

Paper for Consideration by HSSC

Admiralty Information Overlay and P/T updates in Swedish ENC's

Submitted by:	Sweden
Executive Summary:	Sweden issues all relevant preliminary and temporary (P/T) information as updates to ENC. We are concerned that the Admiralty Information Overlay service when compared with content of the ENC's creates difficulty and confusion for the end user. A comparison regarding the content published in the Admiralty Information Overlay (AIO) service and the P/T updates in national ENC's was conducted. The result emphasises the concerns and from a Swedish point of view leads to some conclusions and recommendations.
Related Documents:	Among others: IRCC6-08B "Relevance of information overlay services and their status in the global IHO ENC programme" (France) HSSC6-05.5D rev1 "Relevance of information overlay services with respect to IHO standards" (IHB)
Related Projects:	

Introduction / Background

The UKHO distributes ENC's through the Admiralty Vector Chart Service (AVCS) and also provides, as an added service connected to AVCS, the Admiralty Information Overlay (AIO). The Admiralty Information Overlay serves as an additional layer to ENC where all Admiralty Temporary & Preliminary Notices to Mariners are published.

Analysis/Discussion

Sweden and the Swedish HO considers that we have the necessary procedures established in order to issue all relevant information that the mariner needs for safe navigation and passage as updates to ENC and this includes preliminary and temporary (P/T) updates. This is our basis and starting point for the discussion. The AIO service aims to deliver the same or similar information to the same customer and environment (ENC/ECDIS). We are concerned that duplicate, seemingly similar, products or services create confusion for the end user and we question the need for AIO for the area covered by Swedish ENC's.

In order to analyse the situation a comparison, of the content of the Admiralty Information Overlay service and Swedish NtMs and Swedish updates to ENC, was made for a period of one week in April 2015. To ensure a reasonable quality in the investigation we continued to monitor the situation for another three weeks and the outcome was very similar for the following weeks. The study was not always straight forward and a total certainty in the result cannot be expected. There were, for instance, in rare cases difficult to establish a one-to-one relation between a Swedish notice and a corresponding notice in AIO. Despite these uncertainties we consider that the resulting overall picture is sufficient for us to describe the situation and draw some important conclusions.

For the week April 9-16, between normal weekly publishing of the NtM booklet, Sweden had 81 preliminary (P) and temporary (T) notices published in NtM during this period. In the same week 37 P/T updates concerning Swedish waters were published in AIO including 16 updates that were already withdrawn by Sweden.

-Selection of NtMs to publish

In the table below the 81 Swedish P/T NtMs are grouped in four categories depending on how they were selected for publishing as updates in Swedish ENC's and in the Admiralty Information Overlay service respectively.

Number of notices	Sweden publishes in ENC	Admiralty publishes in AIO	Remark
15	Yes	Yes	No issues with the selection. There may be issues regarding unambiguous encoding of the information and whether duplicate information causes confusion for the end user.
28	Yes	No	Information that Sweden considers of importance is not recognised by the user when using only AIO.
32	No	No	No issues with the selection.
6	No	Yes	Admiralty considered these notices relevant for publication in AIO but Sweden did not publish them as updates to ENC.

The two groups where the assessments differ are noteworthy and may be studied further to analyse the situation regarding different categories of notices. In order to draw general conclusions however we do not need to study the processing of individual notices.

We note,

- There are considerable differences in content between the official ENC's and the AIO service.
- The assessments and selections made by the coastal state issuing official ENC's must be considered primary and we question that when creating AIO other selection criteria are used.

The delay in providing the information

The fact that there is a delay between when a P/T notice is published in an ENC update and when it is distributed in the AIO service is unquestionable. At present we see a delay of normally 6-7 weeks between when a P/T notice is published as Swedish NtM and when it appears in UKHO/Admiralty NtM and subsequently in the AIO service. If the Swedish weekly NtM digital booklet is used as source and an important P/T notice was published swiftly as update to ENC there may furthermore be a delay of up to one week already initially. We have observed cases when the delay is considerably longer than 6-7 weeks.

We note,

- With the delays in the procedure a P/T notice may have been published as update in ENC and then already withdrawn without appearing in the AIO service.
- Even if procedures are improved and the time of delay is reduced fact remains that there will always be a delay that will cause the information in ENC and AIO to differ and to be unsynchronised.

The end user situation

As a small part of our investigation we contacted two vessels and their navigating officers to discuss the situation. The vessels both are tankers on European routes using full ECDIS, not carrying paper charts, and both have their ENC distribution through Admiralty Vector Chart Service (AVCS) and they also use the AIO service.

The most important finding is that the understanding onboard, before the discussions, was that the AIO service is the **only way** to obtain the necessary P/T information and bring it in to the ECDIS environment. They were **not** aware of the fact that the ENCs contained P/T information and that such information often would be encoded into Caution Area features. We assume that this misconception could exist among other users as well.

At least from our national viewpoint this situation raises very serious concerns and the fact that primary information in ENC is not recognised and not used must be seen as a potential risk for compromising safety of navigation.

We note,

- End users are not aware of the P/T update information in ENC and risk missing important information.
- An improved knowledge among end users that P/T information may exist both in ENC and in AIO but will differ in content is likely to be **very** confusing.
- The solution available in current ECDIS and S-57/S-58 to portray P/T updates has shortcomings.

Conclusions

- For ENC producing nations that issue all necessary updates, including P/T, to official ENCs on a regular basis the AIO service is a secondary product which is not needed. Having duplicate means of distributing P/T updates to the ECDIS environment creates severe confusion for the end user and causes a considerable risk that important information for navigation is not recognised by the user.
- It is obvious that current solution for the portrayal and use of P/T updates in ENC (S-57,S-58,ECDIS) is not always understood by end users. We should make sure that the future solution with S-101 incorporates an improved solution from the start.

Recommendations

-We consider that for producing nations, as described in this paper, the existence of two different services, AIO and official ENCs, must be avoided. This issue has been discussed for a couple of years now without reaching a solution. We recommend that the UKHO in these cases withdraw their AIO service for the areas concerned.

-We ask the ENCWG to confirm that an improved solution for awareness and use of P/T updates in future S-101 based ECDIS is in their work plans. If not we recommend that HSSC tasks the ENCWG to handle this.

Justification and Impacts

The first recommendation will enable the distribution of one, and only one, unambiguous data set including preliminary and temporary updates, where these updates are available in official ENCs, to the user. We consider that this clarifies the delivery and commitment from IHO in accordance with WEND principles. There is no standardization action involved. The priority is considered to be high.

The second recommendation will ensure an improved functionality in future S-101 ECDIS with regard to P/T updates and for the benefit of the end user. There is some standardization activity involved for the ENCWG and the S-100 WG if necessary. The volume of the task is considered moderate or low and priority is medium.

Action Required of HSSC

The HSSC is invited to:

- a. note the paper
- b. agree on proposed recommendations
- c. take any other action considered necessary