

## Strange Symbols Explanation – supplied by the UK Hydrographic Office

When a question mark is displayed on the ECDIS screen against, or in the place of a symbol, this indicates that the ECDIS software is unable to display the information fully – and this can be for a number of reasons.

- a) It may mean the symbol presentation library within the ECDIS software is an out of date version which doesn't have the drawing instructions for the symbol in question. In this case a large question mark will be displayed in the position of the unknown symbol, fortunately the mariner can normally find out what the object is by using the pick report function.
- b) The beacons in question are displaying with magenta question marks because there is insufficient information known about the feature to complete all the 'mandatory' fields in the data record for that object. If the ECDIS detects one of these blank fields then it alerts the mariner to this by displaying a small question mark next to the symbol. It is sometimes difficult to identify the specific cause of the problem from the pick report.
- c) The same small question mark can also be generated when the ECDIS finds an unexpected (non-standard) entry in one of the data fields associated with an object. This can be due either to an encoding error by the ENC producer, or more likely, by the 'real world' not conforming to expected standards. Take for example a buoy that for some reason is painted a colour that does not conform to its function. eg a lateral buoy painted yellow

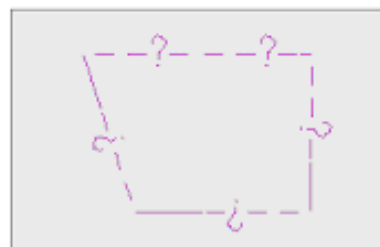
Returning to the question! The difference between the displays in this particular example is due to a combination of factors. The primary cause is that the beacon shape is not known to the ENC producer and the data field that should contain the information has been left blank – the screenshot from the traditional display shows the ENC data correctly. The simplified display would have shown the beacons in black with question marks if the ECDIS had been using the latest version of the symbol presentation library (V3.4). Earlier versions of the presentation library contained a minor error that caused this discrepancy.

Other examples of situations where a question mark may be displayed are shown below:

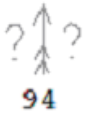
No symbol exists in the symbol library

?  
204

--?--?--  
463



204 is an object which is not sufficiently described to be symbolized, or for which **no symbol exists in the symbol library**. 463 is a pattern of symbols for an area which is not sufficiently described to be symbolized, or for which **no symbol exists in the symbol library**



A current or tidal stream whose **direction is not known** (no orientation)



Recommended route between parts of a traffic separation scheme, or for ships not needing a deep water route, **with the direction not specified** in the data



radio calling-in point whose **direction is not known**



Recommended track as an area, **direction not defined** in data



**default symbol for buoy**, paper-chart, e.g. mandatory attribute missing so cannot find the appropriate drawing instruction from the presentation library.



**default symbol for beacon**, paper-chart, e.g. mandatory attribute missing so cannot find the appropriate drawing instruction from the presentation library.



**default symbol for buoy**, simplified



**default symbol for a beacon**, simplified