MOSL Market Audit 2023/24

Market Operator Services Limited
May 2024

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Executive Summary

Executive summary

Background, scope and objectives

Background

As Market Operator, MOSL requires an independent review of the effectiveness of their response to their key compliance obligations as set out in the Market Code documents, which includes the governance and compliance arrangements, risk and impact assessment, process and controls operated by MOSL.

To govern its compliance obligations, MOSL categorises the obligations contained within the Market Code documents into the core processes (or 'services') in which they are managed. These processes are risk scored according to the impact on the market, taking into account the levels of complexity and automation involved. This will allow MOSL to produce a prioritised ranking of processes subject to review.

In line with discussions in recent years, we have continued to evolve our approach to the Market Audit to ensure that it is focussed on areas of risk in the market, whilst also providing an efficient approach that aligns with the activities that MOSL is currently delivering.

As such our audit programme for FY24 focussed on those activities that MOSL operates, and which are within the remit of the MOSL Internal Audit team. We recognise that MOSL is providing the assurance activities over the Market Participants, and hence our scope compliments that work.

Scope and objectives

a) Review of the CMOS change process

During FY23 we performed a review of the CMOS change management process, noting that the CMOS supplier, CGI, held appropriate ISO certification. There was evidence to support the transfer of the latest Settlements Code to CGI and we confirmed the change management process would require MOSL approval should changes to the Settlement Code require implementation. Sample tests of changes to the CMOS system were performed with no exceptions noted.

For FY24. due to the rehosting of CMOS, there remained an increased level of risk associated with this key application. In consideration of this, we performed the following procedures to ensure the CMOS change process remains appropriate:

- We reviewed the documentation relevant to the change process, and considered whether that process remains robust and applicable to the rehosted environment; and
- We reviewed the CMOS system changes made during the year and checked that these have been made in line with the documented change process.

b) Review of Internal Audit work for MPS controls

A significant amount of work has been conducted, by MOSL, in respect of the Market Performance Standards (MPS) controls. Our scope focused on the Internal Audit work performed during FY24, primarily during their review performed in Q4, involving the following:

- We evaluated the audit methodology in respect of the Internal Audit over MPS, the work conducted and the outcomes of that work; and
- We considered the effectiveness and efficiency of the audit process and the follow-up / action tracking undertaken to address findings and mitigate risk identified during the internal audit work.

c) An assessment of the implementation of the Internal Audit methodology

During FY23, we noted that there was limited formality in respect of the methodology being applied, which was not unreasonable for a new Internal Audit function. A new Internal Audit Methodology has been implemented since then, so we followed up our observations from the prior year by performing the following:

- We reviewed the Internal Audit Methodology documentation available to consider the extent to which it incorporates all areas of good practice; and
- We discussed with the Internal Audit team how the methodology has been developed and applied.

d) An Internal Audit 'health check'

Since implementation, that maturity of the MOSL Internal Audit function has continued to develop. To help provide an understanding of the current state of the function and its future direction, we have performed an objective 'health check', involving the following:

- We performed a desktop review exercise of key documents to consider how aligned the Internal Audit function is with the Institute of Internal Auditors standards;
- We reviewed the Internal Audit plan, to consider whether it is risk focused, and addresses the expected key areas;
- We considered a sample of the Internal Audit reviews that you have completed in the year, seeking to determine the effectiveness of the audit process, the appropriateness of the scope, and the appropriateness of the conclusions; and
- We reviewed the governance arrangements around the Internal Audit team, and the reporting of the findings.

Executive summary

Overview of our results

Results from our review of the CMOS change process

The rehosting of CMOS to a Microsoft Azure environment took place during 2022/23. This followed a detailed process considering the risks involved and implementing controls and mitigations to address them.

We noted that the latest documented CMOS change process, the *Change Release Management Plan (Version 4.0.0.6, dated 4 May 2023)* was unchanged as a result of the rehosting and makes no specific reference to the Microsoft Azure environment. MOSL's Head of IT Operations and Cyber confirmed that the existing change process was unaffected by the migration given the key points of review and approval by MOSL would remain. The key impact of rehosting would affect the environment used by CGI who retained responsibility for designing, testing and implementing the changes.

We considered a paper prepared by MOSL's Head of IT Operations and Cyber relating to the *CMOS Rehost* that discussed the phased transition of the CMOS service to the Microsoft Azure environment and noted that no specific risks were identified that directly impacted MOSL's change management process.

Two system change releases were made during the year (14.0 and 14.5) and we performed testing to confirm these had been made in line with the key controls set out in the *Change Release Management Plan (Version 4.0.0.6)*. No exceptions were noted with regards to the MOSL approvals for these releases in line with the CMOS change process.

A minor observation noted was where MOSL had raised the Purchase Order (process MOSL 0.16) before CGI had raised the Statement of Work (process CGI 0.06) which contradicts the workflow order set out in the Change Release Management Plan, but we understand this had no consequence to the releases themselves.

Based on the results of our review, we conclude that the CMOS change process remains robust and applicable and has been followed by MOSL for both the releases implemented during the year.

Results from our review of Internal Audit work for MPS controls

We examined the work performed by Internal Audit in relation to Market Performance Standards (MPS) for FY24, confirming this had been conducted in line with the latest *Internal Audit Methodology document (Version 1, 11 December 2023)*. The outcomes of the work appeared consistent with the scope agreed and the testing performed.

We considered the effectiveness and efficiency of the audit process, and the follow-up of actions arising from previous reviews, and noted no exceptions other than broader recommendations for improvement (e.g. maintaining formal evidence confirming the sharing and approval of deliverables) that are highlighted within the *Internal Audit Health Check* section included in this report.

Results from our assessment of the implementation of the Internal Audit methodology

Our review in FY23 identified that no formal methodology was in place underpinning the Internal Audit work and recommended that one should be implemented relating to all reviews performed. This should include templates to be used when drafting statements of work, and guidelines to be followed for audit testing.

Revisions in audit practice were implemented for reviews a year ago, with the *Internal Audit Methodology document (Version 1, 11 December 2023)* issued later that formally sets out the approach, including setting out the philosophy, objectives and standards of the function, roles and responsibilities, and details for the Internal Audit annual and engagement-specific cycles.

The document includes guidance on audit evidence and sampling, and definitions for *Audit Opinion* ratings and individual *Audit Finding Classifications*.

The Appendices includes a mapping of activity to the International Standards for the Professional Practice of Internal Auditing, and sets out templates for Terms of Reference, Letters of Engagement, and Audit Reporting.

No further exceptions have been noted with regards to the implementation of the Internal Audit methodology, and we recommend that this continues to be applied in practice and kept under formal review.

Executive summary

Overview of our results

Internal Audit 'health check'

The MOSL Internal Audit function is small, consisting of a one-person team, and is still relatively early in its stages of development. To help provide an understanding of the current state of the function and its future direction, we performed an objective 'health check', leveraging a standard framework for best practice to assess the current state and offer suggestions for further improvement as the function continues to evolve.

This was based upon:

- Interviews with the MOSL Risk and Compliance Manager and Head of People, Risk and Compliance;
- A desktop review of key internal audit documentation; and
- Reviews of a sample of internal audits completed in the year considering the end-to-end scoping, fieldwork and reporting.

A summary of observations is included in Section 2 of this report, with more detailed recommendations for improvement set out in Section 3. These are classified as 'Advisory' given they are considerations for improvement as part of a longer-term plan to develop the scope and maturity of the function.

Overall, we would conclude that the MOSL Internal Audit function has operated effectively during the year, given the relative size and maturity of the function. We note there have been a number of improvements implemented over the year, and the function has demonstrated a positive response to previous recommendations (see Appendix 1) aimed at enhancing the internal audit process and establishing a structured and standardised approach to conducting audits and supporting the Compliance Framework within MOSL.

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Internal Audit Health Check

Internal Audit Health Check

We used the model below to identify where the MOSL IA team is performing today based on the best practice attributes for effective internal audit.

IA functions typically have a range of attributes dependent on the maturity of both the function and business and the extent of time, and resources, invested into any given attribute.

There is no right or wrong level of maturity – consideration should be given as to what stakeholders deem to be the most important output from their IA function.

The MOSL Internal Audit function is still relatively new, so recommendations arising from the observations below are considered advisory in nature, to be implemented based on a structured plan as the function continues to develop.

- ✓ A new **Internal Audit Methodology** document has been implemented articulating the objectives of the function
- The formal remit for Internal Audit would benefit from **clearer defining of roles and responsibilities** (e.g. Compliance responsibilities, Market Participants)
- Simple **internal audit metrics** are in place, but additional measures could be considered to monitor progress towards the longer-term mission and vision for IA

- The use of **technology** (e.g. data analytics) for internal audit is limited beyond the simple use of MS Excel.
- **Continuous auditing** techniques are not applied
- Internal Audit processes are **manual** with no automated Internal Audit Management Systems

- ✓ An **annual budget** is in place and approved, with quarterly re-forecasting and monthly progress reviews
- ✓ **Efficiencies achieved** through the implementation of the Internal Audit Methodology and process standardisation
- The detailed **breakdown of costs** or formal systems for **time recording** are not in place

- ✓ Internal Audit work is subject to regular **review and oversight** to ensure quality and accuracy
- ✓ **Continuous improvement** activities included within the internal audit approach
- **Evidence** of review and approval is currently informal (e.g. email exchange)

- ✓ At present there is a **one-person Internal Audit team** but with the ability to draw from **external resource** and expertise where needed
- ✓ **Training and learning resource**s are available to support Internal Audit development (e.g. IIA webinars)
- There is **limited resource flexibility** to support Internal Audit from outside the function (e.g secondments from other departments)

- ✓ The **Annual Internal Audit Plan** is developed with reference to the MOSL risk register
- ✓ Discussions are held with stakeholders when deriving and updating the Annual Internal Audit Plan to reflect **emerging risks**

- ✓ There is evidence of **good engagement** with the management team and senior stakeholders on audits
- ✓ Key stakeholders have been engaged appropriately in developing the **Annual Internal Audit Plan**, including discussion with the MPC and approval by the ARC
- ✓ **Positive feedback** has been received from a recent survey with auditees

- ✓ The scope of internal audit reviews performed aligns with the **Annual Internal Audit Plan** and details of the approach is discussed and agreed with sponsors and local management in advance
- ✓ **Internal Audit reports** issued appear clear and well-structured and agreed actions are recorded with management ownership and due dates

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Summary of observations and recommendations

Summary of observations and recommendations

#	Area	Observation	Priority	Impact	Action/recommendation	Management response
1	Internal Audit Health Check	**Clarifying boundaries and limitations** The *Internal Audit Methodology (Version 1)* provides background information with regards to the Compliance Framework and a summary of objectives for the MOSL Internal Audit function. However, there is no statement or diagram illustrating the role Internal Audit plays within the broader Compliance Framework alongside other functions or entities, nor is there any statement clarifying which aspects are outside the scope of responsibility of MOSL Internal Audit.	Low	There may be ambiguity and confusion regarding the boundaries of MOSL Internal Audit's role within the Compliance Framework which may hinder the understanding of their broader scope and responsibilities.	**Action** The formal remit for Internal Audit would benefit from further clarification regarding the boundaries and limitations of their role - identifying which areas are excluded from scope and/or covered by other functions or entities. This should include, but is not limited to, the following: ● Regulation and compliance; ● Market Participants; and ● Regulator.	Our internal audit methodology will be updated to reflect the observation setting out clearly the roles and responsibilities within the internal audit and market audit teams.
2	Internal Audit Health Check	**Internal Audit metrics** At present, only basic internal audit metrics are in place to provide an update on the progress of internal audit reviews and actions arising. For example, the *Controls and Compliance Update (February 2024)*, contained a section on 'Progress Against Internal Audit Plan' detailing: ● The number of audits carried out against the plan and currently ongoing; and ● The percentage of audit recommendations that have been implemented. As the function develops, additional metrics may be beneficial to provide further insight.	Advisory	Further metrics can provide more meaningful insights for Internal Audit function and the Audit and Risk Committee to effectively monitor and assess the effectiveness and progression of internal audit activities, identify trends or areas for improvement.	**Recommendation** As the function becomes more mature, additional measures could be considered to monitor progress towards the longer-term mission and vision for Internal Audit (e.g. trend analysis, reporting on timeliness, feedback survey results)	Now we have over 18 months of audit data we can develop additional metrics such as trend analysis, as appropriate to improve the function and provide useful information to key stakeholders.

Summary of observations and recommendations (cont'd)

#	Area	Observation	Priority	Impact	Action/recommendation	Management response
3	Internal Audit Health Check	**Breakdowns of internal audit costs** There is no detailed breakdown of Internal Audit costs for the year that provides an analysis of how Internal Audit resource is deployed. There are no formal systems for time recording. Given the current size and maturity of the function, this is reasonable, but would be an area to consider in the future.	Advisory	The limited ability to analyse and understand how internal audit resources are deployed, may hinder the ability to effectively allocate resources as the function develops, identifying areas of inefficiency and assessing the cost-effectiveness of internal audit activities.	**Recommendation** As the function grows and takes on more responsibility, implementing, it should consider implementing means to record and analysis the focus and cost of operating the function in more detail to provide insight into the activities performed.	The internal audit plan mainly outlines the deployment of the function throughout the year, including proposed timeframes for conducting audits and other related tasks. However, we have taken note of your recommendation, particularly as the function continues to evolve and take on additional responsibilities.
4	Review of Internal Audit work for MPS controls Internal Audit Health Check	Evidence of review and approval Following our review of a sample of Internal Audit reviews performed during the year, we noted that the evidence of review and approval by auditees and the Head of People, Risk and Compliance is informal, usually based on an exchange of emails and/or reliant on discussion. Given the size of the function, this is not unreasonable. Although emails were generally retained as evidence of the process followed, there were three instances where the evidence of the sharing of deliverables (Letter of Engagement or Report) with the auditees could not be located. We also note that it is not current practice to require the auditee to provide a written acknowledgement or acceptance of deliverables.	Advisory	As the function develops, relying on informal evidence, such as email exchanges, for review and approval may introduce risks related to insufficient documentation and potential challenges in demonstrating the integrity of the internal audit process and ensuring a clear evidence trail.	**Recommendation** As the function becomes more mature, consider implementing more formal review/approval methods to evidence with Internal Audit workflow. We understand that the Internal Audit team is considering using applications already in place within MOSL (i.e. Monday.com) for this purpose.	We will be utilising our existing workflow management system Monday.com to improve efficiency in this area.

Summary of observations and recommendations (cont'd)

#	Area	Observation	Priority	Impact	Action/recommendation	Management response
5	Internal Audit Health Check	**Resource model** The MOSL Internal Audit function is currently a one-person team with oversight provided by the Head of People, Risk and Compliance. Should additional or specialist resource be required, this can be obtained from external providers. Internal Audit functions can often leverage resources from within their organisation (e.g. secondments from other departments) as a means to supplement their team and allow others to gain broader experience of the organisation. However, we understand that, at present there is limited resource flexibility to support Internal Audit from outside the function.	Advisory	Resource constraints can lead to potential limitations in the scope and depth of internal audit activities which may result in challenges in effectively addressing the full range of audit objectives and adequately covering all areas of risk within the organisation. Leveraging internal resources can offer a broader understanding of the organisation and facilitate knowledge sharing.	**Recommendation** Keep the resource model under review to ensure there is appropriate resilience and capacity to grow to support the future strategy for the function. This may include the ability to utilise MOSL colleagues from other departments on a case-by-case basis to support individual reviews or gaining a 'cycle of experience' through working with internal audit for period of time.	We will keep our resource model under review and in particular look to utilising internal resources as appropriate to build resilience whilst also developing the skills and capability of colleagues.
6	Internal Audit Health Check	**Use of technology and data analytics** The Internal Audit function at MOSL is in the early stages of its journey of utilising data and technology to support its audits, with current usage limited to using MS Excel tools for risk focus and sampling purposes. There is potential to leverage other tools to support spreadsheet analysis (e.g. Arixel) and data analytics and reporting platforms such as Tableau or Power BI. We understand that the impact and use of Artificial Intelligence is being discussed more broadly within MOSL, but it is still in the early stages.	Advisory	The greater use of technology and data analytics can create opportunities for efficiency gains, enhanced risk assessment, and deeper insights.	**Recommendation** Explore and implement data analytics tools beyond basic Excel tools to enhance the effectiveness of internal audit reviews and gain valuable insights from the vast amount of data handled by MOSL.	We see this as an area of future efficiency for the function and will explore, review and implement changes as appropriate to our size and scope.

Summary of observations and recommendations (cont'd)

#	Area	Observation	Priority	Impact	Action/recommendation	Management response
7	Internal Audit Health Check	**Continuous auditing** Continuous auditing is an automated method of performing internal auditing activities on a more frequent basis, providing a timelier response to risks as they arise. At present, continuous auditing techniques are not applied by the MOSL Internal Audit function, but this may be an area to consider as the organisation continues to develop.	Advisory	Adopting continuous auditing techniques can provide more timely identification and response to emerging risks, reducing the potential for significant issues to go undetected. Examples include using data tools to automate ongoing periodic audits - performing risk, control and transaction monitoring, and flagging potential non-compliances to investigate.	**Recommendation** Consider the potential benefits of continuous auditing techniques to improve efficiency, effectiveness, and real-time monitoring of key risks and controls as the internal audit function evolves.	We see this as an area of future efficiency for the function and will explore, review and implement changes as appropriate to our size and scope.
8	Internal Audit Health Check	**Manual processes** At present the Internal Audit processes are largely manual with no automated Internal Audit Management Systems in use to document the work performed, support reporting or tracking the progress of actions arising.	Advisory	Manual processes may result in increased administrative burden, potential errors, and difficulties in maintaining a comprehensive and organised documentation of the work performed.	**Recommendation** Evaluate the need for automated IA management systems in the medium to long term, considering the growth and complexity of the internal audit function, to streamline processes, improve data management, and enhance overall efficiency	A systems approach to audit management is being explored. We will carry out a cost/benefit analysis on any system implementation before progressing with a recommendation to implement.

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Appendices

Appendix 1 - Update on prior year observations

The following summarises the actions and recommendations raised in our prior year report. We note that of the seven observations raised, five have been closed with the remaining two planned to be implemented later in the year.

#	Prior Year Observation	Priority	Action/recommendation	Update
1	No formal methodology is in place underpinning the Internal Audit work.	Medium	Design and implement a methodology to be used across all reviews, including guidelines to be used when drafting statements of work and guidelines to be used during testing, including a sample testing matrix and template for sample testing to be documented. This should all be documented within the working paper so that there is one document that can be referenced back to with all the testing performed.	An *Internal Audit Methodology* document has been implemented that sets out guidelines for conducting Internal Audit work including templates for statements of work, and guidelines to be used during testing. Sample examination of internal audits performed during the year confirms that the procedures and templates set out in this methodology have been followed, and working papers documented were based on the testing matrix and template provided. We therefore regard this finding as closed.
2	The basis for the audit opinion and individual ratings is not clearly articulated in the report	Medium	Include the basis for risk ratings for individual findings and the audit opinion as an appendix to the report template. Review the report template to bring out more clearly the audit opinion and the impact on the Code compliance, with a consideration given on future annual audit opinion to be implemented.	The basis for risk ratings for individual findings and the audit opinion has been set out within the *Internal Audit Methodology* document and individual internal audit reports. The impact of Market Code compliance is directly referenced within the audit findings classification. We therefore regard this finding as closed.
3	Documentation of Walkthroughs	Low	Consider incorporation of the Risk and Control Matrix (RCM) as the key testing document as part of the methodology review. Ensure walkthroughs are performed and documented within an RCM in excel, which includes columns for the process, process owner, controls, etc.	Sample examination of internal audits performed during the year confirmed the incorporation of the RCM as the key testing document as part of the methodology review. The template applied includes columns for process and controls as required, with the department/owner referenced within the description. We therefore regard this finding as closed.

Appendix 1 - Update on prior year observations (cont'd)

#	Prior Year Observation	Priority	Action/recommendation	Update
4	Responsible persons and due date	Low	Include within the report a section for responsible persons and due date for remediation of all findings noted.	We noted that the responsible persons and due date for remediation of all findings is included in most instances within the Audit Action Log but was not a within the internal audit reports. It is best practice to include this information within reporting, but maintaining this information within the Audit Action Log should ensure responsibility and progress can still be monitored. We note that the MOSL are content with this approach. An enhancement to internal audit methodology, would be establish formal principles should changes be requested to change ownership or due dates, to maintain the integrity of the action-tracking process.
5	Inconsistencies between review documents	Advisory	Ensure the audit scope and audit period is consistent across all review documents (i.e. Letter of Engagement, Working Paper, Final Report) and if there is a change in scope or audit period this is noted in the relevant documents.	Sample examination of internal audits performed during the year did not identify any significant inconsistencies between the scope agreed and the work performed. A number of reviews had been rescheduled during the year, but we noted that these had been identified and explained in the *Controls and Compliance Update* report to ARC. We therefore regard this finding as closed.
6	Unique actions references	Advisory	Ensure all actions have unique reference numbers and are detailed within all reports, with their status noted next to them.	At present there is no unique reference numbers allocated to each action arising from internal audit work performed (i.e. all reports continue to use a generic 1,2,3…) and this is not referenced in the Audit Action Log. As such, this advisory observation remains.
7	Milestone reporting	Advisory	During the scoping for future projects, it should be suggested that reporting should be performed after defined milestones during the project.	Only one project assurance review was conducted during the year (Strategic Metering Review Improvement Programme). From enquiry, it was confirmed that the scoping for projects has considered the relevant milestones in place, with no timing concerns raised by stakeholders. More generally, we also noted that the *Controls and Compliance Update* to ARC identified where there had been the rescheduling of reviews in agreement with the Senior Leadership Team (SLT) to allow for better timing of reviews. We therefore regard this finding as closed.

Appendix 2 – Definition of priority ratings

Definition of priority ratings

Our findings are categorised by the following priority ratings:

- **High** – An action relating to a significant issue identified that is resulting in (or could result in) non-compliance with the Wholesale Retail Code (WRC) and is important to be addressed by management or to be considered by the market (if impacts multiple parties) as a matter of priority;

- **Medium** – An action addressing a weakness which, although unlikely to lead to a material risk of non-compliance with the WRC, warrants timely action using the existing framework existing either locally or across the market to ensure a formal and effective system of control exists; and

- **Low** – An action which addresses issues where resolution within the normal management framework is considered desirable to improve efficiency or ensure that the business matches current market best practice; or observations relating to market wide scenarios that could be considered for improvement purposes.

- **Advisory** – An improvement recommendation to MOSL to consider going forwards to better manage their processes and reporting obligations. We will not seek to review progress made against any advisory recommendations we make, as it is for MOSL to review and consider next steps, and we consider there to be low impact on their obligations.

Thank you

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