

SMM Benchmark Administration Control Framework

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1. Summary

Shanghai Metals Market (“SMM”, or “the Administrator”) is a leading independent information and data service provider covering the commodity market in China. It provides information on markets, prices, analysis, commentary, consultancy services and benchmarks. These benchmarks cover various categories, principally ferrous, non-ferrous, precious and minor metals of various grades and specifications (the “Benchmarks”).

SMM is solely responsible for all aspects of the collection of the inputs to these benchmarks, the definition and methodology of each benchmark and the oversight and governance of all aspects of the submission, validation, calculation and distribution of the Benchmarks.

In 2013 the International Organisation of Securities Commissioners (“IOSCO”) released the “IOSCO Principles for Financial Benchmarks” (the “Principles”). These are a non-binding set of principles that set out global best practice for the design, calculation and management of benchmarks. SMM produces its benchmarks in compliance with the IOSCO principles. SMMs compliance with the Principles has been reviewed and certified by an independent consultancy. This certification is publicly available at <https://www.smm.cn/comp/en> & <https://www.metal.com/comp> .

In order to ensure the Principles are met in full, SMM has developed a suite of policies and procedures, applied to its Benchmarks, to ensure compliance with the Principles. Among these is this Benchmark Administration Control and Oversight Framework (the “Framework”) designed to promote the quality and integrity of the determination process for the Benchmarks.

The standards that have been set by SMM are designed to ensure that:

- each Benchmark accurately reflects the underlying interest for which it has been established to measure.
- there are procedures designed to mitigate the market impact of methodology changes or cessations of any of the Benchmarks, including procedures for market consultation and feedback should changes to the methodologies be proposed.
- employees have the required skills, knowledge and experience necessary to perform their specific responsibilities and receive regular training on SMM Benchmark policies
- the transaction, bid and offer prices submitted to SMM by miners, domestic Chinese and overseas trading companies and steel mills are reliable. A robust series of checks ensures new and existing submitters meet required standards as laid out in the Submitter Code of Conduct, and allows for the removal of submitters that do not.
- conflicts of interest are identified and managed or mitigated. As part of this SMM strictly prohibits employees from participating in transactions, offers, or bids as individuals or on behalf of market participants in the underlying markets for SMM Benchmarks; nor can they provide market participants with free subscriptions or any other benefits in exchange for price or market information. A specific conflict of

interests declaration is required annually by employees and management, declaring that they have not benefited from non-public information, and the Index Management Committee maintains a Conflicts of Interest Register in which the Secretary will record all potential conflicts disclosed and the means by which these are mitigated. Staff receive on-going training on matters relating to Conflicts of Interest.

- potential whistleblowers are confident to raise concerns, initially within SMM, but if required, externally, in line with a formal Whistleblowing policy. Staff receive on-going training on matters relating to Whistleblowing.

There is a formal policy and mechanism for all users, market participants and other stakeholders to offer feedback, and other commentary on all aspects of SMMs Benchmarks. This policy ensures that all such feedback is logged, escalated and addressed appropriately.

2. Benchmark Production

SMM has robust, resilient and transparent processes for the determination of the benchmark, including controls over the data inputs.

The daily production of the Benchmarks involves data validation and plausibility checking of eligible transactions, bids, offers and other inputs in preparation for the calculation and publication of the benchmark. SMM also monitors data quality and performs surveillance of the underlying data for suspected misconduct on an ongoing basis.

Senior Managers in the Benchmarks teams attest annually to SMM's compliance with all relevant Benchmark policies and procedures. These cover the technical requirement of what is to be reported as well as covering wider aspects of the data quality framework, such as requirements for the individuals involved, internal controls and whistleblowing arrangements.

3. Governance

The Board of SMM has constituted an Index Management Committee (the "Committee"). This body is solely responsible for all aspects of the operation and management of the Benchmarks. It will conduct reviews of all submitters at least annually and more frequently as required. The Committee is responsible for scrutiny of all inputs to the Benchmarks and the operation of the Benchmark teams.

SMM has clear organisational and governance structures ensuring transparency over significant decisions and well defined, transparent and consistent roles and responsibilities for all persons involved in the provision of benchmarks. Details of the roles and responsibilities of staff in respect of the preparation and distribution of the benchmarks are contained in the individual member of staff's job descriptions.

The Committee also regularly reviews and approves all policies and procedures regarding the production and management of the Benchmarks, including the Submitter Code of Conduct and its' own Terms of Reference.

The Committee is responsible for periodically commissioning and considering reports from SMM's internal audit function on the performance of the Benchmarks and compliance with all Benchmark policies and procedures and the Principles. If required, the Committee may also

commission an external auditor to report on compliance with SMM Benchmark Policies and procedures and compliance with the Principles.

4. Data Security

The Committee is responsible for the maintenance of Benchmark data security and cybersecurity policies, procedures and standards. These are subject to regular review by the Committee to ensure they remain appropriate and up to date.

5. Management of Operational Risk

To ensure the quality of the inputs, calculation, governance and oversight of SMM Benchmarks, SMM has formed the Index Management Committee. Members have the appropriate authority, experience and expertise to manage all aspects of the Benchmarks. The Committee commissions reports on the quality of Benchmark inputs and calculation and has the authority to scrutinise all aspects of the Benchmark calculation and governance process and enact change as required.

6. Expertise

The Committee is responsible for ensuring that all staff involved in the collection, calculation, governance and publication of Benchmark data are appropriately trained on all SMM Benchmark policies and have suitable expertise in the markets the Benchmarks seek to measure. Training on all SMM Benchmarks is an ongoing process for all Benchmark staff and their competence is assessed and reviewed by the Committee.

In particular, where individual staff are approved to exercise expert judgement with regard to any aspect of the Benchmark, these staff and their line management responsible for monitoring exercise of Judgement will receive specific training on the SMM Benchmarks Expert Judgement Policy.

7. Contingency

SMM maintains business continuity and disaster recovery plans. These address potential business disruption that may or may not impact its employees, key service providers, hardware and software. These plans are subject to regular testing by SMMs internal audit function. The plans and reports from internal audit on the testing of these plans are made available to the Committee.

8. Cessation and Transitional Arrangements

Any discontinuance or termination of a Benchmark will be undertaken in an orderly manner, taking into consideration the potential impact to counterparties to, or investors in, financial instruments referencing such Benchmarks and the integrity of the markets. Other than instances of Force Majeure or where there are no outstanding financial instruments linked to a Benchmark, termination of a Benchmark will require escalation, review and approval by the Index Management Committee

9. Transparency

SMM publishes all policies and procedures that govern the calculation and management of its Benchmarks. These are available at <https://www.smm.cn/comp/en/compliance> & <https://www.metal.com/comp/compliance> and from SMM upon request.

10. Approval

This Control Framework has been approved by the SMM Index Management Committee and the SMM Board and is reviewed as required and at least annually by the Committee.

11. Further Information

SMM has set out its compliance with each of the Principles in a specific compliance statement.

SMM maintains clear feedback and Complaints Policies, which allows users and stakeholders to provide their input, for investigations to be undertaken (if required) and to receive a considered response.

Both documents are available on <https://www.smm.cn/comp/en/compliance> & <https://www.metal.com/comp/compliance> and from SMM on request.

SMM is always happy to discuss the SMM Benchmarks with current and potential stakeholders. To do so please contact SMM via Committee@smm.cn.