



IAT-LNG description

Description of the IAPH tool for auditing
LNG Bunker Facility Operators

Ship-to-Ship version

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User License – Terms and Conditions

Please read the Terms and Conditions (the Terms) carefully before using the IAPH Audit Tool (the Tool) as produced and distributed by the International Association of Ports and Harbors (IAPH). The Terms can be found in the description document that comes with the Tool (IAT-LNG-STS-1). The Terms apply to users of the Tool and to those that download and/or distribute the Tool. Your access to and use of the Tool is conditioned on your acceptance of and compliance with the Terms.

By using or distributing the Tool you agree to be bound by these Terms. If you disagree with any part of the Terms then you may not use or distribute the Tool.

List of abbreviations and definitions

Accreditation	Accreditation literally means: giving confidence and comes from the Latin "ad credere", which means "to believe" or "to recognize as credible". Accreditation generally means a procedure whereby a third party provides a written guarantee that a product, process, service or person meets specific requirements. If something is accredited, its level and credibility are recorded. For example, if companies are accredited, it means that their reliability has been checked and that they meet a certain set of requirements. Accreditation is therefore a kind of certification, which indicates that the delivered product meets all standards and legal requirements.
CMF	Clean Marine Fuel
EMSA	The European Maritime Safety Agency
IACS	The International Association of Classification Societies
IAPH	The International Association of Ports and Harbors
IAT-LNG	IAPH Audit Tool for the auditing of LNG Bunker Facility Operators
ISO	The International Organization for Standardization
LNG	Liquefied Natural Gas
LNG BFO	A LNG bunker facility operator. A company that operates an asset that supplies LNG as a marine fuel to a LNG fueled vessel by means of a LNG bunker operation and is in full control of this process and all related processes, including, but not limited to, vessel crewing, but excluding full control over the molecule supplier/owner processes.
LNG bunker company	See LNG BFO
SIGTTO	The Society of International Gas Tanker and Terminal Operators
SGMF	The Society for Gas as a Marine Fuel
STS	Ship-To-Ship

1. Abstract

1.1 Background

The adoption of liquefied natural gas (LNG) as a marine fuel is, without doubt, becoming a reality as large shipping lines have started making investments. Based on upcoming legislation and international initiatives towards reducing CO₂ and other emissions¹, the industry starts moving towards low emission and sustainable marine fuels. Research shows that technology readiness levels of new sustainable fuels are still low², making LNG the intermediate fuel for the coming years, if not decades.

LNG as a marine fuel requires different handling than conventional marine fuels with higher flash points. The International Association of Ports and Harbors (IAPH) recognized the need for information, guidance and harmonization of safety arrangements on LNG bunkering operations in ports as early as 2011 and initiated international cooperation by setting up *a working group on LNG fueled vessels* (as from October 2018 the working group on Clean Marine fuels). This working group supports the industry as it navigates the challenges with this new type of bunker operations by publishing information and tools that it may use to support their legal arrangements with respect to system safety, operational safety and safety awareness – see figure 1.

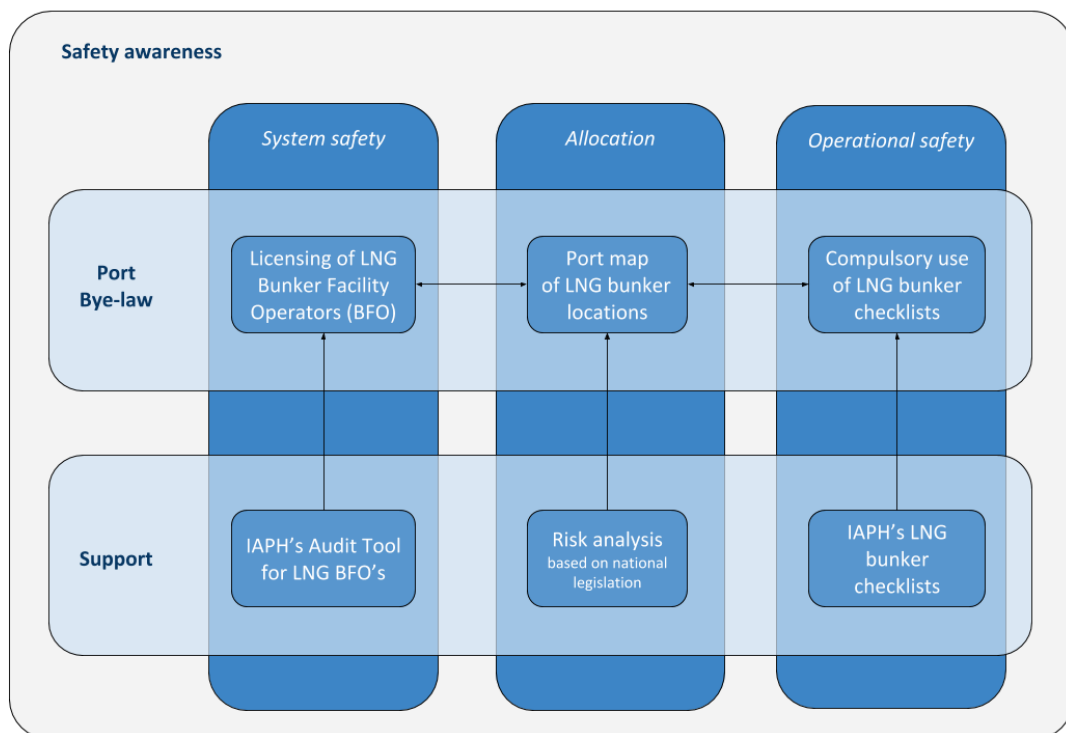


Figure 1: IAPH support tools for LNG Bunker Operations

¹ The IMO Marine Environment Protection Committee 2020 global sulphur limit of 0.50% m/m; its goal to cut the shipping sector's overall CO₂ output by 50% by 2050; and North America and North European Emission Control Areas.

² DNV GL – Maritime Assessment of selected alternative fuels and technologies.

Ports may minimize the risks associated with LNG bunker operations not only by enforcement of legislation on an operational level, but also on the levels of allocation and system safety. This may be effectuated by safety arrangements on the basis of port byelaws in the following way:

- Allocation: based on national legislation and risk analyses, a port may determine where and under which restrictions LNG bunker activities in the port area are permitted, taking into account, among other things, external safety, nautical safety, spatial planning, etc.
- System safety: this ensures that responsibilities of the bunker facility operator (BFO) are clearly defined and that at the front end careful consideration is given to the way LNG bunker operations are organized in a safe manner.
- Operational safety: this ensures that, during bunker operations, the required operational bunker checks are carried out and that people work and report in accordance with the procedures established for that purpose.

Whereas the IAPH, by means of its LNG bunker checklists³ published in 2014, supports operational safety, its *IAPH Audit Tool for LNG bunker facility operators (IAT-LNG)* has the objective to support system safety, to recognize good LNG BFOs, and to have a deterrent effect on possible malpractice in the industry.

1.2 System safety

System safety is a specialty within system engineering that supports program risk management. It is the application of engineering and management principles, criteria, and techniques to optimize safety. The system safety concept calls for a risk management strategy based on identification, analysis of hazards and application of remedial controls using a systems-based approach. The underlying principle is one of synergy: a whole is more than the sum of its parts.⁴

In order to initiate a first step towards a system safety approach, IAPH published *The bunker supplier accreditation model* in 2014. This model has the objective to support a scheme in which LNG bunker facility operators have to comply with the port's accreditation qualifications, i.e. system criteria with respect to safety and environment, in order to attain a license to perform LNG bunker operations in the port.⁵ In such a scheme, the LNG BFO's compliance is checked by auditing its quality management system on these criteria before a license to operate in the port will be issued. This ensures that, at the front-end, the responsibilities of the bunker facility operator with respect to safe and sustainable operations are clearly defined and that careful consideration is given to the way LNG bunker operations are organized.

The *IAPH Audit Tool for LNG bunker facility operators (IAT-LNG)* is a first step in an implementation of this accreditation model – see figure 2.

³ IAPH LNG Bunker Checklists: Ship to Ship, Truck to Ship and Bunker Station to Ship.

⁴ See also: FAA System Safety Handbook, Chapter 3: Principles of System Safety, and wikipedia.org/wiki/System_safety

⁵ The IAPH LNG bunker supplier accreditation model 2014

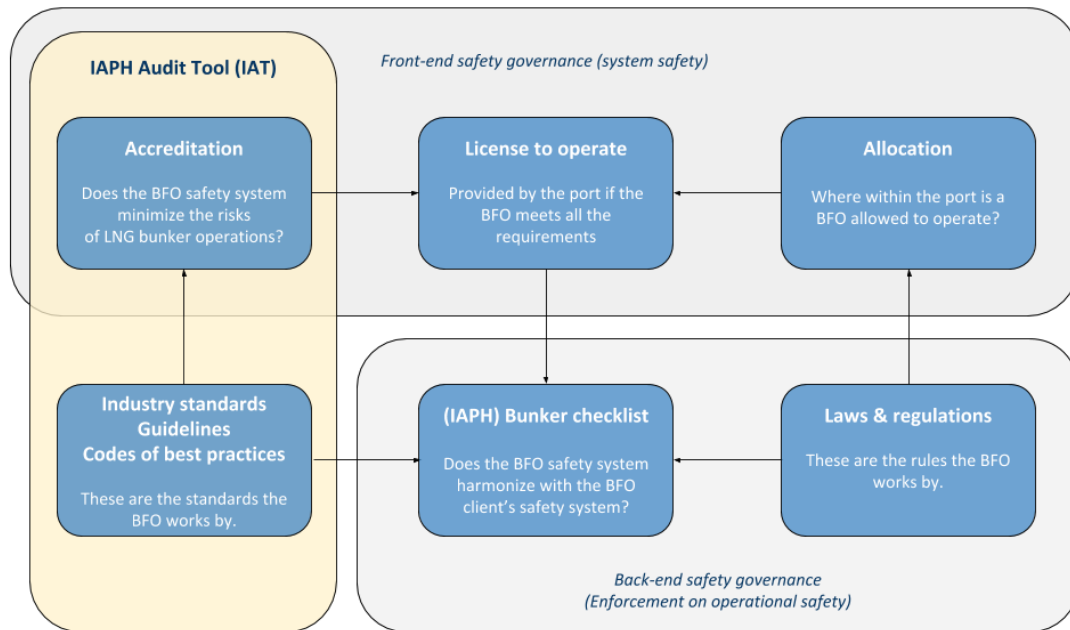


Figure 2: IAPH Audit Tool for front-end safety governance

1.3 Accreditation

Competent authorities, like port authorities, commonly require that LNG BFOs apply for a license to perform LNG bunker operations within their jurisdiction. It is the judgement of these authorities to either grant or refuse the license based on analyses as to whether the BFO has implemented a high quality system safety that is based on regulations, standards, guidelines, and best practices. An accreditation⁶ scheme is a well-known instrument to impose quality requirements and an internationally harmonized accreditation scheme would support a level playing field amongst ports and could reduce the administrative burden for ports as well as for BFOs.

The working group has approached the implementation of the IAPH accreditation model in two phases. The tool for auditing LNG BFOs is the product of the first phase. Part of this tool is an audit checklist that is based on industry standards, guidelines and best practices from organizations such as the International Organization for Standardization (ISO), the Society for Gas as a Marine Fuel (SGMF), and the International Association of Classification Societies (IACS). By using the audit tool, any BFO's quality management system may be audited in a harmonized way, on pre-defined system criteria. The audit tool can be used stand-alone, meaning that without the need for a fully implemented accreditation scheme, ports can already use the tool in their decision making process on whether to issue a license to operate to a LNG BFO.

Also, participating ports may already share among each other their audit results and information on the safety performance of a bunker facility operator so that there would be no need for a port to go through the entire audit process again once a BFO has been audited. The advantage for a BFO would

⁶ For a definition of accreditation see the List of abbreviations and definitions.

be that, once audited, the BFO would not necessarily have to be re-audited when applying for a license to operate in another port.

The working group will monitor and evaluate the usage and effects of the tool. Based on these results, the working group will decide whether a phase two development towards a full accreditation scheme, in which a third party is to audit and accredit LNG BFOs, should be initiated.

2. Audit tool

2.1 Objective

The objective of the *IAPH Audit Tool for LNG Bunker Facility Operators* is to support port authorities in their decision making process of issuing a license or a license to operate to a LNG bunker facility operator. As such, the tool supports a systematically and independent process for obtaining audit evidence and for objectively assessing facts to determine the extent to which pre-defined system safety criteria have been met.

Although not its main objective, the audit tool may also be seen as a central repository of international standards, guidelines and best practices within the context of Ship-to-Ship LNG bunker operations in a port.

2.2 Scope

The scope of this audit tool is the process of auditing a LNG BFO's quality management on pre-determined high-level system safety criteria. This version of the tool is directed at the BFO's internal and external processes that enforce safe and environmental friendly ship-to-ship LNG bunker operations, and the improvement of these processes.

With the tool, audits of a LNG BFO's quality management system can be performed at two levels:

1. Management board and office organization level;
2. Bunker vessel level.

Eight high-level system safety criteria are set as 'system requirements'. The scope for obtaining audit evidence is therefore determined by the following context of these system requirements:

1. Company mission on system safety and Quality Management System;
2. Training and competence;
3. Resources and maintenance;
4. Operational preparation;
5. Safe Operations;
6. Aftercare;
7. Quality Manager;
8. Internal control and reporting.

Detailed information on these requirements may be found in paragraph 2.6.

For each system requirement, the audit checks on procedural safety arrangements for both office and ship. For most procedural checks, a reality check may be included. With a reality check, the auditor may find out whether a procedure's objective is being met.

The audit-intake of the LNG BFO is within scope. More information on the intake form is provided in paragraph 4.3.

A proposal for ways for ports to cooperate and share information on audit results is within the scope of this tool - see chapter 5.

The licensing of a LNG BFO is out of scope of this audit tool.

Although auditors may visit a LNG bunker operation during an audit, a full inspection of this LNG bunker operation and/or enforcement of legislation during this visit are out of scope.

2.3 Content

The *IAPH Audit Tool for LNG Bunker Facility Operators* consists of the following products:

- Description of the IAPH tool for auditing LNG Bunker Facility Operators (IAT-LNG-STS-1 this document).
- Intake Form for LNG Bunker Facility Operators (IAT-LNG-STS-2);
- Audit Checklist for LNG Bunker Facility Operators (IAT-LNG-STS-3);

2.4 Intake form

On a LNG BFO's request to operate in a port, a port can use the intake form to request the BFO to provide basic information that is necessary for performing the audit.

2.5 Audit checklist

An audit checklist document is provided in order to support the audit process. The checklist is based on industry standards, guidelines and best practices, including and not limited to:

- EMSA Guidance on LNG Bunkering to Port Authorities and Administrations 2018 (v 1.0);
- IACS LNG bunkering guidelines No.142 2015;
- ISO 20519 2017 and ISO/TS 18683 2015;
- SIGTTO Liquefied Gas Handling principles on ships and in Terminals 2016;
- SGMF Bunkering Safety Guidelines 2.0 2017, Competency and assessment guidelines 2017, Recommendations of controlled zones during bunkering 2018, Simultaneous Operations (SIMOPS) during LNG bunkering.

The checklist document consists of:

- Part I – Company, vessels, and audit information;
- Part II – Introduction;
- Part III – Documents supplied by the company;
- Part IV – Audit checklist;
- Part V – Audit report;
- Appendix 1 – list of references.

In this document, auditors use the checklist pages in part IV as their audit reference. The checklist provides audit questions that are based on the high level system criteria mentioned in paragraph 2.2. Part V of the checklist may be used by auditors for their general audit report.

2.6 System requirements

Eight high-level safety system criteria are set as 'system requirements'. Whether or not a bunker facility operator (the company) is in compliance with these requirements is determined by assessing the results of an audit. During such an audit, system checks are carried out at two levels:

- Management board and office organization level;
- Bunker vessel level.

For each system requirement, a set of audit checks is laid down. Assessment of the outcome of these checks determines whether the company meets the specific system requirements. A well-organized LNG bunker operation process based on system safety is in place if the company meets all eight system requirements.

The system requirements are the following:

- 1) The company's management board has formulated a mission with regard to good performances in carrying out LNG bunker operations in a safe and environmentally friendly way through compliance with regulations and the prevention of incidents. In addition, the company has set objectives with respect to improving these performances and the management board works proactively to achieve these objectives. The company has a well-functioning quality management system¹⁾ to support its safety quality commitment.

¹⁾ The following is meant by a 'quality management system': A quality management system helps a company to work effectively to meet the system criteria. The system ensures the achievement of good performances with respect to safe operations by the company or by the companies involved in the operations, i.e. preventing incidents or environmental incidents and improvement of these performances. This way of working is supported by ICT where necessary.

- 2) The quality management system guarantees optimal training and competence of staff.
- 3) The quality management system guarantees optimal resources, such as LNG bunker equipment, and optimal planned maintenance of this equipment by a planned maintenance system (PMS).
- 4) The quality management system guarantees optimal preparation for performing LNG bunker operations; e.g. procedures with respect to risk assessment, SIMOPS, mooring system, compatibility checks between the ship and the bunker vessel.
- 5) The quality management system guarantees optimal safety in performing LNG bunker operations; e.g. procedures with respect to the use of checklists.
- 6) The quality management system guarantees optimal completion (aftercare) of the LNG bunker operations and guarantees that all employees are familiar with the obligation to report and make written records of any safety related non-conformities (i.e. incidents, near-incidents/near-misses and hazardous occurrences) and to act accordingly. The system also enables access to

information showing to what extent these non-conformities happen in the company and what measures the company has taken for the prevention of future occurrences. In addition, the system ensures the reporting safety related non-conformities to the ports.

- 7) The company has appointed an independent Quality Manager who is responsible for the internal control on the mission and objectives mentioned above under requirement 1. The Quality Manager, for instance an HSE manager, has adequate education, training and experience. The Quality Manager is the point of contact for the port(s).
- 8) The Quality Manager bears the responsibility for internal auditing of the quality management system and for initiating improvements of the system. He or she reports on a half-yearly basis to the port(s) on their achievements with respect to the performance of safe and environmentally friendly LNG bunker operations, including a list of all relevant documentation versions.

3. Terms and conditions for use of the tool

3.1 Type of use

The Audit Tool may be used in two ways:

- As a stand-alone product it may be used by a single user, for instance a port, without any cooperation with other ports. There are certain term and conditions to use the tool this way.
- Within a system in which ports have agreed to cooperate in LNG audits using the IAT-LNG Tool. There are terms and conditions to join this IAPH Audit Scheme. Potentially, in the future, the Audit Scheme may become an IAPH Accreditation Scheme.

3.2 User License

The following are the terms and conditions for the use of the IAPH Audit Tool:

User License - Terms and Conditions

Last updated: 27/09/2018

Please read these Terms and Conditions (the Terms) carefully before downloading and/or using the IAPH Audit Tool (the Tool) produced and distributed by the International Association of Ports and Harbors (IAPH).

Your access to and use of the Tool is conditioned on your acceptance of and compliance with these Terms. These Terms apply to users and others who download or use the Tool.

By using or distributing the Tool you agree to be bound by these Terms. If you disagree with any part of the Terms then you may not use or distribute the Tool.

1 The Tool

1.1 Parties

This tool has been developed by the IAPH working group on LNG fueled vessels, as from October 2018 the working group on Clean Marine Fuels (the Working Group). IAPH provides the Tool to the User on the Terms of this Agreement. Although the Tool has been developed by the Port Authorities, other competent authorities (national agencies, coast guards, waterway managers, etc.) are encouraged to use the Tool as well.

1.2 Acceptance

Any use of, or access to the Tool by the User constitutes acceptance of the Terms.

1.3 Right to Use

IAPH grants to the User a worldwide, non-exclusive, non-transferable right to use the Tool and the Documentation for its internal business purposes.

1.4 Fees

The IAPH Audit Tool is distributed by IAPH free of charge.

1.5 Distribution

The IAPH Audit Tool is distributed by IAPH. The Tool can be included in non-commercial and free-of-charge publications by third parties with prior written approval by IAPH.

1.6 Reference

In case the IAPH Audit Tool is mentioned in any kind of publication, reference should be made to the version, the authors (the Working Group) and the publisher (IAPH).

2 Use of the Tool

2.1 Purpose

The objective of the IAPH Audit Tool for LNG Bunker Facility Operators is to support port authorities in their decision-making process of issuing a license to operate in the port to a LNG bunker facility operator. As such, the tool supports a systematically and independent process for obtaining audit evidence and objectively assessing facts in order to determine the extent to which pre-defined system safety criteria have been met.

The objective of the audit is to find audit evidence (i.e. the facts) on the LNG BFO's implementation of internal and external processes that ensure safe and environmental friendly ship-to-ship LNG bunker operations, including the way these system-based processes are organized, taking into account risk and quality management, and the way these processes are continuously improved.

2.2 Adjustment and enhancement

The User is not allowed to make adjustments to the IAPH Audit Tool. Any suggestions for adjustment or improvement should be addressed to the Working Group.

Content may not be changed or removed. Additional items may only be added if clearly identified as additional. If changes have been made to the tool, the IAPH logo and IAT logo must be removed and replaced by a reference to IAPH.

2.3 Translations

Translations of the tool are allowed. If the tool has been translated, the IAPH logo and IAT logo must be removed and replaced by a reference to IAPH, unless the translation has been verified by IAPH.

2.4 Usage terms

Instructions on how to use the tool can be found in the description document.

3 Intellectual Property Rights

3.1 Ownership and use of Intellectual Property Rights

Other than as provided in this clause (Intellectual Property Rights), nothing in these Terms shall transfer ownership of Intellectual Property Rights or otherwise grant any Intellectual Property Rights to a party.

3.2 Ownership of the Tool

In using the Tool, the User does not obtain any ownership or interest in the Tool and the User acknowledges that IAPH holds all Intellectual Property rights in the Tool and in any enhancement or modification of the Tool under these Terms.

3.3 Results

IAPH acknowledges that the User is the owner of the Results that are obtained by using the Tool. The User provides IAPH with a license to use the Results for enhancement or modification of the Tool.

3.4 Accuracy

The IAPH Audit Tool contains references to external sources that are not provided or maintained by or in any way affiliated with IAPH. Therefore IAPH does not guarantee the accuracy, relevance, timeliness, or completeness of any information in these external sources.

4 Confidentiality

4.1 Treatment of Confidential Information

Each party acknowledges that the Confidential Information of the other party is valuable to the other party. Each party undertakes to keep the Confidential Information of the other party secret and to protect and preserve the confidential nature and secrecy of the Confidential Information of the other party.

5 Liability and indemnity

5.1 Liability

Neither party will be liable to the other party under or in respect of this Agreement for any consequential loss arising from negligence or breach of contract.

5.2 Indemnity

IAPH will not defend the User against claims brought against the User by any third party alleging that the User's use of the Tool infringes or misappropriates any Intellectual Property Rights.

6 Personal Data Privacy Policy

6.1 Data use

The only personal data collected by the IAPH are the data provided by the user when downloading it. The personal data will only be used by the IAPH for the sole purpose to contact the downloader for update information, demands for feedback on the tool's content and/or ask for involvement in the Working Group.

4. Auditing

4.1 Objective

The objective of the audit is to find audit evidence (the facts) on the LNG BFO's implementation of internal and external processes that enforce safe and environmental friendly ship-to-ship LNG bunker operations, including the way these system-based processes are organized, taking into account risk and quality management, and the way these processes are continuously improved.

4.2 Scope

The scope of the audit is determined by eight system requirements as described in part II of the audit checklist.

4.3 Initiating an audit

An audit may be initiated by a port authority that wishes to support its decision-making process on whether a license to operate in the port should be issued to a LNG BFO. Commonly the audit would be initiated by a port when a BFO requests a permission to operate within the port area.

A re-audit may be initiated by a port authority whenever the pre-determined period of validity of audit evidence has expired.

A re-audit may be initiated by a port authority if circumstances lead to questioning the validity of former audit-evidence, e.g. major changes in company management, incidents, et cetera.

Audit and re-audits are initiated by sending the LNG BFO an audit intake form. The tool provides this intake form as a separate document (IAT-LNG-ST5-2). The port authority is to include a request for documentation for the purpose of desktop research, e.g. bunker manual, bunker management plan. Upon reception of the completed form and requested documentation, an audit team may be formed and the audit dates may be set. The audit's specific scope and agenda is determined by the audit team in consultation with the auditee. The scope, agenda and a list with requested documentation will be sent to the auditee at a minimum of two weeks prior to the audit date.

4.4 Auditor

The audit should be performed by a team of audit-experts on behalf of the port authority. This may either be the port's own personnel, personnel from another port or hired experts. The team should consist of a minimum of two auditors, one being the lead auditor.

The qualifications of the auditors have to be, as a minimum, in accordance with ISO 19011:2011 chapter 7, Competence and evaluation of auditors. Appendix 1 gives an overview of the required qualifications for auditors.

4.5 Auditee

The LNG bunker facility operator is the auditee.

4.6 Auditee documentation

All documentation provided by the auditee is confidential and may only be shared with other parties under strict circumstances and only with the consent of the LNG BFO. Port authorities are obligated to store the auditee's documentation in a secure manner.

4.7 Audit

A complete audit consists of three parts: an audit of the management board and office organization, an audit of one or more bunker vessels, and reality checks - in this order. In some cases, it may not be possible to perform the reality checks on the same date. In those cases, the reality checks are to be performed at the first available opportunity. The tool provides an audit checklist as a separate document (IAT-LNG-STS-3).

4.8 Audit reporting

The port authority reports the audit results to the BFO. The audit result information (audit report) is confidential and may only be shared with other parties under strict circumstances and with the consent of the LNG BFO. Port authorities are obligated to store audit reports, including all relevant information, in a secure manner.

4.9 Validity

The validity of audit-evidence is set by the port authority performing the audit. A default validity of five years is advised. Circumstances may lead to a reduction of this period, this to the discretion of the appropriate port authority.

4.10 Quality of auditing

The quality of auditing is the responsibility of the port authority on whose behalf the audit is performed.

5. IAT-LNG Scheme, a cooperation between IAPH ports

5.1 Definition

The IAT-LNG Scheme (Audit Scheme) is a system of auditing of BFOs in which IAPH ports work together under a set of terms.

5.2 Objective

In addition to the objective as described in 2.1, the objective is improvement of the quality of LNG BFO audits by port authorities and to minimize administrative burdens for ports and LNG BFOs.

5.3 IAPH audit cooperation

The cooperation of IAPH port authorities within the audit scheme consists of:

- Joint audits that are based on the audit tool;
- Sharing audit result information;
- Sharing other applicable information;
- Audit quality assurance.

Upon accepting the terms and conditions, any IAPH port authority may join the audit scheme.

5.4 Steering committee

A steering committee is responsible for maintaining the audit scheme, its description, and the terms and conditions. The steering committee is sub-working group 1 of the Working Group.

The steering committee maintains a list of LNG BFOs that have been audited and by whom. This list includes the name of the contact person of the LNG BFO and of the auditing Port Authority.

There is no further need for an administrator. Port authorities are responsible for their own administration.

The steering committee is responsible for setting up a system in which peer-reviews are appointed for maintaining audit quality.

The steering group meets at least once a year.

5.5 User group

A user group or user groups of participating ports may be formed as per the ports requirements.

5.6 Audits

Port authorities that have audited or re-audited a LNG BFO are requested to inform the steering committee by supplying the following information:

- Name of the Port Authority/Port Authorities and details of the contact person or persons;
- Name of the LNG BFO and details of the contact person;
- Assets/Ships involved;
- Date and reference number of the audit report.

No audit result information and/or LNG BFO documentation is to be included.

5.7 Joint audits

Any port authority may invite another port authority to join the audit of a LNG BFO for their port. Although a port authority may request to be invited, the other port authority is not obliged to comply with the request. Invitations, however, must always be accompanied by the consent of the operator to be audited.

The purposes for joint audits may be:

- Capacity shortage;
- Training purposes;
- Quality control;
- Multiple applications by the LNG BFO.

The port authority of the port the operator has requested to operate in has under all circumstances full responsibility for the quality of the audit and will be responsible for the leading auditor. This is noted on the IAT-LNG audit checklist.

In case the operator has requested to operate in more than one port and the port authorities in question are carrying out a joint audit, it will be determined in advance which port authority is responsible and in charge. This is noted on the IAT-LNG audit checklist.

In a joint audit, all ports involved are owners of the audit result information.

A port authority may also invite another port authority to perform an audit on its behalf. This is not regarded as a joint audit. In this case, there is a customer and subcontractor relationship in which the port authority of the port the BFO has requested to operate in will have full responsibility for the quality of the audit.

5.8 Sharing audit result information

Audit result information is confidential and port authorities are obligated to store this information and all other relevant information in a secure manner. Within the scheme, audit result information, such as audit reports, may be shared among the participating port authorities. A port authority may then base its decision on permitting the same LNG BFO to operate within its jurisdiction entirely or partly on the shared audit result information. This is defined as using another port's audit result

information. In such cases, a port authority does not need to audit the operator again and may perform a much smaller audit based on local circumstances and/or requirements.

Audit results may not be shared before the audited LNG BFO has sent a written agreement on doing so to the responsible port authority.

Port authorities that use audit result information from other ports may share this information with other port authorities and/or other parties but only under strict circumstances and with the consent of the LNG BFO in question. These port authorities are obligated to store the audit result information and all other received documentation in a secure manner.

Within the scheme, port authorities may share information on re-audits and reality checks. For this information equal rules apply:

- A written agreement on sharing this information has been received from the audited LNG BFO;
- The received information is confidential;
- The received information may be shared with other port authorities and/or other parties but only under strict circumstances and with the consent of the LNG BFO in question.

It is the responsibility of the port authority that uses audit information from another port to ensure that it is kept up to date with all the relevant information, such as re-audit and reality check result information.

Within the scheme, the port authority in question is requested to inform other port authorities that have made use of this port's audit results as soon as a LNG BFO has been re-audited or a reality check has been carried out.

Sharing of information should be done in a secure way. When shared electronically, the information should either be shared by a secure digital line or should be password protected. If passwords are shared, this must be done over the phone or other media based on the technology available.

Acceptance and usage of shared audit result information is for a port authority's own risk and liability.

5.9 Sharing other relevant information

Within the scheme, port authorities may share information on near misses and incidents with respect to a LNG BFO. For this information equal rules apply:

- A written agreement on sharing must have been received from the audited LNG;
- The received information is confidential;
- The received information may be shared with other ports and/or other parties but only under strict circumstances and with the consent of the LNG BFO.

It is the responsibility of the port authority that uses audit information from another port to ensure that it is kept up to date with all the relevant information, such as information with regard to enforcement, near misses and incidents.

Participating ports are recommended to include in their permission to operate that the LNG BFO is required to share near misses and incidents with all the port authorities of the ports it is operating in.

Sharing of information should be done in a secure way. When shared electronically, the information should either be shared by a secure digital line or should be password protected. If passwords are shared, this must be done over the phone or other media based on the technology available.

Acceptance and usage of shared information is at a port authority's own risk and liability.

5.10 LNG BFO documentation

All documentation provided by the LNG BFOs is confidential and may only be shared with other ports and/or parties under strict circumstances and with the consent of the LNG BFO. Port authorities are obligated to store the auditee documentation in a secure manner.

If a port authority that uses shared audit result information also wishes to have access to LNG BFO documentation on which the audit was based, the port authority should request this documentation from the LNG BFO directly. The port authority that provided the audit result information is not allowed to share this documentation.

5.11 Validity of audit results

Within the scheme, the default validity of audit-evidence is set at five years. Circumstances may lead to a reduction of this period. This is at the discretion of the port authority performing the audit.

5.12 Re-audits and reality checks

Within the scheme, a re-audit will be performed at the end of the validity period if the LNG BFO wishes to continue its operations.

A re-audit may be performed before the end of the validity period if required by the port authority. This requirement may be based on, but not limited to:

- Major changes to the LNG BFO, such as change of crewing agency;
- Major incidents with the LNG BFO.

A port authority may invite another port authority - for instance a port authority that uses the audit result information - to join the re-audit, but this is not compulsory.

Reality checks are performed at a minimum once a year per LNG BFO per port authority.

Port authorities performing re-audits and reality checks are requested to inform other port authorities that are in possession of the audit result information.

5.13 Audit quality assurance

Within the scheme, the participating port authorities must guarantee the audit quality.

Quality is ensured in two ways:

- Quality requirements of the auditors;
- Peer-reviewing of draft audit reports as initiated by the steering committee;
- Joint audits.

Ports participating in the scheme are required to request a peer-review at least for their first audit report.

5.14 Withdrawal of permission to operate

In case a LNG BFO's permission to operate is withdrawn by the port authority on the basis of invalidity of audit-evidence, this port authority should inform all other port authorities that have used the original audit result information.

APPENDIX 1 – Competence of IAT Auditors

The objective of the IAPH Audit Tool (IAT) for LNG Bunker Facility Operators (BFO) is to support port authorities in their decision making process of issuing a license to operate in the port to a LNG bunker facility operator. As such, the auditor using the tool should follow a systematic and independent process for obtaining audit evidence. The auditor should objectively use the tool and assess facts in order to determine the extent to which pre-defined system safety criteria have been met.

The audit will be a part of the licensing process in a port for LNG bunker facility operators. The person in a port managing the licensing process should appoint the members of the audit team, including the team leader and any technical experts needed for the audit.

An audit team should be selected, taking into account the competences needed to achieve the objectives of the audit. It will not be necessary for each auditor in the audit team to have the same competence; however, the overall competence of the audit team needs to be sufficient to achieve the audit objectives.

To assure the competence of the audit team members, a port should apply the ISO standard 19011:2011 chapter 7: “Competence and evaluation of auditors”.

To determine the competence of audit personnel to fulfil the needs of the audit, the audit should be performed by a team of ISO standard 9001 trained audit experts who will act on behalf of the port authority. This may either be the port’s own personnel, personnel from another port, or hired experts. The team should consist of a minimum of two auditors and during an initial audit preferably of at least three auditors, one being the lead auditor. Important for the appointment of team members is:

- the competence of the team members to support the port authority in its decision making process of issuing a license to operate for a LNG bunker facility operator (BFO);
- the ability of the auditors to interact effectively with the representatives of the auditee;
- the independence of the auditor of the BFO to be audited to avoid a conflict of interest. If the auditor is not independent, it should be transparently explained how a conflict of interest will be avoided;
- the auditors should have a safety or quality management certificate;
- the auditors should have experience with management auditing;

The goal of the audit is to determine the effectiveness of the quality and safety management system of the BFO and to determine to what level a LNG bunker operation will be compliant with the industry best practice guidelines. To be able to achieve this goal, the auditors should be familiar with the following:

- the IAT and the IAT objectives;
- the content of best practice guidelines used as reference in the IAT;
- LNG bunker processes;
- technical equipment and safe guards for a LNG bunkering;

- (local) requirements for LNG bunkering;

If the necessary competence is not covered by the auditors, technical experts with additional competence should be included in the team.

Source: ISO 19011:2011(E)