# Statement of Compliance with the IOSCO Principles for Financial Benchmarks

For the period from April 1, 2022 to March 31, 2023

JPX Market Innovation & Research, Inc.

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- 5. The maintenance and integrity of the JPX(Japan Exchange Group) website is the responsibility of the management; the work carried out by PwC does not involve consideration of these matters and, accordingly, PwC accepts no responsibility for any differences between the information of JPXI on which the assurance report was issued or the assurance report that was issued and the information presented on the website;
- 6. PwC will be entitled to the benefit of and to enforce these terms; and
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### **Section** I Overview of JPXI

#### Introduction

The International Organization of Securities Commissions (IOSCO) published the "Final Report on Principles for Financial Benchmarks" (hereinafter referred to as the "IOSCO Principles") in July 2013. In this report, administrators of financial benchmarks are required to annually disclose their compliance with the IOSCO Principles.

JPX Market Innovation & Research, Inc. (hereinafter referred to as "JPXI") established the governance, processes and controls to comply with the IOSCO Principles and has expressed its compliance with the IOSCO Principles in the "Statement of Compliance with the IOSCO Principles for Financial Benchmarks" hereinafter referred to as the "Statement of Compliance"). PricewaterhouseCoopers Aarata LLC has provided independent reasonable assurance on the governance, processes and controls established by JPXI to comply with the IOSCO Principles as described in Section IV of the Statement of Compliance, for the period from April 1, 2022 to March 31, 2023.

#### **Business Outline**

JPXI was established as a new consolidated subsidiary on December 1, 2021 in order to take on JPX Group's\* indices, data, and digital-related services, thereby enabling JPXI to provide all market-related services centrally. JPXI commenced operations on April 1, 2022 and the index calculation work conducted by Tokyo Stock Exchange, Inc. (hereinafter referred to as "TSE") was transferred to JPXI on that day.

JPXI operates data and index services and system-related services related to the financial instruments markets, etc. JPXI also provides market participants such as trading participants and information vendors with market information, including indices which are calculated based on contract prices on TSE and a variety of statistical data.

\* The JPX group is a corporate group consisting of Japan Exchange Group, Inc. which is a holding company, and seven consolidated subsidiaries, including JPXI, TSE, Osaka Exchange, Inc., Tokyo Commodity Exchange, Inc., Japan Exchange Regulation, Japan Securities Clearing Corporation, and SCRIPTS Asia, K.K. along with three equity-method affiliate companies.

Characteristics of the JPX group are as follows:

#### 1. Cash Equity Markets

TSE Prime Market, Standard Market, and Growth Market are the core cash equity markets\* of the JPX group. The JPX group's cash equity markets have established themselves as not only the central market for trading securities in Japan but also one of the largest markets in the world.

\* On April 4, 2022, TSE reorganized four market segments (1st Section, 2nd Section, Mothers and JASDAQ) into three new market segments: Prime Market, Standard Market and Growth Market.

#### 2. Derivatives Markets

JPX group's derivatives markets provide trading opportunities of index futures, index options, JGB Futures, JGB Futures Options, securities options, and commodity futures, etc. Regarding trading hours, night sessions are available in addition to day sessions.

Some of the index futures and the index options track leading stock price indices such as Nikkei 225 and TOPIX. These index futures and index options are the leading derivatives products in Japan. In addition, among JGB Futures, 10-year JGB Futures have been used as a benchmark in the long-term interest rate market due to their high liquidity.

#### 3. Trading System

Operating trading systems in a stable manner is essential to execute transactions smoothly and maintain stability and reliability in the market. In addition, it is necessary to continuously promote the development of IT infrastructure to properly and quickly respond to the initiatives such as

diversification and sophistication of trading methods due to the advance in financial technology as well as the listing of new products, thereby satisfying the needs of market participants.

The JPX group operates "arrowhead" which is a high-speed, reliable and scalable trading system for cash equity markets, and "J-GATE" which is equipped with global standard trading functions and the world highest level of order processing capabilities in derivatives markets.

#### 4. Information Services

The JPX group distributes information, including contract prices for securities and derivatives trading immediately, when generated or changed, and provides the market participants such as trading participants and information vendors with market information on indices calculated based on stock prices and a variety of statistical data.

The JPX group also offers a variety of services such as timely search of listed companies' disclosure information and corporate action information to satisfy the needs of market participants.

#### 5. Self-Regulatory Function

The JPX group places Japan Exchange Regulation under the holding company (Japan Exchange Group, Inc.), as a quality control center for the exchanges, to maintain fairness and reliability in the market. By conducting self-regulatory operations through the subsidiary, which does not operate the financial instruments exchanges, the JPX group has established an organizational structure to maintain its neutrality and effectiveness of self-regulations while demonstrating a high degree of expertise as a self-regulatory body, which is placed close to the markets. For the commodity market, in order to ensure independence of self-regulatory operations, a self-regulatory committee is in place which acts as an advisory body to the board of directors of Tokyo Commodity Exchange, Inc. The committee deliberates on self-regulatory operations, and a department in charge of self-regulatory operations assists the committee in its duties.

#### 6. Clearing and Settlement

As a clearing house, Japan Securities Clearing Corporation (JSCC) offers clearing services for cash equities traded at exchanges and for futures and options traded at derivatives markets as well as clearing services for trading via Proprietary Trading Systems (PTSs), OTC derivatives trading and OTC JGB trading.

JSCC substitutes itself as a seller to every buyer and a buyer to every seller and guarantees the execution of trade settlement by assuming obligations of delivery of securities and payment of funds. In addition, JSCC offsets the obligations efficiently by netting funds and securities for transfer, and instructs the settlement facilities to settle the trades.

Moreover, Japan Securities Depository Center, Inc. which is a book-entry transfer organization, provides services of securities book-entry transfer between parties such as securities companies and banks.

#### Scope

JPXI calculates TSE Indices based on the prices of stocks, REITs, or infrastructure funds, etc. listed on the markets operated by TSE.

The following indices are defined as in-scope indices in this Statement of Compliance. Details of each index are provided in the Calculation Methodologies published on the JPX website (https://www.jpx.co.jp/english/).

Among the "In Scope Indices", the calculation of JASDAQ - TOP20 and Tokyo Stock Exchange Mothers Core Index ceased as of March 31, 2023.

(In addition, the calculation of TSE Second Section Stock Price Index, JASDAQ INDEX, J-Stock Index, TOPIX Composite, TSE Second Section Composite Index, and TSE Mothers Composite Index ceased as of April 1, 2022 in accordance with the revision of TOPIX and other indices.)

Categories	In-Scope Indices
TOPIX Series	TOPIX (Tokyo Stock Price Index) is a market benchmark with functionality as an investable index, covering an extensive proportion of the Japanese stock market.
	TOPIX (Tokyo Stock Price Index)  TOPIX is a free-float adjusted market capitalization-weighted index that is calculated based on TOPIX constituents as of April 1, 2022 (all domestic common stocks listed on former TSE First Section) and domestic common stocks listed on TSE Prime Market after April 4, 2022.  JPXI has been currently conducting the revision of TOPIX in connection with the market restructuring of TSE on April 4, 2022*.  * With the new constituent selection, JPXI cuts loose from market segments and aims to further improve its functionality as an investable index in addition to its representation of the market. The revisions will be carried out in stages from October 2022 to January 2025. The details are published on the JPX website  (https://www.jpx.co.jp/english/equities/market-restructure/revisions-indices/index.html).
	Size-based TOPIX Sub-Indices / TOPIX New Index Series     Size-based TOPIX Sub-Indices and TOPIX New Index Series are free-float     adjusted market capitalization-weighted indices that are created by dividing     TOPIX constituents selected based on free-float adjusted market     capitalization and liquidity.
	TOPIX Sector Indices     TOPIX Sector Indices are free-float adjusted market capitalization-weighted indices that are created by dividing TOPIX constituents into 33 sectors.
	TOPIX-17 Series     TOPIX-17 Series are free-float adjusted market capitalization-weighted indices that are created by dividing TOPIX constituents into 17 categories based on 33 sectors.
	TOPIX Ex-Financials     TOPIX Ex-Financials is a free-float adjusted market capitalization-weighted index that is calculated based on the stocks in 29 out of 33 sectors in TOPIX Sector Indices, excluding Banks, Securities and Commodities Futures, Insurance and Other Financial Business.
	TOPIX Style Index Series (TOPIX Value, TOPIX Growth etc.)  TOPIX Style Indices Series are free-float adjusted market capitalization-weighted indices. Index constituents are selected from TOPIX constituents

Categories	In-Scope Indices
	based on factors such as consolidated PBR (price-book value ratio). The Series consists of six indices including TOPIX Value.
	TOPIX High Dividend Yield 40 Index     TOPIX High Dividend Yield 40 Index is a free-float adjusted market capitalization-weighted index. 40 stocks are selected from TOPIX 100 constituents based on the latest actual dividend yields.
	Ex-TOPIX     Ex-TOPIX is a market capitalization-weighted index that is calculated based on TOPIX constituents.
Market Section	Market section-based indices are calculated based on all listed stocks in each market section.
	Tokyo Stock Exchange Prime Market Index     Tokyo Stock Exchange Prime Market Index is a free-float adjusted market capitalization-weighted index that is calculated based on all domestic common stocks listed on TSE Prime Market.
	Tokyo Stock Exchange Standard Market Index     Tokyo Stock Exchange Standard Market Index is a free-float adjusted market capitalization-weighted index that is calculated based on all domestic common stocks listed on TSE Standard Market.
	Tokyo Stock Exchange Growth Market Index     Tokyo Stock Exchange Growth Market Index is a free-float adjusted market capitalization-weighted index that is calculated based on all domestic common stocks listed on TSE Growth Market.
	Tokyo Stock Exchange REIT Index     Tokyo Stock Exchange REIT Index is a free-float adjusted market capitalization-weighted index that is calculated based on all REITs (Real Estate Investment Trusts) listed on the TSE market.
	Tokyo Stock Exchange Infrastructure Funds Index     Tokyo Stock Exchange Infrastructure Funds Index is a free-float adjusted market capitalization-weighted index that is calculated based on all infrastructure funds listed on the TSE market.
	Tokyo Stock Exchange Prime Market Composite Index     Tokyo Stock Exchange Prime Market Composite Index is a free-float adjusted market capitalization-weighted index that is calculated based on all domestic common stocks, domestic classified stocks, foreign stocks listed exclusively on TSE, and domestic preferred equity contribution securities listed on TSE Prime Market.

Categories	In-Scope Indices		
Index Constituent Selections	For index constituent selection-based indices, stocks for calculations are selected based on factors such as market capitalization, trading values, profits and dividends. JPX-Nikkei Index 400 and JPX-Nikkei Mid and Small Cap Index are indices jointly developed by the JPX group and Nikkei Inc.		
	JPX-Nikkei Index 400     JPX-Nikkei Index 400 is a free-float adjusted market capitalization-weighted index that is calculated based on the prices of 400 stocks (principally common stocks) selected from stocks whose main markets are those of TSE (TSE Prime Market, Standard Market and Growth Market). These stocks are selected based on factors such as market capitalization, trading values, ROE and operating income as well as qualitative factors such as governance and disclosure.		
	JPX-Nikkei Mid and Small Cap Index     JPX-Nikkei Mid and Small Cap Index is a free-float adjusted market capitalization-weighted index that is calculated based on the prices of 200 stocks (principally common stocks) selected from stocks whose main markets are those of TSE (TSE Prime Market, Standard Market, and Growth Market). These stocks are selected based on factors such as market capitalization, trading value, ROE and operating income as well as qualitative factors such as governance and disclosure.		
	Tokyo Stock Exchange Mothers Index     Tokyo Stock Exchange Mothers Index is a free-float adjusted market capitalization-weighted index that is calculated based on domestic common stocks listed mainly on former TSE Mothers and domestic common stocks listed on TSE Growth Market*.      * This index is calculated based on 250 issues among Tokyo Stock Exchange Growth Index constituents in descending order of market capitalization after April 28, 2023.		
	Tokyo Stock Exchange Mothers Core Index     Tokyo Stock Exchange Mothers Core Index is a price-weighted index that is calculated based on the prices of 15 stocks selected from domestic stocks listed mainly on former TSE Mothers as of April 1, 2022. These stocks are selected based on factors such as market capitalization, trading values, profits and dividends.		
	• JASDAQ - TOP20  JASDAQ-TOP20 is a price-weighted index that is calculated based on the prices of 20 stocks selected from domestic common stocks listed mainly on former JASDAQ as of April 1, 2022. These stocks are selected based on factors such as liquidity and market capitalization.		
	Tokyo Stock Exchange Standard Market TOP20 Index     Tokyo Stock Exchange Standard Market TOP20 Index is a price-weighted index that is calculated based on the prices of 20 stocks selected from domestic common stocks listed on TSE Standard Market. These stocks are selected based on factors such as liquidity and market capitalization.		
	Tokyo Stock Exchange Growth Market Core Index     Tokyo Stock Exchange Growth Market Core Index is a price-weighted index that is calculated based on the prices of 20 stocks selected from domestic common stocks listed on TSE Growth Market. These stocks are selected based on factors such as liquidity and market capitalization.		
	Tokyo Stock Exchange REIT Property Sector Index Series     Tokyo Stock Exchange REIT Property Sector Index Series is a free-float		

Categories	In-Scope Indices
	adjusted market capitalization-weighted index series. Index constituents are selected from all REITs listed on TSE Mothers based on the use of properties held by each REIT.
	Tokyo Stock Exchange Dividend Focus 100 Index     Tokyo Stock Exchange Dividend Focus 100 Index is a free-float adjusted market capitalization-weighted index. 100 issues (90 stocks and 10 REITs) are selected from the constituents of TOPIX 1000 and Tokyo Stock Exchange REIT Index based on market capitalization and estimated dividend yields.
	Tokyo Stock Exchange REIT Core Index     Tokyo Stock Exchange REIT Core Index is an equal-weighted index. Index constituents are selected from constituents of TSE REIT Index based on the level of the free-float market capitalization and trading value as of the base date.
	Tokyo Stock Exchange REIT Logistics Focus Index     Tokyo Stock Exchange REIT Logistics Focus Index is a modified market cap weighted index. Index constituents are selected from constituents of TSE REIT Index, and the index is composed of REITs that invest in logistics facilities mainly and REITs that invest in a portfolio of assets including logistics facilities.
Others	• Ex-Tokyo Stock Exchange First Section Index Ex-Tokyo Stock Exchange First Section Index is a free-floated adjusted market capitalization-weighted index that is calculated based on TOPIX constituents as of April 1, 2022.
	• Currency Hedged Index Series  Currency Hedged Indices provide the return of the target indices when hedged for currency risk that are calculated using one - month forward currency exchange contracts to hedge the return of the base index. Currency Hedged Indices are calculated on TOPIX, Tokyo Stock Exchange REIT Index, and JPX-Nikkei Index 400.
	• Leveraged and Inverse Indices  Leveraged Indices are calculated by applying a certain positive multiplier to the daily rate of return of the underlying indices. Inverse Indices are calculated by applying a certain negative multiplier to the daily rate of return of the underlying indices. Leveraged and Inverse Indices are calculated on TOPIX and JPX-Nikkei Index 400.
	High-Speed Indices     High-Speed Indices are calculated at the millisecond-level whenever there is a new price of index constituents to be used for index calculation. High-Speed Indices are calculated on TOPIX, TOPIX Core30 and TOPIX500.

#### **Internal Rules for Compliance with the IOSCO Principles**

JPXI has established internal rules for the calculation of TSE Indices to comply with the IOSCO Principles for Financial Benchmarks, which set forth policies and procedures for the following areas:

- Policies Concerning Calculation of TSE Indices (Established on March 31, 2017)
  These policies set forth overall guidelines on the calculation of TSE Indices.
- Policies for Addressing Objections regarding TSE Indices (Established on March 31, 2017)

These policies set forth guidelines to address objections and complaints on the calculation of TSE Indices in a fair and proper manner.

• Policies Concerning Suspension or Transition of TSE Indices (Established on March 31, 2017)

These policies set forth guidelines to take fair and proper actions when JPXI suspends the calculation and publication of TSE Indices.

- TSE Index Data Correction Policy (Established on May 31, 2019)

  The policy specifies procedures for cases where JPXI calculates and publishes an index in a manner inconsistent with the rules specified by the methodologies and corrects said index.
- Index Consultation Implementation Guidelines (Established on April 1, 2020)
  These Guidelines stipulate necessary matters for the Index Consultation function pursuant to the provisions of Article 9 of "Policies Concerning Calculation of TSE Indices".
- Index Advisory Panel Administrative Guidelines (Established on April 1, 2020)
  These Guidelines specify necessary matters with regard to the Index Advisory Panel (hereinafter "Panel") pursuant to the provisions of Article 10 of "Policies Concerning Calculation of TSE Indices".
- Other Internal Rules
  - Internal Guidelines on Outsourcing the TSE Indices Calculation and Publication
     Internal Rules on Information Security
  - O Internal Rules on Salary and Compensation
  - Ocode of Conduct for Employees of Japan Exchange Group
  - O Internal Manual for Periodic Review on the Calculation Methodologies

### **Section** II Management Statement

#### **Management Statement**

We confirm that, for the period from April 1, 2022 to March 31, 2023, JPXI has designed and implemented the governance, processes and relevant activities to comply with the Principles for Financial Benchmarks published by the International Organization of Securities Commissions (the "IOSCO Principles") with regard to the indices listed in Section I of this report.

The accompanying description in Section IV of the Statement of Compliance sets out details of our responses to the IOSCO Principles based on the activities for the period from April 1, 2022 to March 31, 2023.

The management of JPXI is, and shall be, responsible for stating the compliance with the IOSCO Principles as well as appropriately designing and operating the governance, processes and control activities. In addition, the management is responsible for establishing and operating appropriate internal controls to ensure continued compliance with the Statement of Compliance.

#### Koichiro Miyahara

President & CEO

On behalf of JPX Market Innovation & Research, Inc.

August 28, 2023

### **Section** III Independent Assurance Report

### Independent Practitioner's Assurance Report to the management of JPX Market Innovation & Research, Inc.("JPXI") in respect of JPXI's responses to the IOSCO Principles for Financial Benchmarks for the period from April 1, 2022 to March 31, 2023

#### Scope

We have carried out a reasonable assurance engagement in respect of the Policies and Relevant Activities as described in the "JPXI's Response" column of the table in Section IV of the report (the "Policies and Relevant Activities") in response to the IOSCO Principles for Financial Benchmarks (the "Principles") for the in-scope indices. We also carried out a reasonable assurance examination to assess whether the processes and control activities stated within the Policies and Relevant Activities operated as described throughout the period April 1, 2022 to March 31, 2023.

The indices in scope for the purpose of the report and our assurance are set out in section I of the report.

This report is made solely for the use and benefit to the management of JPXI in connection with Principle 17. Our work has been undertaken in accordance with our agreement dated February 16, 2023, so that we might state to the management of JPXI those matters we are required to state in an independent assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than JPXI and the management of JPXI for our work, for this report, or for the opinion we have formed, save where expressly agreed in writing.

#### Our Independence and Quality Control

In carrying out our work, we complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Management 1, which requires us to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Respective responsibilities of the management of JPXI and the Independent Practitioner

The management of JPXI is responsible for ensuring that JPXI designs, implements, operates and monitors policies, processes and control activities to adhere to the Principles. They are also responsible for preparing the Management Statement of Adherence to the Principles, set out in Section II supported by the description of the Policies and Relevant Activities as set out in the JPXI's Response column of the table in Section IV of the report.

Our responsibilities are to undertake a reasonable assurance engagement and report in connection to the Policies and Relevant Activities in Section IV of the report. We report to you whether, based on the results of our work, the description of the Policies and Relevant Activities in Section IV placed in operation over the in-scope indices to adhere to the Principles, is fairly stated, in all material respects,

and whether the process and control activities stated within the Policies and Relevant Activities have operated as described throughout the period April 1, 2022 to March 31, 2023.

#### Our Approach

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) - Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board.

The objective of a reasonable assurance engagement is to obtain such appropriate evidence as we consider sufficient to enable us to express an assurance opinion as to whether, on the basis of our procedures, management's description of the Policies and Relevant Activities in respect of the in-scope indices is fairly stated, in all material respects and the processes and control activities included within the description of Policies and Relevant Activities operated as described throughout the period April 1, 2022 to March 31, 2023.

We examined, on a test basis, evidence relevant to assessing the Policies and Relevant Activities in response to the Principles. Our procedures are described in the PwC's Testing column of the table in Section IV of the report. Assessing the suitability of design of the Policies and Relevant Activities is outside the scope of this engagement, accordingly, we do not express an opinion thereon.

Our procedures were not sufficient to enable us to conclude on the suitability of design or operating effectiveness of the policies, processes or control activities in place to address the Principles. While we assessed the operation of the process and control activities throughout the period as described in our testing procedures, management's description of their process and control activities that they have implemented to adhere to the Principles was not extensive enough to form the basis for an opinion over the operating effectiveness of those activities and accordingly, we do not express such an opinion.

While the Policies and Relevant Activities and related Principles may be informed by the need to satisfy legal or regulatory requirements, our scope of work and our conclusions do not constitute assurance over compliance with those applicable laws and regulations.

#### Inherent limitations

Process and control activities are subject to inherent limitations and, accordingly, errors or irregularities may occur and not be detected. As such, our procedures cannot guarantee protection against (among other things) fraudulent collusion especially on the part of those holding positions of authority or trust. Furthermore, our conclusion is based on historical information and the projection of any information or conclusions in relation to the Policies and Relevant Activities to any future periods would be inappropriate.

The validity and reliability of daily index levels and returns is dependent on both (i) those that provide the input data to the benchmark administrator, for which the data provider is solely responsible, and (ii) the procedures performed by the benchmark administrator to check that information. Data providers of information are not themselves subject to the Principles and we are unable to comment on input data submitted by those parties.

#### **Opinion**

Based on the results of our procedures, in our opinion, in all material respects:

- (i) management's description of 'Policies and Relevant Activities' set out in the JPXI's Response column of the table in Section IV in respect of the in-scope indices is fairly stated; and
- (ii) the process and control activities stated within the Policies and Relevant Activities have operated as described in all material respects throughout the period April 1,2022 to March 31,2023.

#### Other information

The management of JPXI is responsible for the other information, comprising the Statement of Adherence in Section II and the description of the 'Overview of JPXI' in Section I of the report. Other information is presented by management to provide additional information and context to the Policies and Relevant Activities. Our conclusion on the description of Policies and Relevant Activities does not cover such other information and we do not express any form of assurance opinion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with our knowledge obtained in the course of our work. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

#### Intended users and purpose

This report is intended solely for the use of JPXI for the purpose of reporting on the Policies and Relevant Activities of JPXI for the in-scope indices, in accordance with the terms of our engagement letter dated February 16, 2023.

Our report must not be recited or referred to in whole or in part in any other document nor made available, copied or recited to any other party, in any circumstances, without our express prior written permission.

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the management of JPXI and JPXI for our work, for this report or for the opinions we have formed, save where terms have expressly been agreed in writing.

PricewaterhouseCoopers Aarata LLC

Tokyo, Japan

August 28, 2023

## **Section IV**IOSCO Principles and JPXI's Responses

#### **IOSCO Principles and JPXI's Responses**

The table below sets out the responses of JPX Market Innovation & Research, Inc. (hereinafter referred to as "JPXI") in terms of how JPXI complies with the IOSCO Principles for in-scope indices listed in Section I of the Statement of Compliance for the period from April 1, 2022 to March 31, 2023. The accompanying "PwC's Testing" summarizes the work performed by PricewaterhouseCoopers Aarata LLC (hereinafter referred to as "PwC") to validate that the governance, processes and relevant activities summarized by JPXI are fairly stated and operated. This supports the assurance opinion as documented in Section III of this report.

IOSCO Principles	JPXI's Response	PwC's Testing
1. Overall Responsibility of the Administrator		
The Administrator should retain primary responsibility for all aspects of the Benchmark determination process. For example, this includes:  a) Development: The definition of the Benchmark and Benchmark Methodology;  b) Determination and Dissemination: Accurate and timely compilation and publication and distribution of the Benchmark;  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; and d) Governance: Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination	JPXI retains primary responsibility for all aspects of the determination process, such as the development, determination, dissemination, operation and governance with regards to indices calculated and published by JPXI (hereinafter referred to as the "TSE Indices¹").  JPXI uses the system of Tokyo Stock Exchange, Inc. (hereinafter referred to as "TSE") for calculating and publishing indices. The establishment and operation of internal controls over the calculation and publication of indices using TSE's systems are the responsibility of JPXI.  a) and d)  Refer to the responses to Principles 2 onwards.	a) and d) Refer to PwC's Testing implemented by PwC in Principle 2 onwards.

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<sup>&</sup>lt;sup>1</sup> JPXI calculates TSE Indices based on the prices of stocks, REITs, or infrastructure funds, etc. listed on the markets operated by TSE.

IOSCO Principles	JPXI's Response	PwC's Testing
1. Overall Responsibility of the Administrator		
process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark.	b) (Policies) JPXI concluded the agreement for the use of system services with TSE and uses the index calculation system and the market information system (for external distribution of index values calculated in the index calculation system) for the use of its system services for calculating and publishing indices.	(Policies) PwC inspected the agreement for the use of system services with TSE, which became effective on April 1, 2022, to confirm that the contract includes JPXI's use of the TSE's system services.

IOSCO Principles	JPXI's Response	PwC's Testing
1. Overall Responsibility of the Administrator		
	(Relevant Activities) Contract prices at the regulated exchange markets operated by TSE are transmitted directly from the trading system to the index calculation system, and index values are automatically calculated and published by the index calculation system and the market information system.  IT controls related to the TSE systems and monitoring controls help to address the accuracy and timeliness of index calculations and publications. This includes the daily monitoring of error notifications, which alert TSE if there are errors, for example, an error when transmitting contract prices from the trading system to the index calculation system.  Any error notifications are reviewed by TSE IT Department and JPXI IT Service Department checks review results in the weekly meeting.  There were no system incidents events impacting the accuracy and timeliness of index calculations and publications, such as data losses between April 1, 2022 and March 31, 2023.	(Relevant Activities) PwC observed monitoring of error notifications and inspected error notifications registered in a management system to confirm that:  - the IT controls, including error notifications when transmitting contract prices from the trading system to the index calculation system, exist.  - error notifications are registered and recorded in a management system.  - monitoring of error notifications had been undertaken by TSE IT Department on a daily basis. PwC inspected a sample of transmission error notification recorded in a management system to confirm that:  - a cause of error was investigated and resulted in no impact on the index calculation.  - the error notification and the investigated result were reported to JPXI IT Service Department on a timely basis. PwC inspected minutes of weekly meeting between TSE IT Department and JPXI IT Service Department to confirm that JPXI Service Department confirmed the TSE's review results. PwC inquired of a responsible person and inspected incident records to confirm that, between April 1, 2022 and March 31, 2023, there were no system incident events impacting the accuracy and timeliness of index calculations and publications, such as data losses.

IOSCO Principles	JPXI's Response	PwC's Testing
1. Overall Responsibility of the Administrator		
1. Overall Responsibility of the Administrator	c) Refer to the responses to Principle 11.	c) Refer to PwC's Testing implemented by PwC in Principle 11.

IOSCO Principles	JPXI's Response	PwC's Testing
2. Oversight of Third Parties		
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:  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; b) Monitor third parties' compliance with the standards set out by the Administrator; c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark	JPXI outsources activities regarding data collection, calculation and publication for the Currency Hedged Indices Series (hereinafter referred to as the "Hedge Indices") to S&P Dow Jones Indices LLC (hereinafter referred to as "S&P").  S&P calculates and publishes the Hedge Indices which are calculated based on values of index portfolios hedged by one-month forward contracts, in principle using WM/Refinitiv foreign exchange rates at 4 P.M. London time. Values of the underlying indices which are used as a basis of the Hedge Indices calculations are calculated by JPXI on the same day. For indices other than the Hedge Indices, JPXI collects input data, calculates and publishes the indices.  JPXI sets forth the following policies and procedures to properly oversee a third party undertaking these activities:	
determination process; and d) Take reasonable steps, including contingency plans, to avoid undue operational risk related to the participation of third parties in the Benchmark determination process. 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.	<ul> <li>a) and c) (Policies)  JPXI stipulates the following in the internal rules on outsourcing the TSE Indices calculation and publication:  • JPXI stipulates the roles and obligations of a third party for indices-related activities in an outsourcing agreement and clarifies the scope of responsibilities of the third party.  • JPXI stipulates the scope of roles and responsibilities on calculation or publication of indices and publish them in the Calculation Methodologies.</li> </ul>	a) and c) (Policies) PwC inspected JPXI's internal guidelines on outsourcing the TSE Indices calculation and publication to confirm they include the elements described in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
2. Oversight of Third Parties		
	When selecting a third party, which undertakes indices-related activities, JPXI checks that the third party has sufficient capabilities to conduct outsourced activities, based on its past performance and information obtained through explanations by the third party and interviews.  JPXI stipulates in the internal guidelines on administrative authority that internal approvals by authorized officers and staff are required for selecting a third party and concluding an outsourcing agreement.	
	(Relevant Activities)  JPXI has concluded an outsourcing agreement in writing with S&P in accordance with the internal guidelines on outsourcing the TSE Indices calculation and publication. JPXI has confirmed that the roles and obligations of S&P are clearly defined and specified through the internal approval process when concluding the outsourcing agreement. JPXI has also clarified their roles and obligations and publishes them in the Calculation Methodologies.  JPXI entered into a new outsourcing agreement with S&P for TOPIX Net Total Return Australian Dollar Hedged Index during the period (from April 1, 2022 to March 31, 2023).	(Relevant Activities) PwC inquired of a responsible person to confirm that JPXI took over the rights and obligations of the information service business, information system business, and IT service business from TSE through a company split and merger. PwC inspected an outsourcing agreement signed by TSE (former contract party) and S&P and a notice letter on changes of contract parties to confirm that the agreement was handed over to JPXI from April 1, 2022. PwC inspected internal guidelines on outsourcing of the TSE Indices calculation and publication to confirm that the agreement was concluded based on the guidelines. PwC inspected the newly signed outsourcing agreement with S&P to confirm that the outsourcing agreement was entered into during the period from April 1, 2022 to March 31, 2023.

IOSCO Principles	JPXI's Response	PwC's Testing
2. Oversight of Third Parties		
		PwC inspected an approval document to confirm that the roles and responsibilities of outsourcing arrangement were determined and discussed in the approval process.
	b) (Policies) JPXI stipulates in the internal guidelines on outsourcing the TSE Indices calculation and publication that JPXI monitors whether outsourced activities are appropriately conducted by the third party.	b) (Policies) PwC inspected JPXI's internal guidelines on outsourcing the TSE Indices calculation and publication to confirm they include the elements described in JPXI's Response.
	(Relevant Activities) JPXI has verified the Hedge Indices with recalculation on a daily basis and confirmed that there are no material differences between the indices calculated by S&P and the recalculated indices, which makes JPXI believe that the outsourced activities are appropriately conducted by the third party.	(Relevant Activities) PwC inspected a verification file to confirm that JPXI verified with recalculation and confirmed there were no material differences between the indices calculated by S&P and the recalculated indices based on the internal guidelines on outsourcing the TSE Indices calculation and publication of indices.
	d) (Policies)  JPXI stipulates in the internal guidelines on outsourcing the TSE Indices calculation and publication that JPXI holds a TSE Indices Administering Meeting(s) and takes necessary steps, if JPXI believes that the outsourced activities are not appropriately conducted by the third party.	d) (Policies) PwC inspected JPXI's internal guidelines on outsourcing the TSE Indices calculation and publication to confirm they include the elements described in JPXI's Response.

JPXI's Response	PwC's Testing
(Relevant Activities)  JPXI has established an arrangement that JPXI Index Business Department will calculate the Hedge Indices in case the outsourced activities are not conducted by the third party.	(Relevant Activities) PwC inspected evidence of the daily TSE Indices Administering Meeting to confirm that the TSE Indices Administering Meeting had been held on a daily basis during the period and JPXI had maintained the framework where JPXI calculates the Hedge Indices in cases where the third party cannot calculate this. PwC also inspected the internal guidelines on outsourcing the TSE Indices calculation and publication to confirm that it stipulates the TSE Indices Administering Meeting as the framework where JPXI calculates the indices instead of the third party if necessary. PwC inquired of a responsible person in JPXI to confirm there was no instance where a third party was unable to provide services in relation to the in- scope indices for the period from April 1, 2022 to March 31, 2023.
	(Relevant Activities) JPXI has established an arrangement that JPXI Index Business Department will calculate the Hedge Indices in case the outsourced activities are not

IOSCO Principles	JPXI's Response	PwC's Testing
3. Conflicts of Interest for Administrators		
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. Administrators should disclose any material conflicts of interest to their users and any relevant Regulatory Authority, if any.  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:  a) Existing or potential conflicts of interest do not inappropriately influence Benchmark determinations;  b) Personal interests and connections or business connections do not compromise the Administrator's performance of its functions;  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;  d) Adequate supervision and sign-off by authorised or qualified employees prior to releasing Benchmark determinations;	JPXI documents highly transparent and objective calculation methodologies and publishes them in the form of the Calculation Methodologies, which include the methodologies for index constituent selections by quantifying public information and data. JPXI believes that this will exclude the arbitrariness and conflicts of interest from the indices calculation processes.  In addition, the TSE Indices are calculated and published automatically through TSE's index calculation system and market information system based on contract prices at the regulated exchange markets operated by TSE; therefore, JPXI believes that the likelihood of conflicts of interest is extremely low. JPXI ensures that appropriate oversight and approval processes are in place over the index constituent selections and data maintenance (such as input of third party allotment and stock split information).  (Policies)  JPXI ensures that conflicts of interests do not affect the determination of indices by establishing the following framework over the conflicts of interest management in the Policies Concerning Calculation of TSE Indices and Corporate Governance Report of Japan Exchange Group, Inc. (the parent company) (hereinafter referred to as "JPX").	(Policies) PwC inspected the Polices Concerning Calculation of TSE Indices and the Corporate Governance Report to confirm they include the elements described in JPXI's Response. PwC also inspected each of the relevant TSE's policies as below:
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;		

IOSCO Principles	JPXI's Response	PwC's Testing
3. Conflicts of Interest for Administrators		
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; and	Code of Conduct JPXI sets forth and requires its employees to comply with the Code of Conduct for Employees of Japan Exchange Group to maintain the soundness of indices administration.	Code of Conduct PwC inspected the Code of Conduct for Employees of Japan Exchange Group to confirm it requires employees to comply with the Code of Conduct.
g) Adequate remuneration policies that ensure all staff who participate in the Benchmark determination are not directly or indirectly rewarded or incentivised by the levels of the Benchmark.  An Administrator's conflict of interest framework should seek to mitigate existing or potential conflicts	Block of Information Flow JPXI blocks the flow of information between the departments engaged in the indices-related activities and other departments by stipulating in the internal rules on information security that information should not be provided to those who are not permitted.	Block of Information Flow PwC inspected JPXI's internal rules on information security to confirm they require employees not to provide information other than those who are permitted.
created by its ownership structure or control, or due to other interests the Administrator's staff or wider group may have in relation to Benchmark determinations. To this end, the framework should:  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; and  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.	Compensation Structure  JPXI sets forth an employee compensation structure and performance evaluation arrangement in the internal rules on salary and compensation.  Compensations for individuals in the departments engaged in the indices-related activities are not associated directly with activities such as the design, calculation or publication of the TSE Indices.  As one of indicators for evaluation of performance-linked remuneration for Executive Officers, we have adopted Total Shareholder Return (TSR) of the Company shares (in comparison with the growth rate of JPX-Nikkei 400 Total Return Index). JPXI maintains a structure where these Executive Officers are not involved in the calculation of the index values since they are calculated automatically in the index calculation system based on the Calculation Methodology published on the JPX website.	Compensation Structure PwC inspected JPXI's internal rules on salaries and compensation to confirm the compensation structure is not associated directly with the design, calculation or publication of the TSE Indices.

IOSCO Principles	JPXI's Response	PwC's Testing
3. Conflicts of Interest for Administrators		
	Internal Training JPXI holds a liaison conference with employees in charge of compliance, distributes compliance-related information via the intranet and conducts periodic elearning courses on ethics and Code of Conduct for employees who engaged in the indices-related activities. By these means, JPXI continuously makes efforts to raise their awareness of compliance and to educate them.	Internal Training PwC inspected JPXI's compliance handbook distributed to employees to confirm the compliance requirements have been disseminated to employees. PwC also inspected materials that showed the compliance related information were distributed using the company's intranet. In addition, PwC inspected the e-learning attendance record to confirm that TSE employees in charge of the index had taken training on ethics and the Codes of Conduct.
	Whistle-blowing System JPXI has established a compliance hotline for violations of the Code of Conduct. Following investigations by the hotline office, matters reported via the hotline are directly escalated to the Representative Executive Officer, Group CEO of Japan Exchange Group, Inc., responsible for the hotline.	Whistle-blowing System PwC inspected TSE's compliance handbook distributed to employees to confirm matters reported via the hotline will be investigated by the hotline office and directly escalated to the Representative Executive Officer, Group CEO of Japan Exchange Group, Inc.

IOSCO Principles	JPXI's Response	PwC's Testing
4. Control Framework for Administrators		
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	JPXI sets forth the following policies and procedures on index calculation and publication processes, to establish and operate an appropriate control framework:	
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.  This control framework should be reviewed periodically and updated as appropriate. The	a) and c) (Policies) JPXI sets forth the Code of Conduct, block of information flow, compensation structure, internal training and whistle-blowing system in the Policies Concerning Calculation of TSE Indices and JPX Corporate Governance Report as a framework over the conflicts of interest. Refer to the response to Principle 3 for details.	a) and c) (Policies) Refer to Principle 3 above.
framework should address the following areas: a) Conflicts of interest in line with Principle 3 on conflicts of interests; b) Integrity and quality of Benchmark determination: 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; ii. Arrangements to promote the integrity of Benchmark inputs, including adequate due	b) (Policies) Refer to the responses to Principle 6 through Principle 19 for the policies for maintaining the soundness and quality of index calculation. The TSE Indices are calculated based on contract prices at the regulated exchange markets operated by TSE; therefore, b) ii. Is not applicable.	b) (Policies) Refer to Principle 6 to 19 below.
diligence on input sources; iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and iv. Providing robust infrastructure, policies and procedures for the management of risk, including operational risk. c) Whistleblowing mechanism:	<ul> <li>(Relevant Activities)</li> <li>JPXI conducts the following relevant activities to maintain the soundness and quality of its index calculation:         <ul> <li>A supervisor reviews the results of daily index constituent data maintenance, periodic index constituent selections and data input to system.</li> <li>The TSE Indices Administering Meeting</li> </ul> </li> </ul>	(Relevant Activities) PwC inspected a sample of review evidence for the index constituent data maintenance and index constituent selections to confirm the supervisor's review was performed. PwC inspected the records of the daily TSE Indices Administering Meeting on a sample basis to confirm the daily monitoring activities were performed in

IOSCO Principles	JPXI's Response	PwC's Testing
4. Control Framework for Administrators		
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.  d) Expertise:  i. Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and  ii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel.	<ul> <li>maintains the soundness and quality of the indices by monitoring the daily indices-related activities.</li> <li>The TSE Indices are calculated and published automatically through TSE's index calculation system and market information system based on contract prices at the regulated exchange markets operated by TSE.</li> <li>TSE has appropriate access controls over the system for the indices-related activities according to the administrative authority of its employees.</li> <li>Refer to the responses to Principle 16 through Principle 19 for arrangements to ensure the accountability and effectiveness of the complaints mechanisms.</li> </ul>	the meeting. PwC recalculated a sample of the TSE Indices in accordance with the Calculation Methodologies and agreed to the indices calculated and published automatically in TSE's index calculation system and market information system. PwC inspected samples of user access request forms (addition, change and removal) and user access lists to confirm that JPXI controls access rights according to the administrative authority for employees. Regarding the arrangement to ensure the accountability and effectiveness of the complaints mechanism, refer to Principle 16 to 19 below.
	d) (Policies) JPXI sets forth the Policies Concerning Calculation of TSE Indices to require employees engaged in the indices-related activities to retain sufficient knowledge on the indices.	d) (Policies) PwC inspected the Policies Concerning Calculation of the TSE Indices to confirm they include the elements described in JPXI's Response.
	(Relevant Activities) JPXI provides staff training related to revisions of laws and regulations, which have impact on the design of indices or the indices-related activities, in order to continuously reflect them to the design of indices	(Relevant Activities) PwC inspected the training records to confirm training was provided to employees engaged in the indices-related activities.

IOSCO Principles	JPXI's Response	PwC's Testing
4. Control Framework for Administrators		
Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by: 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; 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 Administrators' applicable quality and integrity standards for Submission; c) Specifying how frequently Submissions should be made and specifying that inputs or Submissions should be made for every Benchmark determination; and d) Establishing and employing measures to effectively monitor and 32crutinize inputs or Submissions. This should include pre-compilation or prepublication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.	The TSE Indices are calculated based on contract prices at the regulated exchange markets operated by TSE; therefore, the clauses relating to indices based on submissions are not applicable.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
5. Internal Oversight		
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.  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.  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:  a) The terms of reference of the oversight function; b) Criteria to select members of the oversight function; c) The summary details of membership of any	(Policies) JPXI believes that the likelihood of conflicts of interest is extremely low, due to the high transparency and objectivity of the Calculation Methodologies, and also due to the automatic calculation of the TSE Indices by the system; therefore, JPXI does not have an oversight function comprising of separate committees or other governance arrangements. Regarding the TSE Indices, JPXI stipulates in the Policies Concerning Calculation of TSE Indices that JPXI monitors the indices-related activities by holding the daily TSE Indices Administering Meeting which comprises of employees with sufficient knowledge and expertise in the indices-related activities. Additionally, regarding the jointly developed indices calculated and published by JPXI, JPXI stipulates in the administering regulations related to jointly developed indices that JPXI monitors the indices-related activities by holding the Jointly Developed Indices Administering Meeting periodically (at least once a month) which comprises of members from JPXI and the partner of the jointly developed indices.	(Policies) PwC inspected the Policies Concerning Calculation of TSE Indices and the administering regulations related to jointly developed indices to confirm that they include the elements described in JPXI's Response.
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.  The responsibilities of the oversight function include: a) Oversight of the Benchmark design: i. Periodic review of the definition of the	(Relevant Activities) a) JPXI discusses the market situations and their impacts on the indices in the daily TSE Indices Administering Meeting and considers whether to amend the Calculation Methodologies or suspend the publication of indices permanently if necessary.	(Relevant Activities) a) Regarding the jointly developed indices, PwC inspected a sample of the minutes of the Jointly Developed Indices Administering Meeting to confirm decisions were made in accordance with the administering regulations for the Jointly Developed

IOSCO Principles	JPXI's Response	PwC's Testing
5. Internal Oversight		
Benchmark and its Methodology; ii. Taking measures to remain informed about issues and risks to the Benchmark, as well as commissioning external reviews of the Benchmark (as appropriate); 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	Regarding the jointly developed indices calculated and published by JPXI, JPXI holds the Jointly Developed Indices Administering Meeting periodically (at least once a month) to make decisions on matters related to the jointly developed indices. Refer to the responses to Principle 10 for the periodic review of the design of indices, Principle 12 for the revisions to the Calculation Methodologies and Principle 13 for the transition and suspension of indices.	Indices Administering Meeting.  Regarding the periodic review of the design of indices, the revisions to the Calculation  Methodologies and the transition and suspension of indices, refer to Principle 10, 12 and 13 respectively.
Methodology, and authorising or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12; and 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.  b) Oversight of the integrity of Benchmark determination and control framework: i. Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party; 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; and iii. Overseeing any exercise of Expert Judgment by the Administrator and ensuring Published Methodologies have been followed. Where conflicts of interests may arise in the	b) Through the daily TSE Indices Administering Meeting, JPXI monitors the indices-related activities such as overall management and operation of the indices, daily index constituent data maintenance and periodic index constituent selections as well as discussing remedial actions to be taken, where necessary. Refer to the response to Principle 4 for the framework of monitoring by the TSE Indices Administering Meeting.	b) Refer to Principle 4 above.

IOSCO Principles	JPXI's Response	PwC's Testing
5. Internal Oversight		
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.		

IOSCO Principles	JPXI's Response	PwC's Testing
5. Internal Oversight		
Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:  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 analysed, or querying the role of the Administrator in challenging or sampling unusual inputs or Submissions; b) Overseeing the Code of Conduct for Submitters; c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters; and 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.	The TSE Indices are calculated based on contract prices at the regulated exchange markets operated by TSE; therefore, the clauses relating to indices based on submissions are not applicable.	No testing performed as there is no relevant policy or activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
6. Benchmark Design		
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.  Benchmark design should take into account the following generic non-exclusive features, and other factors should be considered, as appropriate to the particular Interest:  a) Adequacy of the sample used to represent the Interest; b) Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing); c) Relative size of the underlying market in relation to the volume of trading in the market that references the Benchmark; d) The distribution of trading among Market	All of the TSE Indices are calculated based on contract prices at the regulated exchange markets operated by TSE, and are calculated based on the published Calculation Methodologies which are designed to reflect the actual economic Interests to be measured in an accurate and highly reliable manner.  The requirements c) to e) of this Principle are not applicable as the index constituent selections and index calculations are based on the quantitative market data related to stocks traded at the exchange.  (Policies)  JPXI stipulates the methodologies for adjustments of the base market value, calculation of FFW and the index constituent selections in the Calculation Methodologies and publishes them on the JPX website. JPXI has also developed relevant manuals for these processes.	(Policies) PwC inspected the Policies Concerning Calculation of TSE Indices and the Calculation Methodologies to confirm they include the elements described in JPXI's Response and published on the JPX website.
Participants (market concentration); e) Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark).	(Relevant Activities)  JPXI ensures that the TSE Indices are calculated in accordance with the Calculation Methodologies by appropriately monitoring the daily indices-related activities in the TSE Indices Administering Meeting.	(Relevant Activities) Regarding the appropriateness of calculation and publication of the TSE Indices in accordance with the Calculation Methodologies, refer to Principle 4 above.

IOSCO Principles	JPXI's Response	PwC's Testing
7. Data Sufficiency		
The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should:  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 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.  This Principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable Bona Fide, 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.  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	The TSE Indices satisfy the sufficiency of data as the TSE Indices are calculated based on contract prices in highly liquid markets at the exchange.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
7. Data Sufficiency		
in an observable market consisting of Bona Fide, Arms-Length transactions. 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 behaviour of an index or market or other aspects of an active market. 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.		

IOSCO Principles	JPXI's Response	PwC's Testing
8. Hierarchy of Data Inputs		
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; and e) Other market information or Expert Judgments. 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	JPXI selects the index constituent based on the market data, and the TSE Indices are calculated and published automatically based on contract prices at the regulated exchange markets in accordance with the Calculation Methodologies; therefore, the hierarchy of the data input is not applicable to the TSE Indices.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
8. Hierarchy of Data Inputs		
transaction. Under these circumstances, non-transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.		

IOSCO Principles	JPXI's Response	PwC's Testing
9. Transparency of Benchmark Determinations		
The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:  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 Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction-based, spread-based or interpolated/extrapolated); 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.	JPXI selects the index constituent based on the market data, and the TSE Indices are calculated and published automatically based on contract prices at the regulated exchange markets in accordance with the Calculation Methodologies. In addition, JPXI publishes the Calculation Methodologies on the JPX website. Expert judgments are not used for determining the TSE Indices.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
10. Periodic Review		
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. 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.	(Policies) JPXI stipulates in the Policies Concerning Calculation of TSE Indices and the internal manual for periodic review on the Calculation Methodologies that JPXI reviews the Calculation Methodologies at least yearly to check whether the Interests of the TSE Indices currently being measured have diminished or are not functioning due to structural changes in the stock market.  JPXI also stipulates in the Policies Concerning Calculation of TSE Indices to publish a summary of changes to the Calculation Methodologies on the JPX website upon obtaining internal approvals of authorized officers and staff.	(Policies) PwC inspected the Policies Concerning Calculation of TSE Indices and JPXI's internal manual for periodic review on the Calculation Methodologies to confirm they include the elements described in JPXI's Response.
	(Relevant Activities) In November 2022, JPXI conducted the periodic review on the Calculation Methodologies and confirmed that there were no material changes in the stock market. In addition, changes to the Calculation Methodologies have been announced on the JPX website after obtaining internal approval.  The next periodic review is scheduled in November 2023.	(Relevant Activities)  PwC inspected a sample of supporting evidence for the periodic review on the Calculation Methodologies to confirm the periodic review was performed in November 2022. Also, PwC confirmed there were no critical change. As for the changes to the Calculation Methodologies, PwC confirmed it was announced on JPXI's website after obtaining internal approval.

IOSCO Principles	JPXI's Response	PwC's Testing
11. Content of the Methodology		
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	(Policies)  JPXI publish the Methodology "the Policies Concerning Calculation of TSE Indices" and "the TSE Index Data Correction Policy" used to make Benchmark determinations.  a), b), g) and h) JPXI sets forth the following in the Calculation	(Policies) PwC confirmed the Methodology "the Policies Concerning Calculation of TSE Indices" and "the TSE Index Data Correction Policy" are published on the JPX website.  PwC inspected the Calculation Methodologies and the Policies Concerning Calculation of TSE Indices
particular Stakeholders, and its appropriateness as a reference for financial instruments.  At a minimum, the Methodology should contain:  a) Definitions of key terms;  b) All criteria and procedures used to develop the Benchmark, including input selection, the mix of	<ul> <li>Methodologies:</li> <li>Definitions of key terms related to the indices calculation.</li> <li>Calculation methodologies and data used in the indices calculation.</li> <li>Responsibility of JPXI Index Business</li> </ul>	published on the JPX website to confirm they include the elements described in JPXI's response.  PwC inspected the TSE Index Data Correction Policy to confirm that it stipulates the procedures for correcting data, announcing to the public and others.
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; c) Procedures and practices designed to promote	Department for receiving inquiries on the calculation policies from stakeholders, if any. Refer to the response to Principle 12 for the procedures to revise the Calculation Methodologies.  • Methodologies related to the daily index constituent data maintenance and the periodic	
consistency in the exercise of Expert Judgment between Benchmark determinations; 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);	index constituent selections to respond to the potential limitations of the indices, including decrease in the market liquidity and potential data concentration.  c), d), and f)	
<ul> <li>e) The procedures for dealing with error reports, including when a revision of a Benchmark would be applicable;</li> <li>f) Information regarding the frequency for internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should</li> </ul>	JPXI stipulates the following in the Policies Concerning Calculation of TSE Indices:  • The TSE Indices Administering Meeting discusses the matters requiring judgments to maintain the consistency of judgments in the indices calculation.	

IOSCO Principles	JPXI's Response	PwC's Testing
11. Content of the Methodology		
also include information regarding the procedures and frequency for external review of the Methodology;  g) The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and  h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.	<ul> <li>In the event that the market is forced to close its stock market prior to the end of daily trading hours due to a computer malfunction (e.g. system failure of the index calculation system or market information system), a natural disaster, or other such unavoidable reasons, JPXI shall calculate the TSE Indices using the latest stock price information published by TSE, in the following sequence: <ol> <li>Special Quotes or Sequential Trade Quotes</li> <li>Contract Price</li> <li>Base Price for Index Calculation when neither (1) nor (2) is available (determined in the following order: (i) Theoretical Ex-rights Price, (ii) Most Recent Special Quote or Sequential Trade Quote on or before the previous trading day, (iii) Most Recent Contract Price on or before the previous trading day.)</li> <li>In the event that the market is forced to suspend its stock market due to a computer malfunction, a natural disaster, or other such unavoidable reason, and trading is then resumed through a reboot of the system, the TSE Indices shall be calculated by JPXI using the stock price information published by TSE after resumption of trading in the following sequence;</li> <li>Special Quotes or Sequential Trade Quotes</li> <li>Contract Price</li> <li>Base Price for Index Calculation when neither (1) nor (2) is available after resumption of trading (determined in the following order: (i) Theoretical Ex-rights</li> </ol> </li> </ul>	

IOSCO Principles	JPXI's Response	PwC's Testing
11. Content of the Methodology		
	Price, (ii) Most Recent Special Quote or Sequential Trade Quote on or before the previous trading day, (iii) Most Recent Contract Price on or before the previous trading day.)  In the event that the TSE Indices Administering Meeting deems that conditions of stock market operated by TSE are not appropriate to implement changes to the TSE Indices (for example, due to unavoidable circumstances like natural disasters), JPXI may handle such changes differently from the process outlined in the Calculation Methodologies, after notification on the JPX website. This could include, for example, postponement or suspension of the periodic review. These changes are constituents selection, adjustments to base market value and others as specified in the Calculation Methodologies. Such conditions include, but not limited to, a sudden surge in volatility and/or lack of liquidity in the entire market.  If any revision to the Calculation Methodologies is required, JPXI reviews the rationale of revision and the adequacy of contents in the internal approval process by authorized officers and staff.  e)  JPXI corrects the TSE Indices in accordance with the TSE Index Data Correction Policy. The corrections are reported to the JPX's risk management committee based on the internal risk management policy and the internal risk management rules.  JPXI reviews structural changes in the stock market	

IOSCO Principles	JPXI's Response	PwC's Testing
11. Content of the Methodology		
	at least once a year to consider the need for revising the Calculation Methodologies.	
	(Relevant Activities) JPXI reviews structural changes in the stock market at least once a year to consider the need for revising the Calculation Methodologies.	(Relevant Activities) PwC inspected the minutes of the TSE Indices Administering Meeting to confirm that annual revision on the Calculation Methodologies were conducted in November 2022.

IOSCO Principles	JPXI's Response	PwC's Testing
11. Content of the Methodology		
Where a Benchmark is based on Submissions, the additional Principle also applies:  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. 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.	This principle is not applicable to the TSE Indices as they are not based on submissions.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
12. Changes to the Methodology		
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.  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. The Administrator should specify how changes to the Methodology will be scrutinised, by the oversight function.  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:  a) Provide advance notice and a clear timeframe that gives Stakeholders sufficient opportunity to analyse and comment on the impact of such proposed material changes, having regard to the Administrator's assessment of the overall circumstances; and	<ul> <li>(Policies) JPXI stipulates the following in the Policies Concerning Calculation of TSE Indices: <ul> <li>The Index Consultation is a function implemented for the purpose of ensuring the opportunities to gather diverse opinions from index users and enhancing the fairness and transparency of the decision making process over the TSE Indices.</li> <li>The Index Consultation will be implemented when deciding on the matters below. However, when the TSE Indices Administering Meeting deems that it is not significant, this shall not apply. Any decision on the following matters shall be subject to the appropriate internal approval.</li> <li>(1) Any material changes to the Calculation Methodologies</li> <li>(2) Treatment on a new type of corporate action which is not defined in the Calculation Methodologies</li> <li>(3) Other topics for which the TSE Indices Administering Meeting determines that comments from a wide range of views are necessary</li> <li>Any material changes refer to above are defined as a change, if a change to the Calculation Methodologies is made, that causes the changes on constituent issues and/or constituent ratios of the indices and requires a rebalance by passive asset managers at the different timing with a periodic review, a change on the methodology of constituent selection, a change on the methodology of constituent selection and a change on the methodology of calculation of index values.</li> <li>In the event that a change is to be made to the</li> </ul> </li> </ul>	(Policies) PwC inspected the Policies Concerning Calculation of TSE Indices and the Index Consultation Implementation Guidelines to confirm they include the elements described in JPXI's Response. In addition, PwC inspected the Index Consultation Implementation Guidelines on the website to confirm that it is published on the website and available to the public.

IOSCO Principles	JPXI's Response	PwC's Testing
12. Changes to the Methodology		
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.	Calculation Methodologies, a decision shall be required based on internal approval.  JPXI stipulates the following in the Index Consultation Implementation Guidelines and publishes it on the JPX website:  The consultation period shall be, as a general rule, at least thirty (30) days from the day of publication. If the period is less than thirty (30) days, JPXI will publish the reasons for this on the JPX website. JPXI will make the final decision on matters put out for consultation at the TSE Indices Administering Meeting, taking into consideration the opinions submitted. Finalized measures will be published on the JPX website.	
	(Relevant Activities) The changes to the Calculation Methodologies during the period from April 1, 2022 to March 31, 2023 were made after the internal approval process.  Regarding material changes in Calculation Methodologies, JPXI have conducted index consulting as follows and announced the revised Calculation Methodologies.  •Revision to Guidebook for JPX-Nikkei Mid and Small Cap Index  Regarding changes in Policies Concerning Calculation of TSE Indices, JPXI have conducted index consultation as follows and announced the revised Policies Concerning Calculation of TSE Indices.  •Proposed Amendment to Policies Concerning	(Relevant Activities) For the changes in the Calculation Methodologies for the period from April 1, 2022 to March 31, 2023, PwC inspected the evidence of approvals on a sample basis to confirm those changes were made in accordance with the Policies Concerning Calculation of TSE Indices. PwC inspected the evidence of index consultation to confirm that the index consultations were conducted on the material changes to the Calculation Methodology and the calculation guidelines described on the left column, and it was confirmed that the revised Calculation Methodologies were published on the website.

IOSCO Principles	JPXI's Response	PwC's Testing
12. Changes to the Methodology		
	Calculation of TSE Indices	

IOSCO Principles	JPXI's Response	PwC's Testing
13.Transition		
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.  These written policies and procedures should be Published or Made Available to all Stakeholders. Administrators should encourage Subscribers and other Stakeholders who have financial instruments that reference a Benchmark to take steps to make sure that:  a) Contracts or other financial instruments that reference a Benchmark, have robust fall-back provisions in the event of material changes to, or cessation of, the referenced Benchmark; and 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.  Administrators' written policies and procedures to address the possibility of Benchmark cessation could include the following factors, if determined to be	<ul> <li>(Policies) JPXI stipulates in the Policies Concerning Suspension or Transition of TSE Indices that JPXI considers a permanent suspension of publication of an index, if any of the following circumstances is recognized:  • When the calculation and publication of the existing index is suspended, and a new index is calculated and published as a consequence of significant changes in the design of an index.</li> <li>• When there is a significant decrease in the demand for an index such as the absence of a licensee for the use of the TSE Indices (hereinafter referred to as the "TSE Indices User").</li> <li>• When an index no longer represents its intended Interest due to structural changes in the stock market and a revision to its Calculation Methodology is not expected to resolve the issue.</li> <li>The "Policies Concerning Suspension or Transition of TSE Indices" is published on the JPX website.</li> <li>The policies also set forth procedures for suspension or transition of the TSE Indices as follows:</li> <li>• When considering the permanent suspension of the publication of an index, JPXI obtains internal approvals of authorized officers and staff after considering impacts of the suspension on the TSE Indices Users at the TSE Indices Administering Meeting.</li> <li>• If the TSE Indices Users exist, JPXI collects their opinions through the Index Consultation.</li> <li>• When permanently suspending the publication</li> </ul>	(Policies) PwC inspected the Policies Concerning Suspension or Transition of TSE Indices to confirm they include the elements described in JPXI's response. PwC inspected the Policies Concerning Suspension or Transition of the TSE Indices to confirm that it is published and available to the public.

IOSCO Principles	JPXI's Response	PwC's Testing
13.Transition		
reasonable and appropriate by the Administrator: 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; 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; c) The procedures that the Administrator would follow in the event that a suitable alternative cannot be identified; 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 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	of an index, JPXI announces the timing and the reasons for suspension on the JPX website at least one (1) month prior to the suspension.  • When transitioning to a new index due to a significant revision to the Calculation Methodologies, JPXI considers the impact on the existing index (such as the existence of financial instruments that track the index) and if necessary, continues the calculation and publication of the existing index for a defined period of time in parallel with the new index.  (Relevant Activities)  JPXI suspended the following indices on April 1, 2022 in accordance with the revision of TOPIX and other indices.  • TSE Second Section Stock Price Index  • JASDAQ INDEX  • JASDAQ INDEX (Standard)  • JASDAQ INDEX (Growth)  • J-Stock Index  • TOPIX Composite  • TSE Second Section Composite Index  • TSE Mothers Composite Index  JPXI has conducted the index consultation as follows with respect to the suspension of these indices.  • Revisions of TOPIX and Other Indices	(Relevant Activities) PwC observed the JPX website and confirmed that the calculation of the indices in the left column were suspended as of April 1, 2022. PwC observed the Index Consultation "Review of TOPIX (TSE Stock Indices, etc.)" to confirm that the announcement of the timing and rationale of the permanent suspension of the indices in the left column were published on the JPX website more than one month prior to the suspension.

IOSCO Principles	JPXI's Response	PwC's Testing
13.Transition		
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.		

IOSCO Principles	JPXI's Response	PwC's Testing
14. Submitter Code of Conduct		
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. 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. The Administrator's oversight function should be responsible for the continuing review and oversight of the Submitter Code of Conduct. The Submitter Code of Conduct. The Submitter Code of Conduct should address: a) The selection of inputs; b) Who may submit data and information to the Administrator; 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; d) Criteria applied to employees of a Submitter who are permitted to submit data or information to an Administrator on behalf of a Submitter; e) Policies to discourage the interim withdrawal of Submitters from surveys or Panels; f) Policies to encourage Submitters to submit all	This principle is not applicable to the TSE Indices as they are not based on submissions.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
14. Submitter Code of Conduct		
relevant data; and g) The Submitters' internal system and controls, which should include: i. Procedures for submitting inputs, including     Methodologies to determine the type of eligible inputs, in line with the Administrator's     Methodologies; ii. Procedures to detect and evaluate suspicious inputs or transactions, including inter-group transactions, and to ensure the Bona Fide nature of such inputs, where appropriate; iii. Policies guiding and detailing the use of Expert Judgment, including documentation requirements; iv. Record keeping policies; v. Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs; vi. Training, including training with respect to any relevant regulation (covering Benchmark regulation or any market abuse regime); vii. Suspicious Submission reporting; viii. Roles and responsibilities of key personnel and accountability lines; ix. Internal sign off procedures by management for submitting inputs; x. Whistle blowing policies (in line with Principle 4); and 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		

IOSCO Principles	JPXI's Response	PwC's Testing
14. Submitter Code of Conduct		
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 Submission responsibilities), and any other business of the Submitter or of any of its affiliates or any of their respective clients or customers.		

IOSCO Principles	JPXI's Response	PwC's Testing
15. Internal Controls over Data Collection		
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. Where Administrators receive data from employees of the Front Office Function, the Administrator should seek corroborating data from other sources.	Regarding indices calculated independently without entrusting data acquisition, calculation and publication work to a third party, for Tokyo Stock Exchange Dividend Focus 100 Index, JPXI uses dividend forecast data provided from TOYO KEIZAI INC. JPXI believes that the requirements in this Principle do not apply to such data, as they are observable in the market.  Regarding other TSE Indices, the index constituent selections and calculations are based on information obtained from TSE such as the stock price information.  For indices that are entrusted to third parties for data acquisition, calculation, and publication, refer to Principle 2.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
16. Complaints Procedures		
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.  The complaints procedures policy should:  a) Permit complaints to be submitted through a userfriendly complaints process such as an electronic Submission process;  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;  c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and  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	(Policies) JPXI sets forth and publishes the Policies for Addressing Objections regarding TSE Indices to establish a fair and appropriate complaints mechanism for complaints received with regard to the TSE Indices, and accepts inquiries from external parties via email. The policies stipulates that a formal complaint is defined as a complaint or request related to the TSE Indices that is received, via the method prescribed in the policies, from a party who has a license agreement with JPXI for the use of the TSE Indices or a party who receives the TSE Indices data directly from JPXI via TMI². The policies also set forth specific procedures for addressing complaints as follows:  • JPXI receives complaints from the TSE Indices Users at JPXI's email address (index@jpx.co.jp). JPXI requests the TSE Indices Users to provide JPXI with the following information that are required for the investigation of complaints: (1) An explicit statement that a complaint is in line with the policies, (2) The name, company name, email address and phone number of the TSE Indices User, (3) The name of the index in question, subject period, index value and grounds for the complaint, and (4) Other information as grounds for the complaint. • JPXI accepts complaints from the TSE Indices Users in good faith and makes an effort to respond in a prompt and appropriate manner. JPXI always	(Policies) PwC inspected the Policies for Addressing Objections regarding TSE Indices to confirm they include the elements described in JPXI's Response. PwC inspected the Policies for Addressing Objections regarding TSE Indices on the website to confirm that it is published and available to the public.

<sup>&</sup>lt;sup>2</sup> Data feed service provided by TSE

IOSCO Principles	JPXI's Response	PwC's Testing
16. Complaints Procedures		
applicable national legal or regulatory requirements.  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.	maintains a neutral and fair attitude toward formal complaints from the TSE Indices Users and conducts investigations in accordance with the details of complaints; however, JPXI's investigations may be delayed when sufficient information is not provided by the TSE Indices User, or JPXI may refrain from providing responses when they are deemed inappropriate in common sense.  • Investigation results of complaints will be promptly provided to the complainant by email or in writing within three (3) business days from the completion of the investigation.  • Details of formal complaints and investigation results are retained for a period of five (5) years in principle in accordance with JPXI's internal policies.  • JPXI responds to concerns, questions, consultations or other matters from the TSE Indices Users with regard to the indices in good faith and in a prompt manner.  (Relevant Activities)  JPXI responds to concerns, questions, consultations and other matters from the TSE Indices Users in good faith and in a prompt manner, in accordance with the Policies for Addressing Objections regarding TSE Indices.  JPXI did not receive any formal complaints during the period from April 1, 2022 to March 31, 2023.	(Relevant Activities) PwC enquired of a responsible person in JPXI and received a response that JPXI received no formal complaints for the period from April 1, 2022 to March 31, 2023.

IOSCO Principles	JPXI's Response	PwC's Testing
17. Audits		
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. 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.	JPXI has engaged with PwC to conduct an annual external assurance engagement in respect of JPXI's responses to the IOSCO Principles.	PwC, as an independent assurance provider, was appointed to provide a reasonable assurance opinion on JPXI's Responses to the IOSCO Principles.

IOSCO Principles	JPXI's Response	PwC's Testing
18. Audit Trail		
Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:  a) All market data, Submissions and any other data	(Policies) JPXI stipulates in the internal rules on information security that JPXI retains the data used for the index calculation for five (5) years.	(Policies) PwC inspected JPXI's internal rules on information security to confirm they include the elements described in JPXI's Response.
and information sources relied upon for Benchmark determination; b) The exercise of Expert Judgment made by the Administrator in reaching a Benchmark determination; c) Other changes in or deviations from standard procedures and Methodologies, including those made during periods of market stress or disruption; d) The identity of each person involved in producing a Benchmark determination; and e) Any queries and responses relating to data inputs. 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.	<ul> <li>(Relevant Activities)</li> <li>JPXI Index Business Department retains the following records related to the index calculation:</li> <li>Data and other information used for the daily index constituent data maintenance and periodic index constituent selections,</li> <li>Documents related to the jointly developed indices and minutes of Jointly Developed Indices Administering Meetings,</li> <li>Records of internal approval process related to revisions to the Calculation Methodologies or when there are unordinary incidents, and</li> <li>Documents related to queries from the regulatory authorities.</li> <li>In addition, the index calculation results from TSE's index calculation system are stored in the database.</li> </ul>	(Relevant Activities) In order to confirm that relevant data and records for the TSE Indices are retained in accordance with TSE's internal rules on information security, PwC inspected a sample of daily index constituent data maintenance, data used for periodic index constituent selections, data related to jointly developed indices, the minutes of Jointly Developed Indices Administering Meeting, evidence of approvals for revisions of the Calculation Methodologies and TSE Indices data calculated in TSE's systems.

IOSCO Principles	JPXI's Response	PwC's Testing
18. Audit Trail		
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: a) The procedures and Methodologies governing the Submission of inputs; b) The identity of any other person who submitted or otherwise generated any of the data or information provided to the Administrator; c) Names and roles of individuals responsible for Submission and Submission oversight; d) Relevant communications between submitting parties; e) Any interaction with the Administrator; f) Any queries received regarding data or information provided to the Administrator; g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments; h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.	This principle is not applicable to the TSE Indices as they are not based on submissions.	No testing performed as there is no relevant policy or control activity in JPXI's Response.

IOSCO Principles	JPXI's Response	PwC's Testing
19. Cooperation with Regulatory Authorities		
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.	If requested by the regulatory authorities, JPXI will submit documents and other materials required in these Principles in a prompt manner after obtaining the appropriate level of internal approvals by authorized officers and staff, depending on the nature of inquiries.	PwC enquired of a responsible person in JPXI and received a response that JPXI will respond to requests from the regulatory authorities appropriately.  Regarding the record retentions relevant to the indices calculation, refer to Principle 18 above.