

2nd NCWG MEETING
Monaco 26-29 April 2016

Paper for Consideration by the Nautical Cartography Working Group (NCWG)

Intermittent Lakes

Submitted by:	NCWG Chair (on behalf of Saudi Arabia)
Executive Summary:	There is a requirement to indicate extensive areas of intermittent lakes on charts where there is little or no other topographic detail.
Related Documents:	S-57 FAQ Submitted 19 August 2015 S-4; INT1
Related Projects:	S-101 development

Introduction / Background

There is a requirement to indicate to the mariner that many lakes adjacent to the coast of Saudi Arabia are intermittent, and may not therefore be identified as lakes from vessels navigating in the area at certain times of the year.

Analysis / Discussion

This request was first received through the IHO S-57 Frequently Asked Questions (FAQ) mechanism included on the ENCWG page of the IHO web site. This FAQ indicated an inconsistency in S-4 and INT1 between the specifications for charting rivers and the specifications for charting lakes.

S-4 clauses B-353.1 and B-353.3 provide specifications for depicting perennial and intermittent rivers respectively on charts. However clause B-353.6 provides only a generic specification for encoding lakes, which does not distinguish between perennial and intermittent lakes. Cases have been identified that require identification of lakes as intermittent on charts where they are adjacent to the coast; there is little or no additional charted topography; and the lakes are dry for the majority of the year. Given that this can be done for rivers it is considered that, for consistency, a similar presentation be adopted for lakes.

The specification for encoding lakes in the S-57 ENC Product Specification is aligned to the S-4 specification. It was considered that additional guidance needed to be added to S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC* (UOC), to provide guidance on encoding intermittent lakes for ENC. This was the subject of the FAQ response which is a “work-around” in S-57, and this guidance will be incorporated in the next version of the UOC. A further proposal will also need to be made to the S-101 Project Team to add the attribute **status** to the feature **Lake** to allow for intermittent lakes to be encoded in S-101.

Conclusions

Providing a specification for the depiction of intermittent lakes on charts will be consistent with similar specification for rivers.

Recommendations

It is suggested that a statement similar to the following be added at the end of clause B-353.6:

Intermittent lakes should be represented as for intermittent rivers (see B-353.5).

For INT1, it is suggested that an example be included at C21, and the description amended to “Intermittent river **or lake**”.

If this is accepted, it is further suggested that the ENCWG be requested to develop encoding guidance for intermittent lakes for inclusion in S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC*, and a proposal developed for submission to the S-101 Project Team (S-100WG) for the addition of the **status** attribute to the **Rivers** feature.

Justification and Impacts

Acceptance of the recommendations in this paper will allow for consistent depiction of intermittent lakes on charts, in line with the specification for intermittent rivers.

Action required of NCWG

The NCWG is invited to:

- a. **Discuss** this paper.
- b. **Approve** the recommendations above.