

## Compliance with IOSCO Principles for Financial Benchmarks – Oslo Børs OBX Index (OBX) and Oslo Børs Benchmark Index (OSEBX)

Published October 2015

The Board of the International Organization of Securities Commissions (IOSCO) published the «Principles for Financial Benchmarks – Final Report» in July 2013<sup>1</sup>. The objective was to create an overarching framework of Principles for Benchmarks used in financial markets. Specifically, the IOSCO Board seeks to articulate policy guidance and principles for Benchmark-related activities that will address conflicts of interest in the Benchmark-setting process, as well as transparency and openness when considering issues related to transition.

The table below sets out the extent of Oslo Børs' compliance with the IOSCO principles. This document should be read in conjunction with the following:

- Oslo Børs Index Methodology – Equities
- Oslo Børs Index Queries and Complaints Policy

IOSCO principles (summary)	Oslo Børs comment
<b>GOVERNANCE</b>	
<p><b>1. Overall Responsibility of the Administrator</b></p> <p>The retention by the Administrator of primary responsibility for all aspects of the Benchmark determination process, such as the development and determination of a Benchmark and establishing credible and transparent governance, oversight and accountability procedures. This Principle makes clear that, regardless of the particular structure for Benchmark determination and administration, there should be an overall entity which is responsible for the integrity of the Benchmark.</p>	<p>The OBX Index is a tradable index with exchange traded futures and options available. The Oslo Børs Benchmark Index (OSEBX) has been designed as a benchmark for the Norwegian capital market. The calculation and composition of the indices are described in detail in the “Oslo Børs Index Methodology – Equities” (the Methodology) document available on the Oslo Børs web site. The name “OBX” is protected by copyright law.</p> <ul style="list-style-type: none"> <li>a) Development: The definitions of the OBX and OSEBX indices are set out in the Methodology together with the rules for the composition and calculation for the indices</li> <li>b) Determination and Dissemination: The indices are calculated on the basis of Oslo Børs real time prices, and disseminated via a real time feed to information vendors and trading members. Additionally the indices are displayed with a 15 minute delay on the Oslo Børs website</li> <li>c) Operation: The day to day operation of the indices is carried out by the Products Team of the Information Services department of Oslo Børs. Oslo Børs notifies index subscribers of any corporate actions and how the index will be affected. If, for some reason, the index is not disseminated as usual, or if the value is erroneous, Oslo Børs will keep the market informed of the development.</li> <li>d) Governance: The indices are governed by the Index Management Committee which is an internal committee consisting of Oslo Børs senior management. For further details, see the response to Principle 5.</li> </ul>
<p><b>2. Oversight of Third Parties</b></p> <p>The adoption by the Administrator (and its oversight function) of clearly defined written arrangements setting out the roles and obligations of the parties involved in the</p>	<p>None of the activities relating to the index determination process is undertaken by third parties.</p> <p>However, the following third party data is used by Oslo Børs and affects the index composition</p>

<sup>1</sup> <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

IOSCO principles (summary)	Oslo Børs comment
<p>Benchmark determination and the monitoring of any third party’s compliance with those arrangements. This Principle reflects the concern that any outsourcing of functions should be subject to oversight by the Administrator. This Principle applies only where activities relating to the Benchmark determination process are undertaken by third parties, for example with respect to collection of inputs, or where a third party acts as the Calculation Agent or Publisher of the Benchmark.</p>	<p>and constituent weightings:</p> <ul style="list-style-type: none"> <li>• When conducting the index rebalancing, ownership data provided by Verdipapirsentralen ASA (VPS), the Norwegian central securities depository, are used in the calculation of free float figures. VPS is a part of Oslo Børs VPS ASA group.</li> <li>• Oslo Børs listed companies are classified using MSCI and S&amp;P’s Global Industry Classification Standard (GICS). The classification of a company may affect its membership of the OSEBX index and other indices where the GICS classification is used as a criterion in the selection process. MSCI and S&amp;P are the sole owners of GICS, and have the decision-making responsibility with respect to all classifications under the GICS standard.</li> </ul>
<p><b>3. Conflicts of Interest for Administrators</b>                      The documentation, implementation and enforcement of policies and procedures for the identification, disclosure, management and avoidance of conflicts of interest, including the disclosure of any material conflicts of interest to Stakeholders and any relevant Regulatory Authority. This framework should be appropriately tailored to the level of existing or potential conflicts of interest identified by the Administrator and should seek to mitigate existing or potential conflicts of interest created by the ownership or control structure or due to other interests arising from the Administrators’ staff or wider group in relation to Benchmark determinations. This Principle is intended to address the vulnerabilities that create incentives for Benchmark manipulation.</p>	<p>Oslo Børs has established a framework for managing conflicts of interest, which identifies and discloses potential conflicts of interest and describes measures to mitigate and avoid potential and actual conflicts of interest in general. The framework is reviewed and approved annually by the Oslo Børs Executive Board.</p> <p>Members of the Index Management Committee are obliged to disclose any actual or potential conflicts of interest before meetings in the committee. If any potential or actual conflict of interest is disclosed, the committee decides the appropriate measures to be taken in order to avoid or mitigate the disclosed conflict of interest.</p> <p>Oslo Børs staff involved in any stage of the index determination are not directly or indirectly rewarded or compensated based on the levels of any Oslo Børs index.</p> <p>Oslo Børs does not trade or hold positions in any securities or financial products linked to its indices.</p>
<p><b>4. Control Framework for Administrators</b>                      An appropriate control framework at the Administrator for the process of determining and distributing the Benchmark, which should be appropriately tailored to the materiality of the potential or existing conflicts of interest identified, and to the nature of Benchmark inputs and outputs. The control framework should be documented, available to any relevant Regulatory Authority and Published or Made Available to Stakeholders. Among other things, a control framework should include an effective whistleblowing mechanism in order to facilitate early awareness of potential misconduct.</p>	<p>Oslo Børs has implemented a control framework for the benchmark administration process, encompassing documented procedures for the index determination process, a governance structure, periodical risk assessments, index design and methodology and monitoring of IT systems and infrastructure.</p> <p>The OBX and OSEBX indices are calculated on the basis of the prices generated in the Oslo Børs trading system. The trading on Oslo Børs is subject to a number of defined market surveillance processes, for which a summary is available on the Oslo Børs website:  <a href="http://www.oslobors.no/ob_eng/Oslo-Boers/Trading/Market-surveillance">http://www.oslobors.no/ob_eng/Oslo-Boers/Trading/Market-surveillance</a></p> <p>Enquiries and complaints are processed in accordance with defined procedures found in the “Oslo Børs Index Queries and Complaints Policy” document.</p>
<p><b>5. Internal Oversight</b></p>	<p>The internal oversight function is carried out by the Index Management Committee (IMC). IMC oversees all areas of the benchmark determination process and take decisions in all substantial</p>

IOSCO principles (summary)	Oslo Børs comment
<p>An oversight function to review and provide challenge on all aspects of the Benchmark determination process, which should be appropriate to the Benchmark in question (i.e., including its size, scale and complexity) and provide effective oversight of the Administrator. The oversight function and its composition 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. A separate committee or other appropriate governance arrangements should carry out the oversight function.</p>	<p>matters, including but not limited to methodology changes, index rebalancing, and material changes to procedures and organisation. IMC is also the escalation point from the Products Team, and make decisions in matters that represent a risk for substantial financial and/or reputational impact.</p> <p>IMC is made up of senior staff from the Information Services department, the Market Surveillance department and the Secondary Market department at Oslo Børs, as further described in the Methodology. The composition of IMC ensures the integrity and competence of the IMC.</p> <p>Oslo Børs may consult the Index Advisory Group in matters regarding the index administration, e.g. in connection with methodology changes, complex corporate actions and index rebalancing. The IMC decides when and to which extent the Advisory Group should be consulted. The Index Advisory Group comprises experienced practitioners representing key index Stakeholders, such as fund managers and market makers in relevant financial products.</p>
<p><b>QUALITY OF THE BENCHMARK</b></p>	
<p><b>6. Benchmark Design</b></p> <p>The design of a Benchmark should take into account generic design factors that are intended to result in a reliable representation of the economic realities of the Interest that the Benchmark seeks to measure and to eliminate factors that might result in a distortion of the price, rate, index or value of that Benchmark. The factors presented are generic and non-exclusive illustrations.</p>	<p>Detailed provisions on the purpose and the composition of the indices are described in detail in section 2.3 (OSEBX) and 2.4 (OBX) of the Methodology</p>
<p><b>7. Data Sufficiency</b></p> <ul style="list-style-type: none"> <li>• The data used to construct a Benchmark should be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand (i.e., in an active market) and be anchored by observable transactions entered into at arm’s length between buyers and sellers in the market for the Interest the Benchmark measures. This Principle recognizes that <i>Bona Fide</i> observable transactions in active markets provide a level of confidence that the prices or values used as the basis of the Benchmark are credible. Principle 7 does not mean that every individual Benchmark determination must be constructed solely from 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 based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions.</li> <li>• Provided that an active market exists, Principle 7 does not preclude Benchmark Administrators from using executable bids or offers as a means to construct Benchmarks</li> </ul>	<p>The real time index calculation is based solely on automatic trades in the Oslo Børs trading system.</p> <p>When determining the closing price for an index the last paid price for each constituent shall apply, however with the following exception:</p> <ol style="list-style-type: none"> <li>If the best bid is higher than the last paid price, the bid shall apply, or;</li> <li>If the best ask is lower than the last paid price, the ask shall apply</li> </ol> <p>Please refer to section 3 of the Methodology.</p>

IOSCO principles (summary)	Oslo Børs comment
<p>where anchored in an observable market consisting of <i>Bona Fide</i>, Arms-length transactions. For example, this approach might be appropriate in a market where overall transaction volume is high over sustained periods, though on any given day there might be more firm bids and offers than posted transactions taking place.</p> <ul style="list-style-type: none"> <li>• The 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. The Principle also does not preclude the use of non-transactional data for 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 <i>anchored</i> in an actual functioning securities or options market.</li> </ul>	
<p><b>8. Hierarchy of Data Inputs</b> The establishment of clear guidelines regarding the hierarchy of data inputs and the exercise of Expert Judgment used for the determination of Benchmarks. This Principle is intended to make transparent to users the manner in which data and Expert Judgment may be used for the construction of a Benchmark. This Principle is not intended to create a rigid checklist or otherwise 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, set out in the Benchmark Methodology, provided that the Data Sufficiency Principle is met.</p>	<p>The index calculation is performed on the basis of prices generated in the Oslo Børs trading system. There is no hierarchy with regards to the data inputs nor is the calculation based on Expert Judgments.</p>
<p><b>9. Transparency of Benchmark Determinations</b> The publication with each Benchmark determination, to the extent reasonable without delaying the Administrator’s publication deadline, of a concise explanation sufficient to facilitate a Subscriber’s or Market Authority’s ability to understand how the Benchmark determination was developed, as well as a concise explanation of the extent to which and the basis upon which judgment, if any, was used by the Administrator in establishing a benchmark determination. Benchmarks that regularly publish their Methodologies would satisfy principle 9 when derived from data sourced from Regulated Markets or Exchanges with mandatory post-trade transparency requirements. In addition, a Benchmark that is based exclusively on executable quotes as contemplated by Principle 7 would not need to explain in each determination why it has been constructed with executable bids or offers, provided there is disclosure in the Methodology.</p>	<p>The index calculation is performed on the basis of prices generated in the Oslo Børs trading system. The latest version of the Methodology is always available from the Oslo Børs website.</p> <p>Subscribing clients are provided with data files containing the constituent weights and prices, as well as other information allowing them to validate how the indices are determined.</p> <p>For the OBX index, the constituents and their weights are published each morning in the Oslo Børs news distribution portal (<a href="http://www.newsweb.no">www.newsweb.no</a>), which is open to the public.</p>
<p><b>10. Periodic Review</b> The periodic review by the Administrator of 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 (e.g., the Interest has diminished to the extent that it can no longer function as the basis for a credible</p>	<p>Oslo Børs constantly monitors the execution of the index calculation methodology to ensure that it continues to appropriately measure the underlying Interest. Whenever Oslo Børs detects any circumstances that may require changes to the Methodology, Stakeholders will be consulted in accordance with the policy for methodology changes, as described in the response to Principle 12.</p>

IOSCO principles (summary)	Oslo Børs comment
Benchmark). In order to facilitate Stakeholders' understanding of the viability of a Benchmark, a summary of such reviews should be Published or Made Available when material revisions have been made to a Benchmark, including the rationale for the revisions.	When revisions to the Methodology have been made they are announced in accordance with the information policy set out in section 1.3 of the Methodology.
<b>QUALITY OF THE METHODOLOGY</b>	
<p><b>11. Content of the Methodology</b></p> <p>The documentation and publication of the Methodology used to make Benchmark determinations, with sufficient detail to allow Stakeholders to understand how the Benchmark is derived and to assess its representativeness, its relevance to particular Stakeholders, and its appropriateness as a reference for financial instruments.</p>	The procedure used for the index rebalancing of the indices are described in section 2.3 (OSEBX) and 2.4 (OBX) of the Methodology.
<p><b>12. Changes to the Methodology</b></p> <p>The publication of 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 Benchmark use) of changes.</p>	<p>Any material changes to the Methodology, such as changes in the index rebalancing criteria or handling of corporate actions, are subject to consultations with Stakeholders. The Index Management Committee decides whether the Index Advisory Group should be consulted, or whether there is need for a wider consultation of Stakeholders and other relevant market participants.</p> <p>When revisions to the Methodology have been made they are announced in accordance with the information policy set out in section 1.3 of the Methodology.</p>
<p><b>13. Transition</b></p> <p>Clearly written policies and procedures that address the need for possible cessation of a Benchmark, due to market structure change, product definition changes, or any other condition, which makes the Benchmark no longer representative of its intended function. 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. Administrators should encourage Subscribers and Stakeholders to have robust fall-back provisions in contracts or financial instruments that reference a Benchmark.</p>	Oslo Børs has an index discontinuation policy, as described in section 1.2 of the Methodology.
<p><b>14. Submitter Code of Conduct</b></p> <p>The development of guidelines for Submitters ("Submitter Code of Conduct, which should be available to any relevant Regulatory Authorities and Published or Made Available to Stakeholders. Note: This Principle is only applicable to a Benchmark based on Submissions.</p>	Not applicable as the indices are not based on submissions.
<p><b>15. Internal Controls over Data Collection</b></p> <p>When an Administrator collects data from any external source the Administrator should ensure that there are appropriate internal controls over its data collection and transmission processes. These controls should address the process for selecting the source,</p>	<p>The daily index calculation is performed on the basis of prices generated in the Oslo Børs trading system, and is not dependent on any data from external sources.</p> <p>However, when performing index rebalancing Oslo Børs uses third party data that affects the</p>

IOSCO principles (summary)	Oslo Børs comment
<p>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>index composition and constituent weightings, as described further in the response to Principle 3.</p>
<b>ACCOUNTABILITY</b>	
<p><b>16. Complaints procedures</b> The establishment and publication of a written complaints policy by which Stakeholders may submit complaints concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, application of the Methodology to a specific Benchmark determination and other Administrator decisions in relation to a Benchmark determination. This Principle is intended to promote the reliability of Benchmark determinations through Stakeholder input and alert Market Authorities to possible factors that might affect the reliability of determinations.</p>	<p>Oslo Børs has established complaints procedures as described in the “Oslo Børs Index Queries and Complaints Policy”, which is available on Oslo Børs' web site.</p>
<p><b>17. Audits</b> The appointment of 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 the requirements of the Principles. The frequency of audits should be proportionate to the size and complexity of the Administrator’s operations. Under certain circumstances (i.e., appropriate to the level of existing or potential conflicts of interest identified by the Administrator) an Administrator should appoint an independent external auditor to periodically review and report on the Administrator’s adherence to its stated Methodology criteria. These provisions are intended to promote compliance with the Principles and provide confirmation to relevant Market Authorities and Stakeholders of such compliance.</p>	<p>Oslo Børs has not assigned a mandate to an internal or external auditor for reviewing compliance with IOSCO Guidelines for the following reasons:</p> <ul style="list-style-type: none"> <li>a) As benchmarks for the Norwegian capital market the OBX and OSEBX indices are subject to constant monitoring by market participants</li> <li>b) The index determination process is to a large extent rule based, and the rules are thoroughly described in publicly available methodology documentation.</li> <li>c) There are a number of defined internal procedures for the index determination process</li> <li>d) Key Stakeholders are represented in the Index Advisory Group, which are consulted in significant matters related to the index determination process, e.g. change of the Methodology.</li> <li>e) The daily index calculation is based on neither Submissions nor third party inputs nor Expert Judgments</li> </ul>
<p><b>18. Audit Trail</b> The retention of written records by the Administrator for five years, subject to applicable national legal or regulatory requirements. This Principle is intended to safeguard necessary documents for Audits. Additional requirements apply for Benchmarks based on Submissions.</p>	<p>Written records of Index Management Committee meeting minutes, Index Advisory Group correspondence, market data used in the index determination process and supporting documents are retained for at least five years.</p>
<p><b>19. Cooperation with Regulatory Authorities</b> Relevant documents, Audit Trails and other documents addressed by 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. This is intended to facilitate a Regulatory Authority’s ability to access information that might be needed to determine the reliability of a given Benchmark determination or to access information that might be needed to investigate misconduct.</p>	<p>As an operator of a regulated market, Oslo Børs is under the supervision of the financial supervisory authority of Norway (Finanstilsynet). Although Oslo Børs' role as index administrator is not formally part of its regulated activity, Oslo Børs confirms that all relevant documents and audit trails will be handed over promptly upon request by Finanstilsynet.</p>