicts of interest that are anticipated in contractual provisions by BEISL.</p>
Remuneration Links	<p>BEISL ensures that there are no direct links in remuneration of individuals that may create actual, perceived or potential conflicts of interest or influence an individual's conduct in relation to any aspect of the provision of benchmarks. Baltic employees' remuneration is not linked to BEISL's benchmark determination process and/or publication.</p>
Segregation of duties	<p>BEISL organises tasks and duties of individuals involved in benchmark determination process in a manner that prevents occurrence of a conflict of interest.</p>
Ownership structure	<p>BEISL ensures that conflicts of interests that may arise due to its ownership by SGX are appropriately managed. This includes the effective separation of business functions between BEISL and SGX. The BEISL benchmark business is subject to governance arrangements that are separate from any parts of the business of SGX and any of its affiliates. Members of governance bodies of BEISL benchmark administration business must disclose any actual, perceived or potential conflict of interest in accordance with the procedure set out in Section 11.7.4 (<i>Internal management, control and resolution of conflicts of interest</i>) below, including any such conflict stemming from the BEISL ownership structure.</p>

Disclosure of conflict of interest

11.7.2 BEISL shall disclose all existing or potential conflicts of interest, including conflicts stemming from BEISL's ownership by SGX, to users of its benchmarks. This information shall be provided in a form of email communication to the relevant contact person(s) within the user. Finally,

BEISL shall disclose such conflicts of interest to the Financial Conduct Authority without undue delay and by means of email communication with the relevant supervision team members.

Internal management, control and resolution of conflicts of interest

11.7.3 In the event an actual, perceived or potential conflict of interest is identified or disclosed, the following procedure shall apply:

Role	Responsibilities
<p>Senior Manager/ Compliance Department</p>	<p>In respect of Baltic Employee</p> <p>Baltic Employee shall immediately inform the Compliance Department or a Senior Manager of any conflicts of interest in respect of a benchmark administered by BEISL.</p> <p>Upon identification of an actual, perceived or potential conflict of interest or upon disclosure of conflicts of interest or issues relating to the potential conflicts of interest, BEISL shall inform the employee involved in the conflict of:</p> <p>A summary of the actual, perceived or potential conflict of interest and any supporting evidence;</p> <ol style="list-style-type: none"> 1 A request for the employee concerned to refrain from further activity in relation to the provision of benchmark for BEISL, until the issue concerning the actual, perceived or potential conflict of interest has reached an appropriate resolution approved by the BEISL Board. 2 BEISL shall provide to the BEISL Oversight Function an ad-hoc report detailing the status of any conflicts of interest issues, any resolutions to include management control that have been implemented, and any associated actions to be undertaken. <p><i>Escalation for further advice</i></p> <p>If the Compliance Department or a Senior Manager is unable to determine an appropriate resolution or appropriate implementation of management controls in response to the conflict of interest disclosed by an employee, the issue shall be escalated to the BEISL Board and recorded in the conflicts of interest register.</p> <p>In respect of the Calculating Agent</p> <p>Upon identification of an actual, perceived or potential conflict of interest or upon disclosure of conflicts of interest or issues relating to the potential conflicts of interest by an individual of the Calculating Agent, BEISL shall inform the Calculating Agent in writing providing:</p> <ol style="list-style-type: none"> 1 A summary of the actual, perceived or potential conflict of interest concerning the individual of the Calculating Agent along with any supporting evidence; 2 Where an actual, perceived or potential conflict of interest is identified, a request for a response from the Calculating Agent

Role	Responsibilities
	<p>or from the individual which is the subject of a conflict within a specified timeframe of 21 working days; and</p> <p>3 A request for the individual of the Calculating Agent which is the subject of a conflict to recuse itself from the provision of benchmark for BEISL, until the issue raised concerning the actual, perceived or potential conflict of interest has reached an appropriate resolution approved by the BEISL Board.</p> <p>If a response is received from the Calculating Agent or the individual of the Calculating Agent which is the subject of an actual, perceived or potential conflict a review shall be conducted by BEISL and a resolution report prepared within 30 working days of receipt of the response. The report shall include:</p> <ol style="list-style-type: none"> 1 A summary of the actual, perceived or potential conflict of interest identified; 2 A summary of the response received from the Calculating Agent or the individual concerned; 3 Any relevant consideration of statutory, procedural or regulatory guidelines/provisions; 4 Any relevant consultative input or escalation for an advisory opinion relating to the actionable steps to be undertaken by BEISL where deemed appropriate; and 5 The resolution determined and procedures for monitoring and managing the conflict where deemed appropriate. <p>BEISL shall provide to the BEISL Oversight Function an ad-hoc report detailing the status of any conflicts of interest issues, any remedial actions that have been approved, management controls in place and any associated actions to be undertaken.</p> <p><i>Escalation for further advice</i></p> <p>In circumstances where a resolution cannot be reached by the Compliance Department or Senior Manager, the matter shall be escalated to the BEISL Board to review and/or advise on the issues surrounding the nature and management of the actual, perceived or potential conflict of interest identified or disclosed in relation to the Calculating Agent.</p> <p>The escalation shall be recorded in the conflicts of interest register.</p> <p>Where considered appropriate, the BEISL Board may appoint others or refer the resolution of the conflict of interest to external bodies (including legal representatives of BEISL, and the Financial Conduct Authority).</p>

Role	Responsibilities
	<p>The BEISL Board</p> <p>Rules and procedures for managing directors' conflicts of interests, including disclosure thereof, are set out in BEISL's Articles of Association.</p> <p>In respect of the BAIC</p> <p>Upon identification of an actual or, perceived or potential, conflict of interest or upon disclosure of such conflicts of interest or issues relating to the potential conflicts of interest by a BAIC member, the Compliance Department shall issue a letter to the BAIC member involved in the conflict of interest issue. The letter shall include:</p> <ol style="list-style-type: none"> 1 A summary of the actual, perceived or potential conflict of interest and any supporting evidence; 2 Where an actual, perceived or potential conflict of interest is identified, a request for a response from the BAIC member involved within a specified timeframe of 21 working days; and 3 A request for the BAIC member concerned to recuse itself from all relevant Baltic Air Index Council meetings, discussions and abstain from voting relating to the actual, or perceived or potential conflict of interest until appropriate resolution remedial action has been reached by the Compliance Department. <p>All documentation and evidence relating to the actual, perceived or potential conflict of interest, identified or disclosed, shall be reviewed and recorded in the conflict of interest register.</p> <p>If a response is received from the BAIC member concerned in relation to the actual, perceived or potential conflict of interest, a review shall be conducted by the Compliance Department and a remedial action report prepared, within 30 working days of receipt of the response. The report shall include:</p> <ol style="list-style-type: none"> 1 A summary of the actual, or perceived or potential conflict of interest identified; 2 A summary of the response received from the BIC member concerned; 3 Any relevant consideration of statutory, procedural or regulatory guidelines/provisions; 4 Any relevant consultative input or escalation for an advisory opinion relating to the actionable steps to be taken by BEISL where deemed appropriate; and 5 The remedial actions determined and procedures for monitoring and managing the conflict where deemed appropriate.

Role	Responsibilities
	<p><i>Escalation for further advice</i></p> <p>In circumstances where a resolution cannot be reached by the Compliance Department, the matter shall be escalated to the BEISL Board for review and adoption of remedial actions.</p> <p>General responsibilities</p> <p>Upon identification of an actual, perceived or potential conflict of interest or upon disclosure of conflicts of interest or issues relating to the potential conflicts of interest related to the administration of benchmarks, the Compliance Department shall issue a letter to the individual involved in the conflict of issue. The letter shall include:</p> <ol style="list-style-type: none"> 1 A summary of the actual, perceived or potential conflict of interest and any supporting evidence; 2 Where an actual, perceived or potential conflict of interest is identified a request for a response from the individual concerned within a specified timeframe of 21 working days; and 3 A request from the individual concerned to recuse itself from any aspect related to the actual, perceived or potential conflict until the Compliance Department has reached an appropriate resolution. <p>All documentation and evidence relating to the actual, perceived or potential conflict of interest identified or disclosed shall be reviewed and recorded in the conflict of interest register.</p> <p>If a response is received from the individual concerned in relation to the actual, perceived or potential conflict of interest, a review shall be conducted by the Compliance Department and a remedial action report prepared, within 30 working days of receipt of the response. The report shall include:</p> <ol style="list-style-type: none"> 1 A summary of the actual, perceived or potential conflict of interest identified; 2 A summary of the response received from the individual concerned; 3 Any relevant consideration to statutory, procedural or regulatory guidelines/provisions; 4 Any relevant consultative input or escalation for an advisory opinion relating to the actionable steps to be taken by the Compliance Department where deemed appropriate; and 5 The remedial actions determined and procedures for monitoring and managing the conflict where deemed appropriate. <p>The Compliance Department shall provide to the BEISL Oversight Function an <i>ad-hoc</i> report detailing the status of any conflict of</p>

Role	Responsibilities
	interest issues, any remedial actions that have been approved, management controls in place and any associated actions to be undertaken.
	<p><i>Escalation for further advice</i></p> <p>If the Compliance Department is unable to agree on a resolution in response to the actual, perceived or potential conflict of interest, the issue shall be escalated to the BEISL Board. The escalation of the issue to the BEISL Board shall be recorded in the conflicts of interest register.</p> <p>Where considered appropriate, the BEISL Board may appoint others or refer to external bodies (including legal advisors and/or the Financial Conduct Authority) to advise on the conflict of interest issue.</p>
The BEISL Oversight Function	<p>General</p> <p>The BEISL Oversight Function shall be informed of the existence of any new conflicts of interest managed by BEISL.</p>
The BEISL Board	<p>General</p> <p>In the event of an escalation by the Compliance Department of any identified cases of actual, perceived or potential conflict of interests, the BEISL Board shall be ultimately responsible for adopting suitable remedial actions.</p>

11.8 Declaration of conflicts of interest

11.8.1 As a preventative measure and in order to facilitate the assessment of conflicts of interest, the BEISL Board, members of the BAIC, Calculating Agent, Data Providers and Baltic Employees are required to provide BEISL with a declaration of interest at the time of their appointment and on an annual basis. Declarations of interests should be appropriately updated in the conflicts of interest register, in the event any change in the interests may affect BEISL's benchmarks.

11.9 Method of disclosure

11.9.1 Any actual, perceived or potential conflict of interest shall be disclosed through the following channels:

Role	Method
<p>Calculating Agent;</p> <p>Data Providers; and</p> <p>Baltic Employees</p>	<p>Disclosures of any actual, perceived or potential conflict of interest or issues relating to potential conflicts of interest shall be addressed to the Compliance Department.</p> <p>Where relevant, disclosures can be made pursuant to BEISL's Complaints handling policy or whistleblowing policy as set out under Sections 12 (<i>Complaints</i>) and 13 (<i>Whistleblowing</i>) below.</p>

The BEISL Board	Rules and procedures for management of the conflict of interests, including disclosure thereof, by the BEISL directors' is set out in the BEISL's Articles of Association.
The BAIC	Disclosures of any actual, perceived or potential conflict of interest or issues relating to potential conflicts of interest shall be addressed to the Senior Assessor and/or the Compliance Department. Where relevant, disclosures can be made pursuant to BEISL's Complaints handling policy or whistleblowing policy, as set out under Sections 12 (<i>Complaints</i>) and 13 (<i>Whistleblowing</i>) below

11.10 Review

11.10.1 BEISL's conflicts of interest policy and framework shall be reviewed annually by the Senior Management and Compliance Department and any recommended changes shall be brought to the attention of Senior Management of BEISL, the BEISL Board, and BEISL Oversight Function.

12 Complaints

The air cargo industry is comprised of market participants operating under a variety of different arrangements. At times, it is envisaged that BEISL may be in receipt of concerns, comments or occasionally, formal complaints as to its benchmark administration activities. Complaints may be submitted in relation (but not limited to) matters such as whether a specific benchmark calculation is representative of market value, proposed benchmark calculation changes, applications of methodology in relation to a specific benchmark calculation and other editorial decisions in relation to the benchmark calculation process.

12.1 Informal comments

12.1.1 Informal comments or queries will be handled most efficiently by liaising with the Senior Assessor and team via telephone or by emailing: balticbroker@balticexchange.com

12.1.2 Upon receiving an informal comment, the Senior Assessor will consider the nature of the comment and assess the merit fairly. The Senior Assessor will provide a response to a Complainant and shall endeavour to do so in a timely manner. The Senior Assessor will also consider if an escalation of the informal comment is required.

12.1.3 If the informal comment is not addressed to the satisfaction of the Complainant, then the Complainant will be provided with information setting out how to initiate a formal complaint in accordance procedure set out under Section 12.2 (*Formal complaint*) below.

12.2 Formal complaint

12.2.1 A formal complaint can be made:

By email to complaint@balticexchange.com; or

By post to: The Baltic Exchange Limited, Complaints, 38 St Mary Axe, London, EC3A 8EX

12.2.2 If a Complainant uses another method other than the ones listed above, in order to ensure the communication is treated as a formal complaint in accordance with this Guide, the Complainant should clearly mark “complaint” on the communication.

12.2.3 Content of a formal complaint

A formal complaint shall include:

- (1) The contact details of the Complainant (including full name, address, telephone number and a valid email address);
- (2) The company name of the Complainant;
- (3) The nature of the formal complaint;
- (4) A detailed description of the issue or concern;
- (5) Whether the formal complaint refers to BEISL’s role as a Benchmark Administrator, including activities of the Calculating Agent;
- (6) The details of the relevant index/benchmark;
- (7) The date of the incident if applicable; and
- (8) The date of the formal complaint.

12.2.4 If any of the information required above is missing, BEISL may not be able to fully assess a formal complaint. In such circumstances, BEISL may contact the Complainant to request further information. If BEISL does not deem a submitted query or dispute to rise to the level of a formal complaint, BEISL may contact the Complainant to discuss the matter.

12.2.5 Obligations of BEISL to the Complainant submitting a formal complaint

A formal complaint may relate to any aspect of BEISL's benchmark determination and administrations process and BEISL shall ensure:

- (1) All investigations of a formal complaint made by a Complainant to BEISL shall be handled in a fair and timely manner;
- (2) The investigation of a formal complaint shall be conducted by parties independent of those involved in the subject of the complaint; and
- (3) Resolution of the formal complaint shall be communicated to the Complainant, once BEISL's decision has been finalised.
- (4) Procedure for receiving and investigating a formal complaint:
- (5) Upon receiving a formal complaint, BEISL will escalate the issue to the relevant department best placed to address the formal complaint and shall investigate, assess fairly, consistently, and promptly
- (6) The subject matter of a formal complaint;
- (7) Whether the formal complaint should be upheld; and
- (8) The final resolution determined.
- (9) When making the above assessments, BEISL shall take into account all relevant factors including but not limited to:
 - (10) All evidence available and the particular circumstances of the formal complaint;
 - (11) Similarities with any other formal complaint received by BEISL; and
 - (12) Relevant guidance published by the Financial Conduct Authority or that of any other relevant regulatory authority
- (13) The resolution time for a formal complaint will vary according to the nature of the issue and the level of investigation it may require. Where BEISL receives and investigates a formal complaint, BEISL shall:
 - (14) Investigate the complaint competently, diligently and impartially, obtaining all additional information as deemed necessary;
 - (15) Send the Complainant a prompt written acknowledgment of receipt of a formal complaint;
 - (16) Provide regular updates as to the status of the issue and anticipated timescale to resolution; and
 - (17) Provide the Complainant a final or other response within the anticipated timescale.
- (18) Following an investigation of a formal complaint, BEISL shall explain to the Complainant promptly and, in a way that is fair, clear and not misleading, BEISL's assessment of the formal complaint and its decision on the formal complaint, unless such communication

would be contrary to the objectives of public policy or to provisions of Regulation (EU) No 596/2014 on market abuse (**MAR**), or other relevant conduct or market law or regulation.

Escalation of a formal complaint

12.2.6 A written response to a formal complaint will be provided to the Complainant by BEISL. In the event that the Complainant disagrees with the decision, the issue will be escalated to the BEISL Board for investigation.

12.2.7 The decision of the BEISL Board shall be delivered within six months from the date of the formal complaint and shall be final. The Complainant shall be notified of the outcome without undue delay following the meeting of the BEISL Board at which such decision was taken.

12.3 Formal complaint in relation to BEISL as Administrator

12.3.1 When the nature of the Complainant's formal complaint relates to BEISL as an Administrator, then the following shall apply:

- (1) A formal complaint in relation to BEISL as a Benchmark Administrator shall be reviewed by the BEISL Board;
- (2) BEISL's Compliance Department, if required, shall be consulted to resolve a formal complaint in relation to BEISL as a Benchmark Administrator, as soon as reasonably practicable;
- (3) The Complainant shall be advised of the outcome of its investigations within a reasonable time period unless such communication shall be contrary to the BMR; and
- (4) The BEISL Board and/or Compliance Department shall report to the BEISL Oversight Function on the investigation, management and outcome of the formal complaint.

12.3.2 At all times, BEISL shall ensure the investigation of a formal complaint in relation to BEISL as a benchmark Administrator shall be conducted by parties independent of those involved in the subject of the formal complaint.

13 Whistleblowing

13.1 Whistleblowing claims

13.1.1 Whistleblowing claims may be related (but not limited) to the following circumstances:

- (1) Infringement of the BMR;
- (2) Infringement of any other legislative provision applicable to BEISL and /or the Calculating Agent;
- (3) Collusion or suspected collusion aimed at manipulating or attempting to manipulate BEISL benchmarks;
- (4) Any other instances of suspicious and manipulative conduct which affects or may affect the determination and publication of BEISL's benchmarks;
- (5) Claims concerning BEISL as an Administrator;
- (6) With regard to the functioning of BEISL and malpractice within BEISL:
- (7) Any fraud or corruption;
- (8) Any irregularities involving BEISL's benchmark determination process or other benchmark related misconduct
- (9) The commission of any criminal offence;
- (10) Any dishonesty or other irregularities in the benchmark determination process or publication of a benchmark;
- (11) Conduct which endangers the health and safety of Baltic Employees and others working for BEISL;
- (12) A miscarriage of justice has occurred, is occurring or is likely to occur;
- (13) Any failure to comply with legal obligations to which Baltic Employees or others working for BEISL are subject (including but not limited to failure to comply with the rules and requirements of the Financial Conduct Authority);
- (14) Misuse or abuse of BEISL's assets;
- (15) Any violation of any other policy of BEISL; and
- (16) Any attempt to conceal information relating to any of the whistleblowing claims or sorts of malpractice mentioned above.

13.2 Key principles

13.2.1 The following principles shall apply to whistleblowing claims raised with BEISL:

- (1) All whistleblowing claims raised with BEISL shall be independently assessed by a RPP (as defined under Section 13.3 below) in order to ensure that all claims are properly considered and handled fairly;
- (2) BEISL shall treat all disclosures consistently and fairly;

- (3) BEISL shall take all reasonable steps to maintain the confidentiality of the Whistleblower (unless it is required by law to break that confidentiality);
- (4) BEISL shall not tolerate the harassment or victimisation of anyone reporting a genuine concern. Any instances of victimisation shall be taken seriously and managed appropriately; and
- (5) No individual making a whistleblowing claim shall suffer reprisal (even if the individual making a whistleblowing claim is mistaken) as a result of reporting a genuine concern in the public interest, and that the individual reasonably believes that making the disclosure tends to show past, present or likely future wrongdoing. This assurance, however, does not apply to anyone making a whistleblowing claim with the intention to provide information they know or reasonably believe to be untrue. Personal grievances and Complaints shall not be covered by this Policy. Baltic Employees may be subject to disciplinary action for making such claims.

13.3 **Relevant Prescribed Person (RPP)**

- 13.3.1 Whistleblowing claims received by BEISL shall be investigated and resolved on a consistent and fair basis by personnel who are independent of any personnel who may be or may have been involved in the subject of the whistleblowing claim.
- 13.3.2 The whistleblowing claim shall be collected and processed by a person in BEISL specifically appointed to hear whistleblowing claims. Accordingly, a RPP, the Head of Systems and Data of BEISL, is appointed and shall hold primary responsibility for monitoring the communication channels by which individuals may submit whistleblowing claims and for ensuring the investigation and resolution of the whistleblowing claim as described below in Section 13.6 (*Investigation and management of a whistleblowing claim*).
- 13.3.3 The RPP is bound by professional confidentiality when processing the whistleblowing claim. The RPP shall work with sufficient autonomy with respect to BEISL, and where appropriate, may be questioned in his or her capacity as an RPP.
- 13.3.4 If the Head of Systems and Data is a party to a whistleblowing claim made by a Whistleblower, the Head of Systems and Data shall recuse himself or herself and BEISL shall appoint an alternative RPP independent of the whistleblowing claim.

13.4 **Whistleblowing framework**

- 13.4.1 *When to make a disclosure*: if you are aware or suspect that there may be any sort of malpractice occurring pursuant to Section 13.1 (*Whistleblowing claims*) above.
- 13.4.2 *Why you should make a disclosure*: prompt disclosure is important because it helps to ensure that BEISL takes the necessary measures, with a view to avoiding or minimising damage, loss, liability and/or criticism.
- 13.4.3 It is important that an individual submits a whistleblowing claim to BEISL pursuant to this Section 13.4, in order to give BEISL the opportunity to investigate and manage the whistleblowing claim consistently and fairly.
- 13.4.4 *Procedure to make a disclosure*: BEISL will investigate all whistleblowing claims that are raised, even if they are raised anonymously. Whistleblowing claims may be submitted through the following communication channels:
 - (1) Typed report in a letter to the RPP;
 - (2) Telephone to the RPP; or

(3) Email to the RPP at: whistleblowing@balticexchange.com

13.4.5 If a whistleblowing claim is to be made in confidence and anonymously, the individual shall make their submission in a typed report addressed to the RPP in a sealed envelope. That sealed envelope shall be submitted via post in order to ensure that it is not traceable. The contact address that shall be used:

13.4.6 Relevant Prescribed Person, Benchmark Whistleblowing, The Baltic Exchange Ltd, 38 St Mary Axe, London EC3A 8BH

13.4.7 BEISL would, however, encourage an individual making a whistleblowing claim to give as much detailed information about their concern including their name and details of the malpractice, including comments as to how the individual has been able to find out about the malpractice.

13.4.8 The more information that can be provided to BEISL, the easier it is for BEISL to progress the investigations into the whistleblowing claim. BEISL will ensure that if an individual does provide their name, the person conducting the investigation will consider the procedures that they will put in place to protect the identity of the individual, although in some circumstances this may not be possible. If an individual does raise a concern on an anonymous basis, that individual should be aware that this may make it impossible for BEISL to fully investigate their concerns and that they would not ordinarily be able to receive feedback and any action taken by BEISL to look into the disclosure may be limited.

13.5 Receipt of whistleblowing claim

13.5.1 The RPP shall regularly monitor the communication channels by which individuals and Baltic Employees may submit whistleblowing claims.

13.5.2 In the event a whistleblowing claim is filed with BEISL, the RPP shall notify the Whistleblower via any of the communication channels provided by the Whistleblower, that the claim has been received and that a resolution shall aim to be provided within 90 days of receipt, given that BEISL is able to acquire the necessary documents, evidence, and statements in a timely manner. BEISL shall also inform the Whistleblower that follow-up enquiries may be necessary to clarify the whistleblowing claim and documentations may need to be provided to substantiate the claim. BEISL, however, notes that providing documentation to substantiate the whistleblowing claim shall not be a requirement in order for BEISL to look into the concerns raised.

13.5.3 The RPP shall record relevant details of the claim and on the Whistleblower in a secure whistleblowing register pursuant to BEISL’s record keeping requirements.

13.6 Investigation and management of a whistleblowing claim

BEISL shall investigate all whistleblowing claims made concerning BEISL as a benchmark Administrator in accordance with the following framework:

Role	Action to be carried out
RPP	<p>The RPP upon receipt of the whistleblowing claim, shall notify the CEO and the Compliance Department and the Chief Financial Officer.</p> <p>The RPP shall escalate the whistleblowing claim to the BEISL Board, with the BEISL Board acting in its capacity as the Administrator’s management body.</p>

Role	Action to be carried out
	<p>Depending on the severity of the claim or breach by the Administrator, ad hoc BEISL Board meetings can be convened.</p> <p>If the whistleblowing claim involves any of the BEISL directors, those directors shall be asked to excuse themselves from all sessions and meetings at which the whistleblowing claim is to be discussed or actioned.</p> <p>For the avoidance of doubt, where a whistleblowing claim has been made against the Administrator, such claim shall be escalated by RPP to the BEISL Oversight Function for review and resolution. In such case, procedures set out in the subsequent paragraphs shall apply mutatis mutandis.</p>
<p>The BEISL Board</p>	<p>Investigation into a whistleblowing claim</p> <p>The BEISL Board is to ensure that an investigation and detailed analysis into the whistleblowing claim is carried out. This includes but is not limited to:</p> <ol style="list-style-type: none"> 1 Follow-up with the Whistleblower to clarify the alleged activity and answer any questions which the BAIC may have in relation to the whistleblowing claim; and 2 Collection and review of relevant documentation and evidence. <p>The BEISL Board shall be supported by the RPP in the collection of the relevant documentation and evidence and in managing the relations with the Whistleblower.</p> <p>All documentation and evidence that is reviewed and communications that are conducted as part of the investigation into the whistleblowing claim shall be recorded in the whistleblowing register.</p> <p>Hearing with the accused party</p> <p>Following the review of the evidence and claim provided by the Whistleblower and of any additional documentation and evidence identified throughout the investigation stage, the BEISL Board shall invite any of the person's involved to a hearing in front of the BEISL Board.</p> <p>The invitation to appear in front of the BEISL Board shall be sent at least 14 days before the scheduled hearing. In the event that such person is unable to attend the hearing, the hearing shall be rescheduled with minimum delay in order for the whistleblowing claim to be dealt with in a timely manner. In the event that such a person is unable or unwilling to attend the hearing, he or she may submit a written response to the alleged activity.</p> <p>The BEISL Board shall adhere to the strictest standards of confidentiality and respect the Whistleblower's preference for anonymity where it has been indicated by the Whistleblower,</p>

Role	Action to be carried out
	<p>throughout the processing and investigation stage and subsequently</p> <p>Issue a whistleblowing report</p> <p>Following the investigation by the BEISL Board and RPP, and taking into consideration the response of the relevant person(s) involved, the BEISL Board shall produce a whistleblowing report in response to the whistleblowing claim. The whistleblowing report shall include but is not limited to:</p> <ol style="list-style-type: none"> 1 A summary of the whistleblowing claim; 2 The BEISL Board’s response to the whistleblowing claim based on the investigations carried out; and 3 Any remedial actions that may be taken to address the alleged claim. <p>The whistleblowing report, upon finalisation by the BEISL Board, shall aim to be delivered to the Whistleblower within 90 days of receipt of the whistleblowing claim given that the BEISL Board is able to acquire the necessary documents, evidence and statements in a timely manner.</p> <p>Escalation for further advice</p> <p>Where deemed appropriate and necessary, the BEISL Board may refer the whistleblowing claim to external bodies (including legal advisors, the police or the Financial Conduct Authority) to investigate and/or advise on the whistleblowing claim or part of it including the investigation itself, acquisition of documentation, evidence and statements together with the processing of the whistleblowing claim. All decisions of the BEISL Board in this respect shall be documented in the form of resolutions.</p> <p>If the BEISL Board is unable to agree on a final resolution for the whistleblowing report, the claim can be escalated to the BEL Board for review if considered appropriate. The escalation of the whistleblowing claim to the BEL Board shall be recorded in the whistleblowing register.</p> <p>The BEL Board shall review the documentation, evidence and statements collected by the BEISL Board. The BEL Board shall draft and approve a decision to be provided to BEISL.</p>
BEISL Oversight Function	Review the BEISL Board investigation

Role	Action to be carried out
	<p>All whistleblowing claims, investigations, escalations and resolutions shall be reported to BEISL Oversight Function.</p> <p>BEISL Oversight Function shall oversee the adherence of the whistleblowing framework and, where appropriate, take effective measures in the reporting of any findings and monitor the implementation of any remedial actions where identified.</p> <p>If the BEISL Oversight Function is not scheduled to meet within the 90-day period allowed for a response to a whistleblowing claim, then an ad hoc meeting can be scheduled.</p>

13.7 Escalation to the Regulators

13.7.1 In the event a whistleblowing claim is made with the Administrator or against BEISL pursuant to Section 13.6 (*Investigation and management of a whistleblowing claim*) and a finding of malpractice is determined, the Financial Conduct Authority shall be notified by the Compliance Department or the BEISL Oversight Function.

13.7.2 The Financial Conduct Authority, as the national competent authority for BEISL, shall be notified of the whistleblowing claim, the findings of any subsequent investigation and the whistleblowing report. Records, documentation, evidence and statements relating to all whistleblowing claims made may be shared with the Financial Conduct Authority upon request.

13.8 Confidentiality of whistleblowing claims

13.8.1 All whistleblowing claims that are received by BEISL shall be addressed and resolved in accordance with applicable UK and EU legislation. The identity of the Whistleblower, as well as any element allowing for their identification, will be kept confidential at all stages of the process to the extent possible.

13.8.2 In particular, the identity of the Whistleblower shall not be disclosed to third parties, the accused party, or other Baltic Employees unless BEISL is obliged to disclose their identity in the event of any subsequent judicial proceedings, court order or investigations undertaken by the Financial Conduct Authority. The confidentiality of the accused party of any whistleblowing claim shall be respected, as appropriate.

13.8.3 All information relating to the whistleblowing claim including all documentation, evidence statements, whistleblowing report and any minutes of meetings convened shall be kept secured in relation to IT infrastructure.

13.9 Review

13.9.1 BEISL's framework for whistleblowing, as set out in this Guide, shall be reviewed semi-annually by the Head of Systems and Data and the Compliance Department and any recommended changes shall be brought to the attention of the BEISL's senior management, BEISL Board and BEISL Oversight Function. The whistleblowing framework shall also be reviewed following any whistleblowing claim made.

14 Prevention of market abuse and reporting of infringements

Systems and procedures for prevention of benchmark manipulation

14.1 Overview

14.1.1 BEISL has put in place effective arrangements, oversight, systems and procedures to ensure the quality of the Contribution of Input Data to its benchmarks and to prevent the manipulation of its benchmarks. This includes systems and monitoring procedures that are designed to detect suspected manipulation or attempted manipulation of a benchmark in compliance with the provisions of Regulation (EU) No 596/2014 on market abuse (MAR) . There are four pillars of these arrangements:

- (1) **Surveillance:** automated and manual surveillance by the Calculating Agent involved in provision of benchmarks, which may result in internal reports by the Calculating Agent provided to BEISL of suspected benchmark manipulation requiring further investigation by BEISL. The surveillance arrangements are described in detail in Section 14.2 below.
- (2) **Assessment:** internal BEISL investigation and assessment of reports of suspected benchmark manipulation, with advice from external counsel and/or experts as needed. The assessment procedure is described in more detail in Section 14.3 below.
- (3) **Oversight and approval:** internal BEISL oversight of the provision of benchmark and approval process to the determined benchmark prior to benchmark publication or dissemination.
- (4) **Reporting:** where following internal investigation of suspected market manipulation the Compliance Department forms a reasonable suspicion of market abuse, it will report the suspicion to the Financial Conduct Authority. The reporting procedure is described in more detail in Section 14.4 below.

14.2 Surveillance arrangements

14.2.1 BEISL has established two surveillance channels, which may generate reports of suspected manipulation of a benchmark:

- (1) **Automated surveillance system**

The Calculating Agent maintains arrangements that analyses the Input Data of each Data Provider against the Contribution of Input Data of all Data Providers reporting on a particular route. This includes algorithms alongside some manual controls in order to detect anomalies. Additional analysis is also undertaken by drawing comparisons between the Contribution of Input Data and historical data. Statistical methods of testing are used to show trends, correlations and deviations to help identify any suspicious activity.

BEISL maintains bespoke IT systems and arrangements that analyses the determined benchmark. This includes algorithms that analyse data against a given set of parameters, including the benchmark methodology, previous day submissions and calculated averages. The automated system alerts the Assessors to anomalies in Input Data received.

- (2) **Manual surveillance procedure**

Data Scientists and BEISL Assessors monitor all relevant developments in the market via various channels, including market reports. This allows the Assessors to formulate views on an acceptable price range. On receiving Relevant Data from Data Providers, Assessors conduct review and analysis of the data in order to detect any anomalies.

Assessors report all suspicious submissions to the Compliance Department without delay for further evaluation.

Calculating Agent, Director and employee reporting

14.2.2 In addition, the Calculating Agent, all BEISL directors and employees are obliged to report to the Compliance Department without delay any cases of suspected manipulation of BEISL benchmark(s) and/or any conduct that may give rise to such manipulation. This is to be done in accordance with general procedure for reporting BMR infringements as set out in Section 14.6 (*Internal reporting of BMR infringements*) below.

14.3 Assessment procedure

14.3.1 All relevant information generated as a result of the surveillance arrangements described above is assessed in order to determine whether there is a reasonable suspicion of benchmark manipulation. This assessment entails the following steps:

Step 1: Additional information gathering

Assessments are transactional based. Following detection of anomalies in the Contribution of Relevant Data, the Calculating Agent contacts the Data Provider in order to verify the contribution of Relevant Data.

In addition, BEISL Assessors shall undertake monitoring checks and if an anomaly in the Input Data is identified or is deemed suspicious, they shall consult with the Calculating Agent for verification purposes.

In both instances, if an anomaly cannot be verified or otherwise explained, the matter shall be referred to the BEISL Compliance Department.

Step 2: Determination of reasonable suspicion

Upon receipt of information from the Calculating Agent or Assessors on anomalies, the Compliance Department conducts further verification thereof. The Compliance Department may collect further information in order to determine whether information included in the Calculating Agent's or Assessor's report gives rise to a reasonable suspicion of benchmark manipulation. The Compliance Department may use all available and relevant information in the assessment and may seek information from directors and employees of the Data Provider. In the case when the Compliance Department finds a reasonable suspicion of benchmark manipulation, it is obliged to report such a case to the Financial Conduct Authority.

14.4 Reporting of suspected benchmark manipulation

14.4.1 In the event that it forms reasonable suspicion of benchmark manipulation, the Compliance Department reports this finding to the Financial Conduct Authority. Without prejudice to the responsibilities of the BEISL Oversight Function, the Compliance Department is the only department within BEISL authorised to submit such reports. It will make all reasonable efforts to ensure that any such report contains sufficient information for the Financial Conduct Authority to properly investigate.

14.4.2 As a general rule, all reports and any other communication with the Financial Conduct Authority must be submitted by the head of the Compliance Department, or his/her specified designate. Copies of such reports and other communication shall be shared with the BEISL Oversight Function.

14.4.3 The Compliance Department will submit to the Financial Conduct Authority any information received after its original report has been submitted that may be relevant or useful for the regulator in investigating suspected benchmark manipulation.

14.4.4 BEISL will make all reasonable efforts to comply with any request for information from the Financial Conduct Authority concerning any report it submits.

14.5 **Record keeping**

14.5.1 The Calculating Agent and BEISL records all alerts generated by the automated surveillance system, together with any Assessors' reports generated as a result of any manual surveillance procedures and director and employee reports of suspected benchmark manipulation. Written records are produced as reports of suspected benchmark manipulation are investigated and escalated internally. BEISL maintains copies of all such written records, including in respect of cases categorised as "near misses" and not reported externally, as well as any report submitted to the Financial Conduct Authority, in accordance with record keeping procedure set out in Section 10.4 of the Air Freight Guide.

14.6 **Internal reporting of BMR infringements**

14.6.1 All BEISL directors and employees, Calculating Agent and any other natural persons whose services are placed at their disposal or under control of BEISL directors or employees, are obliged to report cases of suspected or actual infringement of BMR to the Compliance Department without delay. These reports are to be submitted at the department's dedicated email address: compliance@balticexchange.com

14.6.2 The report to the Compliance Department must include a brief description of the suspected BMR infringement, the unit and/or function responsible for the infringement, the name of primary contact person within the function and information on any immediate remediation that has been taken.

14.6.3 The Compliance Department is responsible for investigating any alleged infringement and adoption of remedial action. The Compliance Department shall notify the Financial Conduct Authority any such infringement identified.

14.6.4 The Compliance Department shall keep the BEISL Oversight Function informed of all such identified cases of BMR infringement.

15 Confidentiality and Transparency

15.1 High confidentiality and transparency standards

- 15.1.1 Confidentiality is vital to BEISL's administration process and in ensuring that its activities with regards to the provision of benchmarks are carried out without any threat of interference or influence from any individual who may have a private interest. This includes activities of the Calculating Agent and any other third party to which BEISL may outsource certain activities linked with the provision of its benchmarks, or any other third party providing services to BEISL.
- 15.1.2 To the extent BEISL engages a third party to provide services to BEISL, cooperate with BEISL or support BEISL's administration activities, BEISL requires that such third party has in place appropriate processes and controls to preserve the principle of confidentiality.
- 15.1.3 BEISL shall treat confidential information involved in the provision of benchmarks as commercially sensitive information.
- 15.1.4 BEISL is committed to protecting confidential information and shall not disclose commercially sensitive information or communication thereof except if required by order of a court or a Regulator exercising a statutory power. BEISL may make available general information regarding which Data Providers may offer information that is used in the provision of benchmarks.
- 15.1.5 To the extent that BEISL engages a third party to provide services to BEISL, cooperate with BEISL or support BEISL's administration activities, BEISL requires that such third party shall not disclose commercially sensitive information to any unauthorised party except if required by order of a court or a Regulator exercising a statutory power. This includes services provided by the Calculating Agent.
- 15.1.6 BEISL's ensures it provides disclosure of elements sufficient to ensure the benchmark's reliability and accuracy. BEISL acknowledges transparency regarding its benchmarks is necessary to allow stakeholders and users of the benchmark to understand how the benchmark is derived and to assess its representativeness, relevance and appropriateness for its intended use.

16 Operational Risks

16.1 Risks and control systems

16.1.1 BEISL adopts the following definition of operational risk:

“Risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.”

16.1.2 The processes involved in the provision of benchmarks is heavily dependent on a computer system which integrates the commercially sensitive information uploaded by Data Providers, the processes to the extent BEISL engages the Calculating Agent, the approval mechanism by BEISL and the publication mechanism via the public website. Within the public website there are a number of levels of access, also controlled by password.

16.1.3 BEISL’s benchmark determination process is fully automated to ensure continuous delivery with automated processes from data ingestion to index production removing much of the risk and difficulty in index management.

16.1.4 Only transaction data is used in the benchmark determination process and any use of expert judgment or discretion is limited to the application of the waterfall methodology set out at Section 4 of the Air Freight Guide which is carried out by the Calculating Agent.

16.1.5 To the extent that BEISL engages a Calculating Agent and/or third party to provide services to BEISL, BEISL ensures it undertakes reasonable steps – including the establishment of appropriate contingency plans - to avoid undue operational risk related to the participation of the service provider in the benchmark determination process.

Information Technology risks

16.2 Administrator level

16.2.1 The software which supports BEISL is a proprietary system specifically developed for the Baltic Exchange Ltd and its affiliates. First line support in response to technical problems is provided by Baltic staff, second line by BEISL’s software provider and third line is provided by the software providers development staff.

16.2.2 The Baltic Exchange Ltd and its affiliates maintain a disaster recovery plan which is set out in Appendix 5. This sets out how the company will react and recover from terrorist incidents, problems which render its premises inaccessible and major failures of infrastructure.

16.2.3 There is a certain level of risk to all computer systems from malicious attack. Such attacks can be divided into three types. They may be specific attempts to invade a certain computer system to disrupt or manipulate services, or they may be more general “hacking” attacks where attempts are made to penetrate randomly selected computer systems. The third type is the very common “denial of service” attacks which seek to disable systems by overwhelming them with requests rather than by penetrating them. BEISL employs third party specialists to test its systems annually to analyse the first two risks. The third type of attack is defended against using sophisticated infrastructure provided by third party Systems.

Personnel risks

16.2.4 BEISL ensures that on any working day staff levels among the Assessors and technical staff members are sufficient to minimise risks brought about by unexpected absences. To reduce risks from global epidemics, staff are discouraged from attending the office when they are ill with contagious diseases such as (for example) Coronavirus or to implement a split team rota to attend the office in order to mitigate the risk of all Senior Assessor/ Assessors being unwell at

the same time. In order to mitigate the risk of the loss of the Senior Assessor or any Assessor, the Senior Assessor is responsible for ensuring an even spread of work between Assessors. BEISL also implements succession planning in relation to the Assessor team and performs stress tests to identify the minimum number of staff required to continue full operation of the benchmark administration activities.

- 16.2.5 It would be a cause of major disruption if BEISL found itself unable to administer some or all of the benchmarks. Continuous efforts are made to reduce the likelihood of this situation arising. If the criteria set out in Section 4.3 are no longer met in relation to a particular benchmark, BEISL might find itself unable to publish some or all of the benchmarks. Many of the indices are determined using a minimum data set sourced from three (3) Data Providers. BEISL ensures there is a continuous upload of information from which data is sourced.
- 16.2.6 Indices can be implicated due to incorrect upload of data. This could lead to a lack of trust in the indices. This risk is mitigated by integrating built-in controls to avoid incorrect upload of information. BEISL ensures that there is monitoring of the data upload and to avoid such situations and to avoid incorrect data being sourced and published.
- 16.2.7 To the extent that BEISL engages a third party to provide services to BEISL, BEISL ensures it undertakes reasonable oversight and approval process to the benchmark determination process.

Responsibility for managing operational risks

- 16.2.8 Day-to-day responsibility for managing operational risk is shared between BEISL Employees directly involved in provision of benchmarks (Senior Assessor and Assessors), the Compliance Department and the IT services department, led by Head of Systems and Data and the Calculating Agent. Appointment, substitution or removal of individuals involved in those functions is conducted in accordance with BEISL's general recruitment policy and in particular, the requirement for all employees and contractors to have the necessary skills, knowledge and experience as set out in Section 2.1.1 of the Air Freight Guide.

17 Compliance

17.1 Policies approval, monitoring and maintenance

BEISL Board

- 17.1.1 The BEISL Board is responsible for the Air Freight Guide, and for ensuring the compliance of the Air Freight Guide with any applicable legislation (including, without limitation, the BMR). The BEISL Board may delegate this responsibility to the Compliance Department.

The Compliance Department

- 17.1.2 The Compliance Department is responsible for monitoring day-to-day BEISL's compliance with the benchmark methodologies and with BMR. It should report on such compliance to the BEISL Board once a year. Copies of such reports can be made available to the Financial Conduct Authority upon request.

Compliance Framework

- 17.1.3 To ensure compliance with BEISL's benchmark administration activities, policy and procedures together with applicable regulatory requirements, BEISL shall adopt a compliance monitoring and testing program.

Compliance Function

- 17.1.4 BEISL maintains a permanent and effective compliance function to monitor and the application and effectiveness of the procedures contained within the Air Freight Guide and to report to BEISL Board/Senior Management periodically on compliance issues,

Compliance Testing and Compliance Monitoring

- 17.1.5 The Compliance Function shall be responsible for testing BEISL's policy and procedures related to its benchmark activities as contained within the Air Freight Guide. BEISL shall adopt a Compliance Monitoring Programme (CMP) to support effective compliance and mitigate its compliance risk.

Internal Investigations

- 17.1.6 The Compliance Department shall carry out all necessary investigations upon identification of a breach of BEISL's policy and procedures as contained within the Air Freight Guide. All BEISL employees shall co-operate to their fullest with the compliance function.

Review of the Air Freight Guide

- 17.1.7 The Air Freight Guide shall be reviewed every three years, or as more regularly required in order to maintain compliance with any change in applicable laws and regulation (including, without limitation, the BMR). The BEISL Board shall be assisted in conducting such reviews by the BAIC and/or BEISL Oversight Function.

Amendments to the Air Freight Guide

- 17.1.8 The procedure for such review every three years (or as otherwise required in accordance with Section 17.1.7 above) is as follows:

- (1) The Compliance Department will conduct a review of the Air Freight Guide and prepare a proposal of amendments, if any (the **Proposal**). The Proposal shall include analysis of whether such changes require prior consultation with the BAIC in accordance with Section 2 (*Governance Structure*) of this Air Freight Guide.
- (2) The Proposal is then submitted to the BAIC and to the BEISL Oversight Function for review and consideration.
- (3) Following review and consideration of the Proposal by the BAIC and by the BEISL Oversight Function, any amendments approved shall be included in an updated version of the Air Freight Guide.

17.2 **Enforcement**

- 17.2.1 In the event that the BEISL Board becomes aware that BEISL, the Baltic, any BEISL employees or any third party involved in the provision of benchmark has breached any provision of the Air Freight Guide, the relevant entity or individual may be suspended from their responsibilities in relation to the determination, assessment or other role in relation to BEISL's benchmarks or such other action may be taken as may be reasonable in the circumstances, on a case-by-case basis.
- 17.2.2 The Senior Managers will then conduct a review in relation to the alleged breach and present an analysis for review and consideration to the BEISL Board. Copy of such analysis shall also be transferred without delay to the BAIC and to the BEISL Oversight Function. Following review and consideration by the BEISL Board, the BEISL Board will then decide whether to reinstate any suspended entity or individual, uphold or implement a suspension, or take any other reasonable actions as may be available in the circumstances, on a case-by-case basis. The BEISL Oversight Function may formulate recommendations to the BEISL Board to this end.
- 17.2.3 In the event of any alleged breach in relation to BEISL, the BEISL Oversight Function may also report to the Financial Conduct Authority, unless such report has been submitted by the BEISL Compliance Department. The BEISL Oversight Function will comply with any requests for additional information and, if applicable, subsequent investigation conducted by the Financial Conduct Authority.

APPENDIX 1

Region and Index Specification Guide

Region	IATA Country Code
Europe (01)	AD, AL, AM, AT, AX, AZ, BA, BE, BG, BY, CH, CY, CZ, DE, DK, DZ, EE, EH, ES, FI, FO, FR, GB, GE, GI, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MA, MC, MD, MK, MT, NL, NO, PL, PT, RO, RU, SE, SI, SJ, SK, SM, TN, TR, UA, VA
North America (02)	CA, GL, MX, PM, UM, US
South East Asia (03)	BN, CC, CN, CX, FM, GU, HK, ID, KG, KH, KZ, LA, MH, MM, MN, MO, MP, MY, PH, PW, SG, TH, TJ, TL, TM, TW, UZ, VN
USA (04)	US
China (05)	CY

Baltic Air Index			
Short Code	Unit	Short Description	Long Description
BAI	Index	BAI ^{powered by TAC data}	Average(BAI-HKG01*d, BAI-HKG03*d, Average(BAI-HKG02*d,BAI-HKG04*d), BAI-FRA05*d, BAI-FRA03*d, Average(BAI-FRA02*d, BAI-FRA04*d), BAI-LHR03*d, Average(BAI-LHR02*d, BAI-LHR04*d), BAI-ORD01*d, BAI-ORD03*d, BAI-PVG01*d, Average(BAI-PVG02*d, BAI-PVG04*d), BAI-SIN03*d)*0.1
BAI-FRA00	Index	Frankfurt Outbound Index	Average(BAI-FRA05*d, BAI-FRA03*d, Average(BAI-FRA02*d,BAI-FRA04*d))*0.1
BAI-HKG00	Index	Hong Kong Outbound Index	Average(BAI-HKG01*d, BAI-HKG03*d, Average(BAI-HKG02*d, BAI-HKG04*d))*0.1
BAI-LHR00	Index	London Heathrow Outbound Index	Average(BAI-LHR03*d, Average(BAI-LHR02*d, BAI-LHR04*d))*0.1
BAI-ORD00	Index	O'Hare Int'l, Chicago Outbound Index	Average(BAI-ORD01*d, BAI-ORD03*d)*0.1
BAI-PVG00	Index	Shanghai Pudong Outbound Index	Average(BAI-PVG01*d, Average(BAI-PVG02*d, BAI-PVG04*d))*0.1
BAI-SIN00	Index	Singapore Outbound Index	Average(BAI-SIN03*d)*0.1
BAI-FRA02	US\$/kg	Frankfurt to North America	Frankfurt to North America general cargo (cost to carrier/weight shipped)
BAI-FRA03	US\$/kg	Frankfurt to South East Asia	Frankfurt to South East Asia general cargo (cost to carrier/weight shipped)
BAI-FRA04	US\$/kg	Frankfurt to USA	Frankfurt to USA general cargo (cost to carrier/weight shipped)
BAI-FRA05	US\$/kg	Frankfurt to China	Frankfurt to China general cargo (cost to carrier/weight shipped)
BAI-HKG01	US\$/kg	Hong Kong to Europe	Hong Kong to Europe general cargo (cost to carrier/weight shipped)
BAI-HKG02	US\$/kg	Hong Kong to North America	Hong Kong to North America general cargo (cost to carrier/weight shipped)
BAI-HKG03	US\$/kg	Hong Kong to South East Asia	Hong Kong to South East Asia general cargo (cost to carrier/weight shipped)
BAI-HKG04	US\$/kg	Hong Kong to USA	Hong Kong to USA general cargo (cost to carrier/weight shipped)
BAI-LHR02	US\$/kg	London Heathrow to North America	London Heathrow to North America general cargo (cost to carrier/weight shipped)
BAI-LHR03	US\$/kg	London Heathrow to South East Asia	London Heathrow to South East Asia general cargo (cost to carrier/weight shipped)

Baltic Air Index			
Short Code	Unit	Short Description	Long Description
BAI-LHR04	US\$/kg	London Heathrow to USA	London Heathrow to USA general cargo (cost to carrier/weight shipped)
BAI-ORD01	US\$/kg	O'Hare Int'l, Chicago to Europe	O'Hare Int'l, Chicago to Europe general cargo (cost to carrier/weight shipped)
BAI-ORD03	US\$/kg	O'Hare Int'l, Chicago to South East Asia	O'Hare Int'l, Chicago to South East Asia general cargo (cost to carrier/weight shipped)
BAI-PVG01	US\$/kg	Shanghai Pudong to Europe	Shanghai Pudong to Europe general cargo (cost to carrier/weight shipped)
BAI-PVG02	US\$/kg	Shanghai Pudong to North America	Shanghai Pudong to North America general cargo (cost to carrier/weight shipped)
BAI-PVG04	US\$/kg	Shanghai Pudong to USA	Shanghai Pudong to USA general cargo (cost to carrier/weight shipped)
BAI-SIN03	US\$/kg	Singapore to South East Asia	Singapore to South East Asia general cargo (cost to carrier/weight shipped)

APPENDIX 2

Publishing Times and Submission Windows

Data Group	Input Data Submission Window	Publishing Time
BAI indices	1000-1200	1400

APPENDIX 3

Density-Based Spatial Clustering of Applications with Noise (“DBSCAN”)

Outliers are filtered using DBSCAN (Density-based spatial clustering of applications with noise). This identifies clusters of similar values and flags the data that is the most distant from the nearest clusters as outliers.

A DBSCAN algorithm begins by picking a point (one transaction) x from the dataset at random and assigns it to cluster 1. Then it counts how many points are located within the ϵ (epsilon) distance from x . If this quantity is greater than or equal to min Points (n), then considers it as core point, then it will pull out all these ϵ -neighbours to the same cluster 1. It will then examine each member of cluster 1 and find their respective ϵ -neighbours. If some member of cluster 1 has n or more ϵ -neighbours, it will expand cluster 1 by putting those ϵ -neighbours to the cluster. It will continue expanding cluster 1 until there are no more examples to put in it. In the latter case, it will pick another point from the dataset not belonging to any cluster and put it to cluster 2. It will continue like this until all examples either belong to some cluster or are marked as outliers. This is a widely used, robust method, suited for distributions where the shape of clusters may vary.

For each route, data is transformed and normalised to mean=0 and standard deviation=1.0. The DBSCAN parameters, the maximum distance between two samples and the weight of samples in a neighbourhood, are determined from the data within N (presently 3) standard deviations from the mean. The DBSCAN algorithm is then run to extract the main cluster.

APPENDIX 4

Waterfall Method for Data Density

In the event that data sufficiency criteria on a route are not met, an ANP may be derived from related routes.

For each route, a hierarchy of the routes which are most correlated is established, and a regression model for the preceding 3 months calculated. In the event of inadequate data volumes, the price at time t would be given by

$p(t) = p(t-1) * [1 + r'(t)]$ where r' is the return estimator for time t .

The return estimator r' is determined by the latest, strongest regression model for the most correlated routes with sufficient data density.

APPENDIX 5

Benchmark Business Continuity and Disaster Recovery Plan

1 Scope of the Benchmark Business Continuity and Disaster Recovery Plan (BCDRP)

1.1 The aim of the BCDRP is to set out a framework for the review, management and control to any disruption of BEISL's benchmark determination and administration process.

1.2 This BCDRP is designed to set out the BEISL's compliance pursuant to Article 6 of the BMR with regards to the submission made to the Administrator and the Administrator's benchmark determination process.

2 Business impact assessment

2.1 Any disruption to the benchmark determination process for BEISL should be considered as potentially critical to BEISL's business. Although one off disruptions of relatively short duration would not in themselves be fatal, prolonged or frequent interruptions to the proper functioning of the benchmark determination process will quickly lead to a loss of confidence in BEISL as an Administrator and could critically damage BEISL's business and reputation.

2.2 BEISL's physical and IT infrastructure is therefore designed to ensure that disruptions to the operation of BEISL are extremely rare and that if a disruption does occur, arrangements are in place to enable BEISL to resume with a minimum of delay.

2.3 Disruption to BEISL's benchmark determination process could be caused by one of three types of problems relating to:

2.3.1 IT software;

2.3.2 IT hardware; and

2.3.3 The physical operation of BEISL business due to an incident such as flooding, fire, burglary, acts of terrorism, civil unrest, epidemic disease, cyber-attack, a loss of power, loss of communications or unscheduled absence of employees.

2.4 IT software and IT hardware problems are likely to affect the ability of all BEISL staff to access the BDP and would therefore be likely to cause a disruption to BEISL's benchmark administration process. On the other hand, a problem affecting the physical operation of BEISL's business would not necessarily prevent BEISL from its activities as long as Baltic Employees are trained and equipped with the resources to carry out the business function via alternative methods.

2.5 BEISL's Recovery Point Objective (RPO) in the event of a disruption to its business is for all data to be recoverable while BEISL's Recovery Time Objective (RTO) is the shortest amount of time required for BEISL's business to be able to be resumed but is dependent on the type and severity of the relevant problem causing the disruption as set out below.

3 IT Software defects

3.1 The BDP system software that underpins the overall benchmark process, is developed by a third-party Provider.

3.2 If a serious disruption to BEISL business were to arise because of a suspected software defect, BEISL shall immediately inform the Provider of the problem. The Provider will then immediately start problem identification and will use reasonable endeavours to deliver a system recovery workaround in a timely fashion

- 3.3 Less critical software related problems and any local failure which does not cause an immediate disruption to BEISL shall not affect the benchmark administration process. Baltic Employees shall be able to access the BDP from home or new premises without interruption.
- 3.4 In the event of a short-term need to vacate the BEISL premises, BEISL staff have been equipped with a “grab bag” and laptop computer.
- 3.5 In the event of an unrecoverable failure of the system software, BEISL shall maintain Excel spreadsheets which shall be available in-house and remotely, as part of the company’s office systems provision and shall be used to record Contribution of Input Data provided by Calculating Agent over the telephone. The Senior Assessor shall maintain the master spreadsheets and ensure that these are up to date with regards to the Contribution of Input Data provided by Calculating Agent, reporting routes, multipliers, calculations and any relevant changes to the benchmark methodology. The excel spreadsheets shall be backed up and recoverable as part of the BEISL’s security and backup.

4 IT Hardware defects

- 4.1 The hardware infrastructure for the hosting of BDP is provided by AWS in ISO 27001 compliant data centres.

5 Web server security and failover procedures

- 5.1 All web systems are also protected by Intrusion Prevention which scan inbound requests for known malicious signatures. Any such requests matched will result in the sender being added to the real time blacklist blocking tables.
- 5.2 Daily BEISL system backups shall be transferred to separate storage and the “live” site is regularly ‘synced’ to backup the failover server.
- 5.3 Electronic data storage:
- 5.4 All data related to BEISL’s benchmark determination process is stored in the MongoDB database in compliance with its record keeping obligations. In the event of a failover, there should be, at most, minimal loss of data.
- 5.5 Should there be any reported loss of data at the moment of failover, this shall be discovered through reconciliation by BEISL staff.

6 Internet connectivity defects

- 6.1 BEISL’s access to office systems use servers hosted by the Baltic on its Microsoft Azure cloud-based platform.

7 Actions to be taken in response to an incident

- 7.1 Disruption to BEISL’s benchmark administration process caused by an IT software or hardware problem
 - 7.1.1 The following actions are to be taken in the event of a disruption to BEISL’s benchmark determination process caused by an IT software or hardware problem:
 - (1) An Assessor or the Senior Assessor must immediately alert the Head of Systems and Data, System Support Manager and or its delegates along with a Senior Manager. At least one senior manager shall be contactable at all times.

- (2) The Head of Systems and Data, System Support Manager or its delegates must immediately liaise with the Provider about the incident, provide adequate information about the issue in question, obtain any further information from the Provider regarding the cause of the disruption, an estimated timeframe for its resolution and agree the necessary response.
- (3) The Baltic shall determine whether it is a serious incident and necessary to contact and inform the FCA and, if appropriate, coordinate a suitable response.
- (4) The Head of Systems and Data, System Support Manager, a Senior Manager or the compliance administrator must complete and record details of the incident and any actions that have been taken in respect of the incident (including details of who has been contacted and at what time) in the BEISL incident report form as provided in Schedule 2 of this BCDRP.
- (5) The Assessors shall inform the Calculation Agent about the incident and provide an initial estimate of the likely duration of any disruption to the benchmark administration process.
- (6) The Head of Systems and Data, System Support Manager or a Senior Manager shall issue a notice to inform customers of the Baltic about the incident and provide an initial estimate of the likely duration of any disruption to the benchmark determination process. Such notice shall be communicated to customers of the Baltic by email and the Baltic website or any other available means.
- (7) The Head of Systems and Data, System Support Manager or its delegates will work with the Provider, as appropriate depending on the cause of the outage, to restore any disruption as quickly as possible and to provide updates to the Senior Managers and Baltic Employees of the likely duration of the outage.
- (8) The Baltic shall provide updates to its customers and, if appropriate to other third parties (such as the FCA).

7.2 **BEISL offices inoperable:**

Emergency evacuation

- 7.2.1 In the event of an emergency that requires BEISL's offices to be evacuated immediately, all Baltic Employees should leave the building in accordance with the Baltic's standard evacuation procedures. Subject to any instructions to the contrary from security personnel, in the event of an emergency evacuation during the benchmark determination process, the Assessors and Senior Assessor shall take with them the "grab bag" and laptop computer and go to the nearest available designated alternative location to access the BDP as quickly as possible to resume the benchmark determination process.
- 7.2.2 The objective is to allow BEISL to remain operational during an emergency evacuation.
- 7.2.3 Where, following an emergency evacuation, it is impossible for either the benchmark administration process to be resumed, then a Senior Manager must arrange for the benchmark administration process to be halted.
- 7.2.4 If BEISL's offices become inoperable, whether due to an incident necessitating an emergency evacuation or otherwise, Baltic Employees must immediately ensure that a Senior Manager, Head of Systems and Data or System Support Manager and the compliance administrator have been alerted.
- 7.2.5 A Senior Manager or the compliance administrator shall be responsible for contacting the FCA to inform them of the incident and, if appropriate, coordinating a suitable response.

- 7.2.6 The Head of Systems and Data, System Support Manager, a Senior Manager or the compliance administrator must complete and record details of the incident and any actions that have been taken in respect of the incident (including details of who has been contacted and at what time) in the BEISL incident report form.
- 7.2.7 The Assessors shall inform the Calculating Agent about the incident and provide an initial estimate of the likely duration of any disruption to the benchmark administration process. Such communication shall be made by telephone or other available means.
- 7.2.8 A Senior Manager shall be responsible for issuing a notice to inform customers of the Baltic about the incident. Where relevant, the notice should provide an estimate of the likely duration of any disruption to the benchmark administration process. The notice shall be communicated to customers of the Baltic via email and the Baltic website or by any other available means. Further updates to customers of the Baltic should be provided as needed.

8 Testing

- 8.1 The following testing will be carried out as detailed below:

Test	Involved Parties	Dependency	Frequency
Ensure that the offline backups at the primary data centre are readable/restorable	Head of Systems and Data, System Support Manager & IT Personnel	Out of working hours	Quarterly
Ensure that the offline backups at the secondary data centre are readable/restorable	Head of Systems and Data, System Support Manager & IT Personnel	Out of working hours	Quarterly
Failover from the primary data centre to the secondary data centre	Head of Systems and Data, System Support Manager & IT Personnel	Out of working hours	6 monthly
Test failover to the remote server hosting BEISL office systems	Head of Systems and Data, System Support Manager & IT Personnel	Out of working hours	6 monthly
Test alternate internet connectivity	Head of Systems and Data, System Support Manager & IT Personnel	Out of working hours	6 monthly
Penetration testing	Head of Systems and Data, System Support Manager & 3 rd party tester	Out of working hours	Annually

- 8.2 The Head of Systems and Data and the System Support Manager are jointly responsible for reviewing the results of testing of BDP and other BEISL IT systems, for identifying deficiencies in BEISL's procedures and for ensuring that remedial measures are implemented.
- 8.3 BEISL may introduce new systems functionality in respect of the BDP from time to time. As part of the development phase of any new systems functionality, BEISL will perform full regression testing using script-based scenarios.

9 Review of BEISL's BCDRP

- 9.1 The BCDRP is reviewed at least annually by the Head of Systems and Data and compliance administrator and any recommended changes are brought to the attention of both the Senior Managers of BEISL, the BIC and the BEISL Board. The BCDRP will also be reviewed following any incident which required the BCDRP to be invoked.
- 9.2 Baltic Employees, in particular the Assessors, undergo training and testing at least annually on the BCDRP.

Schedule 1 – BEISL Incident Report Form

This form should be completed for all incidents that directly/indirectly affect the benchmark determination process in accordance with the BCDRP.

Date:	Time of Incident:
Detail description of incident	
<p style="text-align: center;"><u>Action Taken:</u></p> <p>Incident reported to whom within the Baltic? (provide details below)</p>	
<p>Incident reported to Neural Alpha or any other third-party provider? (provide details below)</p>	
<p>Incident reported to customers of the Baltic and the Regulator? (provide details below)</p>	
<p>Any other comments (provide details below)</p>	
Time incident resolved:	<p>Name: (state name of person completing this form)</p>

APPENDIX 6 Glossary

Administrator	means BEISL as the legal person that has control over the provision of a benchmark.
Administrator's Data	means the indices and aggregated route assessments published by the Administrator, from Relevant Data submitted by Data Providers.
Assessor	means an assessor employed by BEISL whose services are placed at BEISL's disposal or under the control of BEISL, and who is responsible for applying a methodology or judgement to input data and other information to reach a conclusive assessment about the price of a certain commodity.
the Baltic	means Baltic Exchange Limited and all its subsidiaries.
BAI	BEISL air freight benchmarks
Baltic Employees	means employees of BEISL and the Baltic.
Baltic Exchange	means the Baltic Exchange Limited.
BCDRP	means the Business Continuity and Disaster Recovery Plan set out in Appendix 6.
BDP	means the Baltic data management system, the bespoke web application used by BEISL to receive benchmark submissions from the Calculating Agent.
BEISL	means Baltic Exchange Information Services Limited.
BAIC	means the Baltic Air Index Council.
BMR	means 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 and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.
Calculating Agent	has the meaning given to it in Section 9.2
CEO	means the Chief Executive Officer of the Baltic.
Complainant	means a Baltic member, Data Provider, benchmark user, market participant or other party raising Complaints.
Complaints	means an informal comment or formal complaint made by a Complainant.
Contribution of Input Data	means providing any Data not readily available to an Administrator, or to another person for the purposes of passing to an Administrator that is required in connection with the determination of a benchmark and is provided for that purpose.
Expert Judgement	means the exercise of discretion by the Data Provider with respect to the use of data in determining a benchmark or index production,

including extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events and weighting firms bids or offers greater than a particular concluded transaction.

FCA	means the Financial Conduct Authority.
Input Data	means data that has been validated and filtered from Relevant Data, in accordance with the methodology set out in section 4 of this Air Freight Guide and used by BEISL to determine a benchmark.
IOSCO	The International Organisation of Securities Commission.
IOSCO PFBs	means the International Organisation of Securities Commissions Principles for Financial Benchmarks.
MAR	means Regulation (EU) No 596/2014 on market abuse (market abuse regulation).
Market Representatives	has the meaning given to it in Section (1).
NCA	means a national competent authority.
Data Provider	has the meaning given to it in Section 7.1.1.
PIDA	means the Public Interest Disclosure Act 1998.
Provider	means Neural Alpha Ltd or any successor vendor.
Record(s)	refers to BEISL work, papers, files, documents, communication and data in any form, whether in electronic, printed, in the form of video, audio or other media or any other mode of capturing BEISL benchmark information.
Regulator	means the FCA or any successor regulator.
Relevant Data	means transactional data in respect of the price for the transportation of air cargo one or more underlying assets, or prices, as contributed by Data Providers and used to create Input Data.
RPP	has the meaning given to it in Section 13.3.
Senior Assessor	means the senior assessor of BEISL whose services are placed at BEISL's disposal or under the control of BEISL, and who is responsible for applying a methodology or judgement to input data and other information to reach a conclusive assessment about the price of an underlying asset.
Senior Manager	means a senior manager as such term is defined in the FCA Handbook.
SGX	means Singapore Exchange Limited.

Whistleblower

means Baltic Employees or any other individual making a whistleblowing claim.



Baltic Exchange

Air Freight Index

Powered by TAC data™