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# **B3 S.A. - Brasil, Bolsa, Balcão**

## **Description of B3 S.A. - Brasil, Bolsa, Balcão about the policies, processes and controls related to the financial indices to comply with the "Principles for Financial Benchmarks" of the International Organization of Securities Commissions (IOSCO) December 2019**

*Disclaimer - This report, including its sections, was prepared to present how B3 applied the IOSCO Principles related to the financial indices considered in the scope of the work. PricewaterhouseCoopers Auditores Independentes ("PwCAI") was chosen as the external auditor to meet the requirements of Principle 17, which requires an audit "to review and report, periodically, the management's adaptation to these criterion and principles".*

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## **Section 1**

### **B3 S.A. - Brasil, Bolsa, Balcão**

#### **Introduction**

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In July 2013, the International Organization of Securities Commissions ("IOSCO") published the "Principles for Financial Benchmarks" ("IOSCO Principles"). The objective of IOSCO is to create a comprehensive table of principles for the benchmarks used in the financial markets.

The IOSCO Principles may be consulted at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

B3 S.A - Brasil, Bolsa, Balcão ("B3") is one of the world's largest financial market infrastructure companies at market value, providing trading services (stock exchange), post-trading services (clearing), and register of OTC operations, as well as of vehicle and real estate financing.

Among the various services that B3 provides is a series of significant financial indices used by the market in Brazil and abroad. Bearing in mind the significance of the governance on these financial indices, as well as their transparency in the market, B3 decided to implement policies, processes and controls based on the IOSCO Principles.

The IOSCO Principles deal with Governance, Quality of the Benchmark, Quality of the Methodology and Accountability mechanisms:

- . Governance - these Principles are intended to ensure that Administrators will have appropriate governance arrangements in place in order to protect the integrity of the indices determination process and to address conflicts of interest;
- . Quality of the Benchmark - these Principles are intended to promote the quality and integrity of indices determinations through the application of design factors that result in a benchmark that will reflect a safe market. The Principles also clarify that a variety of data may be appropriately used to construct a Benchmark;
- . Quality of the Methodology - the Principles are intended to promote the quality and integrity of Methodologies, by setting out minimum information that should be addressed within a Methodology. The Principles require that the information be published or made available so that stakeholders may understand and make their own judgments concerning the overall credibility of a Benchmark. They also require that the Methodology should address the need for procedures that they control when material changes are planned, as a means of alerting stakeholders to these changes that might affect their positions, financial instruments or contracts;
- . Accountability - the Principles establish complaints processes, documentation standards and audit reviews that are intended to provide evidence of compliance by the Administrator with its quality standards, as defined by the Principles and their own policies. The Principles also address making the foregoing information available to relevant Market Authorities.

In response to the IOSCO Principles, B3 provided, therefore, a written assertion described in Section 2. It describes how it adopted the IOSCO Principles. B3 also contracted PricewaterhouseCoopers Auditores Independentes ("PwC") to issue a reasonable assurance report on the suitability of B3 to the IOSCO Principles at December 31, 2018, which is described in Section 4.

## Section 1

### B3 S.A. - Brasil, Bolsa, Balcão

#### Introduction

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#### B3 S.A. - Brasil, Bolsa, Balcão

Created in March 2017 after the integration of BM&FBOVESPA and CETIP, the Central System for Custody and Financial Settlement of Securities, B3 is consolidated as one of the main financial market infrastructure companies in the world, operating in stock exchange or over-the-counter environments. A publicly held corporation, whose shares (B3SA3) are listed in Novo Mercado (New Market), B3 integrates the Ibovespa, IBrX-50, IBrX and Itag indices, among others. It also unites tradition of innovation in products and technology and is one of the largest in market value, being in the spotlight in the stock exchange sector.

Its activities include the creation and administration of trading, clearing, settlement, deposit and register systems for all main classes of assets, from share and corporate fixed-income securities to currency derivatives, structured transactions and interest and commodities rates. B3 also operates as a guarantor main counterparty for most transactions carried out in its markets and it offers depository center and register center services. Through its vehicle and real property financing unit, B3 offers products and services that support the credit analysis and approval process all over the national territory, making the financing process quicker and safer.

For more than 50 years, B3 has developed, calculated and administered a wide variety of indices, following governance criteria that ensure the highest quality, solidity and transparency standards. B3 indices are an important measure of the financial market and are used as a reference for domestic and international investors.

#### Overview of the Indices

##### Broad-based indices

##### 1 Bovespa Index (Ibovespa)

The Ibovespa is the main performance indicator of the stocks traded in B3 and comprises the most actively traded and best representative companies of the Brazilian capital market. It was created in 1968 and, over the last 50 years, has set a benchmark for investors around the world.

##### 2 Brasil 100 Index (IBrX 100)

The IBrX 100 is a total return index. The IBrX 100 is designed to measure the average performance indicator of the quotations of the 100 most actively traded and best representative stocks of the Brazilian stock market. The IBrX 100 base value was established at 1,000 points for December 28, 1995, and it started to be disclosed on January 2, 1997.

##### 3 Brasil 50 Index (IBrX 50)

The IBrX 50 is a total return index. The IBrX 50 is designed to measure the average performance indicator of the quotations of the 50 most actively traded and best representative stocks of the Brazilian stock market. The IBrX 50 base value was established at 1,000 points for December 30, 1997, and it started to be disclosed on January 2, 2003.

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#### 4 **BM&FBOVESPA Broad-based Brazil Index (IBrA)**

The IBrA 100 is a total return index. The IBrA is designed to measure the average performance indicator of the quotations of all stocks traded in the spot market (standard batch) operated by B3 that meet the minimum liquidity and active trading criteria so as to offer a broad-based view of the stock market. The IBrA base value was established at 1,000 points for December 29, 2005, and it started to be disclosed on May 2, 2011.

#### Governance Indices

#### 1 **Special Corporate Governance Stock Index (IGC)**

The IGC is a total return index. The IGC is designed to be the average performance indicator of the quotations of stocks listed for trading on the *Novo Mercado* or on Level 1 or Level 2 of B3. The IGC base value was established at 1,000 points for June 25, 2001, and it started to be disclosed on June 26, 2001.

#### 2 **Special Tag-Along Stock Index (ITAG)**

The ITAG is a total return index. The ITAG is designed to be the average performance indicator of the quotations of stocks issued by companies that give better conditions to the minority stockholders in the event of disposal of ownership control. The ITAG base value was established at 1,000 points for December 30, 2002, and it started to be disclosed on June 30, 2005.

#### 3 **Corporate Governance Trade Index (IGCT)**

The IGCT is a total return index. The IGCT is designed to be the average performance indicator of the quotations of the stocks issued by companies that are part of the IGC, which meet the additional criteria described in this methodology. The IGCT base value was established at 1,000 points for December 29, 2005, and it started to be disclosed on January 3, 2011.

#### 4 **Novo Mercado Corporate Governance Equity Index (IGC-NM)**

The IGC-NM is a total return index. The IGC-NM is designed to be the average performance indicator of the quotations of the stocks issued by companies that offer good levels of corporate governance, listed on the New Market of B3. The IGC-NM base value was established at 1,000 points for December 28, 2006, and it started to be disclosed on September 3, 2012.

#### Segment Indices

#### 1 **BM&FBOVESPA Dividend Index (IDIV)**

The IDIV is a total return index. The IDIV is designed to be the average performance indicator of the quotations of the stocks that had an outstanding remuneration for the investors, in the form of dividends and interest on capital. The IDIV base value was established at 1,000 points for December 29, 2005, and it started to be disclosed on May 2, 2011.

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#### **2 MidLarge Cap Index (MLCX)**

The MLCX is a total return index. The MLCX is designed to be the average performance indicator of the quotations of stocks of a portfolio comprised of companies with the largest capitalization. The MLCX base value was established at 1,000 points for April 30, 2008, and it started to be disclosed on September 1, 2008. Subsequently, a retroactive series was analyzed, starting on August 31, 2005.

#### **3 Small Cap Index (SMLL)**

The SMLL is a total return index. The SMLL is designed to be the average performance indicator of the quotations of stocks of a portfolio comprised of companies with lower capitalization. The SMLL base value was established at 1,000 points for April 30, 2008, and it started to be disclosed on September 1, 2008. Subsequently, a retroactive series was analyzed, starting on August 31, 2005.

#### **4 BM&FBOVESPA Value Index (IVBX 2)**

The IVBX 2 is a total return index. The IVBX 2 is designed to be an average performance indicator of the quotations of the 50 stocks selected in a list classified in descending order per liquidity, in accordance with its Marketability index (measured over the period of effectiveness of the three prior portfolios). The portfolio will not have the stocks with the ten highest Marketability Indexes, nor those issued by the companies with the ten highest market values of the sample. The IVBX 2 base value was established at 1,000 points for December 30, 1999, and it started to be disclosed on May 2, 2001.

#### **Sustainability indices**

#### **1 Carbon Efficient Index (ICO2)**

The Carbon Efficient Index (ICO2) comprises the stocks of companies that participate in the IBrX-50 index and have agreed to join this initiative, by adopting transparent practices related to their Greenhouse Gas Emissions (GHG), taking into consideration in its composition, not only the free float of stocks (total outstanding stocks) of participating companies, but also the efficiency levels of GHG emissions of these same companies.

The main objective of the index is to encourage the companies with actively traded stocks to assess, disclose, and monitor their GHG emissions; being prepared, therefore, to operate in a "low carbon" economy. Furthermore, they aim to provide the market with a performance indicator that will result in a portfolio supported by factors that incorporate issues related to climate changes. The ICO2 base value was established at 1,000 points for August 31, 2010, and it started to be disclosed on December 2, 2010.

#### **2 Corporate Sustainability Index (ISE)**

The Corporate Sustainability Index (ISE) seeks to create an investment environment compatible with contemporary society's need for sustainable development and to encourage corporations to be ethically responsible. Its launch in 2005 was originally financed by the International Finance Corporation (IFC), a financial division of the World Bank, and its methodology was developed by Fundação Getulio Vargas' Sustainability Research Center (FGVCes) and B3.

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The ISE is a tool for comparative analysis of the performance of the companies listed on B3 according to the corporate sustainability, based on economic efficiency, environmental balance, social justice and corporate governance. It also enhances public understanding of companies and groups committed to sustainability, differentiating them in terms of quality, level of commitment to sustainable development, equity, transparency and accountability, and the nature of their products, as well as business performance in the economic, financial, social, environmental and climate change dimensions. The ISE base value was established at 1,000 points for November 30, 2005, and it started to be disclosed on September 1, 2008.

#### **Sectoral indices**

##### **1 BM&FBOVESPA Financial Index (IFNC)**

The IFNC is a total return index. The IFNC is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the intermediary financial sector, diversified financial services sector, private pension and insurance sectors. The IFNC base value was established at 1,000 points for December 30, 2004, and it started to be disclosed on January 4, 2010.

##### **2 Consumer Stock Index (ICON)**

The ICON is a total return index. The ICON is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the cyclical and non-cyclical consumer and health sectors. The ICON base value was established at 1,000 points for December 28, 2006, and it started to be disclosed on January 2, 2009.

##### **3 Electric Utilities Index (IEE)**

The IEE is a total return index with reinvestment in its own asset. The IEE is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the electric energy sector. The IEE base value was established at 1,000 points for December 29, 1994, and it started to be disclosed on August 1, 1996.

##### **4 BM&FBOVESPA Basic Materials Index (IMAT)**

The IMAT is a total return index. The IMAT is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the basic material sector. The IMAT base value was established at 1,000 points for December 29, 2005, and it started to be disclosed on May 2, 2011.

##### **5 Industrial Sector Index (INDX)**

The INDX is a total return index. The INDX is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the industrial activity sectors, comprised of basic materials, industrial items, cyclical consumer goods, non-cyclical consumer goods, information technology and health. The INDX base value was established at 1,000 points for December 30, 1999, and it started to be disclosed on July 3, 2006.

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#### **6 Real Estate Index (IMOB)**

The IMOB is a total return index. The IMOB is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the real estate activity sectors comprised of real estate exploration and civil construction. The IMOB base value was established at 1,000 points for December 28, 2007, and it started to be disclosed on January 2, 2009.

#### **7 BM&FBOVESPA Public Utilities Index (UTIL)**

The UTIL is a total return index. The UTIL is designed to be the average performance indicator of the quotations of the most actively traded and best representative stocks of the public utilities sector (electric energy, water and sewage and gas). The UTIL base value was established at 1,000 points for December 29, 2005, and it started to be disclosed on May 2, 2011.

#### **Other Indices**

#### **1 Un-sponsored Brazilian Deposit Receipts Index - GLOBAL (BDRX)**

The BDRX is a total return index. The BDRX is designed to be the average performance indicator of the quotations of the Un-sponsored BDRs, authorized to trade on B3, which meet the criteria described in this methodology. The BDRX base value was established at 1,000 points for October 5, 2010, and it started to be disclosed on September 3, 2012.

#### **2 Brazil Commodities Index (ICB)**

The ICB is a total return index. It is intended that the ICB will serve as a reference or benchmark for investment funds, treasury, portfolio managers and other investors to be able to assess the performance of their business with commodities and compare them to the performance of other assets or financial investments. Several studies show the benefits of diversification of assets in an investment portfolio, because it allows risk reduction without affecting the total return of the portfolio. The ICB value is calculated based on a theoretical investment in a commodities basket created in 2004, with base value of 10,000 points.

#### **3 Real Estate Investment Fund Index (IFIX)**

The IFIX is a total return index. The IFIX is designed to be the average performance indicator of the quotations of the real estate funds traded on the organized stock exchange and over-the-counter markets operated by B3. The IFIX base value was established at 1,000 points for December 30, 2010, and it started to be disclosed on September 3, 2012.

#### **Interbank Deposit (DI) Index**

#### **1 DI rate**

The statistics of the DI-Cetip Rate asset are calculated and disclosed by B3, are determined based on the issuance of fixed Interbank Deposits, agreed at one business day and recorded and settled by the B3 system, as determined by the Brazilian Central Bank. In the universe of the interbank market, the 1 (one)



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business day term (over) transactions are selected, considering only the transactions carried out between institutions of different conglomerates (Extra-group) and ignoring the others (Intra-Group). The statistics determined herein are, therefore, statistics of the fixed DI Over (Extra-Group) population. The DI was disclosed in 1986.

#### **Timeline**

- . 1968 - Disclosure of the IBOVESPA index.
- . 1986 - Disclosure of the DI Rate.
- . 1996 - Disclosure of the IEE index.
- . 1997 - Disclosure of the IBRX100 index.
- . 2001 - Disclosure of the IGC and IVBX2 indices.
- . 2003 - Disclosure of the IBRX50 index.
- . 2004 - Disclosure of the ICB index.
- . 2005 - Disclosure of the ITAG and ISE indices.
- . 2006 - Disclosure of the INDX index.
- . 2008 - Disclosure of the MLCX and SMLL indices.
- . 2009 - Disclosure of the ICON and IMOB indices.
- . 2010 - Disclosure of the ICO2 and IFNC indices.
- . 2011 - Disclosure of the IBRA, IGCT, IDIV, IMAT and UTIL indices.
- . 2012 - Disclosure of the IGC-NM, BDRX and IFIX indices.

#### **IT general controls**

B3 has an IT Governance Environment with controls developed to protect the integrity, availability and confidentiality of the information; monitor systems, protect them against viruses and other threats and allow recovery within the shortest deadline established in the event of incidents; it requires that service providers be compliant with our internal policies and regulatory obligations, when applicable; help employees understand their responsibilities and be joint responsible for the protection of information and security of our systems.

The policies and standards address the security issues from the phase of development of a project or system to the implementation and maintenance in production.

The process of assessment of risks and controls follows the standards and mechanisms adopted by B3. In this process, the IT security, continuity and integrity risks are assessed. Additionally, internal audits are conducted to review the systems and infrastructure controls.

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## **Section 2**

### **B3 S.A. - Brasil, Bolsa, Balcão**

#### **Management Statement**

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#### **Management Statement**

We confirm that B3 S.A. - Brasil, Bolsa, Balcão ("B3") designed and implemented specific processes to comply with the "Principles for Financial Benchmarks", issued by the International Organization of Securities Commissions ("IOSCO Principles"), for its financial indices described in Section 3.

The description in Section 3 to this report presents fairly the policies, processes and controls implemented to meet the IOSCO Principles at December 31, 2018.

B3 management is responsible for the statement, design and implementation of the policies, processes and controls mentioned in the paragraph above. Specifically, management is responsible for defining appropriate internal controls to ensure that the statement will be continuously complied with.

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### Section 3

## B3 S.A. - Brasil, Bolsa, Balcão

### **IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

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The description, as well as the policies, processes and controls are applied to the following financial indices:

<b>Broad-based</b>	IBOV	IBrX-100	IBrX-50	IbrA
<b>Governance</b>	IGCX	IGCT	IGC-NM	ITAG
<b>Segment</b>	IDIV	MLCX	SMLL	IVBX 2
<b>Sustainability</b>	ICO2	ISE		
<b>Sectoral</b>	IFNC	IMOB	UTIL	ICON
	IEE	IMAT	INDX	
<b>Other</b>	BDRX	ICB	IFIX	
<b>DI</b>	DI RATE			

The principles to be met, according to the "Principles for Financial Benchmarks" issued by the International Organization of Securities Commissions (IOSCO) of July 2013, are:

#### **Governance**

- 1 - Overall Responsibility of the Administrator
- 2 - Oversight of third parties
- 3 - Conflicts of interest for Administrators
- 4 - Control Framework for Administrators
- 5 - Internal Oversight

#### **Quality of the Benchmark**

- 6 - Benchmark Design
- 7 - Data sufficiency
- 8 - Hierarchy of Data Inputs
- 9 - Transparency of Benchmark Determinations
- 10 - Periodic Review

#### **Quality of the Methodology**

- 11 - Content of the Methodology
- 12 - Changes to the Methodology
- 13 - Transition
- 14 - Submitter Code of Conduct
- 15 - Internal Controls over Data Collection

#### **Accountability**

- 16 - Complaints procedures
- 17 - Audits
- 18 - Audit Trail
- 19 - Cooperation with Regulatory Authorities

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

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The table below presents the answers of B3 in respect of how IOSCO Principles have been met, considering the domains and principles:

##### Principle 1 - Overall Responsibility of the Administrator

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 1</b>	<b>B3 Answer</b>
<p>The Administrator should retain primary responsibility for all aspects of the Benchmark determination process.</p> <p>For example, this includes:</p> <p>(a) Development - The definition of the Benchmark and Benchmark Methodology.</p> <p>(b) Determination and Dissemination - Accurate and timely compilation and publication and distribution of the Benchmark.</p> <p>(c) Operation - Ensuring appropriate transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors.</p> <p>(d) Governance - Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark.</p>	<p>B3 is responsible for the indices disclosed to the market, including: methodology, development, calculation, maintenance, disclosure and governance.</p> <p>(a) All methodologies and procedures used in the indices are available on the institutional website.</p> <p>(b) The determination and dissemination of the indices disclosed using Market Data are monitored by the operations team on an intraday basis.</p> <p>(c) Every communication with the market is made through the news agency, and may also be made through an Official Letter when the procedure is not described in the manuals.</p> <p>(d) B3 has a Working Group intended to evaluate the need and opportunity for improvement of the methodologies applied as well as of the other procedures used for the indices as a result of the market needs.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 2 - Oversight of third parties

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 2</b></p>	<p><b>B3 Answer</b></p>
<p>Where activities relating to the Benchmark determination process are undertaken by third parties - for example collection of inputs, publication or where a third party acts as Calculation Agent - the Administrator should maintain appropriate oversight of such third parties. The Administrator (and its oversight function) should consider adopting policies and procedures that:</p> <ul style="list-style-type: none"> <li>(a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with.</li> <li>(b) Monitor third parties' compliance with the standards set out by the Administrator.</li> <li>(c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark determination process.</li> <li>(d) Take reasonable steps, including contingency plans, to avoid undue operational risk created to the participation of third parties in the Benchmark determination process.</li> </ul> <p>This principle does not apply in relation to a third party from whom an Administrator sources data if that third party is a Regulated Market or Exchange.</p>	<p>In order to assess the sustainability performance of the companies listed on B3 and select them to comprise the Corporate Sustainability Index (ISE), B3 and the Board of Directors of the ISE B3 (CISE) count on the technical partnership of the third-party company that provides data gathering services.</p> <p>B3's policy for the acquisition of goods and services deals with the engagement of service providers describing the guidelines of the process:</p> <ul style="list-style-type: none"> <li>(a) The standard form contract of third parties used by B3 presents the responsibilities of the service provider.</li> <li>(b) The information presented by the third party is discussed by the CISE, which is responsible for determining the ISE portfolio.</li> <li>(c) The institution has published on its institutional website a list with all the partners/participants of the index, and has provided details of the role and responsibility of each member as well.</li> <li>(d) The institution counts on a contingency plan to mitigate the risks related to the rendering of services related to the ISE process.</li> </ul>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 3 - Conflicts of interest for Administrators

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
IOSCO Principle 3	B3 Answer
<p>To protect the integrity and independence of Benchmark determinations, Administrators should document, implement and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest. Administrators should review and update their policies and procedures as appropriate.</p> <p>Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.</p> <p>The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the Benchmark poses and should seek to ensure:</p> <ul style="list-style-type: none"> <li>(a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations.</li> <li>(b) Personal interests and connections or business connections do not compromise the Administrator's performance of its functions.</li> <li>(c) Segregation of reporting lines within the Administrator, where appropriate, to clearly define responsibilities and prevent unnecessary or undisclosed conflicts of interest or the perception of such conflicts.</li> <li>(d) Adequate supervision and sign-off by authorized or qualified employees prior to releasing Benchmark determinations.</li> <li>(e) The confidentiality of data, information and other inputs submitted to, received by or produced by the Administrator, subject to the disclosure obligations of the Administrator.</li> <li>(f) Effective procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information may reasonably affect any Benchmark determinations.</li> </ul>	<p>B3 has established a control framework which objective is the benchmarks determination with integrity and independence:</p> <ul style="list-style-type: none"> <li>(a) The Corporate Procedures and Risks area that periodically maps and assesses the risks in procedures established for the management of indices.</li> <li>(b) Areas segregated with regard to methodology (creation, alteration and discontinuance of indices) and operationalization of such methodologies.</li> <li>(c) The executive directors of the areas mentioned in item B are hierarchically independent.</li> <li>(d) Working Group (WG): responsible for the follow-up and approval of the creation, alteration and discontinuance of indices.</li> <li>(e) The Information Security Policy and Code of Conduct are signed and are always available to all employees of the company.</li> <li>(f) The Institution counts on Information Security, Compliance and Internal Audit areas.</li> <li>(g) Formal procedures of remuneration are under the responsibility of the Human Resources area. They are clearly established and applied to all employees of the institution and are not linked to the performance of the indices.</li> </ul> <p>B3 has a segregated structure to mitigate the risks of conflicts of interest:</p> <ul style="list-style-type: none"> <li>(a) Employees are properly qualified to perform the attributions assigned to them and there is segregation of duties in the processes that support the benchmark determination.</li> <li>(b) The institution has a whistleblowing channel available to all stakeholders (internal and external).</li> </ul>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 3</b>	<b>B3 Answer</b>
<p>(g) Adequate remuneration policies that ensure all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivized by the levels of the Benchmark.</p> <p>An Administrator's conflict of interest framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the Administrators staff or wider group may have in relation to Benchmark determinations. To this end, the framework should:</p> <p>(a) Include measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business (including all staff who perform or otherwise participate in Benchmark production responsibilities), and any other business of the Administrator or any of its affiliates.</p> <p>(b) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.</p>	

#### Principle 4 - Control Framework for Administrators

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 4</b>	<b>B3 Answer</b>
<p>An Administrator should implement an appropriate control framework for the process of determining and distributing the Benchmark. The control framework should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified, the extent of the use of discretion in the Benchmark setting process and to the nature of Benchmark inputs and outputs. The control framework should be documented and available to relevant Regulatory</p>	<p>B3 has a structure with established processes that form a control framework in the benchmark determination and which is available to the stakeholders on its institutional website:</p> <p>(a) For more information, see description in Principle 3.</p> <p>(b) For more information, see description of Principles 6 to 15.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 4</b></p>	<p><b>B3 Answer</b></p>
<p>Authorities, if any. A summary of its main features should be Published or Made Available to Stakeholders.</p> <p>This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:</p> <p>(a) Conflicts of interest in line with Principle 3 on conflicts of interests;</p> <p>(b) Integrity and quality of Benchmark determination:</p> <p>(i) Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with Principles 6 to 15 on the quality of the Benchmark and Methodology.</p> <p>(ii) Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources.</p> <p>(iii) Arrangements to ensure accountability and complaints mechanisms are effective, in line with Principles 16 to 19.</p> <p>(iv) Providing robust infrastructure, policies and procedures for the management of risk, including operational risk.</p> <p>(c) Whistleblowing mechanism: Administrators should establish an effective whistleblowing mechanism to facilitate early awareness of any potential misconduct or irregularities that may arise. This mechanism should allow for external reporting of such cases where appropriate.</p> <p>(d) Expertise:</p> <p>(i) Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence.</p>	<p>(c) For more information, see Principle 16.</p> <p>(d) Indices are determined by participants from various areas. The Information Security Policies and Code of Conduct are signed by the employees and are updated periodically.</p> <p>B3 does not use the Submitter to gather data to be used in the calculation of the indices.</p>



### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 4</b>	<b>B3 Answer</b>
<p>(ii) Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel.</p> <p>Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by:</p> <p>(a) Ensuring as far as possible that the Submitters comprise an appropriately representative group of participants taking into consideration the underlying Interest measured by the Benchmark.</p> <p>(b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter Code of Conduct and the Administrator's applicable quality and integrity standards for Submission.</p> <p>(c) Specifying how frequently Submissions should be made and specifying that inputs or Submissions should be made for every Benchmark determination.</p> <p>(d) Establishing and employing measures to effectively monitor and scrutinize inputs or Submissions. This should include pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.</p>	

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 5 - Internal Oversight

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 5</b></p> <p>Administrators should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. This should include consideration of the features and intended, expected or known usage of the Benchmark and the materiality of existing or potential conflicts of interest identified.</p> <p>The oversight function should be carried out either by a separate committee, or other appropriate governance arrangements. The oversight function and its composition should be appropriate to provide effective scrutiny of the Administrator. Such oversight function could consider groups of Benchmarks by type or asset class, provided that it otherwise complies with this Principle.</p> <p>An Administrator should develop and maintain robust procedures regarding its oversight function, which should be documented and available to relevant Regulatory Authorities, if any. The main features of the procedures should be Made Available to Stakeholders. These procedures should include:</p> <ul style="list-style-type: none"> <li>(a) The terms of reference of the oversight function.</li> <li>(b) Criteria to select members of the oversight function.</li> <li>(c) The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.</li> </ul> <p>The responsibilities of the oversight function include:</p> <ul style="list-style-type: none"> <li>(a) Oversight of the Benchmark design: <ul style="list-style-type: none"> <li>(i) Periodic review of the definition of the Benchmark and its Methodology.</li> </ul> </li> </ul>	<p><b>B3 Answer</b></p> <p>B3 has a framework that ensures oversight of the processes that determine the indices under analysis:</p> <p>The Company has the Corporate Processes and Risks area that periodically evaluates the processes and areas that support the benchmark determination, as well as identify possible conflicts of interest. B3 has two main areas responsible for the indices: Products and Clients, and Operations. The Products and Clients area is responsible for activities related to the preparation, alteration and exclusion of the indices from the methodology, and the Operations area is responsible for the operation of the index, which involves the calculation and rebalancing, based on the periodicity defined in each methodology, and the daily maintenance of the portfolio of existing indices.</p> <p>The Company has flowcharts of the processes related to the indices, it uses these documents as an official documentation, which is available to the employees on the Intranet.</p> <p>B3 has a Working Group for the indices which scope is the validation and approval of the creation, alteration and exclusion of indices, as well as the periodical review of the methodologies and isolated demands for which the WG is required. There is an annual planning for periodical review of the methodologies, as well as for review under demand when the need for creation, alteration or exclusion of some index is identified.</p>

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**B3 S.A. - Brasil, Bolsa, Balcão**

**IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 5</b></p>	<p><b>B3 Answer</b></p>
<p>(ii) Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate).</p> <p>(iii) Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorizing or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12.</p> <p>(iv) Reviewing and approving procedures for termination of the Benchmark, including guidelines that set out how the Administrator should consult with Stakeholders about such cessation.</p> <p>(b) Oversight of the integrity of Benchmark determination and control framework:</p> <p>(i) Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party.</p> <p>(ii) Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits.</p> <p>(iii) Overseeing any exercise of Expert Judgment by the Administrator and ensuring Published Methodologies have been followed.</p> <p>Where conflicts of interests may arise in the Administrator due to its ownership structures or controlling interests, or due to other activities</p>	

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 5</b>	<b>B3 Answer</b>
<p>conducted by any entity owning or controlling the Administrator or by the Administrator or any of its affiliates: the Administrator should establish an independent oversight function which includes a balanced representation of a range of Stakeholders where known, Subscribers and Submitters, which is chosen to counterbalance the relevant conflict of interest.</p> <p>Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:</p> <ul style="list-style-type: none"><li>(a) Overseeing and challenging the scrutiny and monitoring of inputs or Submissions by the Administrator. This could include regular discussions of inputs or Submission patterns, defining parameters against which inputs or Submissions can be analyzed, or querying the role of the Administrator in challenging or sampling unusual inputs or Submissions.</li><li>(b) Overseeing the Code of Conduct for Submitters.</li><li>(c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters.</li><li>(d) Establishing measures to detect potential anomalous or suspicious Submissions and in case of suspicious activities, to report them, as well as any misconduct by Submitters of which it becomes aware to the relevant Regulatory Authorities, if any.</li></ul>	

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 6 - *Benchmark Design*

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 6</b>	<b>B3 Answer</b>
<p>The design of the Benchmark should seek to achieve, and result in an accurate and reliable representation of the economic realities of the Interest it seeks to measure, and eliminate factors that might result in a distortion of the price, rate, index or value of the Benchmark.</p> <p>Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:</p> <p>(a) Adequacy of the sample used to represent the Interest.</p> <p>(b) Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing).</p> <p>(c) Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark.</p> <p>(d) The distribution of trading among Market Participants (market concentration).</p> <p>(e) Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark).</p>	<p>B3 has formal processes established to determine the indices:</p> <p>(a) to (e) The process of creation and alteration of indices involves several areas with the objective of analyzing all the possibilities and impacts of the proposal of the benchmark methodology, either for creation or alteration. During the creation of the index, backtests are made to confirm the quality of the information and whether it satisfies the market needs. All the indices under analysis are available on the company's institutional website, and they have various materials that discuss the main aspects of the index, including the methodology. Information is provided about the objective, type of selection, weighting and period of review.</p>

#### Principle 7 - *Data sufficiency*

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 7</b>	<b>B3 Answer</b>
<p>The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:</p> <p>(a) Be based on prices, rates, indices or values that have been formed by the competitive</p>	<p>B3 uses in the calculation of the indices data from the regulated market transactions, except for the ISE and ICO2 indices, which use data obtained from the companies that participate in the indices. To this end, B3 has internal procedures for the review of the information stated with the objective of ensuring accuracy.</p>

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**B3 S.A. - Brasil, Bolsa, Balcão**

**IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 7</b></p>	<p><b>B3 Answer</b></p>
<p>forces of supply and demand in order to provide confidence that the price discovery system is reliable.</p> <p>(b) Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function as a credible indicator of prices, rates, indices or values.</p> <p>This Principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable <i>Bona Fide</i>, Arms-Length Transactions. This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator's Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle 8.</p> <p>Provided that subparagraphs (a) and (b) above are met, Principle 7 does not preclude Benchmark Administrators from using executable bids or offers as a means to construct Benchmarks where anchored in an observable market consisting of <i>Bona Fide</i>, Arms-Length transactions. [fn. 23 For example this approach might be appropriate in a market where overall transaction volume is high over sustained periods, though on any given day there might be more firm bids and offers than posted transactions taking place."]</p> <p>This Principle also recognizes that various indices may be designed to measure or reflect the performance of a rule-based investment strategy, the volatility or behavior of an index or market or other aspects of an active market.</p>	

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#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 7</b>	<b>B3 Answer</b>
Principle 7 does not preclude the use of non-transactional data for such indices that are not designed to represent transactions and where the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indices, which are designed to measure the expected volatility of an index of securities transactions, rely on non-transactional data, but the data is derived from and thus "anchored" in an actual functioning securities or options market. [LIBOR, EURIBOR and TIBOR are intended to represent unsecured, inter-bank funding operations as described by the Benchmark this paragraph does not apply to these three benchmarks].	

#### Principle 8 - Hierarchy of Data Inputs

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 8</b>	<b>B3 Answer</b>
An Administrator should establish and Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of Benchmarks. In general, the hierarchy of data inputs should include:  (a) Where a Benchmark is dependent upon Submissions, the Submitters' own concluded arms-length transactions in the underlying interest or related markets.  (b) Reported or observed concluded Arm's-length Transactions in the underlying interest.  (c) Reported or observed concluded Arm's-length Transactions in related markets.  (d) Firm (executable) bids and offers.  (e) Other market information or Expert Judgments.	B3 does not use Submitter to gather data to be used in the calculation of indices, therefore Principle 8 is not applicable to B3 environment.

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#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 8</b>	<b>B3 Answer</b>
<p>Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the Administrator's Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgment in an active albeit low liquidity market, when transactions may not be consistently available each day. IOSCO also recognizes that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances, no transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.</p>	

#### Principle 9 - Transparency of Benchmark Determinations

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 9</b>	<b>B3 Answer</b>
<p>The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:</p> <p>(a) A concise explanation, sufficient to facilitate a Stakeholder's or Market Authority's ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a</p>	<p>B3 has formal and established procedures regarding the publication of the methodologies that have all the information for the indices to be reperformed:</p> <p>(a) and (b) All methodologies and manual of procedures of the indices under analysis are available on the institutional website of the company. The methodology includes the objective of the index, the type of index, the eligible assets, the criteria for inclusion, exclusion and weighting. The procedures manual is a general document that is intended for all</p>



### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

<b>IOSCO Principles ("Criteria")</b>	<b>B3 Answer ("Description" or "Objective")</b>
<b>IOSCO Principle 9</b>	<b>B3 Answer</b>
<p>Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction based, spread-based or interpolated/extrapolated).</p> <p>(b) A concise explanation of the extent to which and the basis upon which Expert Judgment, if any, was used in establishing a Benchmark determination.</p>	<p>indices and presents the following definitions: outstanding assets (free float), total return index, general formula of calculation of the "ex-theoretical" price, penny stock, negotiability index and also the procedures to calculate the indices, effectiveness of the portfolios, preview of the portfolios and special procedures that deal with the suspension of the negotiation, companies under special status, exclusion or non-inclusion at the discretion of B3, price of exclusion of an asset from the index, adjustments in the event of corporate reorganization involving companies that issue the assets that form part of the index, adjustments when there is free float reduction, adjustments in the event of primary and/or secondary offering of assets that alter the free float and, finally, the governance of the indices. Furthermore, all the alterations and exclusions are informed to the market in an official letter, by the news agency of B3.</p>

#### Principle 10 - Periodic Review

<b>IOSCO Principles ("Criteria")</b>	<b>B3 Answer ("Description" or "Objective")</b>
<b>IOSCO Principle 10</b>	<b>B3 Answer</b>
<p>The Administrator should periodically review the conditions in the underlying Interest that the Benchmark measures to determine whether the Interest has undergone structural changes that might require changes to the design of the Methodology. The Administrator also should periodically review whether the Interest has diminished or is nonfunctioning such that it can no longer function as the basis for a credible Benchmark.</p>	<p>B3 makes a periodical rebalancing of the theoretical portfolios of the indices under analysis.</p> <p>In addition to the reviews made in the rebalancing, extraordinary reviews can be made if facts that may affect the index occur in the market.</p> <p>All the changes made in the indices and their methodologies are available on the institutional website of B3.</p>

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#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 10</b>	<b>B3 Answer</b>
The Administrator should Publish or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.	The reviews and updates of the indices are available on the intranet, in the methodological adjustment manual.

##### Principle 11 - Content of the Methodology

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 11</b>	<b>B3 Answer</b>
<p>The Administrator should document and Publish or Make Available the Methodology used to make Benchmark determinations. The Administrator should provide the rationale for adopting a particular Methodology. The Published Methodology should provide sufficient detail to allow Stakeholders to understand how the Benchmark is derived and to assess its representativeness, its relevance to particular Stakeholders, and its appropriateness as a reference for financial instruments.</p> <p>At a minimum, the Methodology should contain:</p> <ul style="list-style-type: none"> <li>(a) Definitions of key terms.</li> <li>(b) All criteria and procedures used to develop the Benchmark, including input selection, the mix of inputs used to derive the Benchmark, the guidelines that control the exercise of Expert Judgment by the Administrator, priority given to certain data types, minimum data needed to determine a Benchmark, and any models or extrapolation methods.</li> <li>(c) Procedures and practices designed to promote consistency in the exercise of Expert Judgment between Benchmark determinations.</li> <li>(d) The procedures which govern Benchmark determination in periods of market stress or</li> </ul>	<p>B3 provides on its institutional website all the methodologies of the indices that include information on the objective of the index, the eligible assets, and the criteria for inclusion, exclusion and weighting.</p> <p>Additionally, the Procedures Manual is also provided on the website and it contains definitions that are used for all indices, such as: outstanding assets (free float), total return index, general formula of calculation of the "ex-theoretical" price, penny stock, negotiability index and also the procedures to calculate the indices, effectiveness of the portfolios, previews of portfolios and special procedures that deal with the suspension of the negotiation, special status companies, exclusion or non-inclusion at the discretion of B3, price of exclusion of an asset from the index, adjustments in the event of corporate reorganization involving companies that issue assets that form part of the index, adjustments when there is free float reduction, adjustments in the event of primary and/or secondary offering of assets that alter the free float and the governance of the indices.</p>

**Section 3**

**B3 S.A. - Brasil, Bolsa, Balcão**

**IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 11</b></p>	<p><b>B3 Answer</b></p>
<p>disruption, or periods where data sources may be absent (e.g., theoretical estimation models).</p> <p>(e) The procedures for dealing with error reports, including when a revision of a Benchmark would be applicable.</p> <p>(f) Information regarding the frequency for internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology.</p> <p>(g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate.</p> <p>(h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.</p> <p>Where a Benchmark is based on Submissions, the additional principle also applies:</p> <p>The Administrator should clearly establish criteria for including and excluding Submitters. The criteria should consider any issues arising from the location of the Submitter, if in a different jurisdiction to the Administrator.</p> <p>These criteria should be available to any relevant Regulatory Authorities, if any, and Published or Made Available to Stakeholders. Any provisions related to changes in composition, including notice periods should be made clear.</p>	

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 12 - Changes to the Methodology

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 12</b></p>	<p><b>B3 Answer</b></p>
<p>An Administrator should Publish or Make Available the rationale of any proposed material change in its Methodology, and procedures for making such changes. These procedures should clearly define what constitutes a material change, and the method and timing for consulting or notifying Subscribers (and other Stakeholders where appropriate, taking into account the breadth and depth of the Benchmark's use) of changes.</p> <p>Those procedures should be consistent with the overriding objective that an Administrator must ensure the continued integrity of its Benchmark determinations. When changes are proposed, the Administrator should specify exactly what these changes entail and when they are intended to apply.</p> <p>The Administrator should specify how changes to the Methodology will be scrutinized, by the oversight function.</p> <p>The Administrator should develop Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function, and that are appropriate and proportionate to the breadth and depth of the Benchmark's use and the nature of the Stakeholders. Procedures should:</p> <p>(a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyses and comment on the impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances.</p> <p>(b) Provide for Stakeholders' summary comments, and the Administrator's summary response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.</p>	<p>The procedure to change the Methodology occurs based on the market demand, or internal demand identified by the Products area. After identifying the demand, the methodology is reviewed and the changes suggested are analyzed.</p> <p>After the validation and preparation of the proposal for changes, a new portfolio of the index is structured and the necessary tests are made with historical data to simulate the behavior of the index with the change requested. Every change is presented to the Working group, which is responsible for the approval of the change.</p> <p>The change is communicated to the market through an Office Letter disclosed on the website of the institution.</p>

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#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 13 - Transition

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<p><b>IOSCO Principle 13</b></p>	<p><b>B3 Answer</b></p>
<p>Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition which makes the Benchmark no longer representative of its intended Interest. These policies and procedures should be proportionate to the estimated breadth and depth of contracts and financial instruments that reference a Benchmark and the economic and financial stability impact that might result from the cessation of the Benchmark. The Administrator should take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining what policies and procedures are appropriate for a particular Benchmark.</p> <p>These written policies and procedures should be Published or Made Available to all Stakeholders.</p> <p>Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:</p> <ul style="list-style-type: none"> <li>(a) Contracts or other financial instruments that reference a Benchmark, have robust fallback provisions in the event of material changes to, or cessation of, the referenced Benchmark.</li> <li>(b) Stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark.</li> </ul> <p>Administrators' written policies and procedures to address the possibility of Benchmark cessation could include the following factors, if determined to be reasonable and appropriate by the Administrator:</p> <ul style="list-style-type: none"> <li>(a) Criteria to guide the selection of a credible, alternative Benchmark such as, but not</li> </ul>	<p>If B3 decides to discontinue the calculation and publication of an index, according to the Procedures Manual, a prior notice period sufficient to facilitate an orderly transition should be permitted.</p> <p>These procedures include analysis, approval by the level of authority, procedures for exclusion of the calculation, safekeeping of the documents and disclosure to the market.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 13</b>	<b>B3 Answer</b>
<p>limited to, criteria that seek to match to the extent practicable the existing Benchmark's characteristics (e.g., credit quality, maturities and liquidity of the alternative market), differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation.</p> <p>(b) The practicality of maintaining parallel Benchmarks (e.g., where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark.</p> <p>(c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified.</p> <p>(d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the Benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative Benchmark if necessary.</p> <p>(e) The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark, including the timeframe for any such action commensurate with the tenors of the financial instruments referencing the Benchmarks and the adequacy of notice that will be provided to Stakeholders.</p>	

**Section 3**

**B3 S.A. - Brasil, Bolsa, Balcão**

**IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

**Principle 14 - Submitter Code of Conduct**

<b>IOSCO Principles ("Criteria")</b>	<b>B3 Answer ("Description" or "Objective")</b>
<b>IOSCO Principle 14</b>	<b>B3 Answer</b>
<p>Where a Benchmark is based on Submissions, the following additional principle also applies: The Administrator should develop guidelines for Submitters ("Submitter Code of Conduct"), which should be available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.</p> <p>The Administrator should only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor and record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.</p> <p>The Administrator's oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct.</p> <p>The Submitter Code of Conduct should address:</p> <ul style="list-style-type: none"> <li>(a) The selection of inputs.</li> <li>(b) Who may submit data and information to the Administrator.</li> <li>(c) Quality control procedures to verify the identity of a Submitter and any employee(s) of a Submitter who report(s) data or information and the authorization of such person(s) to report market data on behalf of a Submitter.</li> <li>(d) Criteria applied to employees of a Submitter who are permitted to submit data or information to an Administrator on behalf of a Submitter.</li> </ul>	<p>As defined in the methodologies of the indices under analysis, data from Submitters are not used. Therefore, we understand that the principle under analysis is not applicable to B3 environment.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 14</b>	<b>B3 Answer</b>
<p>(e) Policies to discourage the interim withdrawal of Submitters from surveys or Panels.</p> <p>(f) Policies to encourage Submitters to submit all relevant data.</p> <p>(g) The Submitters' internal systems and controls, which should include:</p> <ul style="list-style-type: none"><li>(i) Procedures for submitting inputs, including Methodologies to determine the type of eligible inputs, in line with the Administrator's Methodologies.</li><li>(ii) Procedures to detect and evaluate suspicious inputs or transactions, including inter-group transactions, and to ensure the <i>Bona Fide</i> nature of such inputs, where appropriate.</li><li>(iii) Policies guiding and detailing the use of Expert Judgment, including documentation requirements.</li><li>(iv) Record keeping policies.</li><li>(v) Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs.</li><li>(vi) Training, including training with respect to any relevant regulation (covering Benchmark regulation or any market abuse regime).</li><li>(vii) Suspicious Submission reporting.</li><li>(viii) Roles and responsibilities of key personnel and accountability lines.</li><li>(ix) Internal sign off procedures by management for submitting inputs.</li></ul>	



### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 14</b>	<b>B3 Answer</b>
<p>(x) Whistle blowing policies (in line with Principle 4).</p> <p>(xi) Conflicts of interest procedures and policies, including prohibitions on the Submission of data from Front Office Functions unless the Administrator is satisfied that there are adequate internal oversight and verification procedures for Front Office Function Submissions of data to an Administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above), the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the Benchmark levels), including, without limitation, through appropriate remuneration policies and by effectively addressing conflicts of interest which may exist between the Submitter's Submission activities (including all staff who perform or otherwise participate in Benchmark.</p> <p>Submission responsibilities), and any other business of the Submitter or of any of its affiliates or any of their respective clients or customers.</p>	

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

#### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

#### Principle 15 - Internal Controls over Data Collection

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 15</b>	<b>B3 Answer</b>
<p>When an Administrator collects data from any external source the Administrator should ensure that there are appropriate internal controls over its data collection and transmission processes. These controls should address the process for selecting the source, collecting the data and protecting the integrity and confidentiality of the data.</p> <p>Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.</p>	<p>B3 does not use external data to generate the indices.</p> <p>Therefore, the principle under analysis is not applicable to B3 environment.</p>

#### Principle 16 - Complaints procedures

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 16</b>	<b>B3 Answer</b>
<p>The Administrator should establish and Publish or Make Available a written complaints procedures policy, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator decisions in relation to a Benchmark determination.</p> <p>The complaints procedures policy should:</p> <p>(a) Permit complaints to be submitted through a user-friendly complaints process such as an electronic Submission process;</p> <p>(b) Contain procedures for receiving and investigating a complaint made about the Administrator's Benchmark determination process on a timely and fair basis by personnel who are independent of any</p>	<p>B3 has a Code of Conduct applicable to all employees, and has a whistleblowing channel that is operated by a third-party company fully independent and segregated from B3.</p> <p>(a) Complaints can be made through telephone calls, e-mail to the whistleblowing channel and direct e-mail to the audit committee;</p> <p>(b) The complaints received are classified in accordance with their degree of criticality, being analyzed and investigated by the Code of Conduct Committee;</p> <p>(c) All the complaint analysis procedures are formalized in the Regulation of the Treatment of Complaints and Frauds of B3;</p> <p>(d) All complaints are registered and filed for an undetermined period of time.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 16</b>	<b>B3 Answer</b>
<p>personnel who may be or may have been involved in the subject of the complaint, advising the complainant and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints;</p> <p>(c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and</p> <p>(d) Require all documents relating to a complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five years, subject to applicable national legal or regulatory requirements.</p> <p>Disputes about a Benchmarking determination, which are not formal complaints, should be resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that should be Published or Made Available to Subscribers and Published or Made Available to Stakeholders as soon as possible as set out in the Methodology.</p>	

#### Principle 17 - Audits

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 17</b>	<b>B3 Answer</b>
<p>The Administrator should appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated criteria and with the principles. The frequency of audits should be proportionate to the size and complexity of the Administrator's operations.</p>	<p>The Internal Audit area of B3 makes an annual planning of the work based on the assessment and prioritization of the risks related to the auditable universe, comprised of business and information technology macroprocesses. The work is performed according to the internal audit methodology, which determines that the auditable universe needs to be assessed within a period of five years at most.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 17</b>	<b>B3 Answer</b>
Where appropriate to the level of existing or potential conflicts of interest identified by the Administrator (except for Benchmarks that are otherwise regulated or supervised by a National Authority other than a relevant Regulatory Authority), an Administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated Methodology. The frequency of audits should be proportionate to the size and complexity of the Administrator's Benchmark operations and the breadth and depth of Benchmark use by Stakeholders.	<p>Additionally, in 2016 the internal audit analyzed the "Administrative Indices" procedure and, in 2017, analyzed the "Calculate and disclose the DI Rate" procedure.</p> <p>For this first year, B3 engaged PricewaterhouseCoopers (PwC) to present a reasonable assurance report on the suitability of the description of B3, as well as on the design and implementation of policies, processes and internal controls related to the financial indices, to comply with the "Principles for Financial Benchmarks" of IOSCO.</p>

#### Principle 18 - Audit Trail

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 18</b>	<b>B3 Answer</b>
<p>Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:</p> <p>(a) All market data, Submissions and any other data and information sources relied upon for Benchmark determination.</p> <p>(b) The exercise of Expert Judgment made by the Administrator in reaching a Benchmark determination.</p> <p>(c) Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption.</p> <p>(d) The identity of each person involved in producing a Benchmark determination.</p> <p>(e) Any queries and responses relating to data inputs.</p>	<p>B3 files the information used in the process of creation, alteration and exclusion of indices in a restricted directory, for five years or more.</p> <p>For all data used in the calculation of the indices, as well as the rebalancing of the portfolios, which are obtained in the B3 systems, backup procedures are made by the B3 Technology area and filed for a period of five years or more.</p>

### Section 3

#### B3 S.A. - Brasil, Bolsa, Balcão

##### IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")

IOSCO Principles ("Criteria")	B3 Answer ("Description" or "Objective")
<b>IOSCO Principle 18</b>	<b>B3 Answer</b>
<p>If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this principle, subject to appropriate written record sharing agreements.</p> <p>When a Benchmark is based on Submissions, the following additional principle also applies: Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:</p> <ul style="list-style-type: none"><li>(a) The procedures and Methodologies governing the Submission of inputs.</li><li>(b) The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator.</li><li>(c) Names and roles of individuals responsible for Submission and Submission oversight.</li><li>(d) Relevant communications between submitting parties.</li><li>(e) Any interaction with the Administrator.</li><li>(f) Any queries received regarding data or information provided to the Administrator.</li><li>(g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments.</li><li>(h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations.</li><li>(i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.</li></ul>	

**Section 3**

**B3 S.A. - Brasil, Bolsa, Balcão**

**IOSCO Principles ("Criteria") and management description to meet the criteria ("Objective")**

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**Principle 19 - Cooperation with Regulatory Authorities**

<b>IOSCO Principles ("Criteria")</b>	<b>B3 Answer ("Description" or "Objective")</b>
<b>IOSCO Principle 19</b>	<b>B3 Answer</b>
Relevant documents, Audit Trails and other documents subject to these principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and handed over promptly upon request.	Even though B3 has not direct regulatory obligations regarding the indices, it will always be at the disposal of the regulators for provision of information, data and documents that they consider significant for their activities.  Therefore, the principle under analysis is not applicable to the B3 environment.

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(A free translation of the original in Portuguese)

#### Section 4

### **B3 S.A. - Brasil, Bolsa, Balcão**

#### **Independent auditor's reasonable assurance report**

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## **Independent auditor's reasonable assurance report on the suitability of the description of B3, the design and implementation of policies, processes and internal controls related to the financial indices to comply with the Principles for Financial Benchmarks of the International Organization of Securities Commissions (IOSCO)**

To the Management  
B3 S.A. - Brasil, Bolsa, Balcão  
São Paulo - SP

#### **Scope**

We have been engaged to present a reasonable assurance report on the suitability of the description of B3 S.A. - Brasil, Bolsa, Balcão (hereinafter referred to as "B3"), as well as on the design and implementation of policies, processes and internal controls related to the financial indices at December 31, 2018, to comply with the "Principles for Financial Benchmarks" issued by the International Organization of Securities Commissions (IOSCO) of July 2013 (hereinafter referred to as "IOSCO Principles"), which were described by B3 in Section 3 of this report, in item "IOSCO Principles" or "Criteria".

#### **Responsibilities of B3**

B3 management is responsible for preparing the description and corresponding assertion about compliance with IOSCO Principles in Sections 3 and 2, respectively, including the integrity, precision and method of presentation of the description and assertion. Management is also responsible for the design and implementation of the policies, processes and internal controls related to the financial indices (Section 3), at December 31, 2018, which exist for compliance with IOSCO Principles.

#### **Independent auditor's responsibility**

Our responsibility is to express an opinion on the suitability of the description of B3, as well as on the design and implementation of policies, processes and internal controls, at December 31, 2018, for compliance with IOSCO Principles, related to the financial indices described in Section 3 of this report. Our work was conducted in accordance with the International Standard on Assurance Engagements (ISAE) 3000 and the Brazilian Standard NBC TO 3000 - "Assurance Engagement Different from Audit and Review" issued, respectively, by the International Auditing and Assurance

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## Section 4

### **B3 S.A. - Brasil, Bolsa, Balcão**

#### **Independent auditor's reasonable assurance report**

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Standards Board and the Brazilian Federal Accounting Council (CFC). Those standards require that we comply with ethical and independence requirements and other responsibilities referred to them, including the application of the Brazilian Quality Control Standard (NBC PA 01) and, therefore, the maintenance of a comprehensive quality control system, including policies documented and procedures on compliance with ethical requirements, professional standards and legal and regulatory requirements applicable. Additionally, this standard requires we plan and perform our examination to obtain reasonable assurance about whether, in all material respects, the description of B3 is appropriate, as well as the policies, processes and internal controls related to the financial indices (Section 3) to comply with the IOSCO Principles, are adequately designed and implemented at December 31, 2018.

An assurance engagement to issue a report on the adequacy of the description of B3 and on the design and implementation of policies, processes and internal controls related to the financial indices (Section 3) for compliance with the IOSCO Principles, involves the performance of procedures selected to obtain evidence about the disclosures in the description of such policies, processes and internal controls, and their appropriate design and implementation. The procedures selected depend on the auditor's judgment, including the evaluation of the risks that the description of B3 is not appropriate, and the policies, processes and internal controls related to financial indices (Section 3), to comply with the IOSCO Principles, were not properly designed and implemented. Our procedures included the evaluation about whether the description of B3 is appropriate, as well as about whether the policies, processes and internal controls related to the financial indices (Section 3), were appropriately designed and implemented, as described by B3 in Section 3 of this report.

The test procedures performed for this assurance engagement are summarized in the Attachment to this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **Inherent limitations of controls in institutions**

The information on the management's description, the policies, processes and internal controls related to financial indices (Section 3) that are in place for compliance with the IOSCO Principles, was prepared by B3. Due to their nature, the policies, procedure and internal controls related to the financial indices (Section 3) of B3 may not prevent or detect all the errors or omissions in the processing or reporting of the transactions. Furthermore, the assessment of the design and implementation of the policies, processes and internal controls related to the financial indices (Section 3) considers the current and the past contexts. For future periods, the related internal controls may become unsuitable or inefficient.

Also, the projection to future periods of any evaluation of the suitability of the presentation of the description, as well as the opinions expressed on the suitability of the design or implementation of the policies, processes and internal controls to comply with the IOSCO Principles are subject to the risk that the policies, processes and controls of B3 may become inadequate or fail.

#### **Opinion**

Our opinion was formed on the basis of the matters outlined in this report. In our opinion, in all material respects, management description is fairly presented, and the policies, processes and internal controls related to the financial indices listed in Section 3 were designed and implemented at December 31, 2018 to comply with the IOSCO Principles, according to the criteria described in Section 3 to this report.





Section 4

**B3 S.A. - Brasil, Bolsa, Balcão**

**Independent auditor's reasonable assurance report**

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**Other matters**

This report was prepared only for B3 in connection with Principle 17 of the IOSCO Principles. We performed our work to present to the people in charge of governance of B3 matters related to a reasonable assurance report and it was not presented for any other purpose. We do not accept or assume any liability and we deny any responsibility to any other party other than B3 for our work, for the reasonable assurance report or for our conclusions.

São Paulo, December 13, 2019

*PricewaterhouseCoopers*

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5

*Eliane Kihara*

Eliane Kihara  
Contadora CRC 1SP212496/O-5

(A free translation of the original in Portuguese)

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

PricewaterhouseCoopers Auditores Independentes ("PwC") has verified whether management's description is fairly presented, as well as whether the policies, processes and internal controls related to the financial indices were designed and implemented at December 31, 2018, as described by management in Section 3 to comply with the IOSCO Principles. The procedures performed to determine whether the B3 controls were designed and implemented appropriately and sufficiently to comply with the IOSCO Principles were determined by PwC.

**Principle 1 - Overall Responsibility of the Administrator**

<b>IOSCO Principle 1</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should retain primary responsibility for all aspects of the Benchmark determination process.</p> <p>For example, this includes:</p> <p>(a) Development: The definition of the Benchmark and Benchmark Methodology.</p> <p>(b) Determination and Dissemination: Accurate and timely compilation and publication and distribution of the Benchmark.</p> <p>(c) Operation: Ensuring appropriate transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption,</p>	<p>B3 is responsible for the indices disclosed to the market, including: methodology, development, calculation, maintenance, disclosure and governance.</p> <p>(a) All methodologies and procedures used in the indices are available on the institutional website.</p> <p>(b) The determination and dissemination of the indices disclosed through Market Data are monitored by the operations team on an intraday basis.</p> <p>(c) Every communication with the market is made through news agencies, and may also be made through an Official Letter, when it is a procedure not described in the manuals.</p> <p>(d) B3 has a Working Group intended for evaluating the need and opportunity for</p>	<p>For the indices under analysis, we noted the existence of the methodologies disclosed on the institutional website of B3 and examined the documents that evidence acceptance by Management of disclosure of indices.</p> <p>For each index under analysis, we analyzed the methodologies that evidence:</p> <ul style="list-style-type: none"> <li>. Definition and development of the indices.</li> <li>. Availability of all methodologies and other documents related to the indices presented on the institutional website.</li> </ul> <p>There has been no implementation of indices recently, except for one case of alteration, which follows the same method of implementation of new indices. We obtained the minutes of the committee approving the alteration of the index.</p>

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

<b>IOSCO Principle 1</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>failure of critical infrastructure, or other relevant factors.</p> <p>(d) Governance: Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark.</p>	<p>improvement the methodologies applied and also the other procedures used for the indices due to the market needs.</p>	<p>We verified the process of periodical rebalancing of the indices and review of the methodologies, as well as the update of the methodologies on the institutional website.</p> <p>We did not identify relevant exceptions arising from the test procedures performed.</p>

**Principle 2 - Oversight of third parties**

<b>IOSCO Principle 2</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Where activities relating to the Benchmark determination process are undertaken by third parties - for example collection of inputs, publication or where a third party acts as Calculation Agent - the Administrator should maintain appropriate oversight of such third parties. The Administrator (and its oversight function) should consider adopting policies and procedures that:</p> <p>(a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with;</p>	<p>In order to assess the sustainability performance of the companies listed on B3 and select them to comprise the Corporate Sustainability Index (ISE), B3 and the Board of Directors of the ISE B3 (CISE) count on the technical partnership of the third-party company that provides data gathering services.</p> <p>B3's policy for the acquisition of goods and services deals with the engagement of service providers describing the guidelines of the process:</p> <p>(a) The standard form contract of third parties used by B3 presents the responsibilities of the service provider.</p>	<p>For the indices under analysis, we noted that only ISE uses the data provided by the service provider. The services provided are governed by a formal agreement. We obtained the agreement and addenda formalizing the rendering of services and containing the responsibilities and the term for the service rendering.</p> <p>We verified the limited assurance report issued by a third-party company on the data generation procedure that is used in the composition of the Corporate Sustainability Index (ISE) portfolio.</p> <p>We noted that the Board of Directors of the Corporate Sustainability Index (CISE), which is comprised of 11 institutions (B3 holds the</p>

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

<b>IOSCO Principle 2</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(b) Monitor third parties' compliance with the standards set out by the Administrator.</p> <p>(c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark determination process.</p> <p>(d) Take reasonable steps, including contingency plans, to avoid undue operational risk created to the participation of third parties in the Benchmark determination process.</p> <p>This principle does not apply in relation to a third party from whom an Administrator sources data if that third party is a Regulated Market or Exchange.</p>	<p>(b) The information presented by the third party is discussed by the CISE, which is responsible for determining the ISE portfolio.</p> <p>(c) The institution has published on its institutional website a list with all the partners/participants of the index, and has provided details of the role and responsibility of each member as well.</p> <p>(d) The institution counts on a contingency plan to mitigate the risks related to the rendering of services related to the ISE process.</p>	<p>presidency of the Board of Directors) is responsible for determining, on an annual basis, the portfolio of assets.</p> <p>We noted that all the partners used in ISE are informed on the institutional website of B3 as well as on the specific website of the index (<a href="http://isebvmf.com.br/">http://isebvmf.com.br/</a>), which provide information about ISE, CISE, the partners' roles, and others.</p> <p>We did not identify relevant exceptions arising from the application of the procedures described.</p>

**Principle 3 - Conflicts of interest for Administrators**

<b>IOSCO Principle 3</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>To protect the integrity and independence of Benchmark determinations, Administrators should document, implement and enforce policies and procedures for the identification, disclosure, management, mitigation or avoidance of conflicts of interest. Administrators should review and update their policies and procedures as appropriate.</p>	<p>B3 has established a control framework which objective is the determination of the indices with integrity and independence:</p> <p>(a) The Corporate Procedures and Risks area that periodically maps and assesses the risks in procedures established for the management of indices.</p>	<p>We noted that the management of indices is made by segregated executive boards, Business Directors and Operations Directors to mitigate possible conflicts of interest. Additionally, we noted that the institution has a Corporate Risk and Processes area that periodically maps and assesses the risks in processes established for the management of indices. We obtained the company's</p>

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

<b>IOSCO Principle 3</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.</p> <p>The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the Benchmark poses and should seek to ensure:</p> <p>(a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations.</p> <p>(b) Personal interests and connections or business connections do not compromise the Administrator's performance of its functions.</p> <p>(c) Segregation of reporting lines within the Administrator, where appropriate, to clearly define responsibilities and prevent unnecessary or undisclosed conflicts of interest or the perception of such conflicts.</p> <p>(d) Adequate supervision and sign-off by authorized or qualified employees prior to releasing Benchmark determinations.</p> <p>(e) The confidentiality of data, information and other inputs submitted to, received by or produced by the Administrator, subject to the disclosure obligations of the Administrator.</p>	<p>(b) Areas segregated with regard to methodology (creation, change and discontinuance of indices) and operationalization of such methodologies.</p> <p>(c) The executive directors of the areas mentioned in item B are hierarchically independent.</p> <p>(d) Working Group (WG): responsible for the follow-up and approval of creation, change and discontinuance of indices. The Information Security.</p> <p>(e) Policy and Code of Conduct are signed and are always available to all employees of the company.</p> <p>(f) The Institution counts on Information Security, Compliance and Internal Audit areas.</p> <p>(g) Formal procedures of remuneration are under the responsibility of the Human Resources area. They are clearly established and applied to all employees of the institution and are not linked to the performance of the indices.</p> <p>B3 has a segregated structure to mitigate the risks of conflicts of interest:</p> <p>(a) Employees are properly qualified to perform the attributions that are</p>	<p>organization chart and report of the last engagements performed by the risk area in relation to the procedures of the executive directors responsible for the management of the indices under analysis.</p> <p>We noted that the creation of new products/ methodologies, as well as alterations and discontinuance are reviewed and formally approved, and details on the tests made may be verified in Principle 5.</p> <p>We noted that the institution has formal policies and documents, such as the Information Security Policy and the Code of Conduct, which are disclosed to all employees. We obtained these documents. We also identified, in the Code of Conduct, the existence of a Whistleblowing Channel; for more information on the test made see Principle 16.</p> <p>We noted that the procedures related to the company's remuneration are under the responsibility of the Human Resources area and are clearly established and applied to every employee in the institution.</p> <p>We did not identify relevant exceptions arising from the application of the procedures described.</p>

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

<b>IOSCO Principle 3</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(f) Effective procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information may reasonably affect any Benchmark determinations.</p> <p>(g) Adequate remuneration policies that ensure all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivized by the levels of the Benchmark.</p> <p>An Administrator's conflict of interest framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the Administrators staff or wider group may have in relation to Benchmark determinations. To this end, the framework should:</p> <p>(a) Include measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business (including all staff who perform or otherwise participate in Benchmark production responsibilities), and any other business of the Administrator or any of its affiliates.</p> <p>(b) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the</p>	<p>addressed to them and there is segregation of duties in the processes that support the determination of the indices.</p> <p>(b) The institution has a whistleblowing channel available to all stakeholders (internal and external).</p>	

**Attachment**

**B3 S.A. - Brasil, Bolsa, Balcão**

<b>IOSCO Principle 3</b>	<b>B3 Answer</b>	<b>PwC Test</b>
Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.		

**Principle 4 - Control Framework for Administrators**

<b>IOSCO Principle 4</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>An Administrator should implement an appropriate control framework for the process of determining and distributing the Benchmark. The control framework should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified, the extent of the use of discretion in the Benchmark setting process and to the nature of Benchmark inputs and outputs. The control framework should be documented and available to relevant Regulatory Authorities, if any. A summary of its main features should be Published or Made Available to Stakeholders.</p> <p>This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:</p> <p>(a) Conflicts of interest in line with Principle 3 on conflicts of interests.</p>	<p>B3 has a structure with established processes that form a control framework in the benchmark determination and which is available to the stakeholders on its institutional website:</p> <p>(a) For more information, see description in Principle 3:</p> <p>(b) For more information, see description of Principles 6 to 15.</p> <p>(c) For more information, see Principle 16.</p> <p>(d) Indices are determined by participants from various areas. The Information Security Policies and Code of Conduct are signed by the employees and are updated periodically.</p> <p>B3 does not use the Submitter to gather data to be used in the calculation of the indices.</p>	<p>We noted that the institution has an index management structure that aims to operate with transparency and avoid possible conflicts of interest; for more information about the evaluations, see Principle 3.</p> <p>We noted that the institution makes available on its institutional website a summary with the internal control framework.</p> <p>We identified segregation of the areas that operate in the index management processes (Business and Operation) and that they follow formal procedures established; for more information about the tests made, see Principles 10, 11, 12 and 13.</p> <p>We noted that all data that comprise the indices derive from origins independent from the areas that are part of their management. For more information about the evaluations, see Principle 7.</p>

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<b>IOSCO Principle 4</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(b) Integrity and quality of Benchmark determination:</p> <ul style="list-style-type: none"><li>(i) Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with Principles 6 to 15 on the quality of the Benchmark and Methodology.</li><li>(ii) Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources.</li><li>(iii) Arrangements to ensure accountability and complaints mechanisms are effective, in line with Principles 16 to 19.</li><li>(iv) Providing robust infrastructure, policies and procedures for the management of risk, including operational risk.</li></ul> <p>(c) Whistleblowing mechanism: Administrators should establish an effective whistleblowing mechanism to facilitate early awareness of any potential misconduct or irregularities that may arise. This mechanism should allow for external reporting of such cases where appropriate.</p>		<p>We noted that the institution has formal policies and documents, such as the Information Security Policy and the Code of Conduct, which are disclosed to all employees. We obtained these documents. We also identified, in the Code of Conduct, the existence of a Whistleblowing Channel; for more information on the test made see Principle 16.</p> <p>We did not identify relevant exceptions arising from the test procedures described.</p>



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<b>IOSCO Principle 4</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(d) Expertise:</p> <ul style="list-style-type: none"> <li>(i) Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence.</li> <li>(ii) Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel.</li> </ul> <p>Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by:</p> <ul style="list-style-type: none"> <li>(a) Ensuring as far as possible that the Submitters comprise an appropriately representative group of participants taking into consideration the underlying Interest measured by the Benchmark;</li> <li>(b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter Code of Conduct and the Administrator's applicable quality and integrity standards for Submission;</li> <li>(c) Specifying how frequently Submissions should be made and specifying that inputs</li> </ul>		

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<b>IOSCO Principle 4</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>or Submissions should be made for every Benchmark determination; and</p> <p>(d) Establishing and employing measures to effectively monitor and scrutinize inputs or Submissions. This should include pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.</p>		

**Principle 5 - Internal Oversight**

<b>IOSCO Principle 5</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Administrators should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. This should include consideration of the features and intended, expected or known usage of the Benchmark and the materiality of existing or potential conflicts of interest identified.</p> <p>The oversight function should be carried out either by a separate committee, or other appropriate governance arrangements. The oversight function and its composition should be appropriate to provide effective scrutiny of the Administrator. Such oversight function could consider groups of</p>	<p>B3 has a framework that ensures oversight of the processes that determine the indices under analysis:</p> <p>The Company has the Corporate Processes and Risks area that periodically evaluates the processes and areas that support the benchmark determination and identify possible conflicts of interest. B3 has two main areas responsible for the indices: Products and Clients, and Operations. The Products and Clients area is responsible for activities related to the preparation, alteration and exclusion of the indices from the methodology, and the Operations area is responsible for the operation of the index, which involves the</p>	<p>We noted that the institution has formal documents of the processes related to the management of the indices under analysis, and that these documents are made available to all employees through the Intranet. All the areas carry out their activities as determined in the flowcharts. We checked those documents <i>in loco</i>.</p> <p>We were informed that in August 2018, B3 opted for the creation of a new structure denominated Working Group (WG). We analyzed the document that provides details about the WG functions, roles and responsibilities and verified that the aspects described in Principle 5 about the benchmark</p>

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<b>IOSCO Principle 5</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Benchmarks by type or asset class, provided that it otherwise complies with this principle.</p> <p>An Administrator should develop and maintain robust procedures regarding its oversight function, which should be documented and available to relevant Regulatory Authorities, if any. The main features of the procedures should be Made Available to Stakeholders. These procedures should include:</p> <p>(a) The terms of reference of the oversight function.</p> <p>(b) Criteria to select members of the oversight function.</p> <p>(c) The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.</p> <p>The responsibilities of the oversight function include:</p> <p>(a) Oversight of the Benchmark design:</p> <p>(i) Periodic review of the definition of the Benchmark and its Methodology.</p>	<p>calculation and rebalancing, based on the periodicity defined in each methodology, and the daily maintenance of the portfolio of existing indices.</p> <p>The Company has flowcharts of the processes related to the indices, it uses these documents as an official documentation, which is available to the employees on the Intranet.</p> <p>B3 has a Working Group for the indices which scope is the validation and approval of the creation, alteration and exclusion of indices, as well as the periodical review of the methodologies and isolated demands for which the WG is required. There is an annual planning for periodical review of the methodologies, as well as for review under demand when the need for creation, alteration or exclusion of some index is identified.</p>	<p>oversight are included in the responsibilities of the WG.</p> <p>We noted that, currently, the creation, alteration and exclusion of indices is validated and approved by the WG.</p> <p>We noted that the methodology created or altered is updated on the institutional website with the issue of a Circular Letter in the news agency of B3.</p> <p>We did not identify significant exceptions resulting from the procedures described.</p>

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<b>IOSCO Principle 5</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(ii) Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate).</p> <p>(iii) Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorizing or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12.</p> <p>(iv) Reviewing and approving procedures for termination of the Benchmark, including guidelines that set out how the Administrator should consult with Stakeholders about such cessation.</p> <p>(b) Oversight of the integrity of Benchmark determination and control framework:</p> <p>(i) Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party.</p>		

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<b>IOSCO Principle 5</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(ii) Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits.</p> <p>(iii) Overseeing any exercise of Expert Judgment by the Administrator and ensuring Published Methodologies have been followed.</p> <p>Where conflicts of interests may arise in the Administrator due to its ownership structures or controlling interests, or due to other activities conducted by any entity owning or controlling the Administrator or by the Administrator or any of its affiliates: the Administrator should establish an independent oversight function which includes a balanced representation of a range of Stakeholders where known, Subscribers and Submitters, which is chosen to counterbalance the relevant conflict of interest.</p> <p>Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:</p> <p>(a) Overseeing and challenging the scrutiny and monitoring of inputs or Submissions by the Administrator. This could include regular discussions of inputs or</p>		

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<b>IOSCO Principle 5</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Submission patterns, defining parameters against which inputs or Submissions can be analyzed, or querying the role of the Administrator in challenging or sampling unusual inputs or Submissions;</p> <p>(b) Overseeing the Code of Conduct for Submitters;</p> <p>(c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters; and</p> <p>(d) Establishing measures to detect potential anomalous or suspicious Submissions and in case of suspicious activities, to report them, as well as any misconduct by Submitters of which it becomes aware to the relevant Regulatory Authorities, if any.</p>		

### Principle 6 - Benchmark Design

<b>IOSCO Principle 6</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The design of the Benchmark should seek to achieve, and result in an accurate and reliable representation of the economic realities of the Interest it seeks to measure, and eliminate factors that might result in a distortion of the price, rate, index or value of the Benchmark.</p>	<p>B3 has formal processes established to determine the indices:</p> <ul style="list-style-type: none"><li>(a) to (e) The process of creation and alteration of indices involves several areas with the objective of analyzing all the possibilities and impacts of the proposal of</li></ul>	<p>For the indices under analysis, we noted that the institution has formal documents (flowcharts) establishing who is responsible and what are the processes presented in the determination of the indices. Such structure aims to mitigate possible conflicts of interest and demonstrates transparency in the</p>

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<b>IOSCO Principle 6</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:</p> <p>(a) Adequacy of the sample used to represent the Interest;</p> <p>(b) Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing);</p> <p>(c) Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark;</p> <p>(d) The distribution of trading among Market Participants (market concentration);</p> <p>(e) Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark).</p>	<p>the benchmark methodology, either for creation or alteration. During the creation of the index, backtests are made to confirm the quality of the information and whether it satisfies the market needs. All the indices under analysis are available on the company's institutional website, and they have various materials that discuss the main aspects of the index, including the methodology. Information is provided about the objective, type of selection, weighting and period of review.</p>	<p>processes of definition of or change in the methodology and calculation of the indices. We obtained the organization chart of the institution and checked <i>in loco</i> the flowcharts of the processes under analysis.</p> <p>As described in Principles 1, 5 and 10, B3 has a group for discussion.</p> <p>We noted that the process of creation and alteration of indices involves several areas with the objective of analyzing all the possibilities and impacts of the benchmark methodology proposal, either for creation or for alteration. We also verified the institutional website of B3 and identified that all the indices under analysis have several materials that discuss the main aspects of the index, including the methodology and procedures manual.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>

**Principle 7 - Data sufficiency**

<b>IOSCO Principle 7</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:</p>	<p>B3 uses in the calculation of the indices data from the regulated market transactions, except for the ISE and ICO2 indices, which use data obtained from the companies that participate</p>	<p>We noted that the institution segregates the two main areas of management of the indices, Products and Operations, the former is responsible for the management of the index</p>

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<b>IOSCO Principle 7</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(a) Be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand in order to provide confidence that the price discovery system is reliable; and</p> <p>(b) Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function as a credible indicator of prices, rates, indices or values.</p> <p>This principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable <i>Bona Fide</i>, Arms-Length Transactions. This does not mean that every individual Benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the Administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending upon the Administrator's Methodology, this could result in an individual Benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle 8.</p> <p>Provided that subparagraphs (a) and (b) above are met, Principle 7 does not preclude Benchmark Administrators from using</p>	<p>in the indices. To this end, B3 has internal procedures for the review of the information stated with the objective of ensuring accuracy.</p>	<p>methodologies and the latter for the operationalization of the index methodologies. We obtained the organization chart of the institution, as well as the flowcharts with the processes and those responsible for the areas under analysis.</p> <p>We noted that, in addition to the segregation of the areas, all the data that comprise the indices arise from origins that are independent from the departments that manage the indices. We obtained the flowchart of the systems that support the processes of the indices and the understanding of the origins and destinations of the data that pass through them until the index is provided.</p> <p>We checked <i>in loco</i> the controls of daily review of the indices performed by the Operations area, and obtained some spreadsheets used in those activities.</p> <p>We noted that the Operations area also performs rebalancing activities/controls of the theoretical portfolios of the indices, for more information about the test, see Principle 10.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>



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<b>IOSCO Principle 7</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>executable bids or offers as a means to construct Benchmarks where anchored in an observable market consisting of <i>Bona Fide</i>, Arms-Length transactions. [fn. 23 For example this approach might be appropriate in a market where overall transaction volume is high over sustained periods, though on any given day there might be more firm bids and offers than posted transactions taking place.]</p> <p>This principle also recognizes that various indices may be designed to measure or reflect the performance of a rule based investment strategy, the volatility or behavior of an index or market or other aspects of an active market.</p> <p>Principle 7 does not preclude the use of non-transactional data for such indices that are not designed to represent transactions and where the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indices, which are designed to measure the expected volatility of an index of securities transactions, rely on non-transactional data, but the data is derived from and thus "anchored" in an actual functioning securities or options market. [LIBOR, EURIBOR and TIBOR are intended to represent unsecured, inter-bank funding operations as described by the Benchmark this paragraph does not apply to these three benchmarks].</p>		

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**Principle 8 - Hierarchy of Data Inputs**

<b>IOSCO Principle 8</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>An Administrator should establish and Publish or Make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of Benchmarks. In general, the hierarchy of data inputs should include:</p> <ul style="list-style-type: none"><li>(a) Where a Benchmark is dependent upon Submissions, the Submitters' own concluded arms-length transactions in the underlying interest or related markets;</li><li>(b) Reported or observed concluded Arm's-length Transactions in the underlying interest;</li><li>(c) Reported or observed concluded Arm's-length Transactions in related markets;</li><li>(d) Firm (executable) bids and offers; and</li><li>(e) Other market information or Expert Judgments.</li></ul> <p>Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this principle is not intended to restrict an Administrator's flexibility to use inputs consistent with the Administrator's approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the</p>	<p>B3 does not use the Submitter to gather data to be used in the calculation of indices, therefore Principle 8 is not applicable to B3 environment.</p>	<p>No test was made, since the data used in the calculation of the indices arise from the regulated market transactions.</p>

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<b>IOSCO Principle 8</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Administrator's Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgment in an active albeit low liquidity market, when transactions may not be consistently available each day. IOSCO also recognizes that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances, no transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.</p>		

**Principle 9 - Transparency of Benchmark Determinations**

<b>IOSCO Principle 9</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:</p> <p>(a) A concise explanation, sufficient to facilitate a Stakeholder's or Market Authority's ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the</p>	<p>B3 has formal and established procedures regarding the publication of the methodologies that have all the information for the indices to be reperformed:</p> <ul style="list-style-type: none"> <li>· (a) and (b) All methodologies and manual of procedures of the indices under analysis are available on the institutional website of the company. The methodology includes the objective of the index, the type of index,</li> </ul>	<p>We noted that the process of creation and alteration of indices involves several areas with the objective of analyzing all the possibilities and impacts of the benchmark methodology proposal, either for creation or for alteration. We also verified that all the methodologies follow a standard and are available on the institutional website of B3.</p> <p>We analyzed the methodology and the</p>

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<b>IOSCO Principle 9</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction based, spread-based or interpolated/extrapolated).</p> <p>(b) A concise explanation of the extent to which and the basis upon which Expert Judgment, if any, was used in establishing a Benchmark determination.</p>	<p>the eligible assets, the criteria for inclusion, exclusion and weighting. The procedures manual is a general document that is intended for all indices and presents the following definitions: outstanding assets (free float), total return index, general formula of calculation of the "ex-theoretical" price, penny stock, negotiability index and also the procedures to calculate the indices, effectiveness of the portfolios, preview of the portfolios and special procedures that deal with the suspension of the negotiation, companies under special status, exclusion or non-inclusion at the discretion of B3, price of exclusion of an asset from the index, adjustments in the event of corporate reorganization involving companies that issue the assets that form part of the index, adjustments when there is free float reduction, adjustments in the event of primary and/or secondary offering of assets that alter the free float and, finally, the governance of the indices. Furthermore, all the alterations and exclusions are informed to the market in an official letter, by the news agency of B3.</p>	<p>procedures manual of the indices under analysis and noted the description of all the information necessary for the reperformance of the indices under analysis by the market.</p> <p>Additionally, we noted that the alterations and exclusions of indices are informed to the market, in an official letter, by the news agency of B3 and that before the alteration of the theoretical portfolio of the index, B3 issues to the market 3 previews of the new composition of the portfolio.</p> <p>We did not identify relevant exceptions arising from the application of the procedures described.</p>

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### B3 S.A. - Brasil, Bolsa, Balcão

#### Principle 10 - Periodic Review

<b>IOSCO Principle 10</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should periodically review the conditions in the underlying Interest that the Benchmark measures to determine whether the Interest has undergone structural changes that might require changes to the design of the Methodology. The Administrator also should periodically review whether the Interest has diminished or is nonfunctioning such that it can no longer function as the basis for a credible Benchmark.</p> <p>The Administrator should Publish or Make Available a summary of such reviews where material revisions have been made to a Benchmark, including the rationale for the revisions.</p>	<p>B3 makes a periodical rebalancing of the theoretical portfolios of the indices under analysis.</p> <p>In addition to the reviews made in the rebalancing, extraordinary reviews can be made if facts that may affect the index occur in the market.</p> <p>All the changes made in the indices and their methodologies are available on the institutional website of B3.</p> <p>The reviews and updates of the indices are available on the intranet, in the methodological adjustment manual.</p>	<p>We noted that the indices are rebalanced periodically, according to the characteristics of each index, and the rebalancing is submitted to the approval of the manager in charge.</p> <p>We noted that the index changes are disclosed on the institutional website of B3 through the document "History of the Methodological Adjustments of the Indices", and that all methodologies of the indices under analysis are available on the website.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>

#### Principle 11 - Content of the Methodology

<b>IOSCO Principle 11</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should document and Publish or Make Available the Methodology used to make Benchmark determinations. The Administrator should provide the rationale for adopting a particular Methodology. The Published Methodology should provide sufficient detail to allow Stakeholders to understand how the Benchmark is derived and to assess its representativeness, its relevance to</p>	<p>B3 provides on its institutional website all the methodologies of the indices that include information on the objective of the index, the eligible assets, and the criteria for inclusion, exclusion and weighting.</p> <p>Additionally, the Procedures Manual is also provided on the website and it contains definitions that are used for all indices, such</p>	<p>For each index under analysis, we verified that the Methodologies are available on the website of B3 and include information such as: Objective, the type of index, eligible assets, criteria for inclusion, exclusion and weighting.</p> <p>We verified the procedures manual available on the website of B3, which contains the key terms, criteria, data used, minimal</p>

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<b>IOSCO Principle 11</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>particular Stakeholders, and its appropriateness as a reference for financial instruments.</p> <p>At a minimum, the Methodology should contain:</p> <ul style="list-style-type: none"> <li>(a) Definitions of key terms;</li> <li>(b) All criteria and procedures used to develop the Benchmark, including input selection, the mix of inputs used to derive the Benchmark, the guidelines that control the exercise of Expert Judgment by the Administrator, priority given to certain data types, minimum data needed to determine a Benchmark, and any models or extrapolation methods;</li> <li>(c) Procedures and practices designed to promote consistency in the exercise of Expert Judgment between Benchmark determinations;</li> <li>(d) The procedures which govern Benchmark determination in periods of market stress or disruption, or periods where data sources may be absent (e.g., theoretical estimation models);</li> <li>(e) The procedures for dealing with error reports, including when a revision of a Benchmark would be applicable;</li> </ul>	<p>as: outstanding assets (free float), total return index, general formula of calculation of the "ex-theoretical" price, penny stock, negotiability index and also the procedures to calculate the indices, effectiveness of the portfolios, previews of portfolios and special procedures that deal with the suspension of the negotiation, special status companies, exclusion or non-inclusion at the discretion of B3, price of exclusion of an asset from the index, adjustments in the event of corporate reorganization involving companies that issue assets that form part of the index, adjustments when there is free float reduction, adjustments in the event of primary and/or secondary offering of assets that alter the free float and the governance of the indices.</p>	<p>information, procedures for inclusion and exclusion, special situations, adjustments and governance of the indices.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>

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<b>IOSCO Principle 11</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(f) Information regarding the frequency for internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology;</p> <p>(g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and</p> <p>(h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.</p> <p>Where a Benchmark is based on Submissions, the additional principle also applies:</p> <ul style="list-style-type: none"><li>. The Administrator should clearly establish criteria for including and excluding Submitters. The criteria should consider any issues arising from the location of the Submitter, if in a different jurisdiction to the Administrator.</li><li>. These criteria should be available to any relevant Regulatory Authorities, if any, and Published or Made Available to Stakeholders. Any provisions related to changes in composition, including notice periods should be made clear.</li></ul>		

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**Principle 12 - Changes to the Methodology**

<b>IOSCO Principle 12</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>An Administrator should Publish or Make Available the rationale of any proposed material change in its Methodology, and procedures for making such changes. These procedures should clearly define what constitutes a material change, and the method and timing for consulting or notifying Subscribers (and other Stakeholders where appropriate, taking into account the breadth and depth of the Benchmark's use) of changes.</p> <p>Those procedures should be consistent with the overriding objective that an Administrator must ensure the continued integrity of its Benchmark determinations. When changes are proposed, the Administrator should specify exactly what these changes entail and when they are intended to apply.</p> <p>The Administrator should specify how changes to the Methodology will be scrutinized, by the oversight function.</p> <p>The Administrator should develop Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function, and that are appropriate and proportionate to the breadth and depth of the Benchmark's use and the nature of the Stakeholders. Procedures should:</p>	<p>The procedure to change the Methodology occurs based on the market demand, or internal demand identified by the Products area. After identifying the demand, the methodology is reviewed and the changes suggested are analyzed.</p> <p>After the validation and preparation of the proposal for changes, a new index portfolio is structured and the necessary tests with historical data are made to simulate the behavior of the index with the change requested. Every change is presented to the Working group, which is responsible for the approval of the change.</p> <p>The change is communicated to the market through an Official Letter disclosed on the website of the institution.</p>	<p>We checked the last change made to the methodology applied to the Dividend Index (IDIV). We verified that tests for the validation of the new structure of the index were made, we checked the minutes related to the validation and approval of the alteration, the Official letter disclosed to the market and the availability of the new methodology on the B3 website, with minimal information, as defined in principle 11.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>



## Attachment

### B3 S.A. - Brasil, Bolsa, Balcão

<b>IOSCO Principle 12</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyses and comment on the impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances; and</p> <p>(b) Provide for Stakeholders' summary comments, and the Administrator's summary response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.</p>		

### Principle 13 - Transition

<b>IOSCO Principle 13</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark, due to market structure change, product definition change, or any other condition which makes the Benchmark no longer representative of its intended Interest. These policies and procedures should be proportionate to the estimated breadth and depth of contracts and financial instruments that reference a Benchmark and the economic and financial stability impact that might result from the</p>	<p>If B3 decides to discontinue the calculation and publication of an index, according to the Procedures Manual, a prior notice period sufficient to facilitate an orderly transition should be permitted.</p> <p>These procedures include analysis, approval by the level of authority, procedures for exclusion of the calculation, safekeeping of the documents and disclosure to the market.</p>	<p>There have been no cases of discontinuance of indices recently.</p> <p>We checked the flowchart of the process of exclusion of indices in which the activities and controls of the process are, as well as the Concepts and Practices Manual of B3, in which the procedures necessary to be made in the event of discontinuance of the index are defined.</p> <p>The communication to the market about the discontinuance of the indices is made through</p>

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<b>IOSCO Principle 13</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>cessation of the Benchmark. The Administrator should take into account the views of Stakeholders and any relevant Regulatory and National Authorities in determining what policies and procedures are appropriate for a particular Benchmark.</p> <p>These written policies and procedures should be Published or Made Available to all Stakeholders.</p> <p>Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:</p> <p>(a) Contracts or other financial instruments that reference a Benchmark, have robust fallback provisions in the event of material changes to, or cessation of, the referenced Benchmark; and</p> <p>(b) Stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark.</p> <p>Administrators' written policies and procedures to address the possibility of Benchmark cessation could include the following factors, if determined to be</p>		<p>an Official Letter disclosed to the market. We noted that discussions with the market are made before the discontinuance of the index, according to the Concepts and Practices Manual of B3.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>

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<b>IOSCO Principle 13</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>reasonable and appropriate by the Administrator:</p> <p>(a) Criteria to guide the selection of a credible, alternative Benchmark such as, but not limited to, criteria that seek to match to the extent practicable the existing Benchmark's characteristics (e.g., credit quality, maturities and liquidity of the alternative market), differentials between Benchmarks, the extent to which an alternative Benchmark meets the asset/liability needs of Stakeholders, whether the revised Benchmark is investable, the availability of transparent transaction data, the impact on Stakeholders and impact of existing legislation;</p> <p>(b) The practicality of maintaining parallel Benchmarks (e.g., where feasible, maintain the existing Benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new Benchmark) in order to accommodate an orderly transition to a new Benchmark;</p> <p>(c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified;</p>		

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<b>IOSCO Principle 13</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(d) In the case of a Benchmark or a tenor of a Benchmark that will be discontinued completely, the policy defining the period of time in which the Benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative Benchmark if necessary; and</p> <p>(e) The process by which the Administrator will engage Stakeholders and relevant Market and National Authorities, as appropriate, in the process for selecting and moving towards an alternative Benchmark, including the timeframe for any such action commensurate with the tenors of the financial instruments referencing the Benchmarks and the adequacy of notice that will be provided to Stakeholders.</p>		

**Principle 14 - Submitter Code of Conduct**

<b>IOSCO Principle 14</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Where a Benchmark is based on Submissions, the following additional principle also applies: The Administrator should develop guidelines for Submitters ("Submitter Code of Conduct"), which should be available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.</p>	<p>As defined in the methodologies of the indices under analysis, data from Submitters are not used. Therefore, we understand that the principle under analysis is not applicable to the B3 environment.</p>	<p>Not applicable.</p>

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<b>IOSCO Principle 14</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should only use inputs or Submissions from entities which adhere to the Submitter Code of Conduct and the Administrator should appropriately monitor and record adherence from Submitters. The Administrator should require Submitters to confirm adherence to the Submitter Code of Conduct annually and whenever a change to the Submitter Code of Conduct has occurred.</p> <p>The Administrator's oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct.</p> <p>The Submitter Code of Conduct should address:</p> <ul style="list-style-type: none"><li>(a) The selection of inputs;</li><li>(b) Who may submit data and information to the Administrator;</li><li>(c) Quality control procedures to verify the identity of a Submitter and any employee(s) of a Submitter who report(s) data or information and the authorization of such person(s) to report market data on behalf of a Submitter;</li><li>(d) Criteria applied to employees of a Submitter who are permitted to submit data or information to an Administrator on behalf of a Submitter;</li></ul>		

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<b>IOSCO Principle 14</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(e) Policies to discourage the interim withdrawal of Submitters from surveys or Panels;</p> <p>(f) Policies to encourage Submitters to submit all relevant data; and</p> <p>(g) The Submitters' internal systems and controls, which should include:</p> <p>(i) Procedures for submitting inputs, including Methodologies to determine the type of eligible inputs, in line with the Administrator's Methodologies;</p> <p>(ii) Procedures to detect and evaluate suspicious inputs or transactions, including inter-group transactions, and to ensure the <i>Bona Fide</i> nature of such inputs, where appropriate;</p> <p>(iii) Policies guiding and detailing the use of Expert Judgment, including documentation requirements;</p> <p>(iv) Record keeping policies;</p> <p>(v) Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs;</p> <p>(vi) Training, including training with respect to any relevant regulation (covering</p>		

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<b>IOSCO Principle 14</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Benchmark regulation or any market abuse regime);</p> <p>(vii) Suspicious Submission reporting;</p> <p>(viii) Roles and responsibilities of key personnel and accountability lines;</p> <p>(ix) Internal sign off procedures by management for submitting inputs;</p> <p>(x) Whistle blowing policies (in line with Principle 4); and</p> <p>(xi) Conflicts of interest procedures and policies, including prohibitions on the Submission of data from Front Office Functions unless the Administrator is satisfied that there are adequate internal oversight and verification procedures for Front Office Function Submissions of data to an Administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above), the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the Benchmark levels), including, without</p>		

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<b>IOSCO Principle 14</b>	<b>B3 Answer</b>	<b>PwC Test</b>
limitation, through appropriate remuneration policies and by effectively addressing conflicts of interest which may exist between the Submitter's Submission activities (including all staff who perform or otherwise participate in Benchmark Submission responsibilities), and any other business of the Submitter or of any of its affiliates or any of their respective clients or customers.		

**Principle 15 - Internal Controls over Data Collection**

<b>IOSCO Principle 15</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>When an Administrator collects data from any external source the Administrator should ensure that there are appropriate internal controls over its data collection and transmission processes. These controls should address the process for selecting the source, collecting the data and protecting the integrity and confidentiality of the data.</p> <p>Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.</p>	<p>B3 does not use external data to generate the indices.</p> <p>Therefore, the principle under analysis is not applicable to the B3 environment.</p>	Not applicable.



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**Principle 16 - Complaints procedures**

<b>IOSCO Principle 16</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should establish and Publish or Make Available a written complaints procedures policy, by which Stakeholders may submit complaints including concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, applications of the Methodology in relation to a specific Benchmark determination(s) and other Administrator decisions in relation to a Benchmark determination.</p> <p>The complaints procedures policy should:</p> <p>(a) Permit complaints to be submitted through a user-friendly complaints process such as an electronic Submission process;</p> <p>(b) Contain procedures for receiving and investigating a complaint made about the Administrator's Benchmark determination process on a timely and fair basis by personnel who are independent of any personnel who may be or may have been involved in the subject of the complaint, advising the complainant and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints;</p>	<p>B3 has a Code of Conduct applicable to all employees, and has a whistleblowing channel that is operated by a third-party company fully independent and segregated from B3.</p> <p>(a) Complaints can be made through telephone calls, e-mail to the whistleblowing channel and direct e-mail to the audit committee.</p> <p>(b) The complaints received are classified in accordance with their degree of criticality, being analyzed and investigated by the Code of Conduct Committee.</p> <p>(c) All the complaint analysis procedures are formalized in the Regulation of the Treatment of Complaints and Frauds of B3.</p> <p>(d) All complaints are registered and filed for an undetermined period of time.</p>	<p>We noted that the Code of Conduct is available on the website of the institution and has the procedures and whistleblowing channels available, as well as the procedures of classification of the complaints, of investigation and solution.</p> <p>We obtained the Regulation of the Treatment of Complaints, which presents the scope, concepts and rules applicable to the confidentiality of the information and the responsibilities.</p> <p>The process to safeguard the information will be assessed in Principle 18 - "Audit Trail".</p> <p>No exceptions were noted during the application of the test procedures described.</p>

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<b>IOSCO Principle 16</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and</p> <p>(d) Require all documents relating to a complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five years, subject to applicable national legal or regulatory requirements.</p> <p>Disputes about a Benchmarking determination, which are not formal complaints, should be resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that should be Published or Made Available to Subscribers and Published or Made Available to Stakeholders as soon as possible as set out in the Methodology.</p>		

**Principle 17 - Audits**

<b>IOSCO Principle 17</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>The Administrator should appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the</p>	<p>The Internal Audit area of B3 makes an annual planning of the work based on the assessment and prioritization of the risks related to the auditable universe, comprised of business and</p>	<p>We verified the Internal Audit report on the process of Administration of Indices and obtained the methodologies used by the Internal Audit.</p>

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<b>IOSCO Principle 17</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Administrator's adherence to its stated criteria and with the principles. The frequency of audits should be proportionate to the size and complexity of the Administrator's operations.</p> <p>Where appropriate to the level of existing or potential conflicts of interest identified by the Administrator (except for Benchmarks that are otherwise regulated or supervised by a National Authority other than a relevant Regulatory Authority), an Administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the Administrator's adherence to its stated Methodology. The frequency of audits should be proportionate to the size and complexity of the Administrator's Benchmark operations and the breadth and depth of Benchmark use by Stakeholders.</p>	<p>information technology macroprocesses. The work is performed according to the internal audit methodology, which determines that the auditable universe needs to be assessed within a period of five years at most.</p> <p>Additionally, in 2016 the internal audit analyzed the "Administrative Indices" procedure and, in 2017, analyzed the "Calculate and disclose the DI Rate" procedure.</p> <p>For this first year, B3 engaged PricewaterhouseCoopers (PwC) to present a reasonable assurance report on the suitability of the description of B3, as well as on the design and implementation of policies, processes and internal controls related to the financial indices, to comply with the "Principles for Financial Benchmarks" of IOSCO.</p>	<p>PwC was contracted to review the internal controls of B3 regarding the "Principles for Financial Benchmarks" of IOSCO, and to issue a reasonable assurance report on the adherence to the processes at December 31, 2018.</p> <p>No exceptions were noted during the application of the test procedures described.</p>

**Principle 18 - Audit Trail**

<b>IOSCO Principle 18</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:</p>	<p>B3 files the information used in the process of creation, alteration and exclusion of indices in a restricted directory, for five years or more.</p>	<p>We noted that daily information backup procedures are made for each system under analysis, network servers and directories, and the safeguard is made for a minimum period of five years.</p>

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<b>IOSCO Principle 18</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(a) All market data, Submissions and any other data and information sources relied upon for Benchmark determination;</p> <p>(b) The exercise of Expert Judgment made by the Administrator in reaching a Benchmark determination;</p> <p>(c) Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption;</p> <p>(d) The identity of each person involved in producing a Benchmark determination; and</p> <p>(e) Any queries and responses relating to data inputs.</p> <p>If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this principle, subject to appropriate written record sharing agreements.</p> <p>When a Benchmark is based on Submissions, the following additional principle also applies: Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:</p>	<p>For all data used in the calculation of the indices, as well as the rebalancing of the portfolios, which are obtained in the B3 systems, backup procedures are made by the B3 Technology area and filed for a period of five years or more.</p>	<p>The minutes of the meeting, testing spreadsheets, methodologies and Official Letters are filed in the network directory and make part of the backup procedure made by the Technology area.</p> <p>Additionally, we verified the last restore test made.</p> <p>We did not identify relevant exceptions arising from the application of the test procedures described.</p>

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<b>IOSCO Principle 18</b>	<b>B3 Answer</b>	<b>PwC Test</b>
<p>(a) The procedures and Methodologies governing the Submission of inputs;</p> <p>(b) The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator;</p> <p>(c) Names and roles of individuals responsible for Submission and Submission oversight;</p> <p>(d) Relevant communications between submitting parties;</p> <p>(e) Any interaction with the Administrator;</p> <p>(f) Any queries received regarding data or information provided to the Administrator;</p> <p>(g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;</p> <p>(h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and</p> <p>(i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.</p>		

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**Principle 19 - Cooperation with Regulatory Authorities**

<b>IOSCO Principle 19</b>	<b>B3 Answer</b>	<b>PwC Test</b>
Relevant documents, Audit Trails and other documents subject to these principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and handed over promptly upon request.	Even if B3 does not have direct regulatory obligations regarding the indices, it will always be at the disposal of the regulators to provide the information, data and documents that they consider significant for its activities.  Therefore, the principle under analysis is not applicable to the B3 environment.	Not applicable.

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