

India Index Services and Products Limited (“IISL”) Management Statement of Adherence with the International Organization of Securities Commissions (“IOSCO”) Principles for Financial Benchmarks

Notice:

This financial benchmark report dated December 31, 2017 (“Report”) has been prepared for the sole use and benefit of India Index Services and Products Limited (“IISL”) pursuant to an engagement letter entered into between Deloitte Haskins & Sells LLP (“DHS”) and IISL.

IN THE EVENT ANY PARTY OTHER THAN IISL (“THIRD PARTY”) IS PROVIDED A COPY OF THIS REPORT, THEN BY READING OR RETAINING SUCH COPY OF THIS REPORT, SUCH THIRD PARTY SHALL BE DEEMED TO HAVE ACCEPTED THE FOLLOWING TERMS OF THIS NOTICE, INTENDING TO BE LEGALLY BOUND BY THE SAME:

(i) No third party is entitled to use or rely on this Report for any purpose whatsoever and DHS accepts no responsibility or duty of care or liability to such third party. In the event that any third party uses the Report for any purposes whatsoever, it shall do so at its own risk, without recourse to DHS and DHS shall not be directly or indirectly liable for any losses, damages, costs or expenses, whether in contract, tort or otherwise, suffered by such third party.

(ii) Access to the Report is not a substitute for the third party undertaking its own appropriate inquiries and procedures in relation to the matters covered in the Report.

(iii) DHS makes no representations as to the sufficiency or even appropriateness of the Report for the purposes of the third party. If third party relies on DHS’s Report, it does so entirely at its own risk;

(iv) The third party does not acquire any rights as a result of access to the Report and DHS does not assume any duties or obligations as a result of such access to the Report. DHS is not, by permitting IISL to provide the third party access to the Report, rendering accounting, financial, investment, legal, tax or other professional advice or services to, or acting as a fiduciary, agent or in any other capacity with respect to, the third party.

(v) Third party unconditionally and irrevocably releases DHS and its personnel from all claims, liabilities, losses, damages, costs and expenses relating to or arising out of the Report or the access to or use of the Report by the third party and any assertion of reliance in relation thereto. Third party will not bring any claim against DHS in relation to the Report;

(vi) It was not prepared for providing any services to any third party. The description of the relevant activities on the control processes defined in relation to governance, quality and accountability activities as date December 31, 2017 and thus DHS’s assurance report is based on historical information. Any projection of such information or DHS’s opinion thereon to future periods is subject to the risk that changes may occur after the Report is issued and the description of controls may no longer accurately portray the control processes.

For these reasons, such projection of information to future periods would be inappropriate;

(vii). DHS will be entitled to the benefit of and to enforce these terms; and

(viii). These terms and any dispute with DHS arising from them, whether contractual or non-contractual, are subject to Indian laws and the exclusive jurisdiction of courts in Mumbai, India.

Table of Contents

1.	About IISL	3
2.	Management's Statement of Adherence to IOSCO Compliance	4
3.	Independent Chartered Accountant's Limited Assurance Report	5
4.	Principles and Statements	7
4.1	Principle 1 - Overall Responsibility of the Administrator	7
4.2	Principle 2 - Oversight of Third Parties	10
4.3	Principle 3 - Conflicts of Interest for Administrators	11
4.4	Principle 4 – Control Framework for Administrators	13
4.5	Principle 5 – Internal Oversight	15
4.6	Principle 6 – Benchmark Design	18
4.7	Principle 7 – Data Sufficiency	19
4.8	Principle 8 – Hierarchy of data inputs	21
4.9	Principle 9 – Transparency of Benchmark determinations	22
4.10	Principle 10 – Periodic Review	23
4.11	Principle 11 – Content of the Methodology	24
4.12	Principle 12 – Changes in Methodology	26
4.13	Principle 13 – Transition	28
4.14	Principle 14 – Submitter Code of Conduct	30
4.15	Principle 15 – Internal Controls over Data Collection	32
4.16	Principle 16 – Complaints Procedures	33
4.17	Principle 17 - Audits	34
4.18	Principle 18 – Audit Trail	35
4.19	Principle 19 – Co-operation with Regulatory Authorities	37
5.	Definition of Significant Terms	38
6.	Disclaimer	39

1.About IISL

India Index Services & Products Ltd. (IISL), a subsidiary of NSE, provides a variety of indices and index related services for the capital markets. IISL focuses on the index as a core product. IISL owns and manages a portfolio of indices under the NIFTY brand of NSE, including the flagship index, the NIFTY 50. IISL equity Indices comprises broad-based benchmark indices, sectoral indices, strategy indices, thematic indices and customised indices. IISL also maintains fixed income indices based on Government of India securities, corporate bonds, money market instruments and hybrid indices. Many investment products based on IISL indices have been developed within India and abroad. These include index based derivatives traded on NSE, Singapore Exchange Ltd. (SGX), Chicago Mercantile Exchange Inc. (CME), Osaka Exchange Inc. (OSE), Taiwan Futures Exchange (TAIFEX) and a number of index funds and exchange traded funds. The flagship 'NIFTY 50' index is widely tracked and traded as the benchmark for Indian Capital Markets.

2. Management's Statement of Adherence to IOSCO Compliance

Management's Assertion

IISL is responsible for providing a written assertion about whether, in all material respects, and based on suitable Criteria:

- i. IISL's Description fairly presented the IOSCO Principles of Financial Benchmarks that were designed and implemented as on December 31, 2017
- ii. The controls related to the control objectives stated in IISL's Description of the System were suitably designed to achieve those control objectives as on December 31, 2017

IISL is responsible for having a reasonable basis for its assertion.

IISL is responsible for establishing and maintaining effective internal control. In this regard, IISL has the responsibility for, among other things:

- Selecting the Criteria to be used and stating them in the assertion
- Preparing a Description that fairly presents the IOSCO Principles of Financial Benchmarks that was designed and implemented as on December 31, 2017.
- Specifying the control objectives and stating them in the Description of the System
- Suitably designing and implementing controls to achieve the control objectives stated in the Description of the System
- Identifying the risks that threaten the achievement of the control objectives
- Properly recording transactions on behalf of user entity
- Adjusting the Description of the System to correct material misstatements
- Making determinations as to the relevancy of information to be included
- The overall accuracy of the Description of the System
- Making all records relevant to the subject matter and related information available to us.



Mukesh Agarwal

CEO

3.Independent Chartered Accountant's Limited Assurance Report

TO THE BOARD OF DIRECTORS OF INDIA INDEX SERVICES AND PRODUCTS LIMITED

We have reviewed India Index Services And Products Limited's ('IISL') response to the principles for Financial Benchmarks published by the International Organization of Securities Commissions ("IOSCO Principles") described in the accompanying statement of IISL's assessment described under "Principles and Statements" in Section 4 of this report as at December 31 ,2017.

IISL's Responsibilities

IISL's management is responsible for ensuring that the Company designs, implements and monitors compliance with policies and procedures that adhere with the IOSCO Principles. IISL has provided the accompanying statement of its assessment titled "Management's Statement of Adherence to IOSCO", set out in Section 2 and supported by detailed responses described under "Principles and Statements" in Section 4 of this report duly initialled by us for identification purpose only.

Independent Chartered Accountant's Responsibilities

Our responsibility is to undertake a limited assurance engagement and review the responses provided by IISL on its assessment described under "Principles and Statements" in Section 4 of this report as at December 31 , 2017 in accordance with the IOSCO Principles. We report to you whether, based on the results of our work (which is further described in Section 4 of this report) that IISL's responses in Section 4 is free of material misstatement.

We conducted our review in accordance with International Standard on Assurance Engagements 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board. The Standard requires such limited assurance engagements, to obtain appropriate evidence as we consider sufficient to enable us to obtain moderate assurance as to whether Principles and Statements is free of material misstatement, basis our adopted procedures, and the responses as provided under principles and Statements in relation to governance, quality and accountability activities placed in operation for IISL's indices as on December 31, 2017, set out in Section 4 of this report. Our review is limited to inquiries of IISL's personnel and review of procedures applied for IOSCO Principles and thus provides less assurance than an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Our procedures, described under Section 4, included examination of evidence, on a test basis to assess IISL's Principles and Statements responses to the IOSCO principles. Our procedures were not sufficient to enable us to conclude on the design effectiveness or operation of policies or controls in place to address the Principles and, accordingly, we do not express an opinion thereon.

Inherent Limitations

Because of their nature and inherent limitations, controls and control procedure may not always operate effectively to meet the IOSCO Principles criteria. Also, the projection to the future of any evaluation of the fairness of the presentation of the Description, or conclusions about the suitability of the design or operating effectiveness of the controls and control procedure described therein to meet the IOSCO Principles criteria are subject to the risk that controls and control procedure may become ineffective or fail.

Independent Service Auditor's Report

Our Conclusion

Based on the criteria contained within IOSCO Principles and our review of procedures as described under Section 4, along with evidences received from IISL, no exceptions were noted and nothing has come to our attention that causes us to believe that IISL's assessment described under "Principles and Statements" in Section 4 of this report as at December 31, 2017, is not fairly stated.

Restriction of Use

Our report has been prepared to enable IISL to meet the requirements of adherence with the IOSCO Principles. Our report is intended solely for the information use of the Board of Directors and the Management of IISL and is to be read in conjunction with the Notice issued at the beginning of this Report.

Deloitte Haskins & Sells LLP

Chartered Accountants

(ICAI Registration No.: 117366W/W-100018)



S. Ravi Veeraraghavan

Partner

M. No. 029935

18 April 2018

4.Principles and Statements

IISL applies a wide range of controls and oversight mechanism to all of its indices. In line with the principle of proportionality as provided in the IOSCO principles, IISL in the table below provides the response in terms of how they adhere to each of the IOSCO Principles.

4.1 Principle 1 - Overall Responsibility of the Administrator

S.No.	IOSCO Principle 1	IISL Response ("Practices and Responses")	DHS Response	Results of Review
1.	<p><u>Principle 1 - Overall Responsibility of the Administrator:</u> The Administrator should retain primary responsibility for all aspects of the Benchmark determination process. For example, this includes:</p> <p>a) Development: The definition of the Benchmark and Benchmark Methodology;</p> <p>b) Determination and Dissemination: Accurate and timely compilation and publication and distribution of the Benchmark;</p> <p>c) Operation: Ensuring appropriate transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors; and</p> <p>d) Governance: Establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of the Benchmark.</p>	<p>IISL retains primary responsibility for all aspects of the Benchmark determination process. This includes development, determination & dissemination, operations and governance.</p>	<p>For the sample of existing and new index methodologies, we obtained the methodology document and inspected for evidence that IISL accepts the responsibility as the Benchmark Administrator.</p> <p>For each sample of existing and new index methodologies, we obtained the methodology document and inspected the same for evidence that:</p> <p>Definition of the Benchmark and Benchmark Methodology is evidenced in the methodology document, and Methodology documents are publicly available on website i.e., www.niftyindices.com and www.nseindia.com.</p> <p>We obtained evidence of approval and inspected for evidence that the modifications in Benchmark Methodology for a sample of existing index methodologies have been approved in line with the delegation authority matrix.</p> <p>We obtained evidence of approval and inspected evidences that the Benchmark Methodology for a sample of new index methodologies has been approved in line with the delegation authority matrix.</p> <p>In addition, we noted that a review of the existing index methodologies was performed by</p>	<p>No exception noted</p>

			<p>the Index Committees as part of IISL’s periodic review</p> <p>For each sample of existing and new indices, we obtained the methodology documents and inspected for evidence that the documents:</p> <ul style="list-style-type: none"> • Contain detailed index methodology, construction, maintenance, data, governance and dissemination. • Articulate responsibility of IISL in determination of benchmark. • Methodology document and index maintenance are publicly available on website i.e., www.niftyindices.com and www.nseindia.com. <p>For each sample of existing and new indices, we obtained the monthly factsheets and inspected the same for evidence of the following:</p> <ul style="list-style-type: none"> • Factsheets contain index methodology, characteristics, sector representation, statistics, fundamentals; and • Factsheets are updated monthly, as confirmed by the management. The factsheets are publicly available on the website i.e., www.niftyindices.com and www.nseindia.com. <p>For sample of the existing and new indices, we inspected for evidence that:</p> <ul style="list-style-type: none"> • Significant decisions affecting determination of indices are documented and are publicly communicated • Approved methodology was consistently applied to the system through re-calculation and reconciled with the market published value and the value as computed by the Index Computation System • Index methodology review was performed by the IISL team whereas index constitution review was performed by the Index Maintenance Sub Committee (‘IMSC’) 	
--	--	--	---	--

			<ul style="list-style-type: none"> • Data inputs were reconciled to the source data. <p>DHS obtained the meeting minutes of the 1st Board meeting of IISL to identify the roles and responsibilities of the following committees:</p> <ul style="list-style-type: none"> • Index Policy Committee ('IPC') • Index Maintenance Sub Committee <p>DHS obtained the meeting minutes of the 68th Board meeting of IISL to identify the role and responsibilities of the following committees:</p> <ul style="list-style-type: none"> • Debt Index Management Committee ('DIMC') <p>DHS obtained the Delegation of Authority matrix ('DOA'), approved by the board and inspected for the following evidence:</p> <ul style="list-style-type: none"> • Approval ladder pertaining to the launch of new indices and benchmarks was defined. • Approval authority for execution of contract with third party data providers is clearly defined. 	
--	--	--	--	--

4.2 Principle 2 - Oversight of Third Parties

S.No.	IOSCO Principle 2	IISL Response ("Practices and Responses")	DHS Response	Results of Review
2.	<p>Principle 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:</p> <p>a) Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties who participate in the Benchmark determination process, as well as the standards the Administrator expects these third parties to comply with;</p> <p>b) Monitor third parties' compliance with the standards set out by the Administrator;</p> <p>c) Make Available to Stakeholders and any relevant Regulatory Authority the identity and roles of third parties who participate in the Benchmark determination process; and</p> <p>d) Take reasonable steps, including contingency plans, to avoid undue operational risk related to the participation of third parties in the Benchmark determination process.</p> <p>This Principle does not apply in relation to a third party from whom an Administrator sources data if that third party is a Regulated Market or Exchange.</p>	<p>All the indices at IISL are computed and maintained independently by the in-house full time staff personnel of IISL. IISL sources data on prices, corporate actions, shareholding pattern, from the National stock Exchange of India Ltd. ('NSE') which is a regulated stock exchange in India. The real time calculation of IISL indices is carried out by NSE with whom IISL has a written arrangement. Real time indices are disseminated through NSE trading terminals, website and third party data distributors. Further data on company fundamental, MIBOR rate, bond prices, Shariah compliant stocks etc. is sourced from third party data aggregators through written arrangements. The aggregators do not participate in index computation/ maintenance. IISL has controls in place to cross-validate the data sourced from third party data aggregators.</p> <p>IISL has Business Continuity Plans in place to ensure seamless calculation and dissemination of the index values and underlying data.</p>	<p>We obtained the board approved DOA matrix for approving and signing contracts & evidenced for approval by the respective members of the Board of Directors as per the DOA matrix.</p> <p>For a third party data aggregator, we obtained the executed contract and inspected for evidence that:</p> <ul style="list-style-type: none"> • The executed document included defined roles and responsibilities • The nature of data to be provided to IISL and service delivery levels • The contract was approved by the legal officer and business heads, prior to execution of contract and signed by an authorized signatory as per the delegation authority matrix • The contracts are renewed on periodic basis <p>We obtained internal SOP pertaining to the Index Calculation System and evidenced that it contains procedures pertaining to checks over data provided by third party data providers.</p> <p>We obtained the Business Continuity Plans and verified the same to ensure that the procedures with respect to third party data sources are documented in the same.</p>	No exception noted

4.3 Principle 3 - Conflicts of Interest for Administrators

S.No.	IOSCO Principle 3	IISL Response ("Practices and Responses")	DHS Response	Results of Review
3.	<p><u>Principle 3 - Conflicts of Interest for Administrators:</u> 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:</p> <p>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; 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; 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</p>	<p>IISL, a group company of the NSE (regulated stock exchange), is a separate legal entity involved in independent development, calculation and maintenance of over 140 indices. IISL maintains arms-length relationship with its group companies. For every business transaction between IISL and NSE & group companies, IISL has entered into written arrangements. Indices at IISL are developed through a structured approach of research and market consultation ('VOC') through proper documentation that protects the integrity and independence of benchmark determination. Further review of all IISL indices is carried out based on an objective pre-defined stock selection criteria. In addition to the standardized offerings of IISL indices, IISL also provides the service of customized indices where indices are specifically developed, calculated and maintained based on the guidelines provided by the respective client(s). Further as NSE group policy - <i>Code of Ethics</i>, each employee in the company are subjected to the same which provides the guidelines for investment in stock market along with on-going disclosure requirements. All indices are independently developed and maintained by IISL.</p>	<p>For items (a), (b), (e), (f), we obtained the code of ethics and code of conduct policies on IISL's internal portal and inspected the same to evidence the following: - Procedure for identification of potential conflicts of interest - Disclosures pertaining to conflicts of interest required to be made under the code of ethics For item (g), we obtained the KRAs for sample employees, participating in benchmark determination to evidence that employees are not incentivized directly or indirectly by performance of the benchmark. For item (c), we obtained organization structure of IISL and reviewed the same to evidence that roles, responsibilities and reporting lines have been clearly defined. For item (d), we obtained evidence to identify that end of day index production is triggered and monitored for completion by the Operations team in IISL. We obtained the agenda of the induction for new joiners and inspected for evidence of coverage of compliance trainings covering the below mentioned topics - - Information Security - Business Continuity Awareness - Code of Ethics Declarations We further inspected the roles and responsibilities of the business functions of IISL and noted that they had been segregated to ensure no direct or indirect</p>	No exception noted

	<p>reasonably affect any Benchmark determinations; and</p> <p>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.</p> <p>An Administrator's conflict of interest framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the Administrator's staff or wider group may have in relation to Benchmark determinations. To this end, the framework should:</p> <p>a) Include measures to avoid, mitigate or disclose conflicts of interest that may exist between its Benchmark determination business (including all staff who perform or otherwise participate in Benchmark production responsibilities), and any other business of the Administrator or any of its affiliates; and</p> <p>b) Provide that an Administrator discloses conflicts of interest arising from the ownership structure or the control of the Administrator to its Stakeholders and any relevant Regulatory Authority in a timely manner.</p>	<p>The IMSC & DIMC takes all decisions on addition/ deletion of companies in any Index based on the review carried out by the IISL index operations team as per the predefined index methodology. IISL comprises of qualified and experienced staff personnel with sound knowledge of financial market. Supervision and approval mechanism at different levels is in place prior to releasing the benchmark to ensure its integrity and quality.</p> <p>There is a clear demarcation of business functions such as index operations and business development teams. Each team functions independently to ensure that there is no conflict of interest.</p> <p>Remuneration of staff is not linked to the level of indices, directly or indirectly.</p> <p>Initiatives related to awareness about information security, business continuity and code of ethics are conducted periodically at a group level.</p> <p>Roles and responsibilities of various business functions of IISL have been segregated to ensure no direct or indirect influences in benchmark determination process. Further, the supervision and sign offs by is carried out by authorized qualified employees. Furthermore, each person involved in benchmark determination process are subject to declarations of code of ethics. We thereby confirm that there were no conflict of interest raised during the year 2017.</p>	<p>influences in benchmark determination process. Further inspected the sign offs on the methodology documents were carried out by authorized qualified employees. Also inspected the code of ethics for the personnel involved in benchmark determination process Hence, there were no conflict of interest raised during the year 2017.</p>	
--	--	--	---	--

4.4 Principle 4 – Control Framework for Administrators

S.No.	IOSCO Principle 4	IISL Response ("Practices and Responses")	DHS Response	Results of Review
4.	<p>Principle 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 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 framework should address the following areas:</p> <p>a) Conflicts of interest in line with Principle 3 on conflicts of interests;</p> <p>b) Integrity and quality of Benchmark determination:</p> <p>i. Arrangements to ensure that the quality and integrity of Benchmarks is maintained, in line with principles 6 to 15 on the quality of the Benchmark and Methodology;</p> <p>ii. Arrangements to promote the integrity of Benchmark inputs, including adequate due diligence on input sources;</p> <p>iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and</p> <p>iv. Providing robust infrastructure, policies and procedures for the management of risk, including operational risk.</p> <p>c) Whistleblowing mechanism: Administrators should establish an effective whistleblowing mechanism to facilitate early awareness of any potential misconduct or irregularities that may arise. This mechanism</p>	<p>IISL has a number of controls in place to ensure integrity of the index construction and maintenance and to manage conflicts of interest.</p> <p>For response to Principle (a), please refer IISL Response to Principle 3 above.</p> <p>For response to Principle (b) (i), please refer IISL response provided against Principal 6 to 15</p> <p>For response to Principle (b) (iii), please refer IISL response provided against Principal 16</p> <p>1. Whistle blowing policy at the organization level is in place</p> <p>2. Employees are provided product related training and continuity and succession planning for at personnel organizational level is carried out on a periodic basis.</p> <p>3. Further, for skill development, on-going trainings based on the job requirements are conducted.</p> <p>4. IISL comprises of qualified and experienced staff personnel with sound knowledge of financial market.</p> <p>Supervision and approval mechanism at different levels is in place prior to releasing the</p>	<p>For response to item (a), please refer to Principle 3 as referenced by IISL responses.</p> <p>For response to item (b) (i), please refer to Principle 6 to 15 as referenced by IISL responses.</p> <p>For response to item (b) (iii), please refer to Principle 16 to 19 as referenced by IISL responses.</p> <p>For a sample of indices, we obtained and evidenced the following:</p> <ul style="list-style-type: none"> • Approved methodology was consistently applied to the system • Index methodology review was performed by the IISL team whereas the index constitution review was performed by the IMSC • Data inputs were reconciled with the source data • Re-performance of automated comparison for each day between the real-time and end of day equity indices to evidence differences. • End-of-day index production is triggered and monitored for completion by Operations team in IISL • End-of-day indices are distributed automatically via secured HTTPS protocol on the website, Secured FTP or email through restricted access levels. <p>DHS obtained the access logs and evidenced that login activity and access to the system is with authorized staff personnel and the access logs are maintained and retained as audit trails.</p>	No exception noted

	<p>should allow for external reporting of such cases where appropriate.</p> <p>d) Expertise:</p> <p>i. Ensuring Benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and</p> <p>ii. Staff training, including ethics and conflicts of interest training, and continuity and succession planning for personnel.</p> <p>Where a Benchmark is based on Submissions: Administrators should promote the integrity of inputs by:</p> <p>a) Ensuring as far as possible that the Submitters comprise an appropriately representative group of participants taking into consideration the underlying Interest measured by the Benchmark;</p> <p>b) Employing a system of appropriate measures so that, to the extent possible, Submitters comply with the Submission guidelines, as defined in the Submitter Code of Conduct and the Administrators' applicable quality and integrity standards for Submission;</p> <p>c) Specifying how frequently Submissions should be made and specifying that inputs or Submissions should be made for every Benchmark determination; and</p> <p>d) Establishing and employing measures to effectively monitor and scrutinize inputs or Submissions.</p> <p>This should include pre-compilation or pre-publication monitoring to identify and avoid errors in inputs or Submissions, as well as ex-post analysis of trends and outliers.</p>	<p>benchmark to ensure its control, integrity and quality.</p>	<p>For item (c), DHS obtained the Whistle Blowing Policy and external reporting mechanism evidenced that:</p> <ul style="list-style-type: none"> • Procedures and mechanism for whistle blowing are evidenced in the policy • External reporting mechanism is available under Anonymous Tip-Off / Information • External reporting mechanism is available through e-mail at iisl@nse.co.in <p>We obtained the KRAs for sample staff personnel and evidenced that initial, mid-year and annual performance reviews were conducted and inspected for evidence of review and sign-off by managers.</p> <p>For item (d), DHS obtained IISL's succession plans and evidenced that succession plans are documented for the key staff personnel involved in the benchmark determination process.</p> <p>DHS obtained and evidenced that the training plan covered following trainings:</p> <ul style="list-style-type: none"> • Periodic trainings on functional subjects covering benchmark determination process, statistics, econometrics & simulation, advanced excel and product trainings • Information Security • Business Continuity Awareness • Code of Ethics (quarterly compliance declaration) <p>DHS obtained the KRAs for sample staff personnel and evidenced that the performance indicators are not linked directly or indirectly with the performance of the benchmark.</p>	
--	---	--	---	--

4.5 Principle 5 – Internal Oversight

S.No.	IOSCO Principle 5	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
5.	<p>Principle 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:</p> <p>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 committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.</p> <p>The responsibilities of the oversight function include:</p> <p>a) Oversight of the Benchmark design: i. Periodic review of the definition of the 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);</p>	<p>IISL Board has constituted the Index Policy Committee to formulate policies governing IISL indices. IPC does not participate in the periodic review of indices. In addition to IPC, two committees viz. Index Maintenance Sub-Committee (IMSC) and Debt Index Management Committee (DIMC) have been constituted. The IMSC is responsible for periodic review of IISL indices based on the policies/ guidelines formulated by the IPC. The IMSC meets on a periodic basis to review the composition of IISL indices. DIMC takes decisions on the debt indices at IISL. Each of these committees is represented by the industry experts. None of the member in the above committee except the exchange representative(s) (who co-ordinate between IPC, IMSC and DIMC) represent more than one committee and thereby the independence of each of the committees is maintained. The Committees comprises of representatives from financial market such as asset management company, insurance company, academicians rating agency etc. Terms of references of each</p>	<p>DHS obtained the governance structure to confirm an oversight structure exists for the indices. DHS obtained the meeting minutes of the 1st Board meeting of IISL to evidence the roles and responsibilities of the following committees:</p> <ul style="list-style-type: none"> • Index Policy Committee (‘IPC’) • Index Maintenance Sub Committee (‘IMSC’) <p>DHS obtained the meeting minutes of the 68th Board meeting of IISL to evidence the roles and responsibilities of the following committees:</p> <ul style="list-style-type: none"> • Debt Index Management Committee (‘DIMC’) <p>DHS inspected for evidence that the roles and responsibilities of the aforementioned committees included oversight of indices, index design, and approving changes to Benchmark Methodologies.</p> <p>DHS obtained the approved Delegation of Authority matrix, by the Board to identify approval authorities over the indices.</p> <p>DHS obtained relevant information to identify membership requirements of the IMSC, IPC, DIMC, and identified membership criteria for the members of the IMSC, IPC and DIMC.</p> <p>For a sample of indices, we obtained and evidenced following:</p> <ul style="list-style-type: none"> • Approved methodology was consistently applied to the system. • Index methodology review was performed by the IISL team and the 	<p>No exception noted</p>

<p>iii. Overseeing any changes to the Benchmark Methodology, including assessing whether the Methodology continues to appropriately measure the underlying Interest, reviewing proposed and implemented changes to the Methodology, and authorizing or requesting the Administrator to undertake a consultation with Stakeholders where known or its Subscribers on such changes as per Principle 12; and</p> <p>iv. Reviewing and approving procedures for termination of the Benchmark, including guidelines that set out how the Administrator should consult with Stakeholders about such cessation.</p> <p>b) Oversight of the integrity of Benchmark determination and control framework:</p> <p>i. Overseeing the management and operation of the Benchmark, including activities related to Benchmark determination undertaken by a third party;</p> <p>ii. Considering the results of internal and external audits, and following up on the implementation of remedial actions highlighted in the results of these audits; and</p> <p>iii. Overseeing any exercise of Expert Judgment by the Administrator and ensuring Published Methodologies have been followed.</p> <p>Where conflicts of interests may arise in the Administrator due to its ownership structures or controlling interests, or due to other activities conducted by any entity owning or controlling the Administrator or by the Administrator or any of its affiliates:</p> <p>The Administrator should establish an independent oversight function which includes a balanced representation of a range of Stakeholders where known, Subscribers and Submitters, which is chosen to counterbalance the relevant conflict of interest.</p> <p>Where a Benchmark is based on Submissions: the oversight function should provide suitable oversight and challenge of the Submissions by:</p> <p>a) Overseeing and challenging the scrutiny and monitoring of inputs or Submissions by the</p>	<p>Committee is defined and approved by the Board. In order to maintain transparency, the names of the committee members are publicly displayed on the website.</p>	<p>Index constitution review was performed by IMSC</p> <ul style="list-style-type: none"> • Data inputs were reconciled to the source data. • Re-performance of automated comparison for each day between the real-time and end of day equity indices to evidence differences. • End-of-day index production is triggered and monitored for completion by Operations team in IISL. • End-of-day indices are distributed automatically via secured HTTPS protocol on the website, Secured FTP or email through restricted access levels. <p>We obtained the minutes of meetings of the Index Maintenance Sub Committee to evidence the approvals pertaining to changes in methodology or inclusions/exclusions (if any) of the sample selected indices.</p> <p>Their responsibilities include oversight for index methodologies, design and approving changes to Benchmark Methodologies.</p> <p>IISL does not publish indices based submissions.</p>	
---	---	--	--

<p>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;</p> <p>b) Overseeing the Code of Conduct for Submitters;</p> <p>c) Establishing effective arrangements to address breaches of the Code of Conduct for Submitters; and</p> <p>d) Establishing measures to detect potential anomalous or suspicious Submissions and in case of suspicious activities, to report them, as well as any misconduct by Submitters of which it becomes aware to the relevant Regulatory Authorities, if any.</p>			
---	--	--	--

4.6 Principle 6 – Benchmark Design

S.No.	IOSCO Principle 6	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
6.	<p>Principle 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 nonexclusive 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 Participants (market concentration); e) Market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark).</p>	<p>Index designing at IISL is based on two-fold approach. Firstly, it is a result of internal assessment of potential interest and benefit of the market participants and secondly it is also based upon the market feedback that IISL receives while continuous interaction with the market participants. Benchmarks are designed keeping target theme into consideration and are screened for various parameters such as size, liquidity and underlying universe to suit the theme. Accordingly, the benchmarks at IISL seek to achieve and result in reliable representation of the underlying index theme. The methodology documents for all IISL indices are made available on website i.e. www.niftyindices.com and www.nseindia.com.</p>	<p>We obtained the approval and DOA matrix for approving new benchmarks and making changes to the existing benchmarks and evidenced for approval by required members of the Board of Directors, as per the DOA matrix.</p> <p>For the sample of new and existing indices, we obtained the methodology document, minutes of meeting & approval note and evidenced that:</p> <ul style="list-style-type: none"> • Indices are developed based on the Product Development Process Framework • Methodology was approved by the competent authority in line with the delegation authority matrix of IISL • The benchmark was defined and the document included the following key information <ul style="list-style-type: none"> – Definition of key terms – Computational methodology – Data sources used – Instructions for dissemination – Rebalancing rules and frequency – Procedure for dealing with error reports – Frequency of Internal reviews – Circumstances where administrator will consult with stakeholders – Potential limitations of benchmark 	<p>No exception noted</p>

4.7 Principle 7 – Data Sufficiency

S.No.	IOSCO Principle 7	IISL Response ("Practices and Responses")	DHS Response	Results of Review
7.	<p>Principle 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:</p> <p>a) Be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand in order to provide confidence that the price discovery system is reliable; and b) Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the Interest the Benchmark measures in order for it to function as a credible indicator of prices, rates, indices or values.</p> <p>This Principle requires that a Benchmark be based upon (i.e., anchored in) an active market having observable 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 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</p>	<p>IISL sources data from the National Stock Exchange of India Ltd) which is a liquid and regulated stock exchange in India.</p> <p>In case of fixed income and few strategy indices, IISL sources data published by the credible agencies with written arrangement, and controls in place.</p>	<p>We obtained the methodology document and evidenced that the prices are sourced from third party vendors that are regulated exchanges or other regulated markets.</p> <p>For a sample of indices, we obtained and evidenced the following:</p> <ul style="list-style-type: none"> • Approved methodology was consistently applied to the system. • Index methodology review was performed by the IISL team and the constitution review was performed by IMSC • Data inputs were reconciled to the source data. • Re-performance of automated comparison for each day between the real-time and end of day equity indices to evidence differences. • End-of-day index production is triggered and monitored for completion by Operations team in IISL. • End-of-day indices are distributed automatically via secure HTTPS protocol on the website or email through restricted access levels. 	<p>No exception noted</p>

	<p>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.</p>			
--	--	--	--	--

4.8 Principle 8 – Hierarchy of data inputs

S.No.	IOSCO Principle 8	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
8.	<p>Principle 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:</p> <ul style="list-style-type: none"> 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. <p>Provided that the Data Sufficiency Principle is met (i.e., an active market exists), this Principle is not intended to restrict an Administrator’s flexibility to use inputs consistent with the Administrator’s approach to ensuring the quality, integrity, continuity and reliability of its Benchmark determinations, as set out in the Administrator’s Methodology. The Administrator should retain flexibility to use the inputs it believes are appropriate under its Methodology to ensure the quality and integrity of its Benchmark. For example, certain Administrators may decide to rely upon Expert Judgment in an active albeit low liquidity market, when transactions may not be consistently available each day. IOSCO also recognizes that there might be circumstances (e.g., a low liquidity market) when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances, non-transactional data such as bids and offers and extrapolations from prior transactions might predominate in a given Benchmark determination.</p>	<p>All equity indices are computed by sourcing prices from NSE which is a regulated exchange/ market.</p> <p>For computation of fixed income indices prices are sourced from the credible sources.</p>	<p>No testing performed as the data is sourced from regulated exchange/ markets.</p>	<p>No testing performed</p>

4.9 Principle 9 – Transparency of Benchmark determinations

S.No.	IOSCO Principle 9	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
9.	<p><u>Principle 9 - Transparency of Benchmark determinations</u> The Administrator should describe and publish with each Benchmark determination, to the extent reasonable without delaying an Administrator publication deadline:</p> <p>a) A concise explanation, sufficient to facilitate a Stakeholder’s or Market Authority’s ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a Benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction-based, spread-based or interpolated/extrapolated);</p> <p>b) A concise explanation of the extent to which and the basis upon which Expert Judgment if any, was used in establishing a Benchmark determination.</p>	<p>IISL transparently publishes the benchmark determination process through its methodology documents as publicly made available on its websites. The document also provides the information about the sources of data which is considered for index computation. IISL does not compute indices on submissions.</p>	<p>No testing performed as the data under consideration is transaction based.</p>	<p>No testing performed</p>

4.10 Principle 10 – Periodic Review

S.No.	IOSCO Principle 10	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
10.	<p>Principle 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 non-functioning 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.</p>	<p>The Index Maintenance Sub-Committee reviews the composition of all IISL indices as per the set periodicity applicable for each index which may be monthly, quarterly, semi-annually and annually. Besides this periodic review, additional changes to the index composition are made on a need basis in case of corporate events such as amalgamation, demerger etc.</p> <p>Announcement of changes made to the index composition along with the rationale wherever applicable is made through a press release which is also published on the exchange website i.e., www.niftyindices.com and www.nseindia.com. In case of changes in the index composition, prior announcement is made to the effective date of changes taking place.</p> <p>Similarly, all custom indices at IISL are reviewed as per the pre-defined methodology agreed with clients and the change in the index composition is communicated to respective clients.</p> <p>During the year methodology review of indices was carried out and changes were announced vide press releases on August 22, 2017 through www.niftyindices.com and www.nseindia.com.</p>	<p>For a sample of indices, DHS obtained the following evidence to confirm:</p> <ul style="list-style-type: none"> Rebalancing of the indices is undertaken at the periodicities documented in the monthly index fact-sheets of the indices, as confirmed by the management. The same are available on website i.e., www.niftyindices.com and www.nseindia.com. Annual review of the index methodology is carried out by the IISL product team. <p>For sample of the existing and new indices, we</p> <ul style="list-style-type: none"> Inspected the Press Release dated 22nd August 2017 and confirmed that all changes in the methodology document were documented and were publicly communicated vide press release on www.niftyindices.com and www.nseindia.com. 	<p>No exception noted</p>

4.11 Principle 11 – Content of the Methodology

S.No.	IOSCO Principle 11	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
11.	<p>Principle 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 particular Stakeholders, and its appropriateness as a reference for financial instruments. At a minimum, the Methodology should contain:</p> <ol style="list-style-type: none"> Definitions of key terms; All criteria and procedures used to develop the Benchmark, including input selection, the mix of inputs used to derive the Benchmark, the guidelines that control the exercise of Expert Judgment by the Administrator, priority given to certain data types, minimum data needed to determine a Benchmark, and any models or extrapolation methods; Procedures and practices designed to promote consistency in the exercise of Expert Judgment between Benchmark determinations; 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); The procedures for dealing with error reports, including when a revision of a Benchmark would be applicable; Information regarding the frequency for internal reviews and approvals of the Methodology. Where applicable, the Published Methodologies should also include information regarding the procedures and frequency for external review of the Methodology; The circumstances and procedures under which the Administrator will consult with Stakeholders, as appropriate; and 	<p>IISL publishes on its website ie, www.niftyindices.com and www.nseindia.com a document detailing the methodology for calculation of the indices, stock selection criteria for all its indices, frequency of conducting the periodic reviews and periodic factsheets of all these indices. Further, IISL also computes customized indices based on client’s specific requirements and proprietary methodology.</p> <p>None of the IISL indices are calculated based on any submissions.</p>	<p>We obtained the approval and delegation authority matrix for approving new benchmarks and making changes to the existing benchmarks as evidenced for approval by the Board of Directors.</p> <p>For each of the sample of existing and new indices, we obtained the methodology document, minutes of meeting & approval note, and evidenced that:</p> <ul style="list-style-type: none"> Methodology was approved by the competent authority in line with the delegation of authority matrix of IISL The benchmark was defined and the document included following key information: <ul style="list-style-type: none"> Definition of key terms Computational methodology Data sources used Instructions for dissemination Rebalancing rules and frequency Procedure for dealing with error reports Frequency of Internal reviews Circumstances where administrator will consult with stakeholders Potential limitations of benchmark Methodologies for the sample indices have been published on the website i.e., www.niftyindices.com and www.nseindia.com. <p>For each of the sample of existing and new indices, we obtained the monthly factsheets and evidenced that:</p>	No exception noted

	<p>h) The identification of potential limitations of a Benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs. 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.</p>		<ul style="list-style-type: none"> • They contain index methodology, characteristics, sector representation, statistics, fundamentals; and • Factsheets are updated periodically and are publicly available on website i.e., www.niftyindices.com and www.nseindia.com. <p>IISL does not publish indices based on submissions.</p>	
--	---	--	--	--

4.12 Principle 12 – Changes in Methodology

S.No.	IOSCO Principle 12	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
12.	<p>Principle 12 - Changes in 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 b) Provide for Stakeholders’ summary comments, and the Administrator’s summary response to those comments, to be made accessible to all Stakeholders after any given consultation period, except where the commenter has requested confidentiality.</p>	<p>IISL on an on-going basis reviews the index calculation methodology through internal research, tracking global trends and interaction with the market participants. Any proposed change in the index calculation methodology is deliberated before making a final decision. Any change in the index calculation methodology is communicated to the market participants through a press release which is posted well ahead of the effective date of proposed changes on the exchange website ie, www.niftyindices.com and www.nseindia.com. With the change in the index calculation methodology, the relevant documents detailing index calculation method etc. are simultaneously updated and made available to the market participants through the exchange website ie, www.niftyindices.com and www.nseindia.com. During the year methodology review of indices was carried out and changes were announced vide press releases on August 22, 2017 through www.niftyindices.com and www.nseindia.com.</p>	<p>DHS obtained the approval and delegation authority matrix for approving new benchmarks and making changes to the existing benchmarks and evidenced for approval by the Board of Directors. For each of the sample of existing indices, we obtained the methodology document, minutes of meeting & approval note and evidenced that: <ul style="list-style-type: none"> • Methodology was approved by the competent authority in line with the delegation authority matrix of IISL. • The benchmark was defined and the document included following key information: <ul style="list-style-type: none"> - Definition of key terms - Computational methodology - Data sources used - Instructions for dissemination - Rebalancing rules and frequency - Procedure for dealing with error reports - Frequency of Internal reviews - Circumstances where administrator will consult with stakeholders - Potential limitations of benchmark • Methodologies for the sample indices had been published on the website i.e., www.niftyindices.com and www.nseindia.com. For a sample of recent change related to a public equity index methodology, we obtained documents to evidence that: <ul style="list-style-type: none"> • Announcement of the change in methodology was publicly available on </p>	<p>No exception noted</p>

			<p>the website i.e., www.niftyindices.com and www.nseindia.com vide press release on August 22, 2017.</p> <ul style="list-style-type: none">• Announcement included impact on the index values.	
--	--	--	---	--

4.13 Principle 13 – Transition

S.No.	IOSCO Principle 13	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
13.	<p>Principle 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:</p> <p>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</p> <p>b) Stakeholders are aware of the possibility that various factors, including external factors beyond the control of the Administrator, might necessitate material changes to a Benchmark. Administrators’ written policies and procedures to address the possibility of Benchmark Cessation could include the following factors, if determined to be reasonable and appropriate by the Administrator:</p>	<p>Cessation of indices is rare, therefore in case of cessation of any of IISL indices, IISL would review the implications of its decision regarding discontinuation of the index to its market participants.</p> <p>The Guidelines for Cessation of Indices is in place. Based on these guidelines, the review of index for proposed cessation is initiated.</p> <p>The review may broadly consider involving market consultation, interactions with clients to assess the need for this index with respect to any of the products outstanding linked to index, need for providing alternate index etc.</p> <p>IISL provides reasonable prior communication to the market participants before discontinuation of the index.</p> <p>During the year 2017, none of the indices calculated by IISL were discontinued.</p>	<p>DHS obtained the “<i>Guidelines for Cessation of Indices</i>” and evidenced the following:</p> <ul style="list-style-type: none"> • The guidelines detail the procedure which will be followed by IISL in the event of cessation of a benchmark • Discussions in the form of Voice of Customer (‘VOC’) are undertaken as market feedback • Internal analysis is conducted and market feedback in the form of VOC is undertaken prior to cessation of the benchmark. <p>DHS obtained a mail confirmation from IISL stating that there were no cessations of Indices during the year 2017.</p>	No exception noted

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

4.14 Principle 14 – Submitter Code of Conduct

S.No.	IOSCO Principle 14	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
14.	<p>Principle 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 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 relevant data; and g) The Submitters’ internal systems 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;</p>	<p>IISL transparently publishes the benchmark determination process through its methodology documents as publicly made available on its websites. The document also provides the information about the sources of data which is considered for index computation. IISL does not compute indices on submissions.</p>	<p>No testing performed as benchmarks are not based on submitted data</p>	<p>No testing performed</p>

<p>ii. Procedures to detect and evaluate suspicious inputs or transactions, including intergroup transactions, and to ensure the Bona Fide nature of such inputs, where appropriate;</p> <p>iii. Policies guiding and detailing the use of Expert Judgment, including documentation requirements;</p> <p>iv. Record keeping policies;</p> <p>v. Pre-Submission validation of inputs, and procedures for multiple reviews by senior staff to check inputs;</p> <p>vi. Training, including training with respect to any relevant regulation (covering Benchmark regulation or any market abuse regime);</p> <p>vii. Suspicious Submission reporting;</p> <p>viii. Roles and responsibilities of key personnel and accountability lines;</p> <p>ix. Internal sign off procedures by management for submitting inputs;</p> <p>x. Whistle blowing policies (in line with Principle 4); and</p> <p>xi. Conflicts of interest procedures and policies, including prohibitions on the Submission of data from Front Office Functions unless the Administrator is satisfied that there are adequate internal oversight and verification procedures for Front Office Function Submissions of data to an Administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above), the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the Benchmark levels), including, without 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.</p>			
--	--	--	--

4.15 Principle 15 – Internal Controls over Data Collection

S.No.	IOSCO Principle 15	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
15.	<p><u>Principle 15 - Internal Controls over Data Collection</u> 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.</p>	<p>IISL sources data on prices, corporate actions, shareholding pattern etc. from the National stock Exchange of India Ltd. Further, data on company fundamental, MIBOR rate, bond prices, Shariah compliant stocks etc. is sourced through third party data aggregators who do not participate in the index computation/ maintenance. IISL has controls in place to cross-validate the data sourced from third party data aggregators. IISL sources most of the data directly from the regulated stock exchange (NSE). Additionally, IISL uses credible entities for data sourcing such as 1. Mibor, CBLO rate 2. Foreign exchange rate 3. Prices of fixed income securities 4. List of Shariah compliant stocks</p>	<p>For a sample of indices, we obtained and evidenced the following:</p> <ul style="list-style-type: none"> • Approved methodology was consistently applied to the system. • Index methodology review was performed by the IISL team and index constitution review was performed by the IMSC. • Data inputs were reconciled to the source data. • Re-performance of automated comparison for each day between the real-time and end of day equity indices to evidence differences. • End-of-day index production is triggered and monitored for completion by Operations team in IISL. • End-of-day indices are distributed automatically via secure HTTPS protocol on the website or email through restricted access levels. 	<p>No exception noted</p>

4.16 Principle 16 – Complaints Procedures

S.No.	IOSCO Principle 16	IISL Response ("Practices and Responses")	DHS Response	Results of Review
16.	<p>Principle 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:</p> <p>a) Permit complaints to be submitted through a user-friendly complaints process such as an electronic Submission process;</p> <p>b) Contain procedures for receiving and investigating a complaint made about the Administrator's Benchmark determination process on a timely and fair basis by personnel who are independent of any personnel who may be or may have been involved in the subject of the complaint, advising the complainant and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints;</p> <p>c) Contain a process for escalating complaints, as appropriate, to the Administrator's governance body; and</p> <p>d) Require all documents relating to a complaint, including those submitted by the complainant as well as the Administrator's own record, to be retained for a minimum of five years, subject to applicable national legal or regulatory requirements. Disputes about a Benchmarking determination, which are not formal complaints, should be resolved by the Administrator by reference to its standard appropriate procedures. If a complaint results in a change in a Benchmark determination, that should be Published or Made Available to Subscribers and Published or Made Available to Stakeholders as soon as possible as set out in the Methodology.</p>	<p>IISL has prescribed detailed guidelines for redressal of grievances. As per the guideline, IISL invites complaints, queries, feedback through a designated email id published on the website ie, www.niftyindices.com and www.nseindia.com. Additionally, on the website ie, www.niftyindices.com and www.nseindia.com, a mechanism has also been provided for anonymous tip-off where identity of a person submitting a complaint/ feedback is not revealed. Queries and feedback are noted and responded by the concerned team members whereas complaints are directed to the senior officials of IISL for redressal complaints involving incorrect calculations, data usage, bribery, unethical practice of the employees, insider trading etc. are escalated to the CEO.</p>	<p>DHS obtained the <i>Guidelines on Grievance Redressal</i> and evidenced the following:</p> <p>For item (a), complaints can be submitted at iisl@nse.co.in through e-mail as well as through anonymous tip-off on the website.</p> <p>For item (b), the guidelines detail procedures resolution of the complaints received.</p> <p>For item (c), the guidelines include categories of complaints which will be escalated to the CEO and evidence the grievance redressal process.</p>	No exception noted

S.No.	IOSCO Principle 17	IISL Response ("Practices and Responses")	DHS Response	Results of Review
17.	<p>Principle 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.</p>	<p>IISL engaged DHS to carry out a review of its adherence to IOSCO prescribed principles.</p> <p>Additionally, IISL has voluntarily engaged service of conducting the periodic independent internal audit to evaluate adherence to its stated business functions, criteria and principles. The audit report is presented to the Board.</p>	<p>DHS, an independent assurance provider, was engaged by IISL to carry out a review of IISL’s activities with regards to governance, quality of benchmarks, quality of methodology & accountability, as per the IOSCO guidelines</p>	<p>No exception noted</p>

S.No.	IOSCO Principle 18	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
18.	<p>Principle 18 - Audit Trail Written records should be retained by the Administrator for five years, subject to applicable national legal or regulatory requirements on:</p> <p>a) All market data, Submissions and any other data and information sources relied upon for Benchmark determination; 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.</p> <p>If these records are held by a Regulated Market or Exchange the Administrator may rely on these records for compliance with this Principle, subject to appropriate written record sharing agreements.</p> <p>When a Benchmark is based on Submissions, the following additional Principle also applies: Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:</p> <p>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;</p>	<p>IISL maintains written records of approval notes, Committee minutes for review of indices for the period of at least 5 years.</p>	<p>DHS inspected the final data on sample basis for index calculation on particular dates to confirm it had been retained and are same as communicated externally.</p> <p>For a sample of indices, we obtained the historical 5 year data including data sourced from third party data providers for index calculations and evidenced to confirm they have been retained.</p> <p>DHS obtained and inspected the following:</p> <ul style="list-style-type: none"> • Minutes of Meetings of the IPC, IMSC, DIMC • Roles and responsibilities, and evidenced that identity of persons involved in the benchmark computation is retained. • Public announcements mentioning the changes in index methodologies. <p>IISL does not publish indices based on submissions.</p>	<p>No exception noted</p>

<p>d) Relevant communications between submitting parties;</p> <p>e) Any interaction with the Administrator;</p> <p>f) Any queries received regarding data or information provided to the Administrator;</p> <p>g) Declaration of any conflicts of interests and aggregate exposures to Benchmark related instruments;</p> <p>h) Exposures of individual traders/desks to Benchmark related instruments in order to facilitate audits and investigations; and</p> <p>i) Findings of external/internal audits, when available, related to Benchmark Submission remedial actions and progress in implementing them.</p>			
--	--	--	--

4.19 Principle 19 – Co-operation with Regulatory Authorities

S.No.	IOSCO Principle 19	IISL Response (“Practices and Responses”)	DHS Response	Results of Review
19.	<p><u>Principle 19 - Co-operation with Regulatory Authorities</u> 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.</p>	<p>IISL co-operates with the Regulatory Authorities upon request and provides relevant information that may be available with IISL in order to carry out the regulatory and/or supervisory duties within the legal framework as may be applicable.</p>	<p>IISL confirmed that IISL co-operates with regulatory authorities by providing relevant information/ data whenever sought and there were no requests received from regulators.</p>	<p>No testing performed</p>

5. Definition of Significant Terms

S.No.	Term	Definition
1	IISL	'India Index Services and Products Limited', a wholly owned subsidiary of NSE India Limited, responsible for development and maintenance of benchmark indices
2	IPC	'Index Policy Committee', constituted by the board of IISL to formulate overarching policies and guidelines for the Indices
3	IMSC	'Index Maintenance Sub Committee', constituted by the board of IISL for the maintenance and review of the indices
4	NSEIL	'National Stock Exchange of India Limited', the parent company of IISL
5	DIMC	'Debt Index Management Committee', constituted by the Board of IISL for development and maintenance of fixed income indices.

6. Disclaimer

This entire report including each of its sections (collectively, the "Report") has been prepared to reflect how IISL has applied the IOSCO Principles for Financial Benchmarks across its relevant equity indices. DHS has been selected as independent assurance provider to fulfill the requirements of Principle 17 which requires an audit 'to periodically review and report on the Administrator's adherence to its stated criteria and with the principles'.

IISL provides this Report voluntarily to demonstrate its commitment to best practices in index design, maintenance and calculation.

This Report is only intended to be available to IOSCO and those parties that have agreed to the on-line terms and conditions available at <http://www.niftyindices.com/resources/iosco-compliance> and http://www.nseindia.com/supra_global/content/iisl/iisl_download.htm. This Report is provided for your internal, non-commercial, reference only. It may not be used or referred to in any manner without the consent of IISL and it may not be used to misrepresent IISL or IISL indices. If you are in possession of this Report and have not agreed to the on-line terms and conditions you should destroy the Report.

By providing this Report and making it available to the public, none of IISL, or DHS, or their respective affiliates, assume any obligation, duty, or liability to any third party. This Report shall not create any contract with any third party or create third-party rights to enforce any provision of this Report (directly or indirectly, contractual or otherwise) against IISL, or DHS, or their respective affiliates. Nothing in this Report shall constitute a representation for legal purposes.

For the avoidance of doubt, none of IISL, or DHS, or their respective affiliates, accept any duty of care or responsibility to the recipient or any other party into whose hands this Report may come and you are not permitted to copy or forward the Report, or any portions thereof, to any third parties without the express written consent of IISL or DHS.