

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

ENC UPDATING WORKING GROUP (EUWG)

[A Working Group of the Hydrographic Services and Standards Committee - HSSC]

Chairman: Yves Le Franc (SHOM)
Vice-Chairman: Richard Coombes (UKHO)

EUWG Letter: 03/2009

Date 4 May 2009

To EUWG Members

Dear Colleagues,

Subject: first draft of guidelines

First of all, I'm pleased to inform you that Eivind Mong from Jeppesen Marine joins the group as expert contributor.

Your work and your replies to EUWG letter 02/2009 provided a wide survey of preferred options to encode T and P NMs. Responses were varied and it took some time to analyse them. A reason for this variety is that we did not know the source of the T and P NM information and this was needed. However despite this fact it is possible to identify the preferred options although there are still some outstanding questions. From my analysis I have tried to set up statements and rules for a future guidance.

Annex A presents a first draft of guidelines for your consideration. A questionnaire is included in the draft which is composed of two parts: Part A for Temporary NMs and Part B for Preliminary NMs. It is hoped that these guidelines will encourage HOs to produce "P and T ERs" and it provided to define the methods to be applied. Depending on your responses, we can determine whether we are close to achieving the first objective of the group (the guidance should be approved at the next HSSC meeting).

Annex B is a summary of responses to letter 02/2009. This summary is useful to understand the origin of these guidelines. It just reports tendencies for each real case and to do so, schematises responses. Exact responses and details of each member answers are available through the "reply to all" mechanisms. So, please refer to the response of that member to know the precise encoding method applied.

At this time, we are focused on the guidance for the production of P and T ERs. However, we should keep in mind that other topics need to be studied later, for example:

- some information equivalent to miscellaneous and general notices to mariners, e.g. changes to
 regulations affecting large areas, may not be appropriate to ECDIS and ENC Updates. Such
 information needs to be promulgated by other means,
- some attributes are missing for some object classes (PICREP) and the display on ECDIS of some situation (extinguished LIGHTS) could be improved,
- the mechanism of relaying information between RNW and the subsequent issue of (P) or (T) NMs should be examined, taking into account that there is a need to provide RNW directly on ECDIS.

I would be grateful if you would examine the draft of guidelines and the associated questionnaire. Please send your replies by 29 May 2009.

Yours sincerely,

Yves Le Franc, Chairman

Annex A: Draft of guidelines - questionnaire

Annex B: Summary of responses to EUWG letter 02/2009

DRAFT OF GUIDELINES

Ouestionnaire

(please read all items before fill up the questionnaire)

Part A - Temporary Notice to mariners

GENERAL

1.

Temporary NMs for paper chart are defined in M4/B-600, in particular in § B-601.8 and B-633 (under revision by CSPCWG – see extract from the latest version at the appendix to this document – cf CSPCWG letter 03/2009). (T) NM promulgates navigationally significant information that will remain valid only for a limited period.

For paper chart, the convention is for the mariner to insert the update on his paper chart in pencil, and erase it when the (T) NM is cancelled. S

S-57 provides mechanisms which allow ENCs to be automatically updated (ER). This allows the affected ENC(s) to be continually updated in a timely manner for the duration of the notice and, without additional workload for the mariners.

HOs must promulgate Temporary navigationally significant information by ER to provide the ECDIS user with an updated ENC. This service is equivalent to (T) NM for paper charts.

| 1. | Do you agree text above? | No | Yes |
|---------|--|-------|-----|
| | Comments: | | |
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| | | | |
| | | | |
| 1 D (0 | | 1 3 7 | * 7 |
| 1.B60 | Do you agree with M4/B600 for the definition of Temporary NMs for paper chart? | No | Yes |
| | Comments: | | |
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2.

ER encoding and T NM for paper chart are two different communication processes for promulgating information. As the process differs, it is recommended that ER encoding be handled from the source information because often T NM for paper chart doesn't provide enough detail to perform the relevant ER encoding.

| | | | T • r |
|----|---|-----------------------------|--------------------------|
| 2. | Do you agree text above? | No | Yes |
| | Comments: | | |
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| | | | |
| | | | |
| | 3. | | |
| | | 1.1 | . 110 -111 |
| | Information should be encoded with the relevant objects if possi consider that: | ble. Howevei | , HO snould |
| | An ER must not be initiated if the information will time the ER is received by the mariner. Shorter time by Radio Navigational Warnings. If possible, the include an indication of how long it is to remain in formation. | e periods may ER informa | be covered |
| | ER should not be used if there is little or no live receiving notification when the charted state is notification the ER cannot be cancelled at the correct | restored. W | |
| | This implies that HO should consider constraints of time when identifying the encoding method. Time consuming and unnecessarily complex methods of encoding should avoided. | | |
| 3. | Do you agree text above? | No | Yes |
| | Comments: | | |
| | | | |
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| | 4. | | |
| | The overuse of CTNARE objects for temporary information a possible. The CTNARE object must be used when it is relevant a particular change needs a special warning. CTNARE may be objects are inappropriate (e.g. information not suitable to be and implying caution). | to the object e used when | and/or when the relevant |
| 4. | Do you agree text above? | No | Yes |
| 7. | Comments: | 110 | 103 |
| | Comments. | | |
| | | | |
| | | | |

To correctly encode an ER the source information is useful to determine which elements are reliable, which are permanent and which are temporary.

The STATUS attribute value "temporary" should be used when it is sure that the situation of an object is really temporary.

| 5. | Do you agree text above? | No | Yes |
|----|--------------------------|----|-----|
| | Comments: | | |
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6.

Use of DATSTA - DATEND

The earliest date on which an object will be present (DATSTA) must be encoded only when known. The latest date on which an object will be present (DATEND) must be encoded only when known.

The Encoding bulletin E24 – april 2009 and following versions should be applied.

EB24 - UOC Clause 2.1.5.1 Seasonal objects and Clause 2.6.1 Issuing updates in advance

Clause 2.1.5.1 of Edition 2.1 (April 2002) of the Use of the Object Catalogue for ENC (S-57 Appendix B.1, Annex A) provides guidance on the use of the attributes PEREND and PERSTA for the encoding of seasonal objects in ENC. Clause 2.6.1 of the Use of the Object Catalogue for ENC provides guidance on the provision of advance update information, including the use of the attributes DATEND and DATSTA.

New tests introduced in Edition 3 (2008) of International Electrotechnical Commission document IEC 61174 - Marine Navigation and Radiocommunication Equipment and Systems – Electronic Chart Display and Information Systems (ECDIS) – Operational Performance Requirements, Methods of Testing and Required Test Results, have resulted in the implementation of the use of these time varying attributes by ECDIS manufacturers in their ECDIS systems.

S-57 Appendix A, Chapter 1 – IHO Object Catalogue contains the list of allowable attributes for S-57 Object Classes. For some navigational aid equipment objects the following time varying attributes are not included in the allowable list:

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FOGSIG – PEREND, PERSTA;

RADSTA – PEREND, PERSTA;

RETRFL – DATEND, DATSTA, PEREND, PERSTA;

RTPBCN – PEREND, PERSTA;

TOPMAR – DATEND, DATSTA, PEREND, PERSTA.
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Additionally, there are no definitive instructions in S-52 for the implementation of the Master / Slave relationship in ECDIS in order to apply the time varying attributes to these equipment objects by association.

As a result of the above, navigation aids encoded using PEREND and PERSTA for

seasonality, or DATEND and DATSTA for advance update information, may be adversely displayed in the ECDIS, i.e. a navigation aid equipment object may appear/disappear or remain on the ECDIS display erroneously. This may result in a loss of confidence in the ECDIS by the mariner.

Encoders are therefore advised that where a seasonal or periodic navigation aid contains at least one of the equipment objects FOGSIG, RADSTA, RETRFL, RTPBCN or TOPMAR, the time varying attributes PEREND and PERSTA should not be populated for any object comprising the navigation aid. To indicate seasonality for such navigation aids to the mariner, the attributes STATUS = 5 (periodic/intermittent) and INFORM containing details of the period should be populated.

Where a navigation aid contains one of the equipment objects RETRFL or TOPMAR, advance update information should not be issued. Therefore the attributes DATSTA or DATEND should not be populated for any object comprising the navigation aid. An update applying the temporal change to the navigation aid should be issued as close as possible to the date of the change.

Alternatively, if time varying attributes DATSTA and/or DATEND have been populated for components of a navigation aid that contains at least one of the equipment objects RETRFL or TOPMAR, a separate update applying the temporal change to these equipment objects should be issued as close as possible to the date of the change.

[April 2009]

| 6.a | Except for the double encoding aspect, do you agree text above and the encoding bulletin n°24? | No | Yes |
|-----|--|----|-----|
| | Comments: | | |
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| | | | |
| | Note that no double encoding is required in this bulletin. Richard Coombes will have some discussions about this topic (capacities of older legacy ECDIS) during next DIPWG and TSMAD meeting (Ottawa, Canada, 4-8 May 2009). Report of discussions will be addressed to you later. Then, we will have to choose our position. | | |
| | | | |

7. The INFORM attribute should be used to give supplementary or contextual information when encoding a (T) NM. When the text is too long to be encoded with INFORM, the

attribute TXTDSC must be used. Geographical positions must be expressed in WGS 84 datum and according to M4 $\B-131$.

| 7. | Do you agree text above? | No | Yes |
|------------------|--|---------------|-------------|
| /• | Comments: | 110 | 103 |
| | Comments. | | |
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| | | | |
| | 8. ER issued for temporary information should be managed and rev consider whether further information can be acquired and whether issued to modify or to cancel information previously promulgated | er a new ER s | |
| | (T) NMs for paper charts should indicate "Affected ENC [cell accordingly". Further verification is recommended to make sur consistent with the equivalent paper notice and applicable to the | e that the en | |
| 8. | Do you agree text above? | No | Yes |
| | Comments: | | |
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| GUI | DELINES FOR TYPICAL CASES | | |
| | dividual new physical objects (e.g. wreck, buoy) with no associated eciated (e.g. restricted area) | xplicit or im | plicit area |
| | relevant S-57 object is created. nally, a CTNARE isnot added. | | |
| $\rightarrow 10$ | Add examples from : → 1055(T)/08, 1001(T)/08, 1079(T)/08, 1083(T)/08 (CTNARE), 1697(T)/08, 1698(T)/08, 1719(T)/08, 2289(T)/08, 2291(T)/08,2292(T)/08 | | |
| 1. | Do you agree text above? | No | Yes |
| | Comments: | | |
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2. Individual new physical objects with an associated explicit area around it

| The relevant area is created (e.g. RESARE). The new object is created. However, when the area is an "entry prohibited area" or a CTNARE the object may be omitted except for conspicuous objects (e.g buoy). | | | | | |
|--|---|---------------|-----------|--|--|
| | Add examples from : $\rightarrow 1707(T)/08, 1717(T)/08$ | | | | |
| 2. | Do you agree text above? | No | Yes | | |
| | Comments: | | | | |
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| | lividual new physical objects with a notification of caution (e.g. "Maate with caution") | ariners are a | dvised to | | |
| | new object is created. The advice is normally encoded in INFORM. Excee created to highlight the caution if necessary. | eptionally, a | CTNARE | | |
| | xamples from: 90(T)/08 | | | | |
| 3. | Do you agree text above? | No | Yes | | |
| | Comments: | | | | |
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| 4. Ob | structions (including wrecks) lying within a defined area | | | | |
| An O | BSTRN area or WRECK area is created to cover the area. | | | | |
| Add examples from: $\rightarrow 2275 \text{ (T)/08}$ | | | | | |
| 4. | Do you agree text above? | No | Yes | | |
| | Comments: | | | | |
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5. New simple area object (military practice area, dredging area) The relevant S-57 object is created. Supplementary information is encoded in INFORM.

Normally, a CTNARE is not added.

| Add examples from : $\rightarrow 1016(T)/08, 1017(T)/08, 1081(T)/08, 1699(T)/08, 2259(T)/08$ | | | | | |
|--|--|---------------------------------------|-----|--|--|
| 5. | Do you agree text above? | No | Yes | | |
| | Comments: | | | | |
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| An an defau availa obstr this, a | 6. Complex information within an area (e.g. works in progress) An area object is created. It should be encoded with the relevant S-57 object or, if more suitable or by default, a CTNARE. Supplementary or contextual information is encoded in INFORM. When the available information is sufficiently detailed, navigationally significant objects (e.g. navigational aids, obstructions) are created or modified within the area. When the available information does not permit this, a CTNARE is preferred defining the area. If information and time permit, less navigationally significant objects may be added or modified. Add examples from: → 1056(T)/08, 1081(T)/08, 1082(T)/08, 1716(T)/08, 1726(T)/08,2292(T)/08. | | | | |
| 6. | Do you agree text above? | No | Yes | | |
| | Comments: | 1.0 | | | |
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| The a | 7. Change of an existing object (e.g. navigational aid) The attributes values are normally changed. However, when the information is less navigationally significant and when an defined area object can give the information (INFORM), then change of | | | | |
| _ | ute values may be omitted. | , , , , , , , , , , , , , , , , , , , | | | |
| | Note: HO should make it easy to recover the characteristics before the temporary changes. <i>Add examples from:</i> | | | | |
| $\rightarrow 1004(T)/08, 1056(T)/08, 1726(T)/08 point n^{\circ}4, 1696(T)/08, 2288(T)/08 point no.1, 2260(T)/08$ | | | | | |
| 7. | Do you agree text above? | No | Yes | | |
| | Comments: | | | | |
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7.a Buoy temporary moved

→ 2261(T)/08

| | Several methods are proposed by members. Please, give your level of preference (1: the best, 6: the worse). | |
|-----------|---|--|
| 7.a. 1 | Change of the position of the existing buoy + INFORM Comments: | |
| 7.a. 2 | Change of the position of the existing buoy with DATSTA (date of ER production) and DATEND Comments: | |
| 7.a. 3 | New buoy with DATEND + existing buoy with DATSTA Comments: | |
| 7.a. 4 | New buoy with DATEND + CTNARE with DATEND on the existing buoy Comments: | |
| 7.a. 5 | CTNARE with DATEND covering old and new position Comments: | |
| 7.a. 6 | Other: | |

7.b Light temporary extinguished

 \rightarrow 1726(T)/08 point no. 4, 2260(T)/08

| | Several methods are proposed by members. Please, give your level preference (1: the best, 5: the worse). | |
|------|--|--|
| 7.b. | CTNARE on the LIGHT position | |

| 1 | Comments: | |
|------|---|--|
| | | |
| 7.b. | CTNARE on the extent of the sector of the light | |
| 2 | Comments: | |
| | | |
| 7.b. | Deletion of the LIGHT | |
| 3 | Comments: | |
| | | |
| 7.b. | LIGHT STATUS = extinguished, temporary | |
| 4 | Comments: | |
| | | |
| 7.b. | Other: | |
| 5 | | |
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8. Depth information

8.1 Dated available depths

Real cases need clarification. It seems this information applies mainly to dredged areas. From the related part of the M4 (§B414 – see below), I think that we can consider two cases:

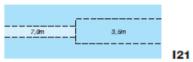
- 1. Information provides from a regular control survey and dredging and the maintained depth is changed. In this cases, it seems that DRGARE/DRVAL1 must be changed. M4 §B-414.1 and B-414.2 refer.
- 2. Information reports depths shoaler than the stated maintained depth. So, we a have to define a guidance to translate M4 §414.5.

Page 6

Medium and Large-scale Charts

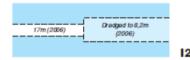
B-414 DREDGED AREAS

Dredged channels and areas must be delimited by dashed lines and the dredged depth must be given in metres and decimetres (depending on the accuracy of the control survey), always followed by 'm' or 'metres'. Shallow water tints should be added in accordance with B-411.6. Decimal zeros may be omitted. Dredged turning (or manoeuvring) basins should be charted in the same way as other dredged areas, and may be labelled accordingly.



The depth should normally be inserted within the area; however, for the exceptional use of tables, see B-414.4.

B-414.1 Areas not regularly maintained. Where it is not known that a dredged area is maintained by regular control surveys and dredging (or if it is definitely known that there is no regular maintenance), the legend on the largest scale chart must give both the depth and year of the latest control survey.



B-414.2 Areas regularly maintained. Where it is known that a dredged area will be maintained by regular control surveys and dredging, the date must be omitted. Where space permits, insert 'Maintained depth...m'.



Where it is known that such areas are subject to siltation between dredgings, a cautionary note may be added.

B-414.3 Limits of dredged areas must be indicated by medium dashed lines. The ends should be left open where leading into deeper water.

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- B-414.4 Tables of dredged depths. In general, the use of tables to list dredged depths should be avoided, except:
 - · in very complex cases, where areas are too small to show legends within the limits;
 - · in areas where very frequent changes occur, to facilitate maintenance by Notice to Mariners.

B-414.5 Soundings within dredged areas. Surveys or reports of depths within a dredged area which are shoaler than the stated depth may be received. If possible, advice should be obtained from the competent authority on whether they have been, or will shortly be, removed. If such assurance cannot be obtained, a cautionary note may be added which may be considered sufficient warning; if not, soundings shoaler than the stated depth may exceptionally be inserted within the dredged area, reported depths being inserted in accordance with B-424.5.

So guideline for this typical cases would be:

- Dated available depths in a dredged area

- When information provides from a regular control survey and dredging and the maintained depth is changed, the attribute value of DRVAL1 of the DRGARE object is changed.
- When it is reported that depths within a dredged area which are shoaler than the stated maintained depth, then a CTNARE is created on the concerned area with depths information

encoded in INFORM or a SOUNDG is created with attributes values EXPSOU = "shoaler than the range of depth of the surrounding depth area" and QUASOU = "value reported".

 \rightarrow 1084(T)/08, 1091(T)/08 no.1

| 8.1. | Do you agree text above? | No | Yes |
|------|--------------------------|----|-----|
| | Comments: | | |
| | | | |
| | | | |
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8.2 Depths less than those charted within a defined area: see Part B

 \rightarrow 1018(T)/08, 1091(T)/08 no.3

| | Do you think that examples showing paper T NMs and equivalent ER encoding are absolutely needed? | No | Yes |
|-------|--|----|-----|
| case. | These examples will be artificial and simpler than real cases of EUWG letter 02/2009 but it'll be time consuming! Comments: | | |

Part B - Preliminary Notice to Mariners

GENERAL

1.

Preliminary NMs for paper chart are defined in M4/B-600, in particular in § B-634 (under revision by CSPCWG – see extract from the latest version at the appendix to this document – cf CSPCWG letter 03/2009). (P) NM promulgates navigationally significant data early to the mariner generally when a paper chart-updating or a paper chart NE can't be issued in due time.

For paper chart, the convention is for the mariner to insert the update on his paper chart in pencil, and erase it when the (P) NM is cancelled.

S-57 provides mechanisms which allow ENCs to be automatically updated (ER). This allows the affected ENC(s) to be continually updated in a timely manner for the duration of the notice and, without additional workload for the mariners.

HOs must promulgate Preliminary navigationally significant information by ER to provide the ECDIS users with an equivalent service to (P) NM for paper charts.

| 1. | Do you agree text above? | No | Yes |
|--------|---|----|-----|
| | Comments: | | |
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| | | | |
| 1.B600 | Do you agree with M4/B-600 for the definition of Preliminary NMs for paper chart? | No | Yes |
| | Comments: | | |
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2.

ER encoding and P NM for paper chart are two different communication processes for promulgating information. For example, in some situations, paper chart needs chart-updating with a block or a new edition. As issuing and delivering a block or a new edition is time consuming, then a (P) NM should be issued for paper chart while S-57's mechanisms are more flexible and allow ENC updates in due time. In some other situations information received are not suitable to correctly update both ENC and paper chart.

As the process differs, it is recommended that ER encoding be handled from the source information because often P NM for paper chart doesn't provide enough detail to perform the relevant ER encoding.

| 2. | Do you agree text above? | No | Yes |
|----|--------------------------|----|-----|
| | Comments: | | |

| | 3. | | |
|----|---|------------------------------|---------------------------|
| | Simple or more complex encoding methods are possible but HO which encoding method is appropriate when performing an ER v time. | | |
| 3. | Do you agree text above? | No | Yes |
| | Comments: | | |
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| | <u> </u> | | |
| | 4. | | |
| | Often, information received is too complex or extensive or impresent objects. In these instances the use of the CTNARE INFORM attribute value of this object gives a précis of the over detailed navigationally significant information. When the text is with INFORM, the attribute TXTDSC must be used. | object is preall changes, to | eferred. The ogether with |
| | It is noted that mariner, if concerned, has the facility to use "Ma the ENC on ECDIS from information given in a textual form. | riner Objects' | ' to annotate |
| | ER encoded with relevant objects or NE of the ENC will be encoding will have been established. The period of time depends | | , when this |
| | the time needed by HO to make the encoding with relevant object | ts, | |
| | the time needed to obtain confirmation of details, | | |
| | the date at which the real world situation is stabilized. | | |
| | It is possible that all these conditions can be satisfied and direct objects to update the ENC with an ER while a block or a NE v paper chart. | | |
| 4. | Do you agree text above? | No | Yes |
| | Comments: | | |
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| | l | 1 | <u>l</u> |

5.

Information received may contain some navigationally significant elements that is simple to encode with the relevant objects in a timely manner. In these instances these elements may be encoded with relevant objects provided that they reflect the actual situation when the ER is made available to the user. However, if the changes are subject to continual change these objects should be amended as a consequence, this may represent

supplementary work for the HO (see Part A). The ER should also warn users that the situation is subject to change.

| | situation is subject to change. | | |
|----|---|--------------|--------------|
| 5. | Do you agree text above? | No | Yes |
| | Comments: | | |
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| | | | |
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| | | l | l |
| | 6. | | |
| | Use of DATSTA – DATEND: see part A | | |
| | | | |
| | 7. | | |
| | Use of INFORM: see part A | | |
| | | | |
| | 8. | | |
| | Additional Diagrams are sometimes very useful to the marine measures). A picture file may be associated using the PICREP | | |
| | object does not allow PICREP attribution, the picture file | may be refer | renced by a |
| | M_NPUB object using the attribute PICREP and sharing th CTNARE. | e same geon | netry as the |
| 8. | Do you agree text above? | No | Yes |
| | Note that this method (M_NPUB) is already recommended in | | |
| | encoding bulletin no. 25 (see below, guidance for typical cases) | | |
| | Comments: | | |
| | | | |
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| | 9 <mark>.</mark> | | |
| | ER issued for Preliminary information should be managed and re consider whether further information can be acquired and whether | | |
| | issued to modify or to cancel information previously promulgated | | |
| | (D) NM - for many already already in disease "A fforded ENC for H | | |
| | (P) NMs for paper charts should indicate "Affected ENC [cell accordingly". Further verification is recommended to make sur | - | |
| | consistent with the equivalent paper notice and applicable to the | | |
| 9. | Do you agree text above? | No | Yes |
| | Comments: | | |
| | | | |
| | | | |
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GUIDELINES FOR TYPICAL CASES

1. Traffic separation schemes

Encoding bulletin E25 – april 2009 and following versions should be applied.

EB25 - UOC Clause 10.2.1 Traffic separation schemes

Clause 10.2.1 of Edition 2.1 (April 2002) of the Use of the Object Catalogue for ENC (S-57 Appendix B.1, Annex A) provides guidance for the encoding of traffic separation schemes (TSS) and each component within a TSS. It is important that mariners be provided with advance notification of changes to TSS, which may include modification to an existing TSS, addition of a new TSS or removal of a TSS. UOC Clause 2.6.1 provides guidance on issuing ENC updates in advance, including the use of the attributes DATEND and DATSTA for objects within an ER data set to indicate when changes to a routeing measure come into force.

Encoders are advised that, in order to provide a consistent approach to mariners regarding advance notification of changes to a traffic separation scheme, the following procedure should be adopted:

- 1) At least one month before the changes to the TSS come into force, issue an updated data set (as an update or a new edition) which:
 - Adds new or amended TSS component objects (except some navigation aids see Note below). These objects must have DATSTA populated with the <u>date that</u> the changes to the TSS come into force.
 - Adds DATEND (populated with the <u>date of the day before the changes to the TSS come into force)</u> to any component objects of the existing TSS that are to be changed or deleted (except some navigation aids see Note below).
 - Creates a CTNARE area object covering the geographic extent of both the current and the future TSS. The attribute INFORM or TXTDSC must be used to explain the change to the TSS, e.g. "The traffic separation scheme off Cape Bon is to be modified at 0000 UTC on 1 July 2009. This ENC includes all the information before and after the change, indicated by the attributes DATEND (before the change) and DATSTA (after the change) on the components of the scheme". The attribute DATEND for the CTNARE should be populated with the date at which the change comes into force or, if encoders wish to provide extended information to the mariner that a change has been made, with a date up to a month after the change comes into force. If the current and the future TSS are not in the same geographic area, it may be required to encode two distinct CNTARE area objects. A picture file may be referenced by a M_NPUB object sharing the same geometry as the CTNARE using the attribute PICREP if it is considered useful, e.g. the equivalent paper chart representation of the amended or new TSS.

Note: The attributes DATEND and DATSTA are not allowed for navigation aid equipment objects RETRFL and TOPMAR. For any changes to TSS that effect these objects, a separate updated data set (as an update) including changes to those navigation aids which contain any of these equipment objects should be issued as close as possible to the date that the modified/new/deleted TSS comes into force. See also ENC Encoding Bulletin Number 24.

- 2) As soon as possible after the modified/new/deleted TSS comes into force, issue an updated data set (as an update or new edition) which:
 - Deletes the changed or redundant component objects of the former TSS.
 - Removes the attribute DATSTA from the component objects of the new TSS.
- 3) The CTNARE (and M_NPUB if encoded) must also be removed by update, either as part of the update to remove the redundant component objects of the former TSS, or as a separate update at a later date, corresponding to the date populated in the attribute DATEND for the CTNARE.

Encoders who are members of RENCs should also provide advance notification of changes to TSS to their RENC in accordance with RENC procedures, in order for the RENC to provide additional notification to mariners of impending TSS changes.

[April 2009]

 $\rightarrow 1002(P)/08$

| 1. | Do you agree the encoding bulletin n°25? | No | Yes |
|----|--|----|-----|
| | Comments: | | |
| | | | |
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| | | | |

2. Complex information within a changing area (e.g. works in progress)

A CTNARE object is created to cover the area. Information is encoded in INFORM. When the available information is sufficiently detailed, navigationally significant and more useful additional relevant objects (e.g. navigational aids, fairways, regulated area) are created or modified within the area if time permits. If relevant, an RESARE – "entry prohibited area" object can be used instead a CTNARE object.

Add examples from (examples should be simpler than these real cases):

→ 1003(P)/08, 1024(P)/08, 1037(P)/08, 1718(P)/08, 1714(P)/08, 1731(P)/08, 1744(P)/08, 1750(P)/08, 1727(P)/08, 1728(P)/08, 2314(P)/08, 2308(P)/08, 2274(P)/08, 2290(P)/08, 2276(P):/08, 2287(P)/08.

| 2. | Do you agree text above? | No | Yes |
|----|--------------------------|----|-----|
| | Comments: | | |

| 3 | . Simple information which does not need an additional notification | of caution | |
|--|---|--|------------------------------|
| The 1 | relevant object is created and the contextual information is encoded in | ı INFORM. | A CTNARE |
| (CBL | t is not added. This could apply for example to submarine cables SUB, PIPSOL) or area under reclamation (LNDARE with CONDT necessary the encoding reflects that positions are approximate. | | |
| | examples from (examples should be more simple than these real cases): $709(P)/08$ | | |
| 3. | Do you agree text above? | No | Yes |
| | Comments: | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 4. De | pth information | | |
| 4.1 D | epths less than those charted within a defined area | | |
| If dep | oths values or exact positions are unknown, a CTNARE object is created | | |
| modification modif | oths values and exact positions are known, a SOUNDG object (or several field with depth contours and depths areas amended as necessary. Source led. However, HO should carefully consider the time needed to update Exact the solution of the | s of informati ENC depth inf he navigation | on are formation. ally |
| When | a SOUNDG is created and known depths values are only most significant | ant, a CTNAF | RE is added. |
| $\rightarrow 10$ | examples from : 018(T)/08, 1091(T)/08 no.3, 1700(P)/08, 1701(P)/08, 1714(P)/08, 1735(I (P)/08, 1727(P)/08, 1728(P)/08, 1769(P)/08, 1769(P)/08, 2309(P)/08, 22 | |)/08, |
| 4.1 | Do you agree text above? | No | Yes |
| | Comments: | | |

| 4.2 Dated | available depths: see Part A | | |
|---------------------|---|----|-----|
| | | | |
| For all PTypical | Do you think that examples showing paper T NMs and equivalent ER encoding are absolutely needed? | No | Yes |
| case. | These examples will be artificial and simpler than real cases of EUWG letter 02/2009 but it'll be time consuming! | | |
| | Comments: | | |
| | | | |
| | | | |

General comment and suggestions on the draft of guidelines and other:

| Name | |
|------------------------------|--|
| | |
| | |
| Member State or Organization | |

Extract from the latest version of M4/B-600 – cf CSPCWG letter 03/2009 (available on IHO web site)

See also B-611.11, B-620.2, B-620.4, B621; B-630.3, B-631.8, B-635.1

B-601.8 Radio Navigational Warning. Radio Navigational Warnings (RNW) are used to promulgate the most urgent information. They are not intended for updating charts directly. Unless it is of very temporary application, the information will normally require a subsequent (T) NM or chart-updating NM, as appropriate, (Technical Resolution F4.4). A recapitulative list of RNW in force may be included in the periodical NM booklet or maintained on a website, see B-630.3.

For further details of systems for broadcasting RNW, see IHO Publication S53.

B-633 TEMPORARY NM

- **B-633.1** A Temporary (T) NM is used to promulgate navigationally significant information that will remain valid only for a limited period, eg:
 - temporary oceanographic buoys;
 - temporary changes in aids to navigation;
 - temporary changes to authorized draughts;
 - hazards of a temporary nature such as naval operations, exploratory drilling or salvage operations;
 - withdrawal or re-instatement of buoys at the close or beginning of the navigation season).

The convention is for the mariner to insert the update on his paper chart in pencil, and erase it when the (T) NM is cancelled.

- **B-633.2** The NM number for a (T) NM should be followed by '(T)', before the year date. The specifications at B-631.3 (Title), 6 (Authority) & 7 (Charts affected) also apply to (T) NM.
- **B-633.3** A (T) NM must not be initiated if the information will no longer be valid by the time the NM is likely to be received by the mariner; this will depend upon the distribution time span for NMs. Shorter time periods may be covered by Radio Navigational Warnings (see B-601.8). The maximum duration for a (T) NM to be in force should usually be no more than 12 months; if likely to be longer, a chart-updating NM should be issued. If possible, the (T) NM should include an indication of how long it is to remain in force.
- **B-633.4** (T) NMs in force should be reviewed regularly to consider whether further information can be acquired and whether they should be cancelled, updated or reissued, or replaced by permanent chart-updating NM. It is very important to ensure that mariners (and other hydrographic offices who chart the area) are aware when (T) NMs are cancelled. If a (T) NM is replaced by a chart-updating NM, that NM should state that the (T) NM is cancelled.
- **B-633.5** The publishing hydrographic office must issue regular lists of (T) NM which are still in force.

- Offices which publish a weekly edition of NM should issue such a list each month.
- Offices which publish a fortnightly edition of NM should issue such a list four times a year or more frequently, if desired.
- Offices which publish a monthly edition of NM must issue such a list at the beginning of every year or more frequently, if desired.

(Technical Resolution F3.7(1))

B-633.6 A (T) NM should not be used if there is little likelihood of notification when the charted state is restored, as without such notification the (T) NM cannot be cancelled at the correct time. If possible, an alternative method of promulgation should be used, such as a general chart note, eg '

Aids to Navigation

The aids to navigation on this chart are reported to be unreliable....

B-634 PRELIMINARY NM

- **B-634.1** A Preliminary (P) NM is issued to promulgate navigationally significant data early to the mariner when:
 - Action/work will shortly be taking place (eg harbour developments; installation of, or alterations to, important navigational aids). If possible, at least 8 weeks notice should be given, with the date of entry into force indicated (Technical resolution F3.5)
 - Information has been received, but is too complex or extensive to be promulgated by chart-updating NM. A précis of the overall changes, together with detailed navigationally significant information, should be provided in the (P) NM, with a statement that full details will be included in a New Chart or New Edition to be published shortly (a date or timescale for the NC/NE should be given, if possible).
 - Further confirmation of details is needed. A chart-updating NM should be promulgated, or NE issued, when the details have been confirmed. Where extended drying areas affect territorial or fishing limits, (P) NM action may be required until they have been confirmed by an appropriate legal authority.
 - For ongoing and changeable situations such as a bridge construction across a major waterway. The (P)NM can be revised and reissued for updates (including diagrams if useful) as work progresses. A chart-updating NM should be promulgated, or NE issued, when the work is complete.

The convention is for the mariner to insert the update on his paper chart in pencil, and erase it when the (P) NM is cancelled.

- **B-634.2** The NM number for a (P) NM should be followed by '(P)', before the year date. The specifications at B-631.3 (Title), 6 (Authority) & 7 (Charts affected) also apply to (P) NM.
- **B-634.3** A (P) NM should give an indication of when the information will be included on the appropriate chart. If this is known it should be stated, eg:
 - 'These changes will be included in a New Edition of Chart 1234 to be published in March 2010'.

Or, if the date for inclusion in the chart is unknown:

• 'These changes will be included in the next New Edition of Chart 1234'.

Where a particular date is specified, the (P) NM should be monitored and if it appears that the publication date mentioned is going to be missed, then consideration should be given to reissuing the (P) NM with a revised date.

Instead of issuing a (P) NM, consideration should be given to issuing a chart-updating NM inserting a 'Works in progress' legend on the face of the chart, e.g. 'Bridge under construction (2009)'.

- **B-634.4** In addition to a (P) NM, it may also be appropriate, where there are major changes, to issue a permanent NM inserting a legend, in magenta, on the face of the chart, referring to the (P) NM, eg:
 - See NM1234(P)/09;
 - Shoal Depths (see NM2345(P)/09).
- **B-634.5 Diagrams.** Diagrams to support (P) NMs are very useful to the mariner, eg:
 - where a new, amended or complex series of routeing measures is being announced;
 - a new bridge is being constructed and shipping routes need to be diverted.

They should be a different scale from the chart, to prevent the mariner from using them as blocks to directly amend the chart. If a diagram is at the same scale as the chart, it must contain a 'Not to be pasted on the chart', or equivalent legend.

It may be best to produce such diagrams in monochrome, using black stipple in lieu of tints if necessary, because:

- digital file sizes may be an issue for receipt by some users;
- the recipient may not be able to reproduce colours.
- **B-634.6** (P) NM in force should be reviewed regularly to consider whether they should be cancelled, updated or reissued, or replaced by permanent chart-updating NM. It is very important to ensure that mariners (and other hydrographic offices who chart the area) are aware when (P) NMs are cancelled. If a (P) NM is replaced by a chart-updating NM, that NM should state that the (P) NM is cancelled. If a (P) NM is cancelled on publication of a NC or NE, the announcement of the NC or NE should state that the (P) NM is cancelled (or that the chart should be removed from the list of charts affected by the (P) NM if it remains in force for other charts).
- **B-634.7** The publishing hydrographic office must issue regular lists of (P) NM which are still in force.
 - Offices which publish a weekly edition of NM should issue such a list each month.
 - Offices which publish a fortnightly edition of NM should issue such a list four times a year or more frequently, if desired.
 - Offices which publish a monthly edition of NM must issue such a list at the beginning of every year or more frequently, if desired.

(Technical Resolution F3.7(1))

Summary of responses to letter 02/2009

Considerations, options, questions:

- 2. Should we use DATSA, DATEND, PERSTA, and PEREND? If yes, in which cases?
- 3. Noting that each ECDIS manufacturer has implemented slightly different methods of handling objects with date dependant attributes. Some older legacy systems do not recognise these attributes at all and as such may not act upon them. ENC producers should be aware of these facts when encoding objects in this way. An alternative means (backup) of providing information to these systems should be considered.

ZA: Until a confirmation is received that all ECDISs can and do display these temporal objects in a consistent manner and as intended in the concept, **a policy of double encoding should be applied** using INFORM and these temporal attributes.

Should the dates and times encoded in DATSTA and PERSTA be the actual times of use or should they be set to an earlier date or time?

Here I think DATSTA is the more critical of the two, so that the feature can be displayed more timorously on the ECDIS screen to possible aid forward planning of navigation in the area. The actual dates of validity or use can easily be captured in INFORM field or in the text of a linked text file using TXTDSC.

If the general approach is to encode the world as it exists then I believe this could mean that instead of use of a CTNARE around a buoy for example, which has been removed for repair, I would propose that this feature is removed physically from the ENC by ER action and reinstated again by an ER based on NM action at a later date. However, such approach may require the reinstating of a depth, wreck or obstruction object that the buoy was originally marking.

PT: Yes, we must use the attributes DATSTA, DATEND, PERSTA, and PEREND according to S-57. In S-57, DATSTA indicates the earliest date on which an object (e.g. a buoy) will be present and DATEND indicates the latest date on which an object (e.g. a buoy) will be present. Otherwise, PERSTA indicates the start of the active period for a seasonal object and PEREND indicates the end of the active period for a seasonal object. Face to those definitions, T&P updates should use the attributes DATSTA and DATEND whenever possible. The problem related with the fact that some ECDIS equipments cannot read those attributes should be solved in two different steps. The first one, and taking in consideration the mariner, we can use the object CTNARE to warn the user that something happen or change at some location. The second step is to ask to IHO (HSSC) to include those attributes as mandatory attributes in S-52 in order to become tested and verified during certifications and approvals.

Regarding this question, that some ECDIS equipments cannot read the attributes DATSA, DATEND, PERSTA, and PEREND, we should try to identify all the equipments with this kind of problems and, by one hand, clearly advise the maritime community that those identified equipments have problems to update ENCs and the mariner should upgrade the systems as soon as possible. By the other hand, we should advise the mariner that in order to update ENCs they should visit the VARs web site. Meanwhile, maybe could be a good idea that RENCs develop an application or a database that each MS can insert the textual description of T&P updates and the cells affected by those updates, and these databases can be distributed to all VARs in order to be issued through their web pages.

NO: In the cases that we have a start date and an end date we will use the attributes DATSTA/DATEND/PERSTA/PEREND.

SE: We are reluctant to use Datsta, Datend, Persta, Perend as it is uncertain if it works with all existing ECDIS. Instead we release ENC Updates at appropriate dates. This requires somewhat more work at the HO but we know it works aboard.

JP:

- IEC61173 Ed3 specifies checking ECDIS to perform correctly on DATSTA/DATEND so that ECDIS type approved these days identifies these attribute correctly. JHOD thinks that currently an alternative method is needed for ECDIS not performing on these attributes but such method will be obsolete in near future.
- JHOD thinks that 2-way display switched "on/off" by DATSTA/DATEND may not be convenient for mariners. For example, military practice area (MIPARE) is displayed "off" in route planning and "on" in route monitoring according to the function of DATSTA/DATEND. For this case, encoding another object may be suitable to inform mariners of the beginning day of the military practice.

UK: The UK uses temporal attributes but acknowledges the fact that some ECDIS manufacturers have implemented this functionality to varying degrees. Some OEM or older legacy systems may not have this functionality at all. With this in mind the UK also encodes a CTNARE or M_NPUB object to provide the necessary information relating to the T or P NM together with the TXTDSC and/or PICREP attributes. In some cases this information is provided well in advance of the "coming into force" in the case of P Notices.

FI: Yes, temporal attributes should be used in all applicable cases. Our policy has been that changes should not be implemented too long before DATSTA and should be cancelled automatically soon after DATEND. This is to cater the needs of the legacy systems.

- When is it inappropriate to convert a P or T NM into an ER?

PT: All the situations must be analysed in a case by case basis, but it will be inappropriate the conversion of a P or T NM into an ER whenever we didn't know exactly the period of time that the ER starts or ends or even the period is undefined. Anyway it is inappropriate to convert a P or T NM into an ER every time that the period of validation of the ER will be less than one week, depending on when the exchange sets are created and distributed to the end users. The majority of preliminary NM doesn't obey to produce preliminary updates, but normal ER files. As we can see at the examples given in the annexes, the large majority of the P&T NtM originates normal updates that must be controlled by each one of the HOs.

DE: We take into account the time of distribution of the ER in relation to the time the (T) NM is valid. Apart from that GER converts every P + T NtM into an ER.

NO: Almost all P/T notices in our NM bulletin will be converted to ER.

ZA: We have never found any (T) and (P) NMs we have issued to be inappropriate for use in ERs in our experience.

SE: NM with general information, e.g. changes to regulations affecting large areas, is still not appropriate for ECDIS and ENC Updates. For foreseeable future such information need to be promulgated through other means, e.g. NM on the web or in paper format.

UK: T notices that are likely to be in force for a very limited time. In the case of P notices when they are not specific enough to encode, i.e. await more definitive description.

FI: The P notices should be converted to ERs only when the information is sufficient and useful to encode. T notices are usually easier, but those that have a very short estimated lifespan (day or two) should not be done as ERs.

- What action has to be taken to make P or T NMs more suitable for ER conversion? Are there other considerations for P and T NM conversion to ER?

PT: I think I've answer to this question above, when I made comments to the first and second questions.

DE: A NtM is a product produced for navigational officers to correct paper charts. An ER is a datafile produced by an HO which is applied automatically by an ecdis machine. So german ERs sometimes have more detailled information as written in NtM, at least the precision of the positions is as precisely as available.

NO: Some adjustments have to be done. Today not all P/Ts in NMs have coordinates attached to the notice. A coordinate is required to make the correct correction, and easily find the right ENCs involved. We may consider demanding more details from the extern supplier of the T/Ps. We also may take a look at the deadlines in connection with the NMs.

ZA: The drafter of the NMs (who can also be the source gatherer of the information in the HO) and the Staff involved with paper charting, needs to be aware of what information is critical to the needs of encoding this information in an ENC i.e. population of the mandatory attributes. Perhaps staff involved with the drafting of T and P notices require an awareness of the spatial accuracies needed and associated with the charting of these features and bring to the encoders attention any issues that may affect the spatial accuracy or encoding.

SE: NMs are intended to be a source for updating paper charts and nautical publications as well as promulgating general information for mariners. The implementation of P- and T-information in ENC is not really a reason for taking actions to change the format or contents in NM.

When we receive information from the real world we promulgate the information as a NM and an ENC Update. In cases where CTNARE + Txtdsc is used we try to make the text as short as possible. In most cases positions are unnecessary in the Txtdsc.

UK: The Producer Nation will probably be in possession of more detailed information relating to the T or P notice. In such instances the ER can be produced directly from the source information. Further verification is required to make sure that the encoded ER is consistent with the equivalent paper notice.

FI: Some P notices do not contain enough data. Sometimes more information can be obtained from the original source, but this does not always help.

- How to define which ENCs are affected by a P or T NM?

PT: ENCs and paper charts are related, so it seems easy to define which ENCs are affected by a T or P NtM. Even in the future, when paper charts and ENCs will be produced from the same source database, I can not foresee any difficulties because when we are changing the data in the source database we are automatically creating the updates, which can be temporary or not, depending on the validation of the new information.

DE: As long as ENCs are derived from paper chart no problem. Every ENC is relate to one or more paper charts, so NtMs for paper charts leads to an ER to the appropriate ENC. The problem may be coming up with intoduction of ENCs create by database (HPD). constraint of time:

NO: This is a problem to be solved internally. No need to describe which ENCs that are affected in the NM.

ZA: I believe that the time has come to show in NM Booklets, the National Producer's ENC as well as the paper chart product numbers that are affected.

SE: If the information from the real world is important to the mariner and has a geographical reference or a geographical extent then an ENC Update should be published.

When deciding which ENC are affected we must carefully consider how the mariner may use the ECDIS for planning, navigating and manoeuvring. This is relevant both regarding the geographical extent and the choice of navigational purpose (scale).

UK: This has to be treated on a case by case basis. The paper T or P may relate to a specific chart however it may be appropriate to produce ERs for larger/smaller scale ENCs depending on their content.

FI: This should be done case by case by comparing the current data content on the cells and actual situation as described in the NM.

• constraint of time:

• When a P or T NM relays a RNW, it should be certain there is no gap between the end of the broadcasting of the RNW and the supply to the ECDIS user of the P or T NM.

UK: Agree

ZA: We ensure that the CNW is only cancelled a week or so after the distribution of the NM Booklet to ensure that continuity in distribution is maintained as far as possible.

• The supply of the P or T NM to the ECDIS should be timely and not too late with regard to the relevant warning/information.

UK: Agree

NO: NHS has a very limited use of Radio Navigational Warnings.

SE: An ENC Update should always be published in a timely manner. Even if a certain situation only exists for a very limited time, e.g. 2 hours, an ENC Update could be published ahead of time if the information is considered important to the mariner.

ZA: Our understanding of the turn around times associated with the production of ER's to be as follows:

From date of receipt of information – generate ER file in the SANHO: 1 day

Send to IC-ENC for their approval – same day as dataset is created

(should this be done completed on a Thursday or Friday then IC_ENC validation could be expected to be done and results reported to SANHO by email by following Tuesday.

If SANHO is required to take correction action this can be done and corrected file sent to IC-ENC by end of Wednesday.

Should file pass IC_ENC validation it will be included in exchange set to their VARS on the Friday of the same week. VARS may only issue update to their customers by the Tuesday of the following week.

This means that an update produced on Thursday 26 Mar 2009 can reach the end user on Monday 6 Apr 2009 at the earliest 11 calendar days after production at SANHO.

Should the Hydrographic Office also post the ER update on its own website in an encrypted form thereby making it available quicker to the mariner. Based on the scenario painted above, this could be done on the 26 Mar 09. Will the end user welcome this or would this confuse the situation further? Perhaps the real point here is the need for a 24/7 service in all areas of the supply chain.

- When to use:
 - CTNARE (noting that CTNARE warns user)?

DE: When no suitable S-57 object is avaible, when no precise or certified position is known.

NO: To be used only where the use of already existing objects aren't satisfactory.

ZA: In general, our use of a CTNARE is limited to the nature of the change being deemed critical to safety and that there is no other appropriate feature class available to be used and its use in conjunction with other feature objects is prescribed by the UOC; or

the desire to retain the existing features and cover the changed event by CTNARE over the affected area for example, should a leading line arrangement of lights have one light inoperative.

JP: JHOD thinks that use of CTNARE should be avoided except only when there is no other suitable encoding method.

UK: When appropriate and when there is no equivalent/corresponding S-57 object available to use.

FI: CTNARE should be used when there is no other S-57 object to use.

• CTNARE + new relevant object or modification of an existing object?

NO: In the cases that we are needed to report important additional information in the areas around the object.

UK: This again will have to be treated on a case by case basis. Depending on the risk associated with a particular T or P notice it may be considered prudent to include a CTNARE to bring a particular notice to the attention of the Mariner. For example if the T or P notice is considered dangerous to surface navigation and is in close proximity to a navigable route then a CTNARE may be necessary. On the other hand if the T or P was close inshore away from navigable water then the relevant object, if available, should be used.

FI: The relevant object should always be used when there is enough data to do it. CTNARE may be used if there is a need to highlight the situation.

• Only new relevant object or modification of an existing object?

NO: Where use of CTNARE is redundant. Where the user get the necessary information/caution from the new object/existing object.

UK: See previous bullet point

PT: CTNARE should be used in all temporary updates, because we have type approved ECDIS systems that cannot read attributes like DATEND or DATSTA or PEREND or PERSTA. In these cases, of course we need to create new objects or modify the existing ones, overlapping or not the same area. That's the reason why I start to write that all the situations must be analysed in a case by case basis.

Also, there are cases where the objects that must be created are CTNARE, because the creation of such object is according to S-57..

There are cases where we just need to create new objects or modify the existing one.

ZA: Our general policy is to reflect the world as it exists in the ENC and not to over use CTNAREs to draw the mariners attention to such changes. For example, a light which is not operating on a buoy: We would choose to remove the light from the parent feature (the buoy) rather than show a CTNARE type area covering the range of the light itself.

If a underwater cable is being laid would it be essential to use a CTNARE for relaying this information to a mariner? What is the real danger to the mariner and does the use of a CBLARE degrade the warning capability of the ECDIS to adequately bring this to the mariner's attention? Could a CBLARE making use of CATCBL, RESTRN and INFORM field not be sufficient to convey this info to the mariner?

A CTNARE may also be a suitable substitute way of covering changes rather than making changes to the actual feature objects especially where changes to SOUNDGs, DEPCNTs, DEPAREs are concerned, as these could also have other features such as limits linked to them spatially as a result of shared common boundaries. One needs to be mindful of the impact of an ER file of large digital sizes on data transmission costs. Having said that, the cost of creating a NE in lieu of an ER update also has a cost overhead associated with it.

SE: An ENC Update should always be published in a timely manner. Even if a certain situation only exists for a very limited time, e.g. 2 hours, an ENC Update could be published ahead of time if the information is considered important to the mariner.

FI: Normally, this should be the most appropriate method.

• When is it useful to warn (or to inform) users of a change? For example, paper P and T MNs always warn or inform. A paper T NM can be annotated, by the user, on the paper chart with a pencil allowing him to remove the temporary information with a rubber when cancelled. ER mechanisms permit the addition and removal of information from ENCs automatically (from the user's perspective), without such warnings.

PT: In a digital world, what are the reasons why the mariner needs to be informed of changes? From my experience, I only need to know that my ENCs are 100% up-to-date. I really can't see the need to warn mariner about changes.

NO: We at NHS mean that the issue of giving the user further information/warning lies on the shoulders of the producers of the ECDIS. A kind of confirmation (check out routine) when adding/removing information/objects in the ECDIS may be a solution?

SE: It is useful to warn the mariners when the change to the S-57 object is considered not enough to avoid danger or confusion. In this context we must consider ships coming to the affected area for the first time as well as ships visiting the area regularly.

UK: The mariner has a similar facility on the ECDIS to highlight warnings and include information. The use of "Mariner Objects" means that the mariner can annotate the ENC to reflect the content of a T&P. This can be removed when it is considered no longer appropriate

Should the CTNARE area be minimized or should it be use as a safety buffer?

PT: CTNARE should be used as a safety buffer, because we know that we still have type approved ECDIS with "problems", but what we should avoid is the use of objects, like CTNARE to display textual messages, as well as attributes like OBJNAM to display the same textual messages. This is the subversion of S-57.

NO: We think the CTNARE should be as small as possible, but it depends on the content of the notice.

ZA: In some instances we do use a buffer the extent of which is applied at our discretion. If the limits are not published in National Government Gazettes then a flexible approach is taken to include a buffer in deserving cases. Such a buffer is usually not applied more than 1NM in width but this is subject to scale of ENC and the need to allow for some advance warning prior to actually entering the area.

We restrict the use of the CTNARE's to cover the area of the activity/ restriction undergoing change or in which the danger exists but this is not always the case. The CTNARE may be extended to the point where it is felt the mariner should be aware of it to this limit.

SE: When deciding size and shape of the CTNARE we must carefully consider how the mariner may use the ECDIS for planning, navigating and manoeuvring and carefully examine the ENC to avoid confusion with existing CTNARE and objects.

A minimized CTNARE would be a point object and this has proven to be useful in some situations. In other situations a larger CTNARE would be more appropriate to either form a "safety buffer" or to make the temporary/preliminary condition more conspicuous or to show the actual, affected area.

UK: The UK already recognises the over use of the CTNARE and seeks to minimise its use wherever possible. However this would not be at the expense of safety. A risk assessment is carried out on all T&P notices and if it is possible to encode the notice, without compromising safety, uses the appropriate S-57 object.

FI: This should be decided case by case. Normally no safety buffer is needed.

• A problem with the over user of the CTNARE object is that it provides the ECDIS with an excessive amount of "alarmable" objects. The amount of CTNARE generated by P or T NM should be quantified to better understand the size and reality of the problem.

NO: This problem has been reported form ECDIS users.

UK: Agree

Note: Although CTNARE could be considered a "safety buffer" it is well known that many, if not most ECDIS users turn this alarm off.

FI: True. CTNARE should only be used when there is a specific need to warn the user.

- Which objects covering the area affected by T and P NM, other than CTNARE, could be used (RESARE, OBSTRN...)?

PT: We should use all the objects that are necessary to encode the situation described by the NtM, and even those objects without the attributes DATSTA and DATEND, we can use the attribute STATUS=7 (temporary), and INFORM or NINFOM to warn the mariner how long the information will be valid. Those attributes can be removed or changed when the situation changes again.

NO: Both RESARE and OBSTRN can be used if the content of the notice is relevant to these objects.

ZA: If the approach is to encode the world as it currently is then any relevant feature class could be used that best describes the event or change.

SE: In principle the relevant S-57 objects should be used. If there is no relevant S-57 object a CTNARE is used. A CTNARE is also used when additional information is needed to describe the situation or if it is necessary to highlight and warn about the situation.

UK: The use of the appropriate S-57 object should be used at all times except where it is considered a danger to navigation. This will obviously depend on the immediate vicinity of the T or P notice and type of vessels that could be considered to use a particular area.

FI: It should not be any object that relates to real world features like OBSTRN. RESARE is useful in some cases, but we don't see as generic solution. At the moment we can not think of any other than CTNARE.

• The use of the NEWOBJ object introduced in S-57 Ed3.3.1.1 and PL3.4 could be an option. We could register two objects with TSMAD and DIPWG, one for temporary objects and one for preliminary ones. This object has the advantage that the method of defining the symbol to generate it can be used with the Symbol Instruction attribute. It also has the necessary allowable attributes to encode temporal attributes.

NO: NHS is positive to introduction of NEWOBJ!

ZA: In its current form the NEWOBJ feature class is limited by definition to being used only to encode a feature specified by IMO that affects safety and cannot be encoded by an existing S57 version 3.1 object class set. Perhaps the inclusion of an information type object class which I hypethethetically call a NVALRT object could be created with a suitable range of attributes to handle the encoding of information which is not directly critical to safety or which does not justify a change to the "normal state" object. It could perhaps also have the affected feature objects linked via an attribute so that these objects flashed on the screen or were encircled by a orange ring or outline which could have a flashing component built into the display mechanism of S52 to draw the mariner's attention to this object?

Alternatively NVALRT could be an attribute on all feature objects which when set to ON state would invoke a flashing of the feature or area being affected by the T or P NM or alternatively cause the feature to be surrounded by an coloured line circle? which could itself flash. This object class should not trigger alarms in an ECDIS. A specialist group would need to decide which types of events warrant the use of this object class and which must have CTNAREs or other alarm triggerable object classes associated with them.

SE: The temporary and preliminary information often affects existing objects. There is a need for allowing T and P relevant attributes on the existing objects. This would require a change to the S-57 Object Catalogue and the ENC Product Specification as well. To use NEWOBJ will not solve all the problems. There would be no automatic warning in the ECDIS for a NEWOBJ. This means that you still would have to create a CTNARE in some situations. EUWG should contribute to a complete future solution in S-100 and S-101.

UK: The use of NEWOBJ could be used in all cases where a CTNARE is <u>NOT</u> necessary due to safety considerations. ECDIS with PL3.4/S-57 ED3.1.1 capability would display these objects correctly in accordance with the standards. Older systems would display the "feature not recognised" symbol (Question Mark). Of course the downside to this is that the user may have these display settings off. Another factor is that some producer nations may not have the capability to capture S-57 Ed3.1.1 NEWOBJs or at least not in the foreseeable future. Some producers may not deem it necessary to upgrade their production capabilities as the changes introduced at 3.1.1 do not affect their territorial waters.

FI: That approach could be investigated.

- Cost of production: when an ER is produced, the cost of tracking the cancellation should be taken in account.

NO: Some more resources must be added to the today's production line.

ZA: In our case the volume of updates ERs produced do not seem to constitute a significant cost wrt the promulgation and cancellation actions associated with such action.

SE: It is important to keep track of all issued P or T to avoid showing obsolete information in ENC. The HO has an obligation to promulgate the information to the mariner and must consider all steps in the process.

UK: Safety is the paramount driver in producing ERs

FI: We like to think the ERs as proper service for the users, our customers.

- Cost of technical solutions: a service equivalent to P and T NMS is feasible if the resources (human) necessary for a technical solution are available. To obtain a harmonized, world wide service, the cost of this technical solution could be an essential factor, bearing in mind the differing resources and capacities of HOs.

ZA: This requires further elaboration and discussion.

SE: There could be a minimal standard for the service. However, the HOs that have a higher capacity can not be denied the possibility to go beyond the minimal requirement.

- Should we take in account the cost of communication associated to the volume of the ER?

PT: Should we be concerned about cost of production of updates and communications when we are discussing safety of navigation? What are exactly the costs of maritime accidents? And if those accidents causes lost of human lives, can we really estimate costs? I don't think so and from my personal point of view the solution that could be finding by us, should not reflect any economic perspective. We should take care about safety, rapidity, confidence, and competency.

DE: As long as the NtMs are the basis of the production of ERs in Germany, we pay no attention to cost and resources. That is so because in our opion the NtM publishes only informations relevant to safety. Navigational officers in close collaboration with cartographers decide whether an information is relevant to safety. They decide whether an information that has to been published as a "normal", T or P NtM. The job of the person producing updates is not decide if he produces an ER, but how to convert the NtM expediant to an ER (S-57).

ZA: Yes, one should be mindful of the impact that the size of the ER may be especially if graphic images are linked in the updates. In general, this cost should be factored into the update service provided by the hydrographic office (direct distributor) or the RENC and its approved distribution partners (indirect distributors). Here the inputs of IC-ENC, PRIMAR and ENC data suppliers need to be sought on the magnitude and costs associated with the current throughput of data being provided by such services.

SE: No.

UK: As the bandwidth increases and the cost reduces it is considered less of an issue

How many original paper chart temporary et preliminary NMs your HO produces per year? How many ENC would be affected per year?

FR: 50 (T) NMs per year, 67% are subsequent from RNW. Very approximately, 150 ENC per year. **FR**: 10 (P) NMs per year, 43% are subsequent from RNW. Very approximately, 30 ENC per year.

AU produces approximately 550 (T) NtM's per year on average. These may affect up to 200 ENC cells. **AU** produces approximately 50 (P) NtM's per year on average. These may affect up to 30 ENC cells.

JP: JHOD issues about 800 (T)NMs per year for paper charts, but not for ENCs yet. JHOD issues a few (P)NMs per year for paper charts, but not for ENCs yet

NO: In 2007: 267 (T) NMs produces per year / In 2008: 228 (T) NMs produces per year

NO: 2007: 67 (P) NMs produces per year/2008: 49 (P) NMs produces per year

SE: T-notices: 242 Affected ENC: Approx. 800 / P-notices: 57 Affected ENC: Approx. 200

DE: (P) NM: For years none, actually 1-3 per year. Up to now each (P) NM leads to an update in the appropriate usage /usages.

NL: T-notices: 100 Affected - ENC: Approx. 50 / P-notices: 50 - Affected ENC: Approx. 25

FI: An average of 138 (T) notices per year was published during years 2004 – 2008. Based on data from last three years it can be estimated that an average of 160 ENC updates containing one or more (T) notice will be published yearly.

An average of 13 (P) notices per year was published during years 2004 - 2008. Based on data from last three years it can be estimated that an average of 10 ENC updates containing one or more (P) notice will be published yearly.

ZA:

| Year | Representing (xx) Months | Total Temporary (T) Notices issued | Total Preliminary (P) Notices issued | Total (T) NMs covered by CNWs | Total (P) NMs covered by CNWs | Total paper charts affected | Total ENCs affected |
|------|--------------------------|------------------------------------|--------------------------------------|--|--|--------------------------------------|---------------------------|
| 2007 | 12 | 27 | 8 | 27 | 7 | 35 | 23 |
| 2008 | 12 | 11 | 2 | 10 | 0 | 8 | 9 |
| 2009 | 2 | 2 | 1 | 2 | 0 | 7 | 3 |

SANHO issues NMs in booklet form on a monthly basis. Should a maritime safety event be valid for less than 2 months it will only be actioned by CNWs. For events up to 12 months duration, a Temporary NM action will be taken and if based on a promulgated CNW, this CNW will be cancelled within the first week or so of the issuing of the NM booklet containing the Temporary Notice. Any events, which remain in force for longer than 12 months, will be covered by permanent NM action.

Describe how to encode each T case below

General comments

JP: JHOD comments:

- JHOD thinks that use of CTNARE should be avoided except only when there is no other suitable encoding method.
- IEC61173 Ed3 specifies checking ECDIS to perform correctly on DATSTA/DATEND so that ECDIS type approved these days identifies these attribute correctly. JHOD thinks that currently an alternative method is needed for ECDIS not performing on these attributes but such method will be obsolete in near future.
- JHOD thinks that 2-way display switched "on/off" by DATSTA/DATEND may not be convenient for mariners. For example, military practice area (MIPARE) is displayed "off" in route planning and "on" in route monitoring according to the function of DATSTA/DATEND. For this case, encoding another object may be suitable to inform mariners of the beginning day of the military practice.
- When describing time of the day is necessary, it should be on UTC for ENCs according to UOC, even it is on local time for paper NtMs.
- For most of (P) cases in the list of the questionnaire, JHOD issues (T) NMs rather than (P) NMs. See cases of (T) NMs.
- Because there is no TSS set by IMO in Japan, information on changing TSS is announced as reference, not as NtMs. Information on changing passage and traffic rule regulated by domestic law, not by IMO, is issued as (P) NtMs, and details are issued as small corrections (NtMs) later.

ZA: Note 1: For all positions requiring transformation to WGS84 due care will be taken to set spatial accuracy attributes of the features concerned.

In the comments below, where DATSTA and PERTA is used, should an earlier date and time be encoded for DATSTA and PERSTA respectively to give advanced display of the area on the ECDIS; and give the actual time of use in the text of INFORM or the external linked file.

Unless otherwise stated, SORDAT, SORIND will always be encoded on the changed object(s) listed below.

AU: General AU comments: In all cases for the encoding of ENC Updates, AU refers to original source documentation, therefore encoding and attribution is done using the most detailed information available. Wherever possible, the most appropriate S-57 Object Classes are used, rather than overuse of **CTNARE**.

Attributes listed in the Encoding Method column do not constitute the full attribution expected for the object. Full attribution must be is done in accordance with the UOC and AHO ENC Encoding Guidelines. The attributes listed in this table are specific to the requirement of the update.

AHO policy in general for the promulgation of (T) NtM's is that only changes that will be in place for more than 4 weeks will be considered (due to the time required to assess and process incoming data at the AHO). As ENC Updates are forwarded to IC-ENC on a weekly basis, it is considered by AHO that all (T) and (P) NtM's would be candidates for ENC Update. It must be noted that currently AHO does not apply (T) and (P) NtM's to it's ENCs, but is awaiting the outcomes of the EUWG.

Where "1.", "2." etc. is included in the Encoding Method for the Use Cases outlined below, this corresponds to the numbers in the (T) or (P) NtM, and is not an indication of multiple Updates

JP: JHOD (Japan) comments:

- When describing time of the day is necessary, it should be on UTC for ENCs according to UOC, even it is on local time for paper NtMs.
- For most of (P) cases in the list of the questionnaire, JHOD issues (T) NMs rather than (P) NMs. See cases of (T) NMs.
- Because there is no TSS set by IMO in Japan, information on changing TSS is announced as reference, not as NtMs. Information on changing passage and traffic rule regulated by domestic law, not by IMO, is issued as (P) NtMs, and details are issued as small corrections (NtMs) later.

NO: Under Encoding Method below we have suggested to use Textual description (TXTDSC) as a reference to the origin of the T/P note. After thinking further on this issue, we are not sure if it's the best solution for us. We can also see that use of Source indication (SORIND) may be a way of taking care of the reference to the source of the T/P note. Because of the lack of experience concerning this case, we are not at this point sure of which solution we want to choose.

UK: The following attributes are assumed to be attached to all objects where necessary or available.

Additionally, all positions quoted in the (T)NM will (if possible) be converted to WGS 84 for inclusion in the text file $SORIND = For \ example \ GB, GB, NMrpt, nnnn(T)/yy$

SORDAT = dd.mm.yyyy

TXTDSC containing file reference to the notice (N.B: INFORM may be used instead to convey unformatted text of a restricted length)

GENERAL COMMENT

In all instances the Temporary Notice will be monitored and the appropriate action taken when it is cancelled

FI: In all cases SORIND and SORDAT are encoded. SORIND in format "FI,FI, ,NtM1004/2008". Only attributes relevant to the notice are mentioned here.

| List of Temporary NMs | Encoding Method | Comment/Justification |
|---|--|--|
| 1004(T)/08 - Light | CTNARE : FR, AU (on sectors | FR: Don't update LIGHTS objects |
| 1. It has been reported that a discrepancy of 2 | ranges), PT, SE, NO (with INFORM | as the change seems to be |
| degrees exists between charted and observed sectors | on LIGHTS), ZA (on the sectors | temporary and is not confirmed. |
| at Port Mór light in position X/Y. Details are as | ranges or INFORM of each sector) | P NM? |
| follows: | , | JP:Later, ER for chart update will |
| Charted bearings Observed bearings | Change sectors: DE, DK, UK, JP, NL | also delete INFORM/NINFOM and |
| Green sector 319·5° - 321° 317·5° - 319° | | modify SORIND/SORDAT |
| White sector 321° - 323° 319° - 321° | CTNARE(P)+ NFORM on lights: FI | |
| Red sector 323° - 324·5° 321° - 322·5° | | AU: inserting a second set of |
| 2. Charts will be updated when final details are | | sector lights corresponding to the |
| available. | | reported sectors will be confusing |
| | | to the mariner. |
| 1056(T)/08 - Works | CTNARE: FR, SE, NO, NL, ZA | FR: There is no danger. |
| 1. The Prince George Lock (Position X/Y) will be out of | Delevent chiest (see diffe detects) | JP: Don't update the object |
| operation, for approximately six months, due to a | Relevant object (modified stauts) + | LOKBSN (to save resources) |
| structural failure. | CTNARE: AU, UK | Later, ER for chart update will |
| 2. Throughout this period passage to and from The | Delevent chiest (modified stavts). ID | also delete INFORM/NINFOM and |
| Canal, will be through Prince Philip Lock., and therefore the movement of small craft may be | Relevant object (modified stauts): JP , PT | modify SORIND/SORDAT |
| delayed. | PI | |
| 3. Mariners will be advised when Prince George Lock | | |
| returns to normal operations. | RESARE: DE, DK | |
| returns to normal operations. | RESARE. DE, DR | |
| | RESARE + Relevant object (modified | |
| | stauts): FI | |
| | , | |
| | | |
| 1055(T)/08 - Buoy | Relevant Objects: FR, AU, DE, PT, | |
| 1. A special light-buoy, <i>LFI.Y.10s ATP 1</i> , marking an | DK, UK, JP, SE, NO, NL, FI, ZA | |
| uncovered well head has been temporarily established | | |
| in position X/Y. | | |
| 1001(T)/08 - Wreck. | WRECKS: FR, AU, DE, PT, DK, UK, | |
| 1. A dangerous wreck is reported to exist in | JP, NO, NL, FI, ZA | |
| approximate position X/Y (WGS84 Datum) | WRECKS + CTNARE: SE | AU: QUAPOS = reported, not |
| 1016/T)/00 Fining was stice area | MIDADE - DATEND, ED ALL LIK ID | confirmed |
| 1016(T)/08 - Firing practice area. | MIPARE + DATEND: FR, AU, UK, JP, | JP: After the period, ER is issued to cancel the (T) object. |
| Ground to air gunnery exercises are taking place daily, between 0800 hrs and 1730 hrs, until 15 April | NO, NL, ZA | FR: The DATEND mechanism will |
| 2008, within a sector area from 180° to 270°, radius | MIDADE(DATEND)_CTNADE: DT | |
| 2008, Within a sector area from 180° to 270°, radius 20km, centred on position X/Y. | MIPARE(DATEND)+CTNARE: PT | cancell the display of the object. However, a second ER will be |
| ZOKITI, CETILIEU OTI POSICIOTI A/T. | Nothing: DE | made to remove the object from |
| | Nothing. DE | the ENC. |
| | CTNARE or existing MIPARE | DE, DK : those actions take place |
| | (INFORM): SE, FI | in areas which are already |
| | (5 i). 3-/ | encoded as Mipare, therefore no |
| | | need for action until now. |
| | | FI: MIPARE is used for permanent |
| | | practise areas only. |
| | | PT: The object CTNARE is |
| | | created taking into account those |
| | | ECDIS equipments that cannot |
| | | read the attributes DATSTA and |
| | | DATEND. |
| 1017(T)/08 - Dredging area | RESARE(dredging area)+ DATEND: | JP: After the period, ER is issued |
| Dredging works are taking place, until 28 March | FR, AU, DK, JP, NO, NL, ZA | to cancel the (T) object. |
| 2008, within an area bounded by the following | CTNARE: PT, SE, FI | DE: In GER up to now not a |
| positions: | DRGARE: UK | subject to NtM |
| List of Positions | Nothing: DE | DK : For every case, use of |
| | | DATEND/DATSTA??? |
| | T. Control of the con | PT: The object DRGARE doesn't |
| | | |
| | | have attributes DATSTA and |
| | | have attributes DATSTA and DATEND, and according to S-57 |
| | | have attributes DATSTA and |

| 1018(T)/08 - Depths 1. Depths of 0.8m less than charted exist within an area bounded by the following positions: List etc. | CTNARE: FR, AU, UK, NO, FI, ZA SOUNDG or CTNARE: DE, JP, DK, SE, NL | has been deepened by dredging." If so, and since works are in progress, it should be encoded as a CTNARE object. JP: When value of the depth is known, encoded as SOUNDG with QUASOU =9:value reported (not confirmed) DE: Ctnare: if no information to |
|---|--|---|
| | Area OBSTRN: PT | valsou and position-Temporary less depths are published on our website. |
| 1079(T)/08 - Buoy 1. Until 10 July 2008, a special light-buoy, FI(5)Y.20s, exists in position X/Y (WGS84 Datum) 2. Mariners are not to use this buoy as a mooring. | Relevant objects + DATEND: FR, AU, DE, PT, DK, UK, JP, SE, NO, NL, FI, ZA | DE: Creating ER deleting the object in week buoy is withdrawn JP: After the period, ER is issued to cancel the (T) object. |
| 1. The dredger <i>Volvox Asia</i> is conducting dredging operations in the Spitfire Channel Bypass (X/Y). The dredger will monitor VHF Ch 12 and coordinate with traffic operations. It will display the appropriate lights and signals. 2. The dredged material will be discarded at the Lytton Reach pumpout (X/Y). 3. Mariners are advised to navigate with caution in the area. | RESARE+DMPGRD: FR, AU, DK, JP, NO, NL, ZA RESARE: NL CTNARE: (AU), PT, UK, SE CTNARE+DMPGRD: FI Nothing: DE | FR:DMPGRD only if this area is far from the RESARE and cannot be included in it. AU: CTNARE area to cover the entire area. If the extent of the areas are know, then RESARE for the dredging area and DMPGRD for the spoil ground can be encoded as part of the initial Update. |
| | | DE: In GER up to now not a subject to NtM |
| 1082(T)/08 - Obstruction Harbour works are in progress for a marina facility at New Farm (X/Y); new piles are lit, Q.Y. An unlit obstruction exists in position X/Y. Mariners are advised to navigate with caution in the area. | CTNARE + OBSTRN : FR, DE, PT, UK, NO, NL, FI CTNARE + OBSTRN+ LIGHT : DK HRBFAC(A) + OBSTRN : AU SLCONS + OBSTRN : ZA CTNARE+PILPNT+LIGHT: JP CTNARE+PILPNT+OBSTRN: SE | |
| 1083(T)/08 – Scientific instruments 1. Until 30 June 2011, sub-surface scientific instruments exist in the following positions: List of Positions | CTNARE(s): FR, PT, NO, NL OBSTRN(s): AU, DK, UK, FI OBSTRN(s) or RESARE: ZA BOYSPP(s): DE OBSTRN (no DATEND) : JP, SE | JP: DATEND can not be used. After the period, ER is issued to cancel the (T) object. |
| 1. Available depths as at 3 October 2007: List of Positions | SOUNDG + CTNARE: FR, UK, SE, NO, ZA SOUNDG: AU, DE, PT, DK, NL, FI | FR: Temporary depths in a dredged area? Or changing depths? A permanent caution note should exist in the ENC. UK: Encode: CTNARE (to cover depths if NM states "Only most significant") JP: no (T)NM, as known depth is issued as small correction SE: CTNARE if the depth are considered hazardous ZA: Do these depths also affect the existing depth areas and depth contours? My approach would be to consider a CTNARE area over depth extent telling mariner, using INFORM, that depths in this area are x.x m shoaler or deeper than shown and include date info also. I would consider only encoding the shallowest depth as a SOUNDG object if it was less than those |

| | | charted in the area. AU: For AU, such a (T) NtM will be produced to (generally) confirm dredged depths in maintained dredged areas and maximum authorised draft/minimum depth at berths. Generally, these do not change, therefore no Update is required, but in the event that a depth does change, Updates should be applied accordingly. |
|---|--|---|
| 1090(T)/08 - Wreck 1. A wreck exists in position X/Y., which lies within the Lae anchorage area. 2. Mariners are advised to navigate with caution in the area. 3. Former Notice 2726(T)/06 is cancelled. | CTNARE: FR WRECKS: AU, DE, DK, UK, JP, NL, ZA WRECKS+CTNARE: PT, SE, NO, FI | |
| 1091(T)/08 - Depth information 1. Available depths as at 15 January 2008: List of Positions 2. Mariners are advised that the revised minimum under keel clearance for Weipa South Channel is 1·2 metres. 3. * Mariners are further advised that the sandbar on Urquhart Point extends 25m into the channel with a minimum depth of 9·3 metres at the toe line. 4. Former Notice 3538(T)/07 is cancelled. | 1. CTNARE: ZA SOUNDG + CTNARE: FR, DE, UK, NO SOUNDG: DK, NL, FI, SE, AU, PT 2. CTNARE: FR, DE, PT, UK, JP, NO, ZA, SE DRGARE (updated): AU SOUNDG: DK 3. CTNARE: FR, DE (may be + SOUNDG), PT, UK, JP, NO, ZA, AU SOUNDG: DK, NL DEPARE+CTNARE+SOUNDG: SE | UK: 1. 2. 3. Encode: CTNARE (to cover depths if NM states "Only most significant") and for other features. PT: Create several objects SOUNDG (P) JP: no (T)NM, as known depth is issued as small correction |
| 1093(T)/08 - Depth information 1. Available depths as at 21 December 2007: 2. Victoria Quay berths A and B are no longer used for commercial operation. 3. Maximum draft of vessels using inner harbour berths must be obtained by contacting the Harbour Master's office. 4. Former Notice 3663(T)/07 is cancelled. | SOUNDG+CTNARE: FR, DE, UK, NO SOUNDG: FI SOUNDG+(BERTHS+HRBARE+no CTNARE): AU, DK, PT, NL BERTHS+CTNARE: ZA SOUNDG+RDOCAL: SE | FR: Only one CTNARE if 2) and 3) are close together. UK: Encode: CTNARE (to cover depths if NM states "Only most significant") and for other features. Delete/amend references to cancelled (T)NM JP: no (T)NM, as known depth is issued as small correction |
| 1716(T)/08 - Offshore installation Flotel Safe Scandinavia will be moored alongside Sleipner B platform in position X/Y until 31 October 2008. Mooring chains and anchors extend outside the 500m radius safety zone of the Sleipner B platform. Anchors will be marked by yellow light buoys. Mariners are requested to exercise caution and maintain a 3000m safe distance from Safe Scandinavia. | RESARE: FR, DK, NO, NL, ZA CTNARE: AU, UK, FI, SE HULKES+RESARE: DE HULKES+CTNARE: PT OFSLPF(P)+RESARE or CTNARE: JP | DE: Resare: Restrn = 8 is a more explicit statement than a generally Ctnare JP: After the period, ER is issued to cancel the (T) object. |
| 1707(T)/08 - Restricted area 1. An exclusion zone with a radius of 1 nautical mile has been established centred on a wreck in position X/Y. 2. Mariners are advised to exercise caution. 3. Former Notice 4727(T)/07 is cancelled. | RESARE: FR, UK, JP, NO, FI, ZA RESARE+WRECKS: AU, DE, PT, DK, NL CTNARE+WRECKS: SE | UK: Delete/amend references to cancelled (T)NM |
| 1726(T)/08 - Works 1. Works are in progress to extend Real Club Náutico Yacht Harbour. | CTNARE+ BOYXXX: FR, NO BOYXXX+ STATUS on LIGHTS: AU, | FR: attributes of the light-beacon are not changed (information is |

| 2. A south cardinal light-buoy, <i>Q</i> (<i>6</i>)+ <i>LFl.15s</i> , is temporarily established in position X/Y. | DE, DK | into CTNARE/INFORM). The light |
|--|---|---|
| 3. A green lateral light-buoy, $Fl(2+1)G.14.5s$, is temporarily established in position X/Y. | CTNARE+BOYXXX+STATUS on LIGHTS: UK, JP, FI, PT | may be visible beyond the CTNARE limits. UK: Delete/amend references |
| 4. The light-beacon at the end of the East Jetty in position X/Y has been temporarily extinguished.5. Former Notice 5072(T)/06 is cancelled. | CTNARE+BOYXXX+delete LIGHTS: SE, NL, ZA | to cancelled (T)NM |
| 1717(T)/08 - Data buoys 1. Oceanographic data buoys will be on station in the positions given below until further notice. Mariners are advised to exercise extreme caution and not to | Only RESARE(s): FR, NO RESARE+BOYSPP: AU, DE, DK, UK, JP, NL, FI, ZA | FR: Pending of the scale UK: Delete/amend references to cancelled (T)NM DE: Does a Resare with radius = |
| anchor or trawl within 1000m of the buoys. 2. Tsunami buoys will be on station in the positions | CTNARE+RESARE+BOYSPP: PT | 1000m in an overview makes sense? |
| given below until further notice. Mariners are advised to exercise extreme caution and not to anchor or trawl within 3NM of the buoys. List of Positions 3. These lists will be updated, as necessary, by | CTNARE+BOYSPP: SE | |
| Temporary Notice to Mariners. 4. Former Notice 1235(T)/08 is cancelled. | | |
| 1696(T)/08 - Light 1. The light, FI(2) G 3M, in position, X/Y has been | CTNARE: FR, NO | FR: CTNARE, because the new information conveyed by |
| destroyed. | Delete LIGHTS: AU, NL, FI | CONDTN and STATUS is not displayed (as far as we known). |
| | STATUS on LIGHTS: DE, DK, UK | displayed (as fal as we known). |
| | STATUS on LIGHTS + CONDTN on LNDMRK: JP | |
| | CTNARE+ delete LIGHTS + CONDTN on LNDMRK: SE | |
| | delete LIGHTS + INFORM on LNDMRK: ZA, PT | |
| 1697(T)/08 - Obstruction 1. An obstruction exists in position X/Y. | OBSTRN: FR, AU, DE, PT, DK, UK, JP, SE, NO, NL, FI, ZA | |
| 1698(T)/08 - Depth 1. A shoal depth of 8m exists in position X/Y. | OBSTRN: FR, PT (+ SEARARE), NL, SOUNDG: AU, DE, DK, UK, JP, SE, NL, FI, ZA UWTROC: NO | DE: Shoal depths are no (T) NMs in GER, therefore no Status = 7 |
| 1699(T)/08 - Restricted area 1. A restricted area, entry prohibited, has been established, until 29 August 2008, within an area bounded by the following positions: List of Positions 2. Road construction works are taking place in the above area. | RESARE: FR, AU, DE, PT, DK, UK, NO, NL, FI, ZA RESARE+CTNARE: JP, SE | |
| 1719(T)/08 - Obstruction 1. An obstruction with a least depth of 2·1m is reported to exist within 30 metres of position X/Y. | OBSTRN (P): FR, DE, JP, ZA OBSTRN (A): DE, PT, AU SOUNDG + CTNARE: UK OBSTRN + CTNARE: NL | FR: POSACC = 30 QUAPOS = 8 DE: An area object Obstrn up to approach, otherwise a point object with Quapos = 7 |
| 2289(T)/08 - Foul 1. A foul exists in position X/Y. | OBSTRN (or WRECKS): FR, AU, DE, PT, DK, UK, JP, SE, NO, NL, FI, ZA | |
| 2291(T)/08 - Wreck 1. A wreck, depth unknown, exists in position X/Y. | WRECKS: FR, AU, DE, PT, DK, UK, JP, SE, NO, NL, FI, ZA | |
| 2275(T)/08 - Wreck 1. A wreck, least depth unknown, is reported to exist within an area bounded by the following list of positions: | CTNARE: FR, NO, FI WRECKS (A): DE, DK, UK, JP, NL, ZA, PT, AU CTNARE+ WRECKS: SE | |
| List 2. Mariners are advised to navigate with caution in this vicinity. | | |
| 2288(T)/08 - Light. Buoy 1. The light, Fl.4s15m7M, in position 22□29´·41N., | CTNARE+BOYISD: FR, NO | FR: CTNARE, because the new information conveyed by |

| 113□50´·99E. is destroyed. 2. An isolated danger light-buoy, <i>Fl(2)5s</i> , has been temporarily established in this position. | STATUS on LIGHTS+BOYISD: AU, DE, DK, UK, JP (CONDTN on structure) delete LIGHTS + INFORM on LNDMRK+BOYISD : ZA , PT Delete LIGHTS + CONDTN on structure + BOYISD: SE, NL, FI | CONDTN and STATUS is not displayed (as far as I known). |
|---|--|---|
| 2259(T)/08 - Restricted area 1. A restricted area, entry prohibited, has been established, until 31 October 2008, within an area bounded by the following positions: List of Positions 2. Breakwater construction works are taking place in the above area. | RESARE(DATEND): FR, AU, DE, PT, DK, UK, SE, NO, NL, ZA RESARE(DATEND) + CTNARE: JP | JP: After the period, ER is issued to cancel the (T) object. |
| 2260(T)/08 - No 3 Area - Light 1. The South Breakwater light, Fl(2)R.5s17m7M, in position X/Y is extinguished until further notice. | CTNARE: FR, NO STATUS (extinguished) on LIGHTS: AU, DE, PT, DK, UK, FI LNDMRK (INFORM) + LIGHTS(STATUS): JP Delete LIGHTS: SE, NL, ZA | FR: CTNARE, because the new information conveyed by CONDTN and STATUS is not displayed (as far as I known). |
| 2261(T)/08 - Buoyage 1. The light-buoy, Fl(2)G.6s No 7, in position X/Y has been temporarily moved to position X/Y. 2. A port-hand light-buoy, Fl.G.3s, has been established in position X/Y. 3. These changes will remain in force until 31 May 2008. | BOYLAT(s)+CTNARE: FR, NO BOYLAT(S): AU, DE, PT, DK, UK, JP, SE, NL, FI, ZA AU: 1. Update to populate TIMSTA = 20080531 for existing light buoy and components. Insert light buoy at new position with DATEND = 20080531 for buoy and components. 2. Update to insert BOYLAT with DATEND = 20080531 for buoy and components. Update to delete inserted buoys and remove DATSTA from existing buoy after 31 May 08. | AU: Changes have occurred which effect navigation in the area therefore they should be applied. Note that if the light buoys have topmarks, the temporal attributes DATSTA and DATEND should not be encoded for the buoys or lights (soon to be released ENC Encoding Bulletin), in which case the existing buoy in (1) should be deleted |
| 2292(T)/08 – Mole – Dolphin - Lights 1. A mole has been established marked by lights as follows: 2. A dolphin marked by a light, Fl.Y.5s, has been established in position X/Y. | Only CTNARE: FR Relevant objects (SLCONS+ MORFAC + LIGHTSs): AU, DE (PILPNT), PT, DK, JP, SE, NL, FI, ZA CTNARE+ Relevant objects: UK, DE, NO | FR: P NM? DE, DK: if info concerning location / extension: Slcons or MORFAC, otherwise Ctnare UK: CTNARE as Item (1) has no co-ordinate information listed |

Preliminary (P) NMs

PT: From my perspective and little experience, I cannot see the need to produce preliminary updates. All the preliminary examples of NMs presented below can originate normal ER files, as well as, the cancelation of former notice it is unnecessary, because we just need to produce a new update changing old information.

UK:

The following attributes are assumed to be attached to all objects where necessary or available. Additionally, all positions quoted in the (P)NM will (if possible) be converted to WGS 84 for inclusion in the text file

SORIND = For example GB,GB,NMrpt,nnnn(P)/yy

SORDAT = dd.mm.yyyy

TXTDSC containing file reference to the notice (N.B: INFORM may be used instead to convey unformatted text of a restricted length)

GENERAL COMMENT

In all instances the Temporary Notice will be monitored and the appropriate action taken when it is cancelled

JP: JHOD issues a few (P)NMs per year for paper charts, but not for ENCs yet.

| List of Preliminary NMs | Encoding Method | Comment/Justification |
|---|--------------------------------|---|
| | Encoding bulletin: FR, AU, PT, | |
| | DK, UK, ZA | |
| Source: International Maritime Organization | | |
| | CTNARE : DE, SE, | |
| areas and to enhance overall maritime safety in the area, two | | DE: For each S-57 area |
| | CTNARE+TSELNE: NO | object composing the traffic |
| Areas To Be Avoided off the southwest coast of Iceland have | | seperation scheme a |
| 1 , | CTNARE+RESARE: NL | separate Ctnare object is |
| These will be implemented at 0000 hours UTC on 1st July | | formed with an Inform-text |
| 2008. | | containing the proposed |
| 2. All vessels over 5,000gt and all vessels carrying dangerous or | | function (S-57 TSS object) |
| noxious cargoes in bulk or in cargo tanks should navigate the | | and launching date. |
| outer route, southwest of the Reykjanes Peninsula, unless they | | Another ER to the 1 st July |
| are permitted to navigate the inner route. Vessels up to 5,000gt | | changing Ctnare into S-57 |
| not carrying dangerous or noxious cargoes in bulk or in cargo | | TSS-object. |
| tanks may transit the inner route. Vessels up to 20,000gt may | | CE 411.1 1 . C E7 |
| transit the inner route provided that the vessel does not carry | | SE: All the relevant S-57 |
| any dangerous or noxious cargoes in bulk or in cargo tanks and | | describing the Traffic |
| the master of the vessel has attended a course held by Icelandic | | separation schemes/Two- |
| authorities and obtained a transit permit. Tankers with a capacity | | way routes/Area to be |
| of up to 5,000gt may navigate the inner route carrying gas cargoes or petroleum products with maximum kinematic viscocity | | avoided would be published |
| of 11.0 cSt at 40°, if the master of the vessel has attended a | | on the day the features come into force. A M_NPUB |
| course held by Icelandic authorities and obtained a transit | | would also be encoded with |
| permit. | | a Txtdsc describing the |
| 3. The Areas To Be Avoided are applicable to all SOLAS | | additional information. |
| vessels of 500gt or more. The eastern area may be transited by | | additional information. |
| vessels calling at ports located within the Eastern Area To Be | | |
| Avoided. Vessels of less than 5,000gt engaged on voyages | | |
| between Icelandic ports and not carrying dangerous or noxious | | |
| cargoes in bulk or in cargo tanks may transit the area south of | | |
| latitude 63° 45′ 00N. | | |
| 4. A new mandatory ship reporting system 'OFF THE | | |
| SOUTHWEST COAST OF ICELAND (TRANSREP)' has been | | |
| adopted. The reporting system covers the Eastern Area To Be | | |
| Avoided. Vessels calling at ports located within the Eastern | | |
| Area To Be Avoided and vessels of less than 5,000gt permitted | | |
| to transit the Eastern Area To Be Avoided south of latitude 63° | | |
| 45' 00N., when engaged on voyages between Icelandic ports | | |
| and not carrying dangerous or noxious cargoes in bulk or in | | |

cargo tanks, are required to participate in the system. 5. Details of the new traffic separation schemes are shown in the accompanying diagrams. The numbered positions on the diagrams relate to the positions quoted below. All positions are referred to WGS84 Datum. 6. Northwest of Garðskagi (Gardskagi) Point **Traffic Separation Scheme** (a) A separation zone bounded by a line connecting the following positions: (b) A traffic lane for northeast/east bound traffic will be established between the separation zone and a line connecting the following positions: "List" (c) A traffic lane for west/southwest bound traffic will be established between the separation zone and a line connecting the following positions: "List" Two-way routes (d) A two-way route for east/west bound traffic will be established by lines connecting the following positions: "List" (e) A two-way route for northeast/southwest bound traffic will be established by lines connecting the following positions: "List" 7. Southwest of Reykjanes Peninsula **Traffic Separation Scheme** (a) A separation zone bounded by a line connecting the following positions: "List" (b) A traffic lane for north-northwest bound traffic will be established between the separation zone and a line connecting the following positions: "List" (c) A traffic lane for south-southeast bound traffic will be established between the separation zone and a line connecting the following positions: "List" Two-way routes (d) The Outer Two-way Route will be established by lines connecting the following positions: "List" (e) The Inner Two-way Route will be established by lines connecting the following positions: "List" 8. Areas To Be Avoided (a) Off the south and southwest coast the Eastern Area To Be **Avoided** will be established by lines connecting the following positions: "List" (b) West of Reykjanes Peninsula the Western Area To Be Avoided will be established by lines connecting the following positions: "List" (c) Faxaflói - Sydra-Hraun Bank **Area To Be Avoided** will be established by lines connecting the following positions: "List" 9. Details of these routeing measures will be included in New Editions of Charts 565, 2733 and 2734 to be published May 2008. Chart 2902 will be updated by Notice to Mariners. 1003(P)/08 - Works & Light-beacon Only CTNARE: FR, NO 1. Harbour works are in progress at Castletown Bearhaven in the vicinity of position X/Y. The works include an extension to Dinish HRBFAC+UWTROC+ delete CTNARE + relevant objects Wharf, dredging of the wharf and of the approach channel. beacon: AU mais la représentation 2. The beacon on Perch Rock (X/Y) has been demolished and the existante peut rester avec la rock on which the beacon stood has been removed to below low CTNARE + add UWTROC + CTNARE. Non exemple water level. delete beacon: DK, SE 3. The chart will be updated when final details are available. CTNARE + delete UWTROC and 4. Former Notice 57(P)/08 is cancelled. beacon: **NL, DE** CTNARE + amend UWTROC + delete beacon: **UK** CTNARE + delete beacon and LNDARE + amend DEPARE: PT CTNARE + delete beacon and LNDARE + add UWTROC: FI, ZA 1024(P)/08 Only CTNARE(s): FR, DK, SE, Buoyage. Submarine pipelines/Platforms/Wells/ Submarine cables NO, NL 1. Work is in progress on the installation of QGII offshore SPM

Relevant objects or CTNARE:

Condensate Terminal. All positions are referred to WGS84

| Datum. | AU | |
|---|---------------------------------------|------------------------------|
| a) The terminal consists of 2 CALM buoy systems: | | |
| b) A submarine pipeline is being laid between Ra's Laffan and | CTNARE+ Relevant objects: PT , | |
| the terminal within an area bounded by the following | UK, ZA (where possible) | |
| approximate positions: "List" | CTNADE OECDLE: DE | |
| 2. Elsewhere throughout the Qatar North Field, further oil and gas field development is in progress: | CTNARE + OFSPLF: DE | |
| a) * New SPM's are being established in the following positions: | | |
| "List" | | |
| b) A new SPM has been established in positionX/Y. A submarine | | |
| pipeline links the SPM to the Al Rayyan production platform as | | |
| follows: | | |
| c) Further production platforms have been established in the | | |
| North Field area as follows: | | |
| d) Wellheads, the water depth over which is unknown, are | | |
| reported to exist in the following positions: "List" | | |
| e) Four additional structures are reported to exist in the | | |
| following positions: | | |
| 3. Submarine pipelines and cables have also been established | | |
| throughout the Qatar North Field as follows: | | |
| a) Three new submarine pipelines have been established: | | |
| WHP-4 to Ra's Laffan: | | |
| WHP-7 to Ra's Laffan: | | |
| WHP-5 to WHP-7: | | |
| b) Submarine cables have been established joining the following | | |
| platforms: | | |
| WH1 to WHP-4: | | |
| WH1 to WHP-5: | | |
| WH1 to WHP-7: | | |
| 4. Mariners are advised to navigate with caution in these areas.5. All charts will be updated when the works are complete. | | |
| 6. Former Notice 5789(P)/07 is cancelled. | | |
| 1037(P)/08 - Works | CTNARE: FR | |
| Works are in progress to establish a floating wind turbine | RESARE: AU, DK, SE, NL, ZA | |
| south-east of Castro (X/Y) The works are expected to continue | LNDMRK+ RESARE: DE, NO | |
| until the end of 2008. | PONTON + LNDMRK+ RESARE: | |
| 2. A restricted area, radius 1000m, which is prohibited to vessels | FI | |
| not engaged in the construction work, has been established, | CTNARE(P)+ RESARE: PT | |
| centred on position X/Y. | (DATEND), UK | |
| 3. Charts will be updated when full details become available | | |
| 1700(P)/08 - Depths | Only CTNARE: FR, AU, DE, UK, | |
| 1. Numerous depths less than charted exist. The most significant | NO, NL | |
| of these are as follows (positions refer to OSI Datum): "List" | | |
| 2. These changes will be included in the next New Editions of | SOUNDGs: PT, DK, SE, FI (and | |
| Charts 2697, 2699, 2723 and 2811. | CTNARE if necessary), DE (or | |
| | CTNARE), ZA | |
| | | |
| | | |
| 1701(P)/08 - Depths | Only CTNARE: FR, AU, DE, UK, | |
| 1. Numerous depths less than charted exist. The most significant | NO, NL | |
| of these are as follows (positions refer to OSI Datum): "List" | <u> </u> | |
| 2. These changes will be included in the next New Editions of | SOUNDGs: PT, DK, SE, FI (and | |
| Charts 1879, 1883, 2723, 2725 and 2752 | CTNARE if necessary), DE (or | |
| | CTNARE), ZA | |
| | | |
| 1718(P)/08 - | Only CTNARE: FR, DK, NO | FI: The actual |
| Works/Channel/Buoyage/Beacons/Lights/Anchorage | , | implementation in this case |
| area/Pilot boarding place | CTNARE + Relevant objects | was to publish a new edition |
| Works are in progress to develop the Port of Vuosaari. These | (ACHARE, DRGARE, PILBOP, | making all the changes |
| works are expected to be complete by the autumn of 2008. | FAIRWY): AU, DE, PT, UK, SE, | permanent. (The |
| 2. A new channel to the Port of Vuosaari, with maximum | NL, FI, ZA | corresponding Finnish notice |
| authorised draught 11.0m, has been established between the | | ,that the UK notice |
| | 1 | 1718(P)/08 refers to, was a |
| following positions: "List" | | |
| following positions: "List" 3. Additional light-buoys and beacons mark the channel limits. | | permanent correction |
| following positions: "List" | | |

| 5. A new pilot boarding place has been established in position X/Y. 6. A new anchorage area has been established in the vicinity of position X/Y. 7. Mariners are advised to navigate with caution and to contact the port authorities for the latest information. 8. These and other amendments will be included in the next New Editions of Charts 1080 and 1083, to be published in due course. 9. Former Notice 2889(P)/07 is cancelled. rte1714(P)/08 — Depths/Wrecks/Submarine pipelines 1. There are numerous changes in the approaches to Alger. 2. Depths less than charted exist. The most significant are as follows (positions referred to Undetermined Datum): "List" 3. *Submarine pipeline laying operations are in progress within an area joining the following positions: "List" 4. A dangerous wreck exists in position X/Y. 5. A non-dangerous wreck exists in position X/Y. 6. Wrecks no longer exist in the following positions: "List" | Only CTNARE: FR, DE, NO CTNARE+Relevant objects (PIPARE, WRECKS, <u>but no</u> <u>SOUNDG</u>): AU (CTNARE covering area of erroneous depths), NL CTNARE covering area of erroneous depths), CBLSUB, | DK: "Given that the changes have already occurred, but are depending that the paper charts new edition, we would add the changes to the ENC's" means: "use relevant objects" |
|---|---|--|
| 7. These and other changes will be included in the next New Edition of Chart 2555. 8. Former Notice 4874(P)/07 is cancelled. * Indicates new or revised entry. | WRECKS, WRECKS not remove until NM's cancellation but Existence doubtfull: UK SOUNDG, CTNARE for pipeline, WRECKS: SE, ZA, FI | |
| | Relevant objects (SOUNDGs, CBLARE, WRECKS): PT | |
| 1. Buoyage in the vicinity of Mayou Shi light vessel and in the south-west approaches to Chiwan has been extensively changed. 2. New red and green light-buoys have been established in the vicinity of Mayou Shi light vessel between positions X/Y and X/Y. 3. *A new fairway, marked by red and green light-buoys, has been established in the south-west approaches to Chiwan between the following positions: "List" 4. *It is reported that this new fairway, which has a controlling depth of 14·5m, is open and on trial for shipping between sunrise and sunset. Vessels of 20,000t or more are forbidden to meet or overtake in the fairway. Vessels greater than 50,000t are advised not to use the fairway. 5. *Vessels using the fairway should report to the Shenzhen and Guangzhou VTS centres. For procedures and working details, see Admiralty List of Radio Signals. 6. *Mariners are advised to navigate with caution along this route. 7. Former Notice 766(P)/08 is cancelled. 1735(P)/08 - Depths | Only CTNARE: FR, NO Relevant objects: AU, DE, DK, SE, ZA CTNARE+ Relevant objects: PT, NL, FI, UK | |
| 1. Numerous depths less than charted exist in Lingding Yang, north of latitude X of longitude Y. The most significant are as follows: "List" 2. These changes will be included in the next New Editions of Charts 341 and 343. | Only CTNARE: FR, AU, UK, NO, NL SOUNDGs: PT, DK, SE, FI(and CTNARE if necessary) , ZA (and CNTARE?) | |
| 1744(P)/08 Coastline/Depths/Fairways/Reclamation areas/Light-beacons 1. There have been extensive changes to coastline and depths within the Port of Qinhuangdao and changes to fairways and depths in the approaches to the port. 2. Both the Main Fairway and West Fairway have been widened to 200m. 3. Reclamation and breakwater construction have taken place to the south of the power station, between the following positions: "List" 4. Reclamation has taken place within West Port joining the mainland to the breakwater between the following positions: "List" 5. Reclamation has taken place to extend the Coal Terminal within Basin No2 to include a new berth, designation 200, between the following positions: "List" | Only CTNARE: FR, AU, NO 1. CTNARE: UK, NL 2. Amend FAIRWY: UK, NL, PT, FI, ZA, SE 3. CTNARE: UK, FI SLCONS+LNDARE: NL, PT, ZA, SE 4. CTNARE: UK, FI LNDARE: PT SLCONS+LNDARE: NL, ZA, SE | UK: Number of different CTNARE to include identified reclamation areas and areas of depths that are less than charted PT: use of CONDTN = under reclamation DK: Given that the changes have already occurred, but are depending that the paper charts new edition, we would add the changes to the ENC's |

| 6. Dredging has taken place between the limit of Basin No 2 and the Fuel Oil Terminal in the vicinity of X/Y. 7. Reclamation has taken place to the west of Basin No 3 adjoining the Oil Pier and between the following positions: "List" 8. Numerous changes to depths have taken place within the Port of Qinhuangdao and approaches. The most significant are as follows: "List" 9. These changes will be included in the next New Edition of Chart 3378. | 5. CTNARE: UK, FI LNDARE: NL, PT SLCONS+LNDARE: NL, ZA, SE 6. CTNARE: UK, FI DRAGARE: NL, PT, ZA DEPARE: SE 7. CTNARE: UK, FI LNDARE: NL, PT, ZA SLCONS+LNDARE: NL, SE 8. CTNARE: UK SOUNDG: NL, PT, FI (and |
|--|--|
| | CTNARE if necessary), SE |
| 1750(P)/08 – Coastline/Depths There have been extensive changes to coastline and depths at Dalian Xingang. Reclamation has taken place in the vicinity of Jiucai Tuozi, between the following positions: "List" A new wharf has been established to the south-west of the Mineral Terminal, replacing the charted approximate pier, between the following positions: "List" Reclamation has taken place north of the Crude Oil Terminal in the vicinity of Sha Tuozi between the following positions: "List" Reclamation has taken place, with the construction of new wharves, between positions X/Y (Oil Wharf Pier) and X/Y (shore) A new wharf has been established between the following positions: "List" Dredging has taken place north-west of the container wharf in the vicinity of position X/Y. Depths are significantly different than charted. Numerous changes to depths have taken place within Dalian Xingang. The most significant are as follows: "List" These changes will be included in the next New Edition of Chart 3696 and a Notice to Mariners Block for Chart 3697. 1709(P)/08 - Submarine cable Submarine cables have been laid joining the following positions (WGS84 Datum): "List" Mariners are advised to avoid anchoring and trawling in the vicinity of submarine cables. These changes will be included in the next New Editions of Charts 2531 4944 and 4945 | CBLSUB: FR, AU, PT, DK, UK, NO, NL, FI CBLSUB+CBLARE: SE |
| Charts 2531, 4944 and 4945. | |
| 1727(P)/08 – Coastline/Depths/Rocks 1. There are numerous changes to coastline, depths and rocks in the vicinity of Deception Island. All positions quoted are referenced to chart datum. "List" 2. The coastline on the south-west of Deception Island between positions X/Y and X/Y has extended up to 0·25M seaward. 3. There are numerous changes to charted depths; the most significant are as follows: "List" 4. Rocks and depths of less than 10 fathoms exist between the coastline and a line joining the following positions: "List" 5. Depths on the north side of Neptunes Bellows are deeper than charted. The 10 fathom contour now joins the following positions X/Y (existing contour) and X/Y (existing contour). 6. Numerous depths have been disproved. The most significant are as follows: "List" 7. Chart 3202 will be updated when the full information becomes available. | Only CTNARE: FR, DK, NO Relevant objects (SOUNDG /UWTROC/COALNE/DEPCNT): PT, SE CTNARE+ Relevant objects: NL, FI, UK (or CTNARE) |
| 1728(P)/08 - Lights/Submarine | Only CTNARE: FR, NO |
| pipeline/Depths/Buoy/Beacons Source: Chilean Charts 14211 & 14212 1. Recent Chilean Charts have highlighted numerous changes to charted detail in Ardley Cove. 2. The light charted in position X/Y has been moved to position | CTNARE (depths) + relevant objects (LIGHTS, PIPSOL, BCNxxx): AU, UK, NL |

| X/Y and marks the new landfall of an existing submarine | Relevant objects (SOUNDG |
|---|--|
| | /LIGHTS/BCNxxx/BOYxxx): |
| | PT, DK, SE, FI, ZA |
| 3. The light charted in position X/Y has been moved to position | , , |
| X/Y. | |
| 4. Three beacons have been moved as follows: "List" | |
| 5. The buoy charted in position X/Y has been removed. | |
| 6. Numerous depths less than charted exist in Ardley Cove. The | |
| most significant are as follows: "List" | |
| 7. These and other amendments will be included in the next New Edition of Chart 1774. | |
| | Only CTNARE: FR, AU, DE, DK, |
| | UK, NO |
| Livingstone Island has indicated that coastline, rocks and depths | |
| · · · · · · | CTNARE + SOUNDG: PT, NL, |
| | FI ' |
| position X/Y have changed. | |
| | SOUNDG+ relevant Objects: SE |
| 3. Further details will be included in a forthcoming Notice to | |
| Mariners Block for Chart 1741 and the next New Edition of Chart | |
| 1776. | |
| 4. Former Notice 5128(P)/07 is cancelled. | Only CTNADE, ED. All DE. DV |
| | Only CTNARE: FR, AU, DE, DK, UK, NO |
| Ross Island indicates changes to rocks, danger lines, depths and | UN, NO |
| | CTNARE+SOUNDG+UWTROC: |
| | PT, NL, FI |
| follows: "List" | , , |
| | SOUNDG+UWTROC: SE |
| Editions of Charts 225, 227 & 3205. | |
| 4. Former Notice 5167(P)/07 is cancelled. | |
| | Only CTNARE: FR, DK |
| points | CTNARE - RECTRC. IIII |
| 1. A two-way recommended route has been established off the coast of Uruguay between the following approximate positions: | CTNARE+RECTRC: UK |
| | TWRTPT/RECTRC/RDOCAL: AU, |
| | PT, SE, NL, FI, ZA |
| recommended route. Consult Admiralty List of Radio Signals | |
| • | RECTRC: NO |
| 3. These and other changes will be included in the next New | |
| Edition of Chart 3064 | |
| | Only CTNARE: FR, AU, NO |
| 1. The latest survey information for Tizard Bank, South | |
| | 4 x CTNARE: UK |
| depths less than charted exist. The most significant of these are | CTNARE COUNTY (LANDARE). |
| | CTNARE+SOUNDG(+LNDARE): PT, DK, NL, FI |
| 3. South Edinburgh Channel "List" | r I, Dity IIL, I I |
| | SOUNDG: SE |
| 5. Shingles Patch has extended up to 400 metres northwards to | |
| enclose the drying heights above. | |
| 6. These and other changes will be included in the next New | |
| Editions of Charts 1183, 1606, 1607 and 1609. | |
| | Only CTNARE: FR, AU, PT, DK, |
| | UK, SE, NO, NL, FI |
| vicinity of position X/Y. The works include an extension to Dinish | |
| Wharf, dredging of the wharf and of the approach channel. | |
| 2. The chart will be updated when final details are available. 3. Former Notice 1003(P)/08 is cancelled. | |
| | Only CTNARE: FR |
| Source: Belgian Notices 6/78(P)/08 & 6/80/08 | Siny Silving III |
| | RESARE: NL, SE, NO |
| Thorntonbank (X/Y). These works are likely to continue until | , , |
| | OSPARE or PRDARE/RESARE: |
| | AU, FI |
| | 1 |
| following positions: "List" 3. In association with the windfarm construction an area, | CTNARE/OSPARE /RESARE: PT, |

| prohibited to all shipping & fishing, has been established joining the following positions: "List" | UK |
|--|---|
| 4. These changes will be included in New Editions of Charts 1406, 1630, 1872 and 2449 to be published 15 May 2008 and in | CTNARE/OSPARE: DK , |
| the next New Edition of Chart 1874. 2274(P)/08 - Restricted area/Wreck | Only CTNARE: FR, DK |
| 1. A channel has been established between Môle du Guernic and Cale de la Poste. | CTNARE/WRECKS: UK, NO |
| The channel is buoyed from April to October and has been designated an anchoring prohibited area. | CTNARE/WRECKS/RESARE: AU , |
| 2. A wreck of unknown depth, believed to have a safe clearance | FI |
| of 20 metres, exists in position X/Y. (WGS84 Datum) 3. Mariners are advised to contact the local port authorities for further details. | CTNARE/WRECKS/HRBARE: PT, ZA |
| 4. These and other changes will be included in the next New Edition of Chart 2348. | Relevant objects(no CTNARE): |
| 2290(P)/08 - Buoyage/Channels | SE, NL Only CTNARE: FR, DK, NO |
| Dredging works have taken place in the northern approaches to Pelabuhan Klang. | CTNARE+ BOYLAT: AU |
| 2. Selat Klang Utara has been dredged to a depth of 13·3m.3. The entrance section of the channel between buoys No 1 and | CTNARE(s)+Relevant objects |
| No 3 has been realigned and widened to 360 metres to agree | (FAIRWY/BOYLAT/DRGARE): |
| with the width of the inner channel. Buoy No 2 has been moved to position X/Y and buoy No 4 has been moved to position X/Y. | PT, UK, NL, ZA |
| 4. The fairway adjacent to the berths at Pelabuhan Utara (North Port) has been dredged to a depth of 15.5m. | Relevant objects (no CTNARE): SE, FI |
| 5. Charts will be updated when full details are available.2276(P)/08 – Depths/Rocks - Reclamation areas - Spoil | |
| Ground – Breakwaters - Buoyage 1. There have been numerous changes to depths, rocks, | Only CTNARE: FR, NO |
| reclamation areas, a spoil ground, breakwaters and buoyage | CTNARE(s)(depths) + relevant |
| within Dalian Gang and its approaches. 2. Numerous depths less than charted exist. The most significant are as follows: "List" | objects (DMPGRD/SLCONS /BOYxxx): AU, UK, FI |
| 3. An area of rock which covers and uncovers, radius approximately 250 metres, exists around Jueshi Island centred | Relevant objects (SOUNDG /SBDARE/DMPGRD/OBSTRN |
| on position X/Y. 4. Reclamation has taken place in the following areas: | /SLCONS): PT, DK |
| At Xiaoyandao Jiao, centred on position X/Y Northwest of Mianhua Dao, centred on position X/Y | CTNARE + SOUNDG + relevant objects (DMPGRD/SLCONS |
| At the western end of Dayao Wan, centred on position X/Y Northwest of Jiucai Tuozi, centred on position X/Y | /BOYxxx): SE, NL, ZA |
| At Heishijiao Wan, centred on position X/Y 5. Reclamation is currently in progress in the following areas: | |
| At Dawu Wharf, centred on position X/Y Northeast of Mianhua Dao, centred on position X/Y | |
| At the northern side of Hongtu Duizi Wan, centred on position | |
| X/Y At the northern side of Dayao Wan, centred on position X/Y | |
| 6. A temporary spoil ground, radius 500 metres, exists centred on position X/Y. A minimum depth of 245m exists within the | |
| spoil ground. 7. Two breakwaters have been established in the Liushutun Area | |
| joining positions as follows: | |
| a. X/Y (charted as under construction).b. X/Y (not currently charted). | |
| 8. The south cardinal buoy, <i>Q</i> (<i>6</i>)+ <i>LFl.15s C3</i> , in position X/Y has been removed. | |
| 9. The south cardinal buoy, <i>VQ(6)+LFl.10s C1</i> , in position X/Y has been removed. | |
| 10. These and other changes will be included in the next New | |
| Edition of Chart 3697. 2287(P)/08 – Fairway/Anchorage areas/Buoyage | |
| 1. A new fairway, width 250m, least depth 11·1m, has been established in the approaches to the new harbour development | Only CTNARE: FR, NO |
| at Niu Jiao, joining the following positions: | Relevant objects (FAIRWY |

| "List" | /PILBOP/ACHARE/BOYLAT): | |
|--|----------------------------|--|
| 2. This new fairway is marked by lateral light buoys as follows: | AU, PT, DK, UK, SE, NL, FI | |
| "List" | | |
| 3. The Songxia pilot/anchorage area has moved eastwards to | | |
| avoid the new fairway and is now bounded by the following | | |
| positions: "List" | | |
| 4. A new anchorage area has been established within an area | | |
| bounded by the following positions: "List" | | |
| 5. These amendments will be included in the next New Edition of | | |
| Chart 2413 and a Notice to Mariners block for Chart 2419. | | |
| 6. Former Notice 1103(P)/07 is cancelled. | | |