Input paper: [[1]](#footnote-1) ENG9-2.1.5

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**X** ARM **□** ENG **□** PAP **X** Input

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Agenda item [[2]](#footnote-2) (from agenda) 2

Workplan Task Number2 …………………………………

Working Group

Author(s) / Submitter(s) IALA Secretariat

Report on analysis of IALA questionnaire responses 2017

# Summary

The IALA questionnaire issued in early 2017 has been analysed and a report prepared by the IALA Secretariat.

## Related documents

ENG9-2.1.6 Report IALA Questionnaire 2017 final.

# analysis Methodology

The following methodology was employed:

* The Excel database containing results from 2010, 2011, 2012, 2017 from Phil Day, Chair ARM Committee, was taken as the initial database.
* The results from 2014 from Jorge Teles, Member ARM Committee, were added to the initial database to produce a full database 2010-2017.
* The database fields were extended to include questions in the 2014 and 2017 questionnaires that were not already in the database.
* The answers were compared to the database, errors corrected and missing 2017 records were added to produce a final database 2010-2017.
* The original data as provided in the answers were not adjusted other than the number of lighthouses. Since the question on the number of lighthouses was removed from the 2017 questionnaire, the number of lighthouses for 2017 was calculated by summing the number of staffed lighthouses and the number of automated lighthouses. There are some obvious inconsistencies which may arise from interpretation of the question in the questionnaire.
* The final database 2010-2017 was analysed using Excel tools to provide information on both the 2017 snapshot of status and trends from 2010 to 2017.
* Some of the summaries may cause considerable comment. In particular there are many inconsistencies in the personnel numbers tables. It is suspected that some respondents may have mistakenly entered number of lighthouse stations instead of number of lighthouse staff.

# Comments on 2017 questionnaire

* The questionnaire was submitted in Excel format which enabled a semi-automatic transfer of the data to the summary database. If another method of conducting the survey is employed, consideration should be given to how the data will transfer to the summary database as manual transfer is tedious and very prone to error.
* Where there is the possibility of ambiguity in the meaning of a question, explanatory comments can be included in cells in an Excel format questionnaire. Other formats of survey probably have similar facility.
* When the next questionnaire is being prepared, the questions should be formulated such that the answers can be added to the exiting summary database to enable trends to be identified over a number of years. New questions can be added and a trend developed over a period of time.
* The database includes answers from administrations other than lighthouse authorities/ IALA National Members. A clear policy on the administrations to be invited to respond is necessary for consistency. It is suggested that, since this is an IALA survey, the questionnaire should only be sent to IALA National Members and Associate Members if they are national AtoN providers.
* In the **Marine Aids to Navigation Staff** section it is suspected that respondents sometimes report on the number of lighthouses rather than the number of staff. It is therefore suggested that the box labels be amended to include “staff”, eg Main Office Staff, Lighthouse Staff, etc.
* In the ***Fixed Marine Aids to Navigation Including Lighthouses*** section the question on Number of Lighthouses has been removed and should be reinstated.
* In the ***Sound Signals*** section the older term Fog Horn has been changed to Fog Signal in 2017 which is confusing. The older term Fog Horn should be reinstated.
* What is the difference between *Historically Listed* and *Historically Classified* in past questionnaires? Which one matches the present question ***LHs with legal protection as historic monuments?***
* In the radio aids section the question on ***Virtual AIS deployed*** could be changed to ***Virtual / Synthetic AIS*** or an additional question on synthetic AIS added.
* In the section on ***Equipment***, the question on LED lanterns requests % while all other questions are numbers. This makes it difficult to compare the trend in LED lanterns with previous years which are in numbers rather than %.
* In the section under ***Power Systems*** it may be useful to add a question on the number of primary battery systems in use as one user noted they are still in use.
* When reviewing the data it is apparent that there are some glaring inconsistencies which may arise from interpretation of the meaning of the question.

# 2019 Questionnaire

The policy of issuing the questionnaire annually was changed to once every 4 years in 2014. While data from years before 2010 is available, data is presently available in the summary database for 2010, 2011, 2012, 2014, 2017. The average response rate is about 30-35% of IALA National membership. It is suggested that the questionnaire be issued annually in order to build up a more complete database enabling a more accurate identification of trends. The report submitted to the Conference can be generated from a combination of the questionnaires from the preceding 4 years, thus providing a larger source database.

* The following is a possible roadmap for managing a questionnaire in 2019:
  + Secretariat submit the 2017 questionnaire and questionnaire report to ARM9.
  + ARM9 produce a questionnaire for 2019 in April 2019. This should be structured with the existing database in mind and include explanatory notes where there is the possibility of ambiguity regarding the meaning of the question.
  + Council 69 approve the 2017 questionnaire report and the 2019 questionnaire in June 2019.
  + Secretariat distribute the approved report on the 2017 questionnaire to all Committees, IALA Members, IMC.
  + Secretariat issue the 2019 questionnaire along with the approved 2017 questionnaire report in June 2019, allowing one month for response with clear deadline.
  + Secretariat issue reminder to those who have not responded three weeks after issue, July 2019.
  + Secretariat carry out a simple analysis of the 2019 questionnaire in July / August 2019. The report would only deal with the responses to the 2019 survey.
  + Secretariat submit the report on the 2019 questionnaire to ARM10 in October 2019.
  + ARM10 submit the 2019 questionnaire report to Council 70 in December 2019 for approval.
  + Secretariat combine the results of the 2019, 2020, 2021 (and 2022 if available) questionnaires to produce a 4 year report including trends over the 4 years.
* The Survey Monkey website advises that *the length of your survey should be short enough that it takes the average user 5 minutes or less to complete. This can be achieved with about 10 questions or less, usually. Before you create your survey, be sure you have given thought to what your objectives are.* According to Survey Monkey, *"The decreased time spent answering each question as surveys grew in length, we saw survey abandon rates increase for surveys that took more than 7-8 minutes to complete; with completion rates dropping anywhere from 5% to 20%*. To maximise responses, the IALA questionnaire should be carefully examined to ensure that it contains only the essential information required by IALA Members rather than all possible information.
* An alternative approach to increasing response rates is to break up the questionnaire into parts, possibly using an on-line tool such as Survey Monkey, and distribute these periodically over the year, perhaps one per month, and combine the responses into a single database.
* Paper ARM8-12.1.8 requests the IALA Secretariat to conduct a survey on the Use of Recommendation E-111 on Port Traffic Signals using Survey Monkey. Lessons can be learned from this exercise which may be applicable to the Annual Questionnaire.
* The existing annual questionnaire summary database is in MS Excel and contains the results of questionnaires from 2010 to 2017 in database arrangement. The information required from the IALA survey is simple, does not need sophisticated statistical analysis tools but should be in a form which enables easy comparison with previous questionnaires. Excel includes analytical and display tools and expertise in Excel is widespread. Use of tailor-made survey tools may require additional skills which are not generally available in IALA Committees or Secretariat. Consideration of using such tools should include consideration of who / how the analysis will be conducted. Excel is probably an adequate tool for generating the information required by IALA.

# Action requested of the Committee

The ENG Committee is requested to:

1. Note the report of the IALA Questionnaire.
2. Provide, as the Committee deems appropriate, any comments to ARM9.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Input papers should be assigned to a work task as listed in the Committee work plan which is available in input papers. Leave open if uncertain but consider how the paper is to be processed if not relevant to a work task [↑](#footnote-ref-2)