INTERNATIONAL HYDROGRAPHIC ORGANIZATION



#### ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

# CHART STANDARDIZATION & PAPER CHART WORKING GROUP (CSPCWG)

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

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CSPCWG Letter: 07/2009

UKHO ref: HA317/010/031-06

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Date 1 July 2009

Dear Colleagues,

**To CSPCWG Members** 

Subject: Actions from CSPCWG5

Several actions (ie 10, 11, 13, 14, 16 and 17) from CSPCWG5 required the Secretary to draft revised or new specifications for consideration by the full WG. All the proposals were discussed at the meeting and the general principles and, where appropriate, new symbols were agreed by the participants. Annexes A –F are the draft wording and some possible graphics for inclusion in M-4, subject to WG members' approval, and subsequently to IHO Member States' approval.

For Action 11, I am grateful to Denmark, Japan, Sweden and US for various bridge graphics, the others being taken from GB charts. Please consider whether you have other graphics which may help to illustrate this topic.

Action 33 required the Secretary to draft a WG letter regarding the use of the light description abbreviation FFl. I have therefore included this action at Annex G for your consideration.

Annex H is a response form. I would be most grateful to receive your responses by 26 August 2009.

Yours sincerely,

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Andrew Heath-Coleman Secretary

Annex A: Draft New Specifications for B-443.8 and B-444.5 - Pipeline tunnel entrance (CSPCWG 5 Action 10) Annex B: Draft Revised Specifications for B-381 - Bridges (CSPCWG 5 Action 11) – separate PDF file Annex C: Draft Revised Specifications for B-445.12 - Wave energy devices (CSPCWG 5 Action 13) Annex D: Draft Revised Specifications for B-418 - Unsurveyed areas (CSPCWG 5 Action 14)

Annex E: Draft New Specification for B - 445.2f - Platform with superstructure removed (CSPCWG 5 Action 16)

Annex F: Draft Revised Specification for B-447.4 - Shellfish beds (CSPCWG 5 Action 17)

Annex G: Use of abbreviation FFI. (CSPCWG 5 Action 33)

Annex H: Response form

#### Annex A to CSPCWG Letter 07/2009

<u>CSPCWG 5 ACTION 10:</u> Secretary to draft specification for pipeline tunnel entrance, and include in WG letter.

Draft revised specification (new text in red)

**B-443.8** Cables, buried so deep that they are not vulnerable to damage from anchoring, should not be charted (so that mariners are not unnecessarily inhibited from anchoring or fishing). In marginal cases they may be charted in magenta with a note stating the nominal depth to which they are buried, as L42.1, but with a cable symbol. If they are partly laid in a tunnel the entrance, if required to be shown, must be charted as L42.2, but with a cable symbol. For details, see B-444.5.

Draft revised specification (new text in red)

**B-444.5 Pipes of all types, buried** so deep that they are not vulnerable to damage from anchoring, should not be charted (so that mariners are not unnecessarily inhibited from anchoring or fishing). In marginal cases they may be charted in magenta with a note stating the nominal depth to which they are buried.

Buried 1.6m L42.1

If required to be shown, the entrance to a pipeline tunnel must be charted by a magenta symbol (black symbol in the case of an outfall in a tunnel):

----) (---- L42.2

The pipeline inside the tunnel should not be charted. This symbol helps to distinguish partly lifted pipelines (or cables, see B-443.8) from those which are in use, but partly in a tunnel.

# Annex B to CSPCWG Letter 07/2009

PDF file sent separately

#### Annex C to CSPCWG Letter 07/2009

<u>CSPCWG 5 ACTION 13:</u> Secretary to draft a revised specification for B-445.12 (wave energy devices) and include in WG Letter.

Draft revised specification (new text in red)

**B-445.12** Wave energy devices; Wave Farms. A wide variety of devices for harnessing wave energy are being developed. These devices need protection and are also potentially dangerous to navigation.

At the present stage of the industry, wave farms should usually be treated as Development Areas (limit N1.2, N2.1 or N2.2 as appropriate, see B445.7); that is, charted in magenta, as the actual obstructions will come and go or be moved as experiments progress. A legend such as '*Renewable Energy Installations* - *Development Area (see Note)*' should be inserted in the area. Small areas may be simply labelled '*Development Area (see Note)*' or '*Wave Farm (see Note)*'. All cables, buoys, lights and permanent structures should be charted as normal.

A magenta note should be inserted warning of the potentially hazardous nature of the area, for example:

DEVELOPMENT AREA Extensive testing of renewable energy installations, both above and below the surface, takes place in this area. Mariners should exercise extreme caution if navigating in this area. For further information, see [eg associated publication].

Later, if such an area becomes established as a wave farm, the symbol for a renewable energy installation should normally be inserted in an area. Symbol N1.1 (black maritime limit implying permanent physical obstructions) should normally be used for the limit of a wave farm:



However, if navigation is prohibited, N2.2 must be used:



If there are other restrictions, N2.1 may be used, noting the principles for portraying coincident limits at B-439.6. Usually, the renewable energy installation symbol will be used in combination with an area symbol, although if necessary (eg because of scale) it may be used as a point symbol, with the centre of the circle representing the position:

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#### Annex D to CSPCWG Letter 07/2009

CSPCWG 5 ACTION 14: Secretary to draft a revised specification for B-418 (unsurveyed areas) and include in WG Letter.

# Draft revised specification (new text in red)

B-418 UNSURVEYED AREAS

**Unsurveyed areas** may be defined as those within which there is no available data derived from a systematic hydrographic survey. This may include areas which only have lines of passage soundings and/or other miscellaneous data such as isolated ship's reports.

Most of the world's waters are unsurveyed. The use of a legend 'Unsurveyed' may give a false impression that all other areas of a chart have been fully surveyed. Therefore the legend should be used sparingly, usually only where it is necessary to draw attention to unsurveyed areas amongst surveyed areas; such areas may not otherwise be obvious to the chart user.

- **B-418.1** Areas delimited by a bold line. In unsurveyed areas which are considered dangerous for vessels to enter, a very positive form of warning is required. Such areas must be shown by bold dashed black or magenta limits, with the legend either:
  - · 'Unsurveyed' (which may be accompanied by a note) or
  - 'Depths (see Note)'.

A reference to the Source or ZOC Diagram may be inserted instead of a note.

Examples:



This treatment is likely to be most appropriate in inshore waters such as coastal archipelagos and barrier reefs and where ice has receded. It may be reinforced by the omission or insertion of colour tints within the bold line, or by horizontal blue bands (0.5mm wide, 0.5mm gaps) inserted within the area. If blue bands are inserted, the legend '*Unsurveyed*' or equivalent may be included if space permits:



Small areas (eg gaps left in surveys because of obstructions such as icebergs, log ponds or moored vessels), should have the legend alongside the limit if blue bands are not inserted.

**B-418.2** Wide blank areas on charts are generally self-explanatory. In areas where the only data are passage soundings, this should be made clear to the user by selecting soundings that retain the line pattern, rather than a regularly spaced pattern. If hazards are known to exist even though the area is unsurveyed, a warning is required, eg '*Coral heads are known to exist in this area*'.

Note: a blank area in inshore waters may also be used to indicate that the chart is too small a scale for navigation (see B-404).

<u>CSPCWG 5 ACTION 16:</u> Secretary to include draft specification for platform with superstructure removed in WG Letter.

#### B-445.2 Platforms (including production platforms).

Several different types of platforms are in use. They are normally piled steel or concrete structures, the latter held in position on the sea floor by gravity. **Tension Leg Platforms** (TLP) consist of semi-submersible platforms secured to flooded caissons on the sea floor vertically below them by wires kept in tension by the buoyancy of the platform.

Platforms may serve a number of purposes. They may carry any of the following equipment: drilling and production equipment, oil and gas separation and treatment plants, pump-line stations and electricity generators. They may be fitted with cranes, a helicopter landing deck, and accommodation for up to 350 people. Platforms may stand singly or in groups connected by pipelines. Some stand close together in a complex, with bridges and underwater cables connecting them. Unwanted gas or oil is sometimes burnt from a flaring boom extending from the platform or from a nearby flare stack.

**a. Platforms** must be charted on all large and medium scale charts covering oil- and gas-fields. Where they lie close together, they may have to be generalised (on paper charts) so that a single symbol represents more than one platform.

The symbol for a platform must be: **L10** and **P2**.

- b. Lights and fog signals. As all platforms must carry lights, the small symbol is emphasized by the associated light flare. The lights and fog signals commonly used for platforms and associated structures consist of the following:
  - A 360° white light (or lights operated in unison) flashing Morse code (U) (meaning 'You are standing into danger') every 15 seconds, visible 15 miles and exhibited at an elevation of between 12 and 30 metres.
  - A secondary (emergency) light or lights with the same characteristics, but visible only 10 miles, automatically brought into operation on failure of the main light(s).
  - Synchronized red lights, flashing Morse code (U) every 15 seconds, visible 2 miles, and exhibited from the horizontal extremities of the structure which are not already marked by the main light(s).
  - A fog signal sounding Morse code (U) every 30 seconds, audible at a range of at least 2 miles.

On charts which include, or are likely to include, many platforms, a note should be inserted on the chart describing the lights and fog signals, instead of individual legends at each platform, eg:

### OIL [and/or GAS] FIELDS

Platforms and associated structures exhibit white and red Mo(U) lights, red obstruction lights, and Mo(U) audible fog signals. Unauthorized navigation within 500 metres of all such structures is prohibited.

This note may be varied to take account of local circumstances, but where different (distinctive) lights are used, the light descriptions must be inserted individually against the platform symbols.

c. **Flares.** As with refineries on land (see B-374.1), offshore terminals may burn off gas from production platforms or from 'flare stacks' set up as separate structures a short distance from the production platforms. In the latter case the stacks must be charted by:

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with the international abbreviation 'Fla', but without a coloured light flare (or patch).

- d. Floating Production Facilities. Semi-submersible drilling rigs and tankers are sometimes converted to act as production platforms, and are then known as 'Floating Production Facilities' or 'Floating Production Platforms'. If required, they must be charted in the same way as other platforms (L10). Floating Production Facilities are normally kept on station by a number of chains and anchors, usually extending well outside the designated safety-zone. Where scale permits, the positions of these chains and anchors should be charted by magenta lines and anchor symbols (L18). On smaller scale charts, a dashed magenta circle encompassing the anchors and other ground tackle with the magenta legend 'Anchors and Chains (see Note)', or equivalent, may be charted together with a suitable explanatory note.
- e. **Platform designations** are often displayed prominently on the structures (see B-445.3). Platforms are usually protected by designated **safety zones** (see B-445.6).
- f. A disused or abandoned platform may be labelled '(disused)', or equivalent. If the superstructure has been removed, leaving only an above-water base structure, this should instead be labelled 'Ru', or the adjective '(ru)' added under any retained designation (eg Z-44), or descriptor (eg SPM):

Features associated with abandoned platforms should also be reviewed, eg:

- pipelines would normally be amended to disused;
- safety zones may still apply and if so should be charted accordingly;
- they may still carry navigation lights, so a flare (and if required a light description) should be included as appropriate;
- if no associated features remain, consideration should be given to enhancing their prominence on the chart (eg with a danger line) as they remain a significant collision hazard.

For charting platforms which have been removed below the surface, see B-422.8.'

**Commentaire [c1]:** Please confirm that I have captured the discussion accurately. Have I missed any points that were made?

#### Annex F to CSPCWG Letter 07/2009

CSPCWG 5 ACTION 17: Secretary to draft a revision to B-447.4 (Shellfish beds) and include in a WG letter.

**B-447.4** Shellfish beds that do not contain physical obstructions. The limits should be charted by a dashed magenta line (N1.2) with an oblique shell symbol (width approximately 3mm) at intervals of approximately 40mm. For small areas, a centred oblique shell symbol may be inserted within the area defined by the dashed magenta line N1.2. A note may be inserted warning against anchoring or grounding in the area, or giving details of any local regulations.

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If shellfish beds contain obstructions to surface navigation, eg trestles, the symbol for a marine farm must be used (see B-447.6).

#### Annex G to CSPCWG Letter 07/2009

CSPCWG 5 ACTION 33: Secretary to draft WG letter regarding the use of abbreviation FFI.

UK took the opportunity of responding to IHO CL 71/2008 (requesting IHO MS approval of draft B450-479) with the following:

UK has recently identified inconsistencies in the interpretation of certain unusual light characteristics and recommends that the opportunity of this revision should be taken to clarify the relevant sections in B-470, specifically related to:

b. The current specification allows the charting of FFI lights (IALA defines as a light in which a fixed light is combined with a flashing light of higher luminous intensity). No reference is made to the possibility of other combination lights such as FOc, FIso or FQ. UK believes that such combination descriptions would be confusing and recommends that the specification should be clarified to state that such descriptions must not be used; these would be better described separately as, for example, Oc.5s10M & F.3M. This is normal practice for 2 lights displayed from the same structure (B-471.8 refers). The continuing use of the potentially confusing (and comparatively rare) abbreviation FFI should be reconsidered by CSPCWG and possibly replaced by Fl. & F. (Note: as the rhythmic component is always the brighter, it is more consistent with other light descriptions to give it, with its greater range, first).

It is therefore suggested that references to FFl should be made obsolescent in INT1 (P10.10) and removed from M-4 (draft) B-471.2, B-471.8c and B-471.9c. If agreed, it would be necessary to also inform IALA of this decision.

### Annex H to CSPCWG Letter 07/2009

### Selected Actions from CSPCWG5 RESPONSE FORM (to be returned to Secretary by 26 August 2009)

andrew.coleman@ukho.gov.uk

CSPCWG5 Action	Subject	Question	Yes	No
10	Pipeline tunnel	Do you approve the draft revised specifications B-443.8 and		
(Annex A)		B-444.5?		
11	Bridges	Do you approve the draft revised specifications B-381?		
(Annex B)				
13	Wave energy devices	Do you approve the draft revised specifications B-445.12?		
(Annex C)				
14	Unsurveyed areas	Do you approve the draft revised specifications B-418?		
(Annex D)				
16	Disused / abandoned	Do you approve the draft revised specifications B-445.2?		
(Annex E)	platforms			
17	Shellfish beds	Do you approve the draft revised specifications B-447.4?		
(Annex F)				
33	FFI	Do you agree that the light description abbreviation FFI		
(Annex G)		should be made obsolescent, using Fl.& F. instead?		

Comments: If you have answered 'no' to any of the above questions, please explain here. If useful, please make track changes to Annex A-G for suggested improvements and send a copy to the Secretary.

Member State..... Name..... Date.....