



CHART STANDARDIZATION & PAPER CHART WORKING GROUP (CSPCWG)

[A Working Group of the Committee on Hydrographic Requirements for Information Systems – CHRIS]

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To CSPCWG Members

Date 27 February

2004

Dear Colleagues,

Subject: New symbols for activities prohibited or “not advisable”

Item D.4 of the CSPCWG Work Plan requires us to consider proposals for new symbols, submitted by Denmark to CHRIS15 (CHRIS15-5.6A refers). This Circular letter considers proposed symbols for activities which are prohibited or “not advisable”.

The submission repeats one which was originally made to CSC in 1999. CSC responded with a “holding” letter promising further consideration and reports on progress. CSC planned to address all such proposals for new symbology at the same time as revising the relevant section of M-4. In these cases, the relevant sections of M-4 have not yet been revised, so CSC’s good intentions have not been realised.

The new submission to CHRIS gives the opportunity to consider these specific symbols now. Annex A provides details of the proposed symbols, and also widens the discussion to consider what responsibility hydrographic offices have to advise mariners, not just of hazards, but also what activities are inadvisable in hazardous areas. It also touches on international symbology conventions. When we have considered all the responses, the secretary will draft amendments to M-4, as appropriate.

I would be grateful if WG members would consider these symbols, and the discussion points, and provide comments **by 27 April 2004**.

Yours sincerely,

Peter G.B. Jones,
Chairman

Annex A: Symbology for Activities Prohibited or “Not Advisable”

**Annex A to
CSPCWG CL 04/2004**

SYMBOLGY FOR ACTIVITIES PROHIBITED OR “NOT ADVISABLE”

1. In their paper CHRIS 15.5.6A, Denmark proposed a series of magenta symbols for various activities prohibited or “not advisable”. Each of the symbols is (presumably) designed to stand alone within an area, or be inserted into a line symbol (usually IN2.1) as a single or multi feature line (similar to IN2.1).



2. *[Magenta]* Meaning: *Entry Prohibited*

- a. Denmark’s explanation: As you are not allowed to enter into these kind of areas we feel that the [road] traffic sign used on land for “entry prohibited” would be obvious to use and easy for the mariner to understand.
- b. Chairman’s comments: This proposed symbol is believed to be well recognised, and accords with the general principle of replacing legends with easily understood symbols whenever possible. It would also be useful for small areas where inserting a legend is difficult. The solid parts distinguish it from the customs symbols (IF61/IN48). It would replace IN2.2, the legend becoming obsolescent. M-4 B-439.3 and 439.4 would require amendment. However, other options need to be considered:
 - i. The S-52 symbol (ENTRES51), meaning “area where entry is prohibited or restricted or to be avoided”, has already been developed for ENC’s. In night vision mode it may appear very similar to the Danish proposal. C&SMWG comments on the use of this symbol on paper charts would be particularly welcome.



[Magenta] S-52 symbol

- ii. The international “Keep out” symbol, circle with a \ (NW/SE) diagonal line. This is the opposite direction to the conventions so far used on ENC’s, and proposed for paper charts.



[Magenta] International “Keep out” symbol



3. *[Magenta]* Meaning: *Diving Prohibited*

- a. Denmark’s explanation: Nil.
- b. Chairman’s comments: This proposed symbol is believed to be self-evident. This activity prohibition is common over historic wrecks, and within harbour areas where space for a legend is often limited. It would need a new INT1 number; I suggest IN27, depicting both a symbol inside an area, and combined with line IN2.1, similar to IN2.1. M-4 B-439.3 and 439.4 would require amendment.



4. *Meaning: Seabed Operations Prohibited*

- a. Denmark's explanation: Nil.
- b. Chairman's comments: This is a common prohibition, especially in cable and pipeline areas, and a symbol would aid the identification of the prohibition in areas where space is limited. The symbol shows a crossed out grab, and is possibly less self-evident, or universally understood, than the symbols above. Although it would probably become quickly recognised, it may be interpreted to imply that only dredging is prohibited, in which case the symbol is ambiguous, which negates the advantage of symbol over text. Is anyone aware of a better symbol which could be used? It would need a new INT1 number; I suggest IN28, depicting both a symbol inside an area, and combined with line IN2.1, similar to IN21. M-4 B-439.3 and 439.4 would require amendment.



5. *[Magenta]*

Meaning: Activities not advisable

- a. Denmark's explanation: We have a lot of areas where it is not prohibited to anchor, fish or dive but the activities are “not advisable”.
 - b. Chairman's comments: All these symbols are based on existing recognised symbols, or the proposed symbols at 2 and 3 above, with the difference that instead of a **prohibition** being indicated by the activity symbol being “crossed out” X, the activity is “**inadvisable**” or “**dangerous**”, indicated by a single / through the symbol. This type of restriction is quite common, especially in former mined areas, or in explosive or chemical dumping grounds. Again, a symbol is more compact than a legend and accords with the INT spec principle of preferring symbols to legends. If adopted, I suggest it could be covered by one INT 1 entry (IN29) labelled “Activities inadvisable or dangerous” and give several example symbols (in a similar way where several different buoy shapes are used in the buoy colour symbol at IQ2). M-4 B-439.3 and 439.4 would require amendment.
6. There are some further points which apply to some or all of the proposed symbols which should be considered:
- a. Is it the responsibility of hydrographic offices to **advise** chart users that certain activities are inadvisable or dangerous? On what basis or authority is this judgement to be made? If we do this for some areas, but not others, are we exposing ourselves to liability?
 - b. Such areas are usually identified by the reason for the danger (e.g. Minefields, Former Mined Areas, Explosives and Chemical Dumping Grounds) and the mariner might be expected to deduce that it is not a good idea to anchor, trawl, etc in such areas. Would it be better to develop symbols for these areas?

- c. S-52 symbology and certain international signage conventions (e.g. No smoking and the “Keep out” symbol at 2bii above) use a single line to indicate something is prohibited. Would the chart user intuitively understand the difference between a single line through a symbol (/) and a symbol crossed out (X), particularly if the two symbols do not occur close together?
- d. S-52 uses a single line / (sloping NE/SW) through the fish and anchor symbols to denote any sort of restriction on an activity. This symbol does not distinguish between prohibited and other restrictions, so could include the definition “not advisable” on ENCs. In this respect, if adopted, the single line will have different meanings on the paper chart and ENC. Comments on this aspect from C&SMWG would be particularly valuable (including an explanation of why S-52 does not mirror the paper chart symbology). At present, the “crossed out” fish and anchor symbols (IN20 & 21) are the only examples of “crossed out” symbols, and are unique to paper charts. Would it be better to change these symbols to a single line, to be consistent with ENCs, if the definition “inadvisable” is not adopted?
- e. International signage convention uses circles for mandatory instructions, triangles for warnings, and diamond shapes for hazardous materials. These conventions have not so far been used for paper charts (except IM16 – Precautionary area), or consistently in S-52. It is possible that, at a future date, IHO may be required to comply with such international conventions. Should we start now?