



INDEPENDENT MARKET OPERATOR

Final Report: Gas Services Information
Annual Compliance Audit of the IMO

20 October 2014



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Version no: Final

EXECUTIVE SUMMARY

This report sets out the results of the market audit by PA Consulting Group in carrying out its assessment of the compliance of the IMO's internal procedures and business processes with the Gas Services Information (GSI) Rules, and the IMO's compliance with the GSI Rules and GSI Procedures.

This market audit has been carried out under GSI Rule 174(2):

The IMO must ensure that the audit covers such matters as the IMO considers appropriate, which must include:

(a) the compliance of the IMO's internal procedures and business processes with the Rules;

(b) the IMO's compliance with the Rules and Procedures; and

(c) the IMO's software systems for the GBB and the calculation of GSI Fees and processes for software management.

This is the first annual compliance audit of the IMO in regard to the GSI systems and processes; it is a comprehensive audit that covers the first year of operations, from 1 August 2013 to 31 July 2014.

Summary of non-compliance incidents

No material incidents of non-compliance were found to have occurred during the Audit Period. There were a small number of non-material breaches, as listed in the table below and described in the body of this report.

Table 1 Incidents of non-compliance by the IMO

| Type | Clause | Issue | Comments |
|---|--------------|---|--|
| GSI Rules: Part 2, Division 1 | 28(1)(c)&(d) | Failure to update the GSI Register and publish notices | <ul style="list-style-type: none">• Multiple incidents• Consequential breaches of 51(1)&(4)• The GSI Register is informational; the records in the GBB and the GSI Fees Tool are more critical |
| GSI Procedure: Operation of the GBB and EMF | 4.3.5 | Early publication of reports on the GBB | <ul style="list-style-type: none">• Self-reported• Consequential breach of 154(3) |
| GSI Rules: Part 6 | 103(1) | Late publication of Gas Statement of Opportunities | <ul style="list-style-type: none">• Self-reported |
| GSI Rules: Part 8, Division 7 | 143 | Failure to notify Minister of changes to Protected Provisions | <ul style="list-style-type: none">• Occurred on two occasions• On both occasions, the changes were fully described in the RCP sent to the Minister; the omission was in the list of affected Protected Provisions in the covering letter• The changes were not controversial |

The IMO has either identified or implemented actions in respect of each of these incidents that reduce the risk of a similar non-compliance occurring in the future.

General comments

During the audit, PA has reviewed both the IMO's compliance with the GSI Rules and GSI Procedures and the adequacy of controls used to manage compliance. We note that the IMO has good controls in place to manage non-compliance risk (as evidenced by the small number of non-material breaches uncovered as part of this audit). Particularly, the IMO has integrated many of the GSI responsibilities into its existing Wholesale Electricity Market (WEM) systems, processes and controls. This has reduced the risk of incidents of non-compliance compared to what the risk might have been if new processes had been created.

Opinion on the compliance of the IMO's Procedures with the GSI Rules

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with the GSI Rules in all material respects. There are a small number of non-material omissions which we have brought to the attention of the IMO.

Opinion on the IMO's compliance with the GSI Rules and GSI Procedures

We have not observed anything that causes us to believe that the IMO has not been compliant with the GSI Rules and GSI Procedures in all material respects.

We have observed a small number of incidents involving non-material non-compliance by the IMO; these are described in the body of this report.

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1 INTRODUCTION

This document sets out the results of the market audit conducted by PA Consulting Group (PA) of the compliance of the IMO's internal procedures and business processes with the GSI Rules, and the IMO's compliance with the GSI Rules and GSI Procedures.

1.1 Scope of the compliance audit

This compliance audit has been carried out under GSI Rule 174(2) which is set out below:

The IMO must ensure that the audit covers such matters as the IMO considers appropriate, which must include:

- (a) the compliance of the IMO's internal procedures and business processes with the Rules;*
- (b) the IMO's compliance with the Rules and Procedures; and*
- (c) the IMO's software systems for the GBB and the calculation of GSI Fees and processes for software management.*

Since this is the first annual GSI compliance audit, it is comprehensive in nature¹.

This report presents the results of the compliance audit.

1.2 Audit period

The period covered by the audit is 1 August 2013 to 31 July 2014.

1.3 Market audit process

This is the first compliance audit of the IMO's obligations under the GSI Rules. It covers the first year of operation of the Gas Bulletin Board (GBB), the Emergency Management Facility (EMF), the Gas Statement of Opportunities (GSOO), and related systems and processes.

1.3.1 Approach

In conducting the compliance audit, PA has:

1. Reviewed, and gained sufficient understanding of, the GSI Rules and GSI Procedures;
2. Identified obligations placed on the IMO by the GSI Rules and GSI Procedures;
3. Mapped those obligations identified in step 2 to the applicable GSI Procedures and the IMO's Internal Procedures (as applicable);
4. Reviewed the GSI Procedures for compliance with the GSI Rules;
5. Reviewed the IMO's Internal Procedures for compliance with the GSI Rules and GSI Procedures;
6. Sought evidence that the IMO is following those procedures so as to comply with the GSI Rules;
7. Had discussions with IMO managers and staff to clarify issues identified; and
8. Prepared this report setting out our findings.

¹ Compared to an incremental audit, which would focus on known risk areas and changes that occurred during the audit period

1.3.2 Auditing standard and level of assurance

Our process was designed to provide limited assurance as defined by International Standard on Assurance Engagements ISAE 3000 “Assurance engagements other than audits or reviews of historical financial information” issued by the International Auditing and Assurance Standards Board.

We note that there are limitations to any external audit. Audits are not an absolute guarantee of the truth or reliability of agency information or the effectiveness of internal controls. They may not identify all matters of significance. This is because external audit techniques involve:

- Professional judgement as to “good industry and market operational practice”;
- The use of sample testing;
- An assessment of the effectiveness of internal control structures; and
- An assessment of risk.

A compliance audit does not guarantee every procedure and action carried out by the IMO in the operation of the gas services, nor does it examine all evidence and every transaction. However, our audit methodology should identify errors or omissions significant enough to adversely affect the decisions of users of the audit report.

1.3.3 Materiality

Where incidents of non-compliant procedures, actions or inactions are identified, they are classified as being either:

- Material, where it may affect decisions made by, or the financial position of, one or more gas market participants; or
- Non-material, where it does not strictly comply with the GSI Rules but either:
 - It does comply with the intention of the GSI Rules; or
 - It is not likely to affect decisions made by, or the financial position of, any gas market participant.

1.4 GSI Rules and Procedures

The point of reference for this compliance audit is the GSI Rules and GSI Procedures, which the IMO is obligated to comply with. These are publically available on the IMO’s website.

1.4.1 The GSI Rules

In conducting this compliance audit, the IMO’s actions are measured against the GSI Rules that were in effect at the time. There was one rule change during the audit period and this did not have an impact on the IMO’s obligations under the GSI Rules. Therefore, in practice either the initial GSI Rules dated 29 June 2013, or the current GSI Rules that went into effect on 31 July 2014, serve as a suitable reference when reading this report.

1.4.2 GSI Procedures

The GSI Rules empower the IMO to make GSI Procedures, at its discretion, on any of the matters listed in rule 155. There are two GSI Procedures that have been created by the IMO under the GSI Rules; these are listed in the table below.

Table 2 List of GSI Procedures

| GSI Procedure Title | Version | Date |
|---|---------|--------------|
| Registration, Deregistration, Exemptions and Transfer | v1 | 29 June 2013 |
| Operation of the Gas Bulletin Board and the Emergency Management Facility | v1 | 29 June 2013 |

Both of these became effective on the same date as the GSI Rules and have not been changed since.

1.5 The IMO's Internal Procedures

There is one Internal Procedure that has been written specifically for GSI matters; this covers the creation and publication of the Gas Statement of Opportunities (GSOO). In other areas, existing Internal Procedures have been expanded to cover GSI matters. The table below contains a complete list of the IMO's Internal Procedures that relate to GSI matters.

Table 3 List of GSI-related Internal Procedures

| ID | Title | Date GSI included | Current Version | Date of current version |
|-------|---|-------------------|-----------------|-------------------------|
| 3.7.1 | Gas Statement of Opportunities (GSOO) | 31 July 2014 | v1.0 | 31 July 2014 |
| 1.1.1 | Internal Procedure Development | 11 June 2014 | v4.0 | 11 June 2014 |
| 1.2 | Compliance Monitoring and Enforcement | 30 July 2014 | v4.0 | 30 July 2014 |
| 1.4 | Market Audits | 27 July 2014 | v5.0 | 27 July 2014 |
| 1.8 | Six-Monthly Compliance Reports | 22 July 2014 | v2.0 | 22 July 2014 |
| 2.2.3 | Daily Operations | 19 June 2014 | v4.0 | 19 June 2014 |
| 2.2.4 | Operations Contingency | 22 July 2014 | v4.0 | 22 July 2014 |
| 4.1.3 | Energy Price Limits Review | August 2014 | v4.0 | August 2014 |
| 4.1.5 | Market Development Reviews | 28 July 2014 | v1.0 | 28 July 2014 |
| 4.2.1 | Rule Change Process | August 2013 | v6.0 | July 2014 |
| 4.2.2 | Procedure Change Process | August 2013 | v7.0 | July 2014 |
| 4.3.1 | Annual Review of Committee Composition | 1 August 2013 | v7.0 | 28 July 2014 |
| 4.3.2 | Committees and Working Groups Secretariat | July 2013 | v4.0 | 28 July 2014 |
| 4.4.1 | Handling of Confidential Information | 1 August 2013 | v2.0 | 1 August 2013 |
| 4.4.3 | Publish to Web | 1 August 2013 | v8.0 | 28 July 2014 |
| 5.2 | Determination of IMO Budget | 20 May 2014 | v2.0 | 20 May 2014 |
| 5.3 | Fees | 18 March 2014 | v2.0 | 18 March 2014 |

These were reviewed in relation to the IMO's obligations under the GSI Rules and GSI Procedures.

1.6 Structure of this report

The remainder of this report is structured as follows:

- Chapters 2 through 12 cover the IMO's compliance with each of the ten Parts of the GSI Rules, and Schedule 3.
- Chapter 13 covers the compliance of the GSI systems and the IMO's software management processes.

1.7 Acknowledgements

PA would like to thank the managers and staff of the IMO who willingly provided information and shared in discussions with us while we carried out this annual compliance audit.

2 PART 1: INTRODUCTORY AND ADMINISTRATIVE MATTERS

Part 1 of the GSI Rules sets out the Introduction to the GSI Rules and covers areas such as the objectives of the market, conventions and transitional arrangements.

2.1 Compliance of Procedures with Part 1 of the GSI Rules

2.1.1 Rule changes

There have been no amendments to Part 1 of the GSI Rules during the Audit Period.

2.1.2 GSI Procedures

The IMO's obligations under Part 1 of the GSI Rules tend to be of a generalised, introductory nature and hence don't require direct coverage in a GSI Procedure. There are a few subrules in Division 8: "GBB Systems" that are relevant to the GSI Procedure: "Operation of the Gas Bulletin Board and the Emergency Management Facility".

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO's obligations under Part 1 of the GSI Rules.

Compliance of the GSI Procedures with Part 1 of the GSI Rules

It is our opinion that the GSI Procedures comply with Part 1 of the GSI Rules in all material respects.

2.1.3 Internal Procedures

There are three Internal Procedures that relate to the IMO's obligations under Part 1 of the GSI Rules:

| ID | Title | GSI Rules | Topics |
|-------|---|-----------|---------------------------------------|
| 1.4 | Market Audits | 18(1), 19 | Software management and certification |
| 4.3.1 | Annual Review of Committee Composition | 13(1-4) | Gas Advisory Board (GAB) members |
| 4.3.2 | Committees and Working Groups Secretariat | 13(6), 15 | GAB secretariat responsibilities |

Updates to Internal Procedures

During the Audit Period, there have been three updates to Internal Procedures that relate to the IMO's obligations under Part 1 of the GSI Rules.

| ID | Title | Updated | Comments |
|-------|---|--------------|----------------------|
| 1.4 | Market Audits | 27 July 2014 | GSI references added |
| 4.3.1 | Annual Review of Committee Composition | July 2014 | Minor changes |
| 4.3.2 | Committees and Working Groups Secretariat | July 2014 | Minor changes |

In each case we have reviewed the updated version.

Compliance of the IMO's Internal Procedures with Part 1 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 1 of the GSI Rules in all material respects.

2.2 Compliance with Part 1 of the GSI Rules

2.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 1 of the GSI Rules.

2.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 1 of the GSI Rules.

3 PART 2: REGISTRATION

Part 2 of the GSI Rules covers the registration of participants and facilities, including registration, deregistration, transfers, and exemptions.

3.1 Compliance of Procedures with Part 2 of the GSI Rules

3.1.1 Rule changes

There have been no amendments to Part 2 of the GSI Rules during the Audit Period.

3.1.2 GSI Procedures

The GSI Procedure: “Registration, Deregistration, Exemptions and Transfer” covers the IMO’s obligations under Part 2 of the GSI Rules.

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO’s obligations under Part 2 of the GSI Rules.

Compliance of the GSI Procedures with Part 2 of the GSI Rules

It is our opinion that the GSI Procedures comply with Part 2 of the GSI Rules in all material respects.

3.1.3 Internal Procedures

There are no Internal Procedures relating to the IMO’s obligations under Part 2 of the GSI Rules. Controls exist in the form of Work Instructions and registration checklists.

3.2 Compliance with Part 2 of the GSI Rules

3.2.1 Incidents

We found one area where the IMO was non-compliant with its obligations under Part 2 of the GSI Rules. The provisions breached were parts (c) and (d) of subrule 28(1); it involved failure to update the public registration information on the GSI Website within the specified timeframe after accepting registration applications.

28(1) If the IMO is satisfied that a Registration Application meets the relevant requirements for registration, the IMO must, by the relevant date:

(a) accept the application;

(b) notify the applicant that its application has been accepted, and specify:

(i) the Gas Day on which each registration takes effect; and

(ii) where the application relates to the registration of a Facility, details of any relevant Receipt Points, Delivery Points and Gate Stations;

(c) amend the GSI Register to record the registration of the Registered Participant or Registered Facility; and

(d) publish a notice of the change to the GSI Register on the GSI Website.

The GSI Register is the public list of registered participants and facilities and is for informational purposes. The GBB and the GSI Fee Calculation Tool contain their own lists on which operations and invoicing are based, respectively.

We have noted multiple incidents where one or both of 28(1)(c) and (d) were not actioned following the processing of a registration application. Some of these have been noted by the IMO in the GSI Register notice that was posted to the GSI Website on 22nd August 2013.

Note also that some of these incidents resulted in a consequential breach of the more general obligations in rule 51, either:

- Subrule 51(1), which requires the IMO to keep the GSI Register up to date; or
- Subrule 51(4), which requires the IMO to issue a notice whenever it amends the GSI Register.

We have deemed these to be non-material breaches, as the impact is minor since we have not observed any corresponding omission from the GBB or the GSI Fee Calculation Tool, and as the GSI Register is for informational purposes.

Since these breaches occurred, the IMO has added items to the registration checklists in Confluence (an internal wiki) in order to reduce the risk of these obligations being breached in the future.

3.2.2 Opinion

With the exception of the breaches related to the GSI Register and associated notices, we have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 2 of the GSI Rules.

4 PART 3: PROVISION OF INFORMATION FOR GBB

Part 3 of the GSI Rules deals with the GBB information requirements pertaining to Gas Market Participants and the various classes of Facilities.

4.1 Compliance of Procedures with Part 3 of the GSI Rules

4.1.1 Rule changes

GSI Amending Rules GRC_2014_02 amended subrules 56(1), 64(1) and 71(1) to clarify the deadline for Gas Market Participants to submit a Medium Term Capacity Outlook and make it consistent with the GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility.

4.1.2 GSI Procedures

The GSI Procedure: “Registration, Deregistration, Exemptions and Transfer” covers some of the IMO’s obligations under Part 3 of the GSI Rules. Others are automated within the GBB systems.

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO’s obligations under Part 3 of the GSI Rules.

Relationship between rule changes and updates to GSI Procedures

The rule change described above did not require any changes to GSI Procedures in respect of the IMO’s obligations under Part 3 of the GSI Rules.

Compliance of the GSI Procedures with Part 3 of the GSI Rules

It is our opinion that the GSI Procedures comply with Part 3 of the GSI Rules in all material respects.

4.1.3 Internal Procedures

There are no Internal Procedures relating to the IMO’s obligations under Part 3 of the GSI Rules.

4.2 Compliance with Part 3 of the GSI Rules

4.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 3 of the GSI Rules.

4.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 3 of the GSI Rules.

5 PART 4: THE GAS BULLETIN BOARD

Part 4 of the GSI Rules describes the information that is required to be published on the Gas Bulletin Board.

5.1 Compliance of Procedures with Part 4 of the GSI Rules

5.1.1 Rule changes

There have been no amendments to Part 4 of the GSI Rules during the Audit Period.

5.1.2 GSI Procedures

The GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility covers most of the IMO's obligations under Part 4 of the GSI Rules, many of which are automated in the GBB systems.

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO's obligations under Part 4 of the GSI Rules.

Compliance of the GSI Procedures with Part 4 of the GSI Rules

It is our opinion that the GSI Procedures comply with Part 4 of the GSI Rules in all material respects.

5.1.3 Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Part 4 of the GSI Rules.

5.2 Compliance with Part 4 of the GSI Rules

5.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 4 of the GSI Rules.

We did note one GBB-related incident of the IMO's non-compliance with its obligations in the GSI Procedure involving early publication of reports on the GBB. This incident did not relate to any obligations under Part 4 of the GSI Rules, but it results in non-compliance with subrule 154(3) in Part 9, which is a general obligation to comply with GSI Procedures. See section 10.2.1 for a description of this incident.

5.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 4 of the GSI Rules.

6 PART 5: THE EMERGENCY MANAGEMENT FACILITY

Part 5 of the GSI Rules describes the operation of the Emergency Management Facility, the information that is to be published on the EMF, and the access requirements and limitations.

6.1 Compliance of Procedures with Part 5 of the GSI Rules

6.1.1 Rule changes

There have been no amendments to Part 5 of the GSI Rules during the Audit Period.

6.1.2 GSI Procedures

The GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility covers most of the IMO's obligations under Part 5 of the GSI Rules.

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO's obligations under Part 5 of the GSI Rules.

Compliance of the GSI Procedures with Part 5 of the GSI Rules

It is our opinion that the GSI Procedures comply with Part 5 of the GSI Rules in all material respects.

6.1.3 Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Part 5 of the GSI Rules. Controls exist in Confluence (an internal wiki) in the form of Work Instructions and checklists.

6.2 Compliance with Part 5 of the GSI Rules

6.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 5 of the GSI Rules.

6.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 5 of the GSI Rules.

7 PART 6: THE GAS STATEMENT OF OPPORTUNITIES

Part 6 of the GSI Rules describes the high-level requirements for the publication and content of the Gas Statement of Opportunities (GSOO).

7.1 Compliance of Procedures with Part 6 of the GSI Rules

7.1.1 Rule changes

There have been no amendments to Part 6 of the GSI Rules during the Audit Period.

7.1.2 GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 6 of the GSI Rules.

7.1.3 Internal Procedures

There are two Internal Procedures relating to the IMO's obligations under Part 6 of the GSI Rules:

| ID | Title | GSI Rules | Topics |
|-------|---------------------------------------|-----------------------|--|
| 3.7.1 | Gas Statement of Opportunities (GSOO) | 103, 104, 105(1), 106 | GSOO publication, content, information requirements, and reviews |
| 4.1.5 | Market Development Reviews | 105(2-3) | GSOO reviews |

The GSOO Internal Procedure is a new document with version 1.0 approved on 31 July 2014.

Updates to Internal Procedures

Other than the new GSOO Internal Procedure, there have been no updates to Internal Procedures during the Audit Period that relate to the IMO's obligations under Part 6 of the GSI Rules.

Compliance of the IMO's Internal Procedures with Part 6 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 6 of the GSI Rules in all material respects.

7.2 Compliance with Part 6 of the GSI Rules

7.2.1 Incidents

The IMO self-reported an incident of non-compliance with subrule 103(1) relating to the timing of the publication of the GSOO.

103(1) The IMO must publish on the GSI Website a GSOO for each year and must do so by 31 December of the previous year.

The GSOO was published one month after the deadline, in January 2014. The reason for the delay was information that the IMO became aware of on 24 December 2013 that impacted forecasts of available gas reserves. The decision to consciously breach subrule 103(1) and delay publication was taken at Board level. We note that if the IMO had decided not to breach subrule 103(1) by publishing

the GSOO on time without incorporating the new information, then the resulting outcomes would have been inconsistent with the GSI objectives.

To reduce the risk of such an incident recurring, the IMO has included additional information sources and clarified steps in the process of developing the GSOO that provide participants with the opportunity to correct any data that pertains to them. The new GSOO Internal Procedure also documents timelines and controls for IMO staff to follow in order to ensure compliance in the future.

7.2.2 Opinion

With the exception of the incident noted above, we have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 6 of the GSI Rules.

8 PART 7: BUDGET AND FEES

Part 7 of the GSI Rules covers the IMO's allowable revenue, budget and fees.

8.1 Compliance of Procedures with Part 7 of the GSI Rules

8.1.1 Rule changes

There have been no amendments to Part 7 of the GSI Rules during the Audit Period.

8.1.2 GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 7 of the GSI Rules.

8.1.3 Internal Procedures

There are two Internal Procedures relating to the IMO's obligations under Part 67 of the GSI Rules:

| ID | Title | GSI Rules | Topics |
|-----|-----------------------------|-----------------------|--|
| 5.2 | Determination of IMO Budget | 108(2), 111-113 | Allowable Revenue, GSI Budget, submission to the ERA |
| 5.3 | Fees | 113(3), 114, 118, 119 | GSI Fees |

Both of these Internal Procedures are existing WEM Internal Procedures that have been expanded during the Audit Period to include GSI processes. The expanded IMO Budget Internal Procedure was approved on 20 May 2014, and the Fees Internal Procedure on 18 March 2014.

Updates to Internal Procedures

Other than the initial expansion to include GSI processes, there have been no updates to Internal Procedures that relate to the IMO's obligations under Part 7 of the GSI Rules.

Compliance of the IMO's Internal Procedures with Part 7 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 7 of the GSI Rules in all material respects.

8.2 Compliance with Part 7 of the GSI Rules

8.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 7 of the GSI Rules.

8.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 7 of the GSI Rules.

9 PART 8: RULE CHANGES

Part 8 of the GSI Rules details the process for making changes to the GSI Rules, including rule change proposals, consultations, approvals and timelines.

9.1 Compliance of Procedures with Part 8 of the GSI Rules

9.1.1 Rule changes

GSI rule change GRC_2014_02 included, among other things, a correction to a typographical error in subclause 130(2); changing "...Rule changes..." to "...rule changes...".

9.1.2 GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 8 of the GSI Rules.

9.1.3 Internal Procedures

There is one Internal Procedure that covers all of the IMO's obligations under Part 8 of the GSI Rules.

| ID | Title | GSI Rules | Topics |
|-------|---------------------|---|---|
| 4.2.1 | Rule Change Process | 125-141, 143-145, 147, 148, 150, 151, 153 | rule changes, initiation, standard and fast-track processing, consultations, timelines, protected provisions, approvals, publication, commencement and record keeping |

This Internal Procedure was expanded in August 2013 to cover the process of making amendments to the GSI Rules.

Updates to Internal Procedures

The Rule Change Process Internal Procedure was updated in July 2014. The changes included:

- Clarifications to process descriptions; and
- Improvements in accountabilities and controls, including use of JIRA (an issue tracking software system) to manage rule changes.

For this audit we reviewed the latest version of this Internal Procedure.

Relationship between rule changes and updates to Internal Procedures

The rule change described above did not require any changes to Internal Procedures in respect of the IMO's obligations under Part 8 of the GSI Rules.

Compliance of the IMO's Internal Procedures with Part 8 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 8 of the GSI Rules in all material respects.

9.2 Compliance with Part 8 of the GSI Rules

9.2.1 Incidents

We have noted one area of non-compliance with Part 8 of the GSI Rules. GSI rule 143 requires the IMO to notify the Minister of any Protected Provisions that are affected by a Rule Change Proposal, while subrule 142(2) specifies which rules are protected.

143 Where the IMO decides to progress a Rule Change Proposal that relates to or affects a Protected Provision, the IMO must notify the Minister at the same time as it publishes the Rule Change Notice under rule 132.

GSI rule change GRC_2014_02 involved changes to a number of Protected Provisions including a minor typographical change to subrule 130(2), which is a Protected Provision under subrule 142(2)(e). The Minister was notified of the proposed changes to Protected Provisions; however the notification to the Minister did not specifically note that subrule 130(2) is a Protected Provision.

Similarly, GSI Rule Change Proposal GRC_2014_01 (which is currently under consideration) includes changes to a number of Protected Provisions and the Minister was notified of the proposed changes. However, the notification to the Minister did not specifically note some of the Protected Provisions that were affected.

We have deemed these incidents to be non-material breaches, as in both cases a notification was sent to the Minister in a timely fashion and included the Rule Change Proposal detailing all of the proposed changes; the omission was only in not drawing attention to all of the affected Protected Provisions in the covering letter to the Minister.

9.2.2 Opinion

With the exception of the breaches of rule 143, we have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 8 of the GSI Rules.

10 PART 9: GSI PROCEDURES

Part 9 of the GSI Rules details the process for developing and changing GSI Procedures, including subject matter, procedure change proposals, consultations, approvals, publication, and timelines.

10.1 Compliance of Procedures with Part 9 of the GSI Rules

10.1.1 Rule changes

There have been no amendments to Part 9 of the GSI Rules during the Audit Period.

10.1.2 GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 9 of the GSI Rules.

10.1.3 Internal Procedures

There is one Internal Procedure relating to the IMO's obligations under Part 9 of the GSI Rules.

| ID | Title | GSI Rules | Topics |
|-------|--------------------------|--------------------------------|--|
| 4.2.2 | Procedure Change Process | 154(1-2), 157, 158(2), 159-164 | Procedure changes, initiation, processing, consultations, timelines, approvals, publication, commencement and record keeping |

This Internal Procedure was expanded in August 2013 to cover the creation and amendment of GSI Procedures under the GSI Rules.

Updates to Internal Procedures

The Procedure Change Process Internal Procedure was updated in July 2014. The changes included:

- Clarifications to process descriptions; and
- Improvements in accountabilities and controls.

For this audit we reviewed the latest version of this Internal Procedure.

Compliance of the IMO's Internal Procedures with Part 9 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 9 of the GSI Rules in all material respects.

10.2 Compliance with Part 9 of the GSI Rules

10.2.1 Incidents

We have noted one incident in relation to Part 9 of the GSI Rules. It involves non-compliance with subrule 154(3) as a consequence of the IMO failing to comply with its obligations in a GSI Procedure.

154(3) The IMO and each person to whom the Procedures are applicable must comply with those Procedures.

The IMO self-reported an incident of non-compliance with clause 4.3.5 of the GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility. This clause sets out the timing for publication of GBB reports; for some types of data the timing includes a delay which is for the purpose of preserving the confidentiality of real-time data.

On 20 December 2013, the IMO published corrected reports dating back to the start of the GBB. Reports that were still under the delay timeframes were accidentally included; these were noticed and removed the same day.

We have deemed this to be a non-material breach. The IMO's failure to comply with GSI Procedure timelines that are specified for reasons of data confidentiality is a serious issue with the potential to constitute a material breach, however in this case the IMO's swift actions to remove the data from the GBB mean that it is unlikely to have affected the decisions of any Gas Market Participant.

The IMO has since put controls in place to reduce the risk of a similar situation happening in the future.

10.2.2 Opinion

With the exception of the consequential non-material breach of subrule 154(3) described above, we have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 9 of the GSI Rules.

11 PART 10: COMPLIANCE AND ENFORCEMENT

Part 10 of the GSI Rules describes the responsibilities of the IMO in regards to monitoring, investigating and enforcing the compliance of Gas Market Participants with the GSI Rules and GSI Procedures. It also covers auditing of the IMO's own compliance.

11.1 Compliance of Procedures with Part 10 of the GSI Rules

11.1.1 Rule changes

There have been no amendments to Part 10 of the GSI Rules during the Audit Period.

11.1.2 GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 10 of the GSI Rules.

11.1.3 Internal Procedures

There are two Internal Procedures relating to the IMO's obligations under Part 10 of the GSI Rules.

| ID | Title | GSI Rules | Topics |
|-----|---------------------------------------|---------------------------|--|
| 1.2 | Compliance Monitoring and Enforcement | 165, 167, 168(2), 169-172 | Compliance monitoring, investigation, enforcement, and reporting |
| 1.4 | Market Audits | 174 | Annual independent compliance audit of the IMO |

Both of these Internal Procedures are existing WEM Internal Procedures that have been expanded during the Audit Period to include GSI processes. The expanded Compliance Monitoring and Enforcement Internal Procedure was approved on 30 July 2014, and the Market Audits Internal Procedure on 27 July 2014.

Updates to Internal Procedures

Other than the initial expansion to include GSI processes, there have been no updates to Internal Procedures that relate to the IMO's obligations under Part 10 of the GSI Rules.

Compliance of the IMO's Internal Procedures with Part 10 of the GSI Rules

It is our opinion that the IMO's Internal Procedures comply with Part 10 of the GSI Rules in all material respects.

11.2 Compliance with Part 10 of the GSI Rules

11.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Part 10 of the GSI Rules.

11.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 10 of the GSI Rules.

12 SCHEDULE 3: TRANSITIONAL RULES

Schedule 3 of the GSI Rules covers the transitional arrangements leading up to, and for a period after, the date when the GSI Rules took effect.

12.1 Compliance of Procedures with Schedule 3 of the GSI Rules

12.1.1 Rule changes

There have been no amendments to Schedule 3 of the GSI Rules during the Audit Period.

12.1.2 GSI Procedures

The GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility covers three instances that allow the IMO to publish reduced data on the GBB. Other obligations on the IMO in Schedule 3 do not require documentation in a GSI Procedure due to their transitional nature; most apply only to the period leading up to the operation of the GBB (and hence prior to the Audit Period).

Updates to GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO's obligations under Schedule 3 of the GSI Rules.

Compliance of the GSI Procedures with Schedule 3 of the GSI Rules

It is our opinion that the GSI Procedures comply with Schedule 3 of the GSI Rules in all material respects.

12.1.3 Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Schedule 3 of the GSI Rules.

12.2 Compliance with Schedule 3 of the GSI Rules

12.2.1 Incidents

We are not aware of any incidents of non-compliance by the IMO associated with Schedule 3 of the GSI Rules.

12.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Schedule 3 of the GSI Rules.

13 GSI SYSTEMS AND SOFTWARE

This chapter covers the IMO's software systems for the GBB and the calculation of GSI Fees, and processes for software management, in accordance with subrule 174(2)(c) of the GSI Rules.

13.1 Introduction

We have approached the audit of systems and software in two components, respectively examining:

1. The IMO's software management processes and controls; and
2. The software itself, including certification status and changes made to the software.

With respect to the software management processes and controls we have:

- Examined the documented processes for software management;
- Compared them to actual operational practices; and
- Reviewed the compliance of operational practices with the GSI Rules.

With respect to the software changes, we have:

- Reviewed the certification status of each system;
- Reviewed all rule changes commencing since the last audit;
- Assessed whether a rule change requires a change to the systems;
- Reviewed all system changes implemented during the Audit Period;
- Assessed whether those changes have potential for material impact on the submission, calculation, or publication of information on the GBB; and
- Reviewed whether or not those changes have required certification under the GSI Rules;

As noted in Section 1.3.2, our process was designed to provide limited assurance as defined by International Standard on Assurance Engagements ISAE 3000 "Assurance engagements other than audits or reviews of historical financial information" issued by the International Auditing and Assurance Standards Board.

13.2 Software certification

The software testing and certification process assesses whether the mathematical formulations specified in the GSI Rules and GSI Procedures have been correctly implemented by the software.

The software systems covered by this section of the review are:

- The Gas Bulletin Board (GBB)
- The GSI Fee Calculation Tool

The GBB was previously certified by PA prior to it being used in production. The GSI Fee Calculation Tool has been subjected to certification testing for the first time as part of this audit.

13.2.1 Certification of the GBB

The initial version of the GBB was certified by PA on the 26th June 2013, prior to the official start of GBB operations on 1 August 2013. Since that time, a number of minor changes have been made to the GBB systems, none of which, in the IMO's opinion, required certifying under rule 19.

19 Certifying GBB software

(1) Subject to this rule, the IMO must ensure that any version of the GBB software used by the IMO has been certified as compliant with the Rules and Procedures by an independent auditor.

(2) The IMO may implement changes to the current version of the GBB software without obtaining certification under subrule (1) where the IMO considers that the change will not have a material impact on any one or more of the following:

(a) the provision of information to the IMO by Gas Market Participants under the Rules;

(b) the processing and publication of information on the GBB or the EMF; or

(c) the calculation and processing of GSI Invoices.

(3) Where the IMO considers that changes to the current version of the GBB software are urgently required and essential for the efficient operation of the GBB, the IMO may implement the changes to the current version of the GBB software prior to certification under subrule (1), and must obtain that certification as soon as practicable.

For this audit, we reviewed the release notes for all changes made to the GBB during the Audit Period and assessed the changes in relation to subrule 19(2). In each case, we agreed with the IMO that certification was not required.

Table 4 Changes to GBB systems

| System | Version number | Release date | Material impact under 19(2)? | Certification status | Comment |
|--------|----------------|--------------|------------------------------|----------------------|---|
| GBB | 1.0.9 | 20/08/2013 | No | Not required | No release notes |
| GBB | 1.1.3 | 11/12/2013 | No | Not required | Version number specified in release notes only as "1.1" |
| GBB | 1.1.4 | 19/12/2013 | No | Not required | No release notes |
| GBB | 1.2.0 | 23/01/2014 | No | Not required | |
| GBB | 1.2.38 | 30/01/2014 | No | Not required | Title unchanged from previous release note |
| GBB | 1.2-57.7 | 25/06/2014 | No | Not required | Release notes say "1.2 build 57.7" while JIRA logs record 1.2-57-16 |

Therefore, we updated the certification to apply to version 1.2 build 57.7 of the GBB systems, which was in use at the end of the Audit Period.

13.2.2 Certification of the GSI Fee Calculation Tool

While the GSI Fee Calculation Tool is not specifically required to be certified under the GSI Rules, the calculation of GSI Fees is a part of this compliance audit.

The GSI Fee Calculation Tool is an Excel workbook that takes Shipper quantities as inputs and allocates the quarterly GSI Budget amount as GSI Fees according to those quantities. It includes capabilities for:

- Performing a recalculation of GSI Fees under rule 119; and
- Adjustments related to reallocation of unrecoverable invoices.

Neither of these functionalities was required during the Audit Period.

As an Excel workbook, the GSI Fee Calculation Tool is not subject to the same level of rigour in terms of version management and change control; it is more of a tool to aid the user than a self-contained

item of software. Given the simple nature of the calculations being performed, we consider the use of Excel to be appropriate. We also note that the IMO conduct manual checks on the outputs, in addition to the checks contained within the Excel workbook.

We tested version 2.0 of the tool, as provided to us by the IMO. It was reviewed against the calculations specified in rule 116. Our testing found a small number of minor issues which were brought to the IMO's attention; none of these related to the core calculation of GSI Fees which was found to be correct.

Therefore, we have provided a certification for version 2.0 of the GSI Fee Calculation Tool which states that the tool is compliant with the GSI Rules.

13.2.3 Opinion

We have not observed anything that causes us to believe that the software used by the IMO in the operation of the GBB, and in the calculation of GSI Fees, is not compliant with the GSI Rules, in all material respects.

13.3 Software management

The IMO's software management processes were reviewed in a separate audit conducted by PA concurrently with this audit. The results of this review can be viewed in Chapter 2 of the report entitled "Audit 2: Compliance of the IMO's market software systems and processes for software management". While the focus of that report is on the IMO's processes in regards to management of WEM software, the same processes are used in the management of software used in GSI systems.

13.3.1 Management of the GBB software

In addition to the Audit 2 report, here we comment specifically on the IMO's software change management performance in relation to the GBB systems. The IMO's obligations in this regard are specified in subrule 18(1) of the GSI Rules.

18(1) Where the IMO uses software (GBB software) and IT systems (GBB systems) to receive, store, collate and publish information for the operation of the GBB, the IMO must:

- (a) maintain a record of which version of GBB software was used at each point in time;*
- (b) where changes are made to GBB software, maintain records of the differences between each version and the reasons for the changes between versions;*
- (c) ensure that appropriate testing of new GBB software versions is conducted; and*
- (d) ensure that any version of the GBB software used by the IMO has been certified in accordance with rule 19.*

The changes made to the GBB during the Audit Period are listed in the Table 4 in the previous section. The comments in that table reveal minor issues around the production of release notes for the GBB, including failure to produce release notes on two occasions (for GBB versions 1.0.9 and 1.1.4).

Records of the changes made to the GBB exist in the IMO's internal records (such as JIRA) and so there is no breach of subrule 18(1)(a) or (b). However, it is good practice for the IMO to produce release notes for every change to the GBB software; therefore we recommend that the IMO seeks to apply the same rigour to the GBB as for core WEM systems. Specifically, we recommend that the IMO:

- Ensures that release notes are produced and published for all releases; and
- Improves and standardises documentation of version numbers and dates:
 - Release notes should clearly state the correct version number;
 - The full version number should be included in the title of the release note document; and

- The release date should be clearly stated in section 1 of the release note (as distinguished from the document control dates under “Revision History”).

13.3.2 Opinion

We have not observed anything that causes us to believe that the IMO's processes for software management are not compliant with the GSI Rules, in all material respects.



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