

**3<sup>rd</sup> NCWG MEETING**  
**ESRI HQ, Redlands, California, USA 16-19 May 2017**

**Paper for Consideration by NCWG**

**Depiction of the swinging circle around anchor berth**

<b>Submitted by:</b>	Italian Hydrographic Office
<b>Executive Summary:</b>	Specify whether, when, and how the swinging circle of an anchor berth placed beyond chart borders should be shown.
<b>Related Documents:</b>	S-4; INT1
<b>Related Projects:</b>	

**Introduction / Background**

When it is required to depict an anchor berth with its swinging circle it must be done using specifications at B-431.2. Some misunderstanding can occur when the point of anchor berth is beyond chart borders and only a sector of the swinging circle falls into the chart.

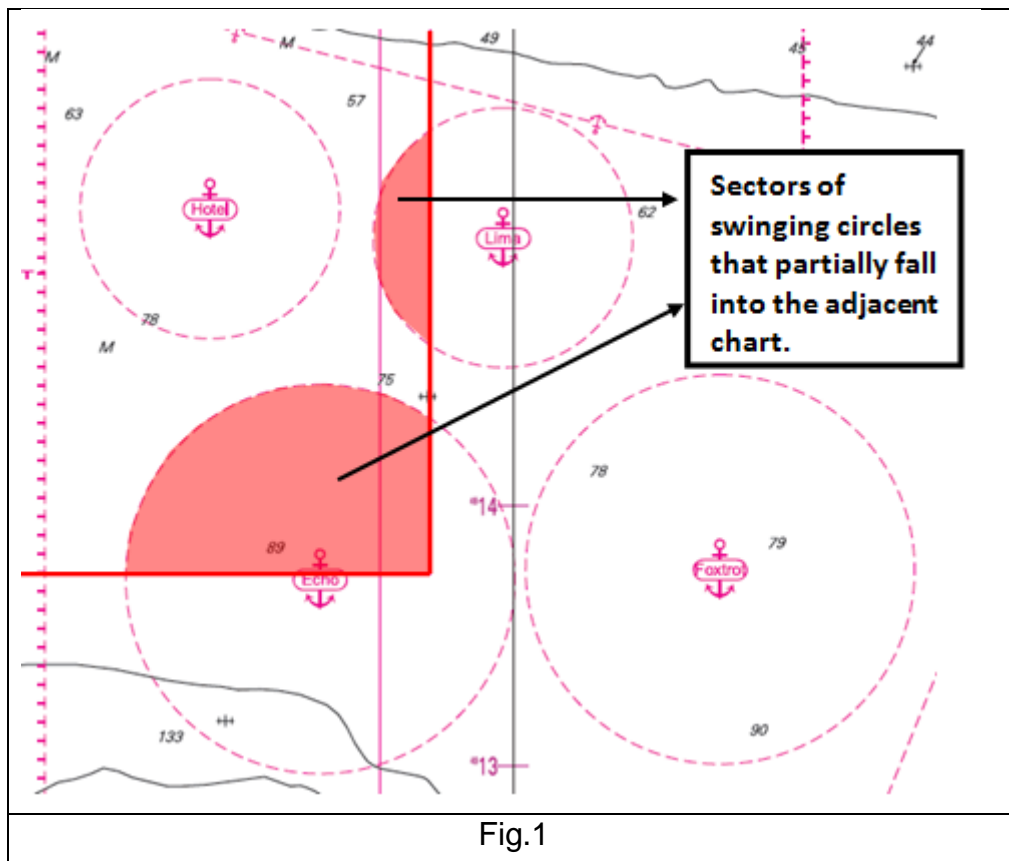
Clarifications would be useful to increase standardization.

**Analysis / Discussion**

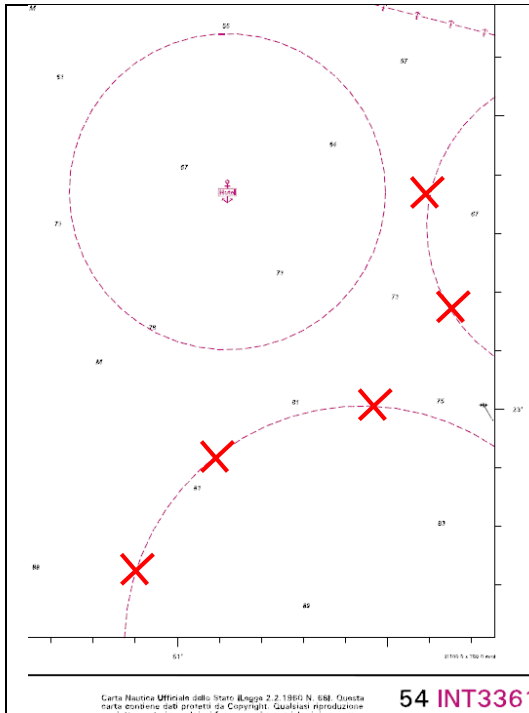
The situation is described in Fig.1. Four anchor berths with their swinging circles are represented in this chart. Lima and Echo anchor berths swinging circles cross the limits of adjacent chart (red color).

Now, the question is:

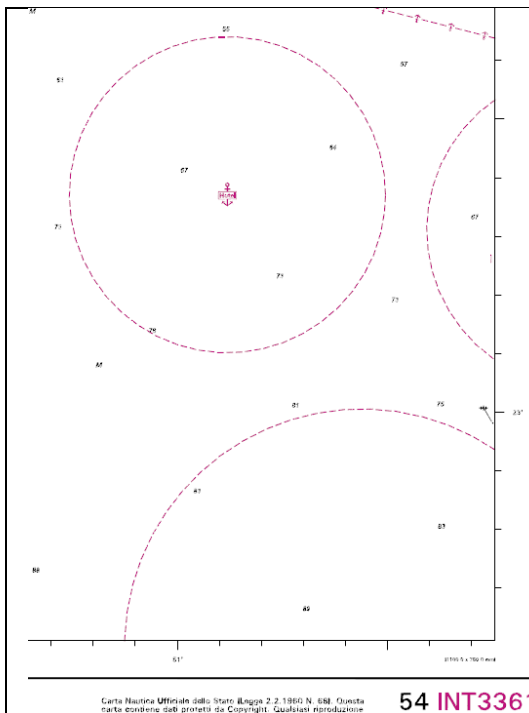
In this situation, should we depict anchor berths and/or swinging circles into the adjacent chart when only partially fall into that?



We propose 4 possible ways to depict this situation:

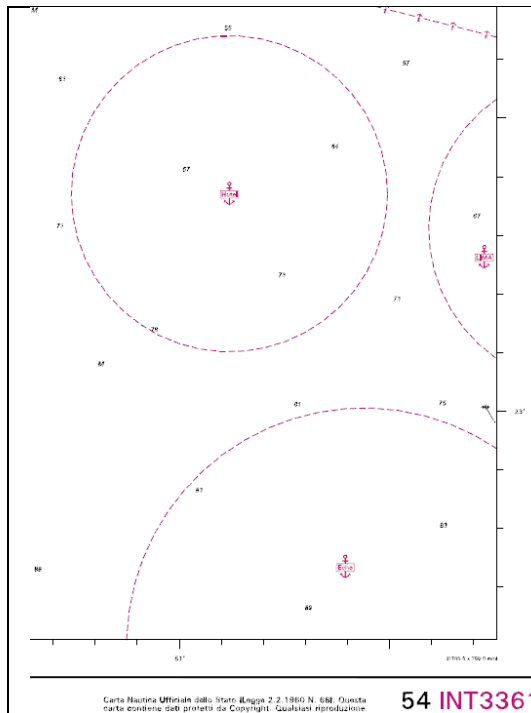


a) avoid representing swinging circles that partially fall into the chart, unless the point of the anchor berth falls within the chart borders.



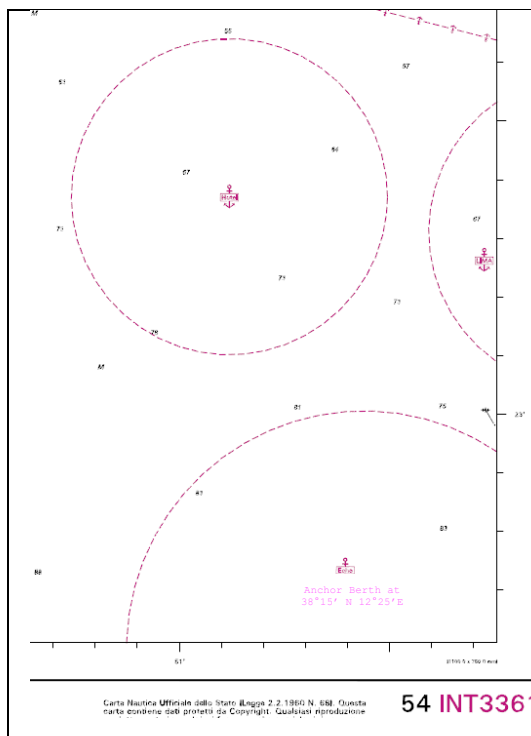
b) represent swinging circles that partially fall into the chart even if the anchor berth falls beyond chart borders and is not depicted.

This option provides vertical/horizontal consistency among data charted (also in case of different scales of representation).



c) represent swinging circles that partially fall into the chart even if the anchor berth falls beyond chart borders. The anchor berth symbol N 11.1 could be forced into the sector of swinging circle shown into the chart.

This option provides mariners with as much details as possible, even though vertical/horizontal consistency between charts with different scales is lost and the anchor berth point is depicted in a wrong position.



d) represent swinging circles that partially fall into the chart even if the anchor berth falls beyond chart borders. The anchor berth symbol N 11.1 could be forced into the sector of swinging circle with an indication of the right geographical position (as per INT1 B 68.2 used for magnetic variation)

Anchor Berth at 38°15' N - 12°25'E

This option provides mariners with as much details as possible, even though vertical/horizontal consistency between charts with different scales is lost and the anchor berth point is depicted in a wrong position.

## Recommendations

Clarifications would be useful to increase standardization and to avoid ambiguities and doubts.

## Action required of NCWG

The NCWG is invited:

- to note and assess this document.
- to amend point B-431.2 (S-4), where and if appropriate, accordingly.