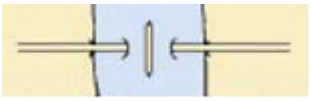
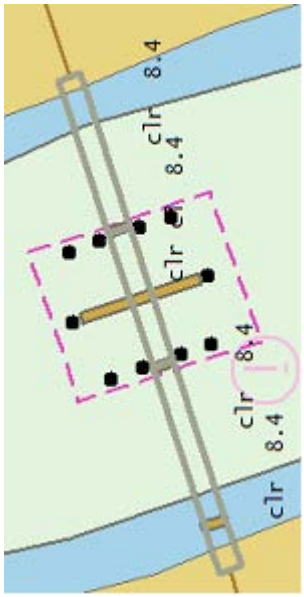
G.1.6 Swing Bridge (M)

A movable bridge (or span thereof) that rotates in a horizontal plane about a vertical pivot to allow the passage of vessels. (adapted from McGraw-Hill Encyclopedia of Science and Technology, 7th Edition, 1992)

Graphics	Encoding Instructions	Object Encoding
Real World *Chart Symbol*  *IENC Symbolization* 	A) Pylons shall be encoded as PYLONS (refer to G.1.10 – Pylons, Piers and Bridge, Cable, Pipeline Support) B) The portions of the bridge that approach the movable span from either shore are to be collected as fixed bridges (separate objects). Only that portion of the bridge that is actually movable is to be collected as a movable bridge. C) Create separate bridge objects for spans over navigable channel when attributes of navigable spans are different (e.g., vertical clearance, horizontal clearance). D) US: If separate spans are required, each span's INFORM should indicate whether it is the "Primary Navigation Span", "Secondary Navigation Span", or "Not to be used for Navigation." E) Bridge approaches (over the bankline) should be encoded. F) Include PICREP, with pictures of bridge when open and closed, if available. US: PICREP is mandatory. EU: PICREP is optional. G) Roads and railways on bridges shall not be encoded. H) US & EU: Add a CTNARE object (INFORM = Swing Area) around the swing area that is showing the actual swing area of the swinging bridge span. I) Place LIGHTS at appropriate position on bridge object and piers bounding the navigable channel. J) All objects of a bridge which belong to one bridge must be combined to one aggregation area (C_AGGR), e.g. - pylons	**Object Encoding** **Object Class =** bridge(A) (M) CATBRG = [3 (swing bridge)] (C) HORCLR = [xx.x] (metres), e.g., 34.2 (C) VERCLR = [xx.xx] (metres), e.g., 13.27 (C) verdat = [12 (Mean lower low water), 31 (Local low water reference level), 32 (Local high water reference level), 33 (Local mean water reference level), 34 (Equivalent height of water (German GlW)), 35 (Highest Shipping Height of Water (German HSW)), 36 (Reference low water level according to Danube Commission), 37 (Highest shipping height of water according to Danube Commission), 38 (Dutch river low water reference level (OLR)), 39 (Russian project water level), 40 (Russian normal backwater level), 41 (Ohio River Datum)] (C) unlocd = [ISRS code] (M) wtwdis = [xxxx.xxx] (units defined in hunits), e.g., 2451.732 (M) hunits = [3 (kilometres), 4 (hectometres), 5 (statute miles), 6 (nautical miles)] (C) INFORM = (Refer to letter D) (C) PICREP = (Refer to Section B, General Guidance) (C) OBJNAM = (Refer to letter I) (C) NOBJNM = (Refer to Section B, General Guidance) (O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)] (M) SCAMIN = [EU: 90000; US: 300000] (C) SORDAT = [YYYYMMDD] (C) SORIND = (Refer to Section B, General Guidance) **Object Encoding** **Object Class =** C_AGGR() (M) OBJNAM = [name and/or operator/owner] (C) NOBJNM = (Refer to Section B, General

	- notice marks - bridge lights - buoys at bridge pillar - two way route parts - communication area - fenders - ice breakers - vertical clearance indicators - signal stations - radio call-in points K) For bridges that consist of only one feature the object name of the bridge is assigned to the bridge object. For bridges with a C_AGGR object the object name has to be assigned to the respective C_AGGR object and not to the bridge object. L) The ISRS code of a bridge is assigned to each single bridge object of the entire bridge (refer to General Guidance section H) M) Use' verdat' only if vertical datum differs: - from DSPM VDAT subfield and - from Meta object 'm_vdat' attribute N) If a structured external XML-file with more detailed communication information is available, the reference to the file has to be entered in the TXTDSC attribute. O) For Notice marks on bridges see O.3.2 P) For time schedule (general) see T.1.1 Q) HORCLR and VERCLR must be encoded for all navigable spans of bridges. R) If there is no vertical clearance indicator at a bridge, but there is a gauge which can be used to calculate the vertical clearance of the bridge depending on the water level, it should be encoded in accordance with I.3.4.	Guidance) (O) TXTDSC = (Refer to letter N) (C) unlocd = [ISRS code] (C) SORDAT = [YYYYMMDD] (C) SORIND = (Refer to Section B, General Guidance) **Object Encoding** **Object Class =** CTNARE(A) (M) INFORM = ["Swing Area"] (M) SCAMIN = [60000] (C) SORDAT = [YYYYMMDD] (C) SORIND = (Refer to Section B, General Guidance)