



IALA GUIDELINE

1054

PREPARING FOR A VOLUNTARY IMO AUDIT ON AIDS TO NAVIGATION SERVICE DELIVERY

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1. INTRODUCTION

At its twenty-fourth session in November 2005, the IMO Assembly adopted Resolution A.973 (24) on the Code for the Implementation of Mandatory IMO Instruments and Resolution A.974 (24) on the Framework and Procedures for the Voluntary IMO Member State Audit Scheme.

The Member State's obligations in general are described in resolution A.973 (24) and the relevant section for coastal States is included in APPENDIX 2.

At this stage, it is recognized that the audit framework and associated documents relate more to flag State and port State obligations than those of coastal States. The obligations of these States are more fully described in the Framework as they are already listed in the Conventions themselves, as well as in numerous IMO resolutions and circulars. However, this is not the case for coastal State obligations. The principle of their obligations appears in SOLAS Chapter V. However, it is difficult to define the details to be covered by the audits as the subjects listed in SOLAS Chapter V are not all covered by specific IMO standards. Therefore, the work of the auditors could be challenging with respect to SOLAS Chapter V for coastal States.

This guidance is designed to assist both Member States who have volunteered to be audited and the auditors to prepare themselves for audit regarding Aids to Navigation (AtoN) (SOLAS Reg. V/13 – see APPENDIX 1).

2. OVERVIEW

Firstly, guidance is offered to IALA members on those sections of the pre-audit questionnaire that the Administrations in charge of aids to navigation have to answer according to their obligations in SOLAS regulations V/13. This is at ANNEX A.

Secondly, a check-list is provided to assist the auditors when auditing such Administrations. The checklist was developed taking into account the areas which should provide the minimum scope for an audit (administrative, legal and technical areas defined in IMO resolution A. 974 (24) part 1, paragraph 7.4.2). This is at ANNEX B.

3. ISSUES TO CONSIDER

The Voluntary IMO Member State Audit Scheme covers a broad range of maritime safety and the prevention of pollution issues (SOLAS, MARPOL, Tonnage 69, Load Line, STCW, and COLREGS). Aids to Navigation (AtoN) service delivery are only a small but important element of the audit scheme. To assist with planning and preparation for an audit (including the completion of the pre-audit questionnaire), the following issues should be considered:

- Member State's policy and legal frameworks should be explained as fully as possible;
- Member State's internal stakeholder arrangements should be described, in particular the sectional and governance arrangements for the responsibilities of a Member State's AtoN service;
Insofar as is possible, clarification of any special organisational arrangements should be fully detailed.
- a designated single point of contact is required for the Member State. It may also be necessary to establish single points of contact for other internal stakeholders that have delegated AtoN service responsibilities;
It might also be useful to establish a hierarchy of responsibilities.
- to assist the audit process, use of organisational diagrams and flow charts should be considered;
- some Federal States could face difficulty in answering all necessary questions;
A mechanism of co-ordination should be implemented to allow the Member State AtoN authority to successfully undergo the audit.
- Member States may consider adopting a programme or project management approach to the audit process;



This will assist with the setting of timetables and the consideration of budget and resources.

- noting that a maximum period of two months is permitted for the completion of the pre-audit questionnaire from the time the audit is officially launched, Member States should not underestimate the time and effort that may be required to complete the questionnaire;
- the working language will be that agreed between the Member State and the IMO;

For some Member States the translation of sections of primary legislation pertaining to AtoN service responsibility, delivery and monitoring will be necessary. In addition, to assist with coordination of the audit, it may be necessary to use hard copy documentation.

- if time and resources permit, it could be useful, in preparing the IMO audit, to proceed with an internal pre-audit.

4. DEFINITIONS

The definition of terms used in this Guideline can be found in the International Dictionary of Marine Aids to Navigation (IALA Dictionary) at <http://www.iala-aism.org/wiki/dictionary>.

5. ACRONYMS

AtoN	Aid(s) to Navigation
COLREGS	Convention on the International Regulations for Preventing Collisions at Sea (1972 as amended)
EEZ	Exclusive Economic Zone (Defined in UNCLOS)
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities - AISM
IMO	International Maritime Organization
ISO	International Standardization Organisation
IWRAP	IALA Waterway Risk Assessment Program
MARPOL	International Convention for the prevention of pollution from ships (1973 as amended)
MEPC	Marine Environment Protection Committee (IMO)
MSC	Maritime Safety Committee (IMO)
PAWSA	Ports and Waterways Safety Assessment (IALA)
PSC	Port State Control
PSSA	Particularly Sensitive Sea Area(s)
RO	Recognised organisation (IMO)
SOLAS	International Convention for the Safety of Life at Sea (IMO 1974 as amended)
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (IMO)
UNCLOS	The United Nations Convention on the Law of the Sea
VTS	Vessel Traffic Services

6. REFERENCES

- [1] IALA NAVGUIDE
- [2] Resolution A.973 (24) on the Code for the Implementation of Mandatory IMO Instruments
- [3] A.974 (24) on the Framework and Procedures for the Voluntary IMO Member State Audit Scheme
- [4] SOLAS Chapter V

ANNEX A PRE-AUDIT QUESTIONNAIRE

This part is intended to facilitate the response to the pre-audit questionnaire (Reference: Appendix 2 of IMO resolution A.974 (24)) for those Administrations responsible for the provision of AtoN in Member States who have volunteered to participate in the Voluntary IMO Member State Audit Scheme.

Information so provided pertaining to AtoN service delivery would probably be included in one single document in response to the pre-audit questionnaire which is provided to the auditors by the Member State.

SOLAS Reg. V/13 refers to the appropriate recommendations and guidelines of IMO and IALA. The IALA recommendations are freely available for download in pdf format at www.iala-aism.org under 'publications'. Information on the general management of AtoN can be found in the IALA NAVGUIDE Manual.

The pre-audit questionnaire comprises 12 sections. The following sections and subsections are relevant to AtoN services.

I. General Information

3, 4, 5. Details of Government body(ies)

Details on Government body(ies) responsible for AtoN should be included.

7. Information on relevant State territorial body(ies) and relationship to the Administration

Reference to AtoN authorities should be noted in this section.

8. Extent of State's involvement in activities

8.2. Functions related to AtoN that fall under coastal State activities. A broad description of AtoN provided by the Member State may be applicable in answering this question.

VIII. Information on coastal State activities

2. Promulgation of navigational warnings and dangers to navigation

Information may be provided about how an AtoN authority provides advice on navigational warnings concerning AtoN.

3. Arrangements for establishment and maintenance of AtoN

The following information may be provided regarding how the AtoN authority meets its obligations stemming from SOLAS Reg. V/13, in particular:

- 1 the determination of level of AtoN service relative to the volume of traffic and degree of risk.
- 2 the details on the implementation, establishment, monitoring, maintenance, modification and decommissioning of AtoN, including plans for the use of AtoN in cases of emergency.
- 3 the achievement of uniformity in AtoN in accordance with IALA recommendations and guidelines.
- 4 the promulgation of information about changes to AtoN.
- 5 the resourcing (funding, equipment and personnel) of AtoN services.

8. AtoN that might be used as associated protective measures of a PSSA

Provide information about any AtoN services that is provided as part of any associated protective measures of a Particularly Sensitive Sea Area (PSSA).

12. National legislation of State to establish sanctions for violations of mandatory IMO instruments within its jurisdiction

National legislation in place with respect to AtoN, if any, should be described.

15. Measures to evaluate effectiveness in implementing IMO mandatory instruments

Mention could be made of the measures, if any, taken to evaluate the effectiveness in implementing SOLAS Reg. V/13 (see also section X); for example, the analysis of accidents and incidents, the use of AtoN availability reports and AtoN planning and inspection reports (see also section X) may be mentioned.

X. Evaluation and review

1. Performance Measures

The measures taken to evaluate effectiveness of AtoN (e.g. vessel tracking analysis, incident analysis, risk analysis, including modelling systems such as IWRAP/PAWSA) should be described. (see also section VIII 15).

2. Continuous Improvement

The manner in which results obtained from evaluation and review are taken into account to improve service delivery, should be described.

XI. Management system

(Note that these points should be responded to in the context of AtoN.)

1. Recognized quality management system

If a recognized quality management system is used, e.g. ISO 9001:2000, then relevant documentation should be copied and submitted together with the questionnaire.

2. Documented management system

If a documented management system is used for AtoN services, e.g. internal contracts between management and subdivisions, external contracts between the organization to be audited and its superiors of either a political and/or administrative nature or any other proprietary management system, then copies of contracts or other relevant documentation should be submitted together with the questionnaire.



ANNEX B CHECKLIST FOR AUDITORS

B 1. LEGISLATION

- which national Administration is responsible for AtoN?
- under what law(s) does the Administration act?

B 2. ORGANIZATION

- how is the Administration organized?
- to what other bodies, if any, has responsibility for AtoN been delegated?
- how has this process of delegation been formally established and documented?

B 3. RESOURCES

- what is the mechanism for establishing resource requirements (Equipment/Human)?
- what are the funding mechanisms for the Administration?
- what is the mechanism for ensuring competence of personnel?

B 4. INTERNATIONAL RECOMMENDATIONS/REGULATIONS

- what national legislation is in place to support provision of, and compliance with AtoN services?
- what international recommendations and guidelines in respect of AtoN services are reflected in the Administration's policies and procedures?



APPENDIX 1 SOLAS CHAPTER V, REGULATION 13

Regulation 13

Establishment and operation of aids to navigation

- 1 Each Contracting Government undertakes to provide, as it deems practical and necessary, either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires.
- 2 In order to obtain the greatest possible uniformity in aids to navigation, Contracting Governments undertake to take into account the international recommendations and guidelines[†] when establishing such aids.
- 3 Contracting Governments undertake to arrange for information relating to navigation to be made available to all concerned. Changes in the transmissions of position-fixing systems which would adversely affect the performance of receivers fitted to ships shall be avoided as far as possible and only be effected after timely and adequate notice has been promulgated.



APPENDIX 2 EXTRACT FROM IMO RESOLUTION A. 973 (24) ON OBLIGATIONS PERTAINING TO COASTAL STATES

PART 3 – COASTAL STATES

Implementation

45. Coastal States have certain rights and obligations under various mandatory IMO instruments. When exercising their rights under the instruments coastal States incur additional obligations.
46. In order to effectively meet their obligations, coastal States should:
- .1 implement policies and guidance which will assist in the implementation and enforcement of their obligations; and
 - .2 assign responsibilities within their Administration to update and revise any relevant policies adopted, as necessary.

Enforcement

47. Coastal States should take all necessary measures to ensure their observance of international rules when exercising their rights and fulfilling their obligations.
48. A coastal State should consider developing and implementing a control and monitoring programme, as appropriate, in order to:
- .1 provide for the allocation of statistical data so that trend analyses can be conducted to identify problem areas;
 - .2 provide for timely response to pollution incidents in its waters; and
 - .3 co-operate with flag States and/or port States, as appropriate, in investigations of maritime casualties.

Evaluation and review

49. Coastal States should periodically evaluate their performance in respect of exercising their rights and meeting their obligations under mandatory IMO instruments.



**APPENDIX 3 PRE AUDIT QUESTIONNAIRE (IMO RESOLUTION A.974 (24) –
FRAMEWORK AND PROCEDURES, ANNEX, PART 2, APPENDIX 2)**

I GENERAL INFORMATION		
1 Name of State		
2 Full contact details for the designated single point of contact for audit purposes		
Name and Title		
Address		Telephone No.: Fax No.: E-mail address:
3 Full contact details of government body(ies) covering the following areas of responsibility:		
	Area of responsibility	
	Safety	Environmental Protection
Name of government body		
Address		
Telephone No.		
Fax No.		
E-mail address		
4 Please provide an organigram and/or a diagram depicting the area of responsibility of each of the above-mentioned government bodies.		

5 Please indicate the number of employees of each relevant government body* by category:
 * Please provide the information requested below for each relevant government body

Category	No. of employees	Location
Management		
Technical		
Surveyors		
Legal		
Educational		
Support Staff		
Other		

6 Please indicate the number of ships on your State's register according to the following types and the nature of the trade in which they are involved. Please provide the information separately for each register, where applicable.

	Number	Nature of Trade
Passenger		
Cargo		
Fishing		
Other		

7 Please provide information on any relevant State territorial body(ies) and its (their) relationship to the Administration.

8 Please specify the scale and extent of your State's involvement in the following activities:

.1 port State activities; and

.2 coastal State activities.

II Information on international instruments		
1 Please indicate to which of the following mandatory IMO instruments listed in the <i>Code for the implementation of mandatory IMO instruments</i> your State is a Party.		
Instruments	Party	Has the instrument been incorporated into your State's national legislation?
SOLAS 74	Yes/No	Yes/No
SOLAS Protocol 78	Yes/No	Yes/No
SOLAS Protocol 88	Yes/No	Yes/No
MARPOL 73/78	Yes/No	Yes/No
Annex III	Yes/No	Yes/No
Annex IV	Yes/No	Yes/No
Annex V	Yes/No	Yes/No
Annex VI	Yes/No	Yes/No
1978 STCW as amended	Yes/No	Yes/No
LL 66	Yes/No	Yes/No
LL Protocol 88	Yes/No	Yes/No
TONNAGE 69	Yes/No	Yes/No
COLREG 72	Yes/No	Yes/No
2 Please attach a flow chart illustrating the processes by which international instruments are formally adopted and transposed into your State's national legislation.		
3 Please provide the following information INDIVIDUALLY FOR EACH OF THE ABOVE INSTRUMENTS to which your State is a party:		
.1 the government body* responsible for the implementation and enforcement of the instrument;		
.2 the equivalents/exemptions issued under this instrument and reported, as appropriate, to the IMO;		
.3 whether other Contracting Governments or Parties have been requested to act on behalf of your State; and		
.4 whether information on national laws, etc., has been communicated to IMO.		
Yes <input type="checkbox"/> No <input type="checkbox"/>		
*Note: The responsible body should be clearly indicated in the relevant places in the flow chart provided under question 2 above.		
4 What is your State's policy in respect of the following:		
.1 the term "to the satisfaction of the Administration"; and		
.2 convention requirements that equipment must be of a type approved by the Administration?		
5 If applicable, how are the above-mentioned provisions implemented?		

III Information on enforcement	
1	Please give details on how your State implements the enforcement provisions of the <i>Code for the implementation of mandatory IMO instruments</i> .
2	Please provide examples of enforcement action taken by your State against ships entitled to fly its flag, companies and/or seafarers during the preceding twelve months.
3	Please provide details on how statistical information is obtained and how trend analyses are conducted to indicate problem areas within your State's fleet.
4	Please describe briefly your State's procedures for dealing with ships entitled to fly its flag that have been detained by port State control.
IV Recruitment and training of surveyors	
1	Please describe or specify your State's recruitment criteria, qualifications and processes for surveyors and other staff engaged in flag and port State duties.
2	Please describe or specify your State's initial training requirements for new entrant surveyors as well as in-service training requirements for experienced surveyors.
3	Please describe or specify your State's management arrangements defining the responsibilities, authority and interrelationship of surveyors and other staff engaged in flag and port State duties.
4	Please describe or specify your State's criteria, e.g. qualification, experience and training, for the appointment of line managers of surveyors.
V Information on recognized organizations (ROs)	
1	Please list the ROs/nominated surveyors authorized to act on your State's behalf.
2	Please specify whether there is a written agreement with each RO, in accordance with MSC/Circ.788-MEPC/Circ.325, and if so, please attach a copy.
3	In the absence of a written agreement in accordance with MSC/Circ.788-MEPC/Circ.325, please specify scope of the authorization(s). A matrix indicating which functions (plan approvals, surveys, certification, exemption and equivalent arrangements) have been delegated to the RO should be provided.

4	How does your State verify and monitor the performance of its authorized ROs? Details of audits carried out by your State to monitor its ROs within the preceding two years should be provided, as well as any planned audits and other oversight and guidance procedures applied by your State to ROs.
5	Please indicate the resources allocated to verification and monitoring of RO performance.
VI Information on investigation and analysis of marine casualties and pollution incidents	
1	Please describe or provide your State's relevant national legislation relating to investigation and analysis of marine casualties and pollution incidents, as appropriate.
2	Please describe your State's organizational structure for casualty investigation and provide an organigram illustrating the national set-up. This should also include a description of how the impartiality and independence of investigators are ensured, against both internal and external influences.
3	Please describe how your State analyses human element contributions to accidents and how the analyses are used in order to improve safety and pollution prevention. Please provide examples of established databases, if appropriate.
4	Please describe how your State carries out the required reporting to IMO.
VII Information on port State control (PSC) activities	
1	Does your State carry out port State control? Yes <input type="checkbox"/> No <input type="checkbox"/>
2	Please provide a brief description of the relevant sections of your national legislation permitting port State control to be undertaken on foreign ships visiting your ports.
3	Does your State belong to one or more regional port State control regimes? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, specify which regional regime(s) and provide further information on the nature of its participation in that or those particular PSC regimes. If no, briefly describe your State's procedures for carrying out port State control.

4	Please describe the arrangements which your State has put in place to enable port State control interventions to be transmitted “forthwith” to all parties concerned.
5	How many PSC inspections have been carried out by your State over the last two years and how many have resulted in detentions? Number of PSC inspections: _____ Number of detentions: _____
6	Does your State have reception facilities for ship-generated wastes under MARPOL 73/78? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please list and describe them and state whether they are adequate in the context of the requirements of the Convention.
VIII Information on coastal State activities	
1	Please describe your State’s national legislation implementing the “force majeure” provisions of SOLAS article IV.
2	Please describe your State’s arrangements for promulgating navigational warnings and dangers to navigation.
3	Please describe your State’s arrangements for the establishment and maintenance of any navigational aids within waters for which it has responsibility and how information relating to these is promulgated.
4	Please describe any measures your State has put in place which encourage the collection of meteorological data and what use is made of this data.
5	Please describe your State’s arrangements for coast watching and for the rescue of persons in distress.
6	Please describe your State’s arrangements for investigating reported incidents of pollution.
7	Please describe your State’s shipping and pollution prevention legislation as applicable to its EEZ.

8	Are there any Particularly Sensitive Sea Areas (PSSAs) established within your State's jurisdiction? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, what are the associated protective measures?
9	Please describe any maritime traffic routeing schemes or restricted areas enforced within waters for which your State has responsibility, and which have not been adopted by the IMO.
10	What IMO maritime traffic routeing system or restricted area does your State enforce within waters under its jurisdiction and how is it managed?
11	What ship reporting systems or VTS systems adopted by IMO, if any, are in force in your State?
12	Under what national legislation does your State establish sanctions for violations of mandatory IMO instruments within its jurisdiction?
13	What methodology does your State employ to enforce its maritime legislation on ships of any flag within its territorial waters?
14	Please describe your State's arrangements for: .1 hydrographic services; and .2 ship reporting systems.
15	Please describe any measures undertaken by your State to evaluate its effectiveness in implementing IMO mandatory instruments which are applicable to it as a coastal State (e.g. exercises to test counter-pollution measures, rescue of distressed persons, etc).
IX Information on reporting requirements	
1	Please describe your State's system for developing (including information gathering) and submitting mandatory reports to IMO.

X Evaluation and review	
1	Please describe how you measure the performance of your maritime administration (i.e. benchmarking the port State control detention rates of ships in your registered fleet; consolidating the results of your inspections of your registered ships; evaluating casualty statistics on your registered fleet; evaluating the effectiveness of the communications and information processes supporting your managerial structure; evaluating annual loss statistics; and using performance indicators and their effectiveness in determining whether staffing, resources and administrative arrangements (including financial and technical) are adequate to meet obligations under mandatory IMO instruments).
2	Please describe the methods by which the results obtained from evaluation and review influence your future policies to promote continuous improvement.
XI Information about management systems	
1	Does your State use a recognized quality management system, e.g. ISO 9001:2000, for part or all of its activities? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, relevant documentation should be copied and submitted together with this questionnaire.
2	Does your State use other management systems, e.g. internal contracts between management and subdivisions, external contracts between the organization to be audited and its superiors of either a political and/or administrative nature or any other proprietary management system? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, copies of contracts or other relevant documentation (in an appropriate language) should be submitted together with this questionnaire.
XII Scope of the audit	
1	Does your State wish some of the areas included in the <i>Code for the implementation of mandatory IMO instruments</i> to be excluded from the audit (reasons for this could be that it is not a contracting party to some international instruments or has acceded only recently to a particular instrument)?



APPENDIX 4 AUDIT SCHEME - SEQUENCE OF ACTIVITIES

Ref.	Activity	Responsible	Procedures Ref.
1	A Member State volunteers to be audited	MS	4.1.2
2	Pre-audit questionnaire sent to the Member State	SG	5.2
3	Completed pre-audit questionnaire to IMO	MS	5.4
4	Selection of auditors by IMO	SG	4.3
5	Notification of auditors to Member State	SG	5.1
6	Final selection of audit team	SG + MS	4.4.1.5; 5.1
7	Developing and negotiating the Memorandum of Co-operation	SG + MS	4.1.4
8	Memorandum of Co-operation finalized and signed	MS + SG	4.1.4; 4.1.5
9	Preparation for the audit by the audit team	ATL	Section 5 (various references)
10	Agreeing the audit plan	ATL + MS	4.1.1; 5.11
11	Opening meeting between the audit team and the Member State	ATL + MS	6.3.1
12	Audit closing meeting	ATL + MS	6.5
13	Audit interim report sent to the Member State and IMO	ATL	7.1.3; 7.2.2
14	Comments sent by the Member State	MS	7.2.3; 7.2.4
15	Member State's corrective action plan, as appropriate, sent to IMO	MS	7.2.1; 7.3.2; 8.4
16	Audit final report sent to Member State and IMO	ATL	7.3.2
17	Audit summary report sent to the Member State and IMO	ATL	7.4.1
18	Audit team leader's mission report to IMO	ATL	7.5.1
19	Agreement with the summary report and permission to circulate	MS + ATL	7.4.1
20	Summary report sent to all IMO Member States	SG	(Framework 8.1.10; 6.3.2)
21	Follow-up, as appropriate	SG	9.2
22	Consolidated summary reports prepared and circulated to all IMO Member States	SG	7.4.3

Note: Items 4 and 7 and also items 6 and 8 may proceed concurrently

MS = Member State

SG = IMO Secretary-General

ATL = Audit team leader