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Agenda item [[2]](#footnote-2) n.n

Technical Domain / Task Number 2 …Visual Signalling………………………………

Author(s) / Submitter(s) …Alwyn Williams, GRAD……………………

Suggested Guidelines to Support Recommendation R0203

# Summary

ENG Working Group 1 (WG1) has been working on the revision of Recommendation R0203 on Terms of Measurement over the last several sessions of the committee meetings, as well as a small number of intersessional meetings. The purpose of the document is to standardise the definitions and terms that define the performance of marine AtoN lights. This has the potential to impact various aspect of marine lights, including measurement processes and their marketing.

As such, it is imperative that the recommendation is supported by guidelines to ensure that the principles and best practice are correctly used in the implementation of the recommendation. This paper is intended to provide an overview of the potential guidelines needed to support the recommendation.

## Related documents

* Draft IALA Recommendation R0203

# Discussion

Recommendation R0203 defines the terminology in the performance-defining metrics of marine AtoN lights. It is a complex subject due to the wide variety of lights in the industry to cater for different needs. In addition, the current version of the recommendation previously known as E200-3 has very useful information that needs to be captured to prevent it from being lost.

With that in mind, the following guidelines are suggested:

* Measurement of Lights

This guideline is intended to cover the process and considerations of measuring light, as applied to marine AtoN lights. The main content of this guideline is anticipated to be from the existing recommendation, with perhaps some updates to certain parts based on the contents of the CIE International Standard CIE S 025:2015. It is anticipated that a small sub-group could carry out this work over a period of three committee sessions.

* Measurement Uncertainty

This is a sufficiently large subject that warrants its own guideline, separate from the guideline described above. The current recommendation does not cover measurement uncertainty in any great detail, and should be completely overhauled to incorporate up-to-date methodologies and mathematical models, taking into account recommendations given in other publications such as the CIE 198 series of documents. That said, the documentation from CIE is not written in a particularly intuitive manner, and there is an opportunity for IALA to produce a practical guide to measurement uncertainty that could become an industry standard on the subject. The area of metrology is not straightforward, and the author of this paper has spent a significant amount of time and effort in dealing with measurement uncertainty of GRAD’s light measurement facilities. As a consequence of this, a paper on this work will be made available to IALA after the 2023 IALA Conference in order to accelerate the production of this guideline. However, even with this input, it is envisaged that the guideline will take at least six committee sessions for a subgroup to complete.

# Action requested of the Committee

The Committee is requested to take the suggestions above into account when developing the 2023 – 2027 IALA work plan.

1. ........
2. Annex Heading 1
   1. Annex heading 2
      1. Annex heading 3
3. ........
4. Appendix heading 1
   1. Appendix heading 2
      1. Appendix heading 3

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)