



CHART STANDARDIZATION & PAPER CHART WORKING GROUP (CSPCWG)

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

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To CSPCWG Members

Date: 10 October 2013

Dear Colleagues,

Subject: Actions from 9th CSPCWG meeting: Group 3 'Hydrography' – follow up to Letter 07/2013.

Thank you to the 19 WG members who responded to Letter 7/2013. As usual, Annex A to this letter includes all the responses, 'votes' and Chairman's comments.

Canada's proposed clarification on pipelines and outfalls and the additions about Volcanic Activity (Action 51) have already been included in S-4, Edition 4.4.0 (IHO CL 55/2013 refers).

We can now submit the proposals from Actions 24, 30 and 42 to IHO Member States (with minor changes as noted in my comments at Annex A).

Although the proposal at Action 36 not to rationalise the use of black (for minimum depth) and magenta (for maximum authorized draught) received almost unanimous support, AU nevertheless made a strong case for changing. Therefore, I would be grateful if Jeff would prepare a discussion paper for CSPCWG10 (to include the comments made by FI and IT) and we will debate this subject further there. I have allocated agenda item 8.2 to this discussion (Letter 12/2013 Annex B refers).

I will submit the proposed change to the definition of 'Existence Doubtful' (ED) to the Hydrographic Dictionary WG (my response to US (NOAA) refers).

There is no need to reply to this letter.

Yours sincerely,

Peter G.B. Jones,
Chairman

Annex A: Consolidated Responses to CSPCWG Letter 07/2013 (with Chairman's comments)

CSPCWG9 Actions drafts: Group 3 'Hydrography'

Consolidated Responses to CSPCWG Letter 07/2013

WG9 Action	Question	Yes	No
See letter 07/2013	Do you agree to add the proposed clarification to B-444? Chairman: this clarification has been included in S-4 Edition 4.4.0, as it is supported by a clear majority.	AU, BR, CA, DK, ES, ESRI, FR, GR, IT, JP, LV, NZ, UA, UK, US(All NOAA)	DE, FI, NO, SE,
24	Do you agree with the proposed changes to B-416.1? Chairman: unanimous!	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK, US	
30	Do you agree with the proposed changes to B-424.5? Chairman: Good consensus. AU and US propose minor changes, see my comments below.	BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK	AU, US
	Do you agree with the proposed changes to C-404.2? Chairman: unanimous!	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK, US	
	Do you agree with the proposed changes to C-404.3? Chairman: Good consensus. Minor change proposed by FR, see comment below.	AU, BR, CA, DE, DK, ES, ESRI, FI, GR, IT, JP, LV, NO, NZ, SE, UA, UK, US	FR
36	Do you agree <u>not</u> to rationalise the use of black (for minimum depth) and magenta (for maximum authorized draught) because of the extent of change required to existing symbology, likely confusion as the mix would be present on charts for many years?	BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, US	AU
	Do you agree with the proposed wording of new subparagraph B-410h?	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, US	
	Do you agree with the proposed changes to B-432.4? Chairman: This action requires further discussion, see letter and my comments to AU.	BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, US	AU
42	Do you agree with the proposed addition to B-415.2? Chairman: unanimous!	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, NO, NZ, SE, UA, UK, US	
51	Do you agree to add the proposed location of the new guidance on underwater volcanic activity at B-428.3? Chairman: Good consensus. Actually included as a new specification at B-428.4 (as suggested by CA). Heading of B-428 expanded accordingly.	AU, BR, CA, DE, DK, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK, US	ES
	Do you agree with the proposed wording of new B-428.3? Chairman: As the text of new B-355 has already been approved by MS, and this new entry in B-428 is in accordance with that, I consider this to be a clarification and have included it in S-4 Edition 4.4.0	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK, US	
	Do you agree with the proposed addition to B-424.3? Chairman: Approved, but included in S-4 Edition	BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IT, JP, LV, NO, NZ, SE, UA, UK	AU, US

Further comments

AUSTRALIA

B-444: Australia has no issue with this clarification from the perspective of decision making by the nautical cartographer, although we question whether the mariner really understands the distinction between a submerged pipeline depicted in magenta or in black. Other than where the purpose of the pipeline is “unspecified”, we consider that the mariner would gain most of their information regarding a pipeline from the annotation on the pipeline (oil, gas, water, etc).

Chairman: Possibly, although they can always check INT1 L40/41, which explains the difference.

Action 24:

B-416.1: The proposed new wording is OK, but as was pointed out in paper CSPCWG9-08.6A, this does not adequately cater for areas of discontinuity where there is no blue tint. Given that the largest vessels now have draughts approaching and sometimes exceeding 15 metres, indicating an area of discontinuity outside the area of blue tint may be just as important as such an indication within the area of blue tint. Such is the case on many Australian charts. CSPCWG must consider this circumstance, and additionally (as has been done in other cases) should also consider indicating the deepest depth for which such an indication should be provided (i.e. beyond which just “stopping” the contours is enough indication). For areas not covered by blue tint, perhaps insertion of a 3mm wide blue tint band, with the legend on either side? Or perhaps as a generic, using the magenta version of the unsurveyed area (I25) as a line symbol with the legend either side?

For a maximum depth to which this applies, suggest something similar to (3rd sentence in clause): In depths shoaler than [50, 30?]m, where use of approximate contours would be inappropriate,

CSPCWG should consider whether some guidance is required for discontinuities in areas deeper than the depth indicated above.

Chairman: this could imply that joining with approximate contours is never appropriate in depths less than [50 or 30m]. Approximate contours may be appropriate; it really depends on the size of the shift. However, it could be argued that actually showing a discontinuity where depths on both sides are greater than 30m is of little interest (at least for surface navigation). And the (half tone) blue tint should really cover the contours of interest to any vessels likely to be navigating in the area, so a discontinuity in depths further out than the blue tint does not really require much emphasis, if shown at all. A break in shallow water blue tint is a useful, but not essential, emphasis.

Editorial: Suggest amending the 2nd sentence of the clause to read:

If the discontinuity is small, the surveyed contours **may** be joined by complete (I30) or approximate (I31) contours (~~I31~~), provided this will not mislead the chart user by implying the area is deeper than it probably is (as demonstrated by the later survey).

Chairman: Agree.

Action 30:

B-424.5: Agree with US comments in terms of the meaning of this clause having been changed from reported dangers in general to just reported shoal depths. Therefore, Australia suggests the following (red indicates AU suggested changes to proposed new wording):

Reported dangers and shoal depths. The presence of reported **dangers and** shoal depths, usually in an unsurveyed or inadequately surveyed area, should alert the mariner to the **possible** existence of other shoal depths. A **danger or** significant depth reported by ships on passage should therefore be charted with the **international abbreviation** ‘Rep’, unless it is supported by other data (eg quality of supporting data, other depths within a line of soundings, satellite imagery).

in the report, ie using the appropriate wreck or obstruction symbols – see B-422. A reported shoal depth must normally be surrounded by an approximate contour (see B-411.2) and blue tint as appropriate to the depth. However, if the sounding is considered a danger to surface navigation, it may be encircled by a danger line in addition to the ‘Rep’ legend. It should not be necessary to include an explanatory note on the chart.

It is suggested that the words “(ie 31m or less)” be removed as the implication is that all reported shoal depths less than 31m should be enclosed by a danger circle, which is not the case on medium and large scale charts. If such a qualification is to be retained, suggest this should be “(ie a significant shoal depth in areas where the general surrounding depths are shoaler than 31m, or the reported depth is significantly shoaler than 30m in an area where the general surrounding depths are deeper than 31m)”. If the intention is that all reported shoal depths less than 31m on small-scale charts should be enclosed by a danger circle, this should be added at C-404.3.

Chairman: In the original (and retained) context of B-424.5, it was clear that the clause was primarily addressing reported depths (eg in the first sentence the words ‘probable existence of other shoal depths’). However, it is certainly true that the abbreviation ‘Rep’ can be used with other dangers such as wrecks (although of course, they have depth over them) and even occasionally features which are not dangers at all. In the latter case, there is no need for that usage to be covered in S-4 as the abbreviation means ‘Reported’ and can obviously be used with any reported feature, even on land. The general heading of this section is ‘Doubtful dangers’, so we should clarify that it can be used for other dangers. We will therefore subtitle the paragraph ‘**Reported (ie unconfirmed) shoal depths and other dangers**’. We can then deal with the most common usage first (ie shoal depths) as drafted and then add a sentence before the paragraph about the date: ‘Other reported dangers, eg wrecks, rocks, should be treated similarly, with the abbreviation ‘Rep’ placed adjacent to the appropriate symbol’.

The indication 31m or less is useful in many cases, but I agree it should not be invariable. We will replace by ‘(eg if it is 31m or less, depending on context)’.

NOTE: When researching this, I noticed that there is an inconsistency in S-4 in regard to the formatting of the term “international abbreviation”. The general format used is to have the term in bold text style. In many cases in the document, the text is not in bold style. The Secretary may consider tidying this up in the next New Version of S-4 for consistency.

C-404.3: Editorial: Suggest amend 4th sentence to read:

The **international abbreviations** PA, PD, ED, SD and Rep must be used as appropriate.

Chairman: Agree. We have made this consistent in S-4 Edition 4.4.0.

Action 36: Minimum depth and maximum authorised draught

The use of the symbols “<>” as an indication of the maximum authorised draught were introduced as this was a reference to “maximum authorised draught” that existed in INT1 in relation to recommended tracks (M6), and therefore considered something historical that the mariner could relate to. CSPCWG has previously agreed that this is not an intuitive symbol (I sometimes wonder what would be the symbol for a one-way track (M5.1) with maximum authorised draught), but rather a way of combining the “two-way” nature of the recommended track with the maximum authorised draught at M6.

The “minimum depth” along a track or routeing measure is a physical surveyed value, and therefore should be in black. The “minimum [maximum] authorised draught” is a declared (regulatory) value only and should be considered to be information “superimposed on the physical feature and not implying any permanent physical obstruction” (B-142.1 first bullet point), and therefore should be in magenta (unless both are the same in which case the value should be considered to be a physical value). Australia considers the current issues in INT1 of having some physical depths shown in magenta and regulatory depths shown in black to be a mixing of concepts that is perhaps based on older manual compilation and colour separate printing processes. To be consistent with the use of colour guidance at B-140, Australia suggests the following:

- A new bullet point added at B-142.2(3) indicating that maximum authorised draught is to be indicated in magenta (do not consider that any qualification is required at B-141 second bullet if this refers to “physical (solid) features”, unless CSPCWG thinks there should be a reference to B-142.2(3)).
- Amend clause B-414 and sub-clauses to include guidance and examples of dredged areas with maximum authorised draught in magenta. Similar changes required for INT1.
- Amend clause B-434.3 to have the maximum authorised draught value quoted in magenta (<> symbols should remain in black), and add a new paragraph and symbol (also required for INT1 (split into M6.1 and M6.2?)) to have an example of a track having minimum depth quoted in black. [Chairman: this would be a new symbol; is there any requirement for it?]
- Amend clause B-434.5 to have minimum depth (example (a)) quoted in black, and remove magenta “<>” from example (b). CSPCWG/INT1 Sub-WG discussion required as to whether both examples need to be included at INT1 – M18.
- Amend B-435.3(f) to have minimum depth quoted in black (same for INT1 – M27.2). CSPCWG/INT1 Sub-WG discussion required as to whether guidance for maximum authorised draught is required in S-4, and additional symbology in INT1.
- Amend B-447.5 4th paragraph and example to have maximum authorised draught quoted in magenta.
- New INT1 – I26 should be a value in magenta, and I27 should be a value in black.
- All existing symbols that have been changed in INT1 to be labelled as obsolescent.

There may be other changes required to S-4 (and possibly INT1) which would require a more thorough investigation. However, Australia considers that standardising the representation of minimum depth and maximum authorised draught in accordance with existing S-4 convention (B-140), rather than mixing concepts now when we are trying to introduce new information to the mariner, and thus further exacerbating the issue, is the best way to go. Agree that there is a degree of hurt with this approach, but we should be addressing this now rather than later when it may be too late.

B-432.4: Refer to above comments.

Chairman: Despite the almost unanimous vote, AU has a point and I would like AU to present these arguments at CSPCWG10 (agenda item 8.2 refers). A key question may be ‘how much hurt?’ – see highlight. Jeff: please also take account of FI and IT comments below in your paper.

Accordingly, we will progress the remaining actions (or already have) and continue this discussion at CSPCWG10.

Action 51

B-428.3: Agree with location, but suggest amend title of clause B-428 to include volcanic activity (to be consistent with this clause heading and following sub-clauses).

B-428.3: Suggest amend “Volcanic activity (see Note)” to italic text.

B-424.3: Suggest that this is more general information than just ED, therefore should be included as a separate paragraph at B-424.

Chairman: agree all.

CANADA

Action 30: Is it clear that in addition to doubtful data, that reported data in this case may also include the date in parentheses? Perhaps the last sentence could say “The year (in parentheses) in which the doubtful (or reported) data were reported may be inserted, provided that this additional information does not tend to render the chart less legible.”

Chairman: it was not intended to delete the paragraphs about the date (from ‘The horizontal and vertical accuracy ...’); these will remain unchanged. We should have made this clearer.

Action 51: Perhaps this needs its own subsection at 428.4. Volcanic activity is somewhat distinct from springs, yet I feel it still fits within this overall section. We should also revise the title of 428 to read: SPECIAL SEABED TYPES: SANDWAVES, KELP, SPRINGS, **VOLCANIC ACTIVITY**

Chairman: agree.

FINLAND

B-444: How often do you really know that the pipeline actually terminates in the water, but don't know what it is for, not even on supply vs. intake/outfall level? Since buried sections are not charted, termination in the water can only be determined using some kind of source data. On the other hand, like Sweden, we also question the usefulness of categorizing the pipelines into two groups which are symbolized with different colours.

Chairman: see comment in table. The reason for the difference in colour is that outfalls (close inshore) are considered to present a possible physical danger to small craft, as explained in the text at B-444. I agree it is debatable whether the mariner understands the difference, but it has been so since the International specifications were originally agreed and there seems no good reason for changing it. Users can always check INT1 L40/41, which explains the difference.

Action 36: What if the maximum draught is associated with ESSA? Should it be in magenta or green?

Chairman: This will depend on outcome of WG9 ACTION 22: AU to continue discussion on dividing regulatory from navigational restrictions (for S-101), keeping Secretary informed.

FRANCE

Action 30:

B-424.5: Is it possible to use more explicit words for “quality of supporting data”: does it mean data of reference, metadata, Source diagram or CATZOC values or anything else?

Chairman: We will change to ‘good quality metadata’.

C-404.2 & C404.3: for small charts, in the new C-404.2 and C-404.3, the possibility of encircling reported depth of value 31m or less seems no longer possible or at least ambiguous when you read B-424 (and B-424.5). Should we be more explicit and add directly a reference to B-424.5? I propose to add at the end of C-404.3 “When reported sounding which is potentially a danger to surface navigation (ie 31m or less), it must be encircled with a danger line – See B-424.5.”

Chairman: it is not intended to rule out using the danger line where relevant. The cross reference to B-424 should make that clear; however, perhaps emphasising ‘all’ would make it clearer, ie: ‘The former practice of encircling all reported depths...’

Action 51:

B-428.3:

1. Should it be precised that the legend “Volcanic activity (see note)” is in sloping text?
2. What has been decided for the current B-428.3 “**Springs in the seabed**”?

Chairman: agree sloping text.. B-428.3 retained unchanged, Volcanic activity numbered B-428.4.

GERMANY

B-444 Action 24: We think that explanations under B-444 are comprehensively enough that we do not need this clarification.

Chairman: see comment in table.

Action 30: I support the comment of Norway.

ITALY

Action 36:

B-432.4:

1) We suggest that the end of the first sentence be modified as follows:

a.a fairway (see B-434.5b) or within any *regulated area* (see B-439.1).

In this way we give some instructions on how to represent the limit for an area where a maximum draught has been defined.

2) We suggest that the following be inserted at point b:

b.in deep water routes and dredged *areas or channels*....

3) Where a maximum draught has been assured/defined by regulatory authority, in order to avoid confusion by the chart user, we suggest that soundings, depth contours and depth areas, already represented into the area, be deleted.

Chairman: We have asked AU to include these suggestions in his submission to WG10.

Action 42:

Point B-415.2:

We suggest that the subtitle **Areas investigated by sonar**, be changed into **Limits of areas investigated by sonar**.

Chairman: The feature is the area, which we are describing by charting its limits, similar to B-431.4 (and many others).

Action 51:

Point B-428.3:

We agree with the introduction of new point B-428.3 and we suggest that the older B-428.3 **Springs in the seabed** be moved to point B-428.2.

Chairman: We used B-428.4 for the volcanic activity.

NEW ZEALAND

Action 30 is a great improvement and will provide far greater clarity on paper charts and ENC's.

NORWAY

B-444: Pipelines in Norwegian charts are all in magenta. The purpose and substance of the pipelines are not that essential to the chart user. Directions of flow in older pipelines are not unique according to the pipeline symbol in Norwegian charts.

Chairman: see comment in table and at FI.

Action 30:

C-404.3: When depths of under 200 meters..... Under is not the best word to use when talking of depths. I would prefer *shoaler than* – or perhaps *less than*.

The abbreviations PA, PD, ED, SD and Rep We suggest it written in italics: The abbreviations *PA, PD, ED, SD* and *Rep*

Chairman: Agree. We will change to 'less than' and change the lettering style for PA etc.

SPAIN

Action 51: We think that it should be placed in paragraph B429.3 (OCEANIC FEATURES).

Chairman: See outcome of vote in table.

SWEDEN

B-444: In both the DE INT1 (the official English version) and the Swedish INT1 it is specified under L40.1 that also unspecified pipelines should be charted in magenta. The proposal in letter 07/2013 from CA has revealed for us that the use of magenta as an unspecified pipeline is not reflected in S-4 B-444. In Sweden most of the pipelines are handled as unspecified and charted in magenta. SE is of the opinion that it is not obvious what the meaning is for the users to make difference between pipelines in black and magenta. If we as chart producers would like to specify what the pipeline is carrying it is enough to specify this with a label. To change all pipelines terminating in the water from magenta to black in SE charts would cause that a

considerable amount of resources has to be spent for something which would not be a significant improvement for the users.

Chairman: see comment in table and at FI. Unspecified pipelines could be black or magenta (depending on whether supply or outfall/intake) according to INT1 L40/41.

US(NOAA)

Action 30:

B-424.5. The edit proposed for S-4 appears to restrict the use of the term “reported” to shoal depths. B-424.5, up to now, has referred to “reported dangers”, which could include objects other than shoals. The term “reported dangers” and guidance has been stricken from B-424.5.

S-32 defines “reported danger” as “an object dangerous to navigation which is shown on a chart but the existence of which has not been confirmed. Sometimes called vigia.” The definition includes **all dangers**, not just a shoal.

Hundreds, if not thousands, of reported objects, other than shoals, have already been charted using the current S-32 definition for “reported danger” and the current text in B-424.5 for using “*Rep*” in association with a reported danger.

At NOAA, we have charted rocks, wrecks, shoals or other dangerous features that have been reported to exist as “*Rep*” when the existence is believable (making “*ED*” inappropriate), but the object has not been “confirmed” (see S-32 definition) by a trusted survey.

We interpret this as agreeing with the existing B-424.5 text and existing S-32 definition for “reported danger”.

According to the Use of the Object Catalogue for ENC (UOC), Section 6.5, a “**Reported Danger**” should be encoded with a QUAPOS of 7 or 8 (7 = **reported** (not surveyed); 8 = **reported** (not confirmed]).

The UOC also states that a “**Reported danger**” should be encoded with a QUASOU of 8 or 9 [8 = **value reported** (not surveyed); 9 = **value reported** (not confirmed)]. A (QUASOU) of 9 = **value reported** not confirmed, which is defined as, “depth value obtained from a report, which has not been possible to confirm. S-57 and the UOC also use “Reported” as an encoding value for rocks, coral reefs and wrecks. Thousands of features have been encoded using these guidelines. The proposed revision to S-4, B-424.5 would remove the use of “*Rep*” with such reported dangers.

Although not expressly stated in S-32, Existence Doubtful (*ED*), would indicate that the chart producer has sufficient reason to **doubt** that the object actually **exists**, but cannot prove it without an authoritative survey.

If the *H.M.S. Guy Fawkes* reports in passage that it observed a sunken wreck, I’d chart a wreck with a “*Rep*”. I don’t doubt that the wreck is there (British sailors don’t lie), so I’m **not** inclined to chart it as “*ED*”. I don’t doubt that it exists. The position might even be accurate. When I get a survey, I can remove the “*Rep*”.

If, on the other hand, I get reports that large vessels repeatedly cross a charted wreck covered by 2 metres, but I don’t have a survey or investigation report from a trusted source, I’d use the “*ED*” label because I tend to doubt that the wreck is really there, but I can’t prove it.

Perhaps, there is a difference in the perception of the word, “doubtful.” The Oxford Dictionary (a British favourite) defines “doubtful as 1. Feeling uncertain about something, 2. Not known with certainty, and 3, which better fits the American perception.....”**improbable.**”

Webster’s Dictionary (commonly used in the United States) defines doubt as, “to be skeptical, to tend to distrust, disbelieve.”

Chairman: see comment at AU. Your explanation of when to use ED as well is useful. The current definition of ED is almost the same as Rep:

S-32: Of uncertain existence. The expression is used principally on charts to indicate the possible existence of a rock, shoal, etc., the actual existence of which has not been established. Usually shown by the abbreviation 'ED'.

S-4: ED, meaning EXISTENCE DOUBTFUL., must be used to indicate the possible, but unconfirmed, existence of a rock, shoal. Etc (sometimes called a “vigia”)

It certainly does not give very good guidance for cartographers in selecting when to apply it, or for the chart user on exactly what the difference between Rep and ED is. Perhaps the S-32 (and therefore S-4 and INT1 definitions) for ED should be changed to:

Of possible existence. The expression is used principally on charts to indicate the reported existence of a rock, shoal, etc., the actual existence of which is considered improbable. Usually shown by the abbreviation 'ED'.

We will pass this to HDWG for consideration.

Action 51:

B-424.3 The proposed text for S-4 states., “ED, meaning EXISTENCE DOUBTFUL., must be used to indicate the possible, but unconfirmed , existence of a rock, shoal. Etc (sometimes called a “vigia”) “

Chairman: we were not proposing any change to that sentence, just some additional wording about doubtful islands. But see above for suggestions for changing the definition.

I hesitate to chart a danger as “EXISTENCE DOUBTFUL” if its existence is possible, or probable, but I don’t have confirmation. “Doubtful” means that I don’t think that it actually exists. Why would I think that it doesn’t exist, if someone just reported that it does exist?

Scenario:

1. A professional mariner reports a DANGER.
2. Dangers are “dangerous.”
3. Reading the proposed S-4 , Section 424.3, edit, the cartographer charts “**ED**”, **meaning Existence doubtful, (which) must be used to indicate the possible, but unconfirmed, existence of a rock, shoal, etc**”
4. The next month, a cruise ship Captain, sees the “**ED**” label, determines that the hydrographic office **doubts** that the danger **exists**, that its existence is improbable, and proceeds to ignore the existing but unconfirmed danger.
5. Launch the lifeboats!

Additional proposed text for B-424.3 states that “Equally, satellite imagery and other modern data sources may enable previously reported doubtful features to be removed from charts with confidence. “

I’m not removing that Shoal ED or Subm Pile ED, or Rock ED from a muddy, turbid, navigable river without a hydrographic investigation.

Chairman: Agree, but that is not an ‘uncharted island in deep water’ which is what the proposed additional text deals with. We could clarify that by replacing ‘previously’ by ‘such’.