

9. HYDROGRAPHIC INFORMATION: POLICY FOR THE PROMULGATION AND SELECTION OF SAFETY-CRITICAL INFORMATION FOR CHARTS

Source: UK Hydrographic Office

Former Notice 9/04 is cancelled. Alterations and additions to the former notice are marked by sidelines.

1. GENERAL

a. Hydrographic information, both temporary and permanent, is an important aid to navigation, but the volume of such information worldwide is considerable. If all the data available were promulgated immediately to update the various United Kingdom Hydrographic Office (UKHO) products, the quantity would overload most users and limit the usefulness of these products. Consequently strict control is exercised in selecting that which is necessary for immediate or relatively rapid promulgation. That which is considered desirable but not essential for safe navigation is usually included in the next full new edition of the product when it is published. Each item of new data received in the UKHO is assessed on a scale of potential danger, or significance, to the mariner (i.e. how *safety-critical*) bearing in mind the wide variety of users of UKHO products in the area affected and the different emphasis which those users place on the information contained in the products. For example, the master of a large merchant vessel may be far more concerned with data regarding traffic routes and deep water channels than the recreational user, who may in turn have a greater interest in shoaler areas where the merchantman would never intentionally venture. The fisherman may have a greater interest in seabed hazards.

b. During 1997, the criteria used to assess whether hydrographic information required immediate or relatively rapid promulgation were revised and made more stringent in response to size of vessels and changes in navigational practice by chart users. However, chart users should note that information assessed prior to 1997 and not yet included in a full new edition of the chart does not benefit from these changes in criteria. Details of the revised criteria are given below at section 4. Mariners are warned that in all cases prudent positional and vertical clearance should be given to any charted features which might present a danger to their vessel.

2. METHODS OF PROMULGATION OF CHART UPDATING INFORMATION

For navigational chart-updating information and the Admiralty Raster Chart Service, the following methods of promulgation which depend upon the urgency, scope and complexity of the data, are used:

a. Radio Navigational Warning (RNW)

There are three types of Radio Navigational Warnings (RNW): NAVAREA warnings, coastal warnings and local warnings:

- (i) Within NAVAREA I area (NE Atlantic) where the UKHO is NAVAREA co-ordinator, a NAVAREA warning is issued when immediate notification of new dangers and changes in navigation aids is essential. Outside the NAVAREA I area, the data is forwarded to the appropriate NAVAREA co-ordinator who will consider issuing a NAVAREA warning for his area.
- (ii) Coastal warnings are issued by the national co-ordinator of the country of origin and give information which is of importance only in a particular region. They often supplement the information given in NAVAREA warnings.
- (iii) Local warnings are usually issued by port, pilotage or coastguard authorities and give information which normally is not required by vessels during ocean passage.

b. Permanent Chart updating Notice to Mariners (NM)

NM is used for the prompt dissemination of textual permanent navigational safety-critical information which is not of a complex nature. Guidelines for the selection of data are included at section 4. below. An explanation of terms used in Notices to Mariners is included at section 5. below.

c. Notice to Mariners (NM) Block

NM Block is used where there is a significant amount of new complex safety-critical data in a relatively small area or where the volume of changes would clutter the chart unacceptably if amended by hand.

d. Priority New Edition (PNE)

A PNE is a new edition of a chart not scheduled in the UKHO charting plan, but produced when there is a significant amount of urgent new data to be disseminated but, due to volume or complexity of the data, is not suitable for NM or NM Block. PNEs may be limited in the amount of information which is included: they may not include all non safety-critical information.

e. Preliminary Notice to Mariners ((P)NM)

((P)NM is used where early promulgation to the mariner is needed, and:

- (i) Action/work will shortly be taking place (e.g. harbour developments) *or*
- (ii) Information has been received, but it is too complex or extensive to be promulgated by permanent chart-updating NM. A précis of the overall changes together with safety-critical detailed information is given in the ((P)NM. Full details are included in a New Chart, New Edition or Priority New Edition *or*
- (iii) Further confirmation of details is needed. A permanent chart-updating NM will be promulgated or NE issued when the details have been confirmed *or*

(iv) For ongoing and changeable situations such as bridge construction across major waterways. A permanent chart-updating NM will be promulgated or NE issued when the work is complete.

f. Temporary Notice to Mariners ((T)NM)

((T)NM is used where the information will remain valid only for a limited period. Note: A ((T)NM will not normally be initiated where the information will be valid for less than 3 - 6 months. In such instances this information may be available as an RNW (see paragraph 2a.) or a local Notice to Mariners.

g. New Edition (NE) and New Chart (NC)

A NE is produced when there is a large amount of new data or a significant amount of accumulated data which is non safety-critical. A NC is issued if it embraces an area not previously charted to the scale shown, or it embraces an area different from the existing chart, or it introduces different depth units. NEs and NCs are scheduled in the UKHO charting plan, although the order of taking up NEs/NCs may be adjusted as priorities change.

h. Non Safety-Critical Information

Information which is assessed as being non safety-critical and not appropriate for promulgation by RNW, NM (permanent, block, preliminary or temporary), or PNE because of its minor nature, is recorded to await the next routine updating of the chart by NE or NC.

3. SOURCES

a. Information is received by the UKHO from a variety of sources. These include:

- (i) the Royal Navy and other surveying organisations;
- (ii) foreign hydrographic offices and/or national charting authorities;
- (iii) other functional authorities e.g. lighthouse authorities, port authorities;
- (iv) commercial organisations e.g. communications companies, oil and gas operators;
- (v) vessels / shipping companies;
- (vi) private individuals e.g. leisure sailors.

b. Of the above sources of information, (i) to (iv) provide the broad base of hydrographic information, but (v) and (vi) are no less important for keeping the published information up to date.

c. Mariners are encouraged to notify the United Kingdom Hydrographic Office when new or suspected dangers to navigation are discovered, changes are observed in aids to navigation, or updates to charts or publications are seen to be necessary. Reports can be in any form: manuscript or e-mail are equally welcome. Hydrographic Notes, forms H102 and H102a, which indicate the nature of the information, are printed in each weekly Notices to Mariners or can be obtained gratis through any Admiralty Chart Agent (see Annual Notice to Mariners No. 2 for details). Reports which cannot be confirmed by the reportee, or are lacking in certain details, should not be withheld; however, limitations should be stressed to the UKHO.

d. Reports of shoal soundings, uncharted dangers and aids to navigation which are out of order should, at the mariner's discretion, also be made by radio to the nearest coast radio station. The draught of modern tankers is such that any uncharted depth under 30 metres (or 15 fathoms) may be of sufficient importance to justify a radio message.

e. Some information, dependent on its source and completeness, will require corroboration from an authoritative source (e.g. primary charting authority, port authority) before being acted upon. However, if corroboration is being sought, but the nature of the information is such that it needs to be promulgated urgently, an NM may be issued.

4. SELECTION OF SAFETY-CRITICAL INFORMATION

a. In all areas of UKHO national charting responsibility (the United Kingdom, UK dependent territories and many Commonwealth countries) and in other areas of significance to international shipping, decisions are made within the UKHO to proceed with one or more of the methods of promulgation outlined in section 2. above. The following types of information are deemed to be safety-critical and will normally receive NM, NM Block or PNE action, at least on the largest scale charts affected:

- (i) Reports of new dangers significant to surface navigation e.g. shoals and obstructions with less than 31 metres of water over them and wrecks with a depth of 28 metres or less. *Note:* on some Admiralty charts, based on older information or on information from hydrographic offices currently using different criteria, certain wrecks which have significantly less water over them than 28 metres may be portrayed by the symbol IK29 in Admiralty Chart 5011 (Symbols and Abbreviations used on Admiralty Charts). For more information about depth criteria, see The Mariner's Handbook (NP100).
- (ii) Changes in general charted depths significant to submarines, fishing vessels and other commercial operations (depths to about 800 metres) including reports of new dangers, sub-sea structures and changes to least depths of wellheads, manifolds and templates, pipelines and permanent platform anchors in oil exploration areas such as the North Sea and the Gulf of Mexico.
- (iii) Changes to the critical characteristics (character, period, colour of a light or range if change is generally over 5 miles) of important navigation aids, e.g. major lights, buoys in critical positions.
- (iv) New or amended routeing measures.

- (v) Works in progress outside harbour areas.
- (vi) Changes in prohibited or restricted areas, anchorages etc.
- (vii) Changes in radio-navigation aids.
- (viii) Additions or deletions of conspicuous landmarks.
- (ix) In harbour areas: changes to wharves, reclaimed areas, updated date of dredging if previous date more than 3-4 years old, works in progress. Also new ports/port developments.
- (x) In UK Home Waters, all cables and pipelines, both overhead (with clearances) and seabed to a depth of 200 metres. Outside UK Home Waters, all overhead cables and pipelines (with clearances); seabed telecommunication cables to a depth of 40 metres; seabed power cables and pipelines to a depth of 200 metres.
- (xi) Marine farms.
- (xii) Pilotage services.
- (xiii) Vertical clearances of bridges. Also horizontal clearances in US waters.
- (xiv) Regulated areas.

b. Areas where there is another national charting authority are termed derived charting areas; in some of these areas there is an obligation to follow the national charting authority in promulgating safety-critical information. This is particularly relevant for countries where there are statutory regulations in force which govern the carriage of authorised charts and publications.

5. NOTICES TO MARINERS — EXPLANATION OF TERMS

a. An explanation of the various commands used within section II of Weekly Notices to Mariners is summarised below: The main text of the update starts with one of the following five commands, usually in the order shown:

(i) **INSERT** is used for the insertion of all new data or, together with the **DELETE** command (see v. below), when a feature has moved position sufficiently that the **MOVE** command (see iv. below) is not appropriate. For example: Delete feature and Insert in a different position.

(ii) **AMEND** is used when a feature remains in its existing charted position but has a change of characteristic, for example:

Amend light to, Fl.3s25m10M 32°36'·90S., 60°54'·18E.

When only the range of a light changes:

Amend range of light to, 10M 32°36'·90S., 60°54'·18E.

(iii) **SUBSTITUTE** is used when one feature replaces an existing feature and the position remains as charted. The new feature is always shown first, for example:

Substitute F for T (where F is the **new** feature)

(iv) **MOVE** is used for features whose characteristics or descriptions remain unchanged, but they are to be moved small distances, for example:

Move starboard-hand conical buoy from: 56°00'·62N., 4°46'·47W.

to: 56°00'·92N., 4°46'·59W.

(v) **DELETE** is used when features are to be removed from the chart or, together with the **INSERT** command (see (i) above), when features are moved a significant distance such that the **MOVE** command is inappropriate.

b. Full details of chart updating methods can be found in NP294, "How to Correct Your Charts the Admiralty Way".

