




G.4 Locks, Barrages, Exceptional Navigational Structures

G.4.9 Opening Barrage (C)

An opening gate used to control and protect against flood water or to regulate the water level.

Graphics	Encoding Instructions	Object Encoding
<p><i>Real World (Aerial View)</i></p>  <p><i>Real World (Skipper's View)</i></p>  <p><i>Chart Symbol</i></p> 	<p>A) For non-navigable parts of a flood barrage use DAMCON, for parts of a barrier/ flood barrage that are navigable at certain water levels use GATCON or gatcon (see instruction D)</p> <p>B) DAMCON area objects have to be placed on a LNDARE object.</p> <p>C) Linear GATCON features should follow the edge of a DEPARE object. Area GATCON features have to be placed on a depth area.</p> <p>D) Encode attribute 'verdat' only if vertical datum differs:</p> <ul style="list-style-type: none"> - from DSPM VDAT subfield and - from Meta object 'm_vdat' attribute and specific for inland navigation or in case of a lifting barrage gate that restricts the air draught. <p>E) VERCLR has to be encoded in case of a lifting barrage gate or gate-frame that restricts the air draught of passing vessels.</p> <p>F) A bridge over a barrier/ flood barrage needs to be encoded separately with a bridge object (see G.1)</p> <p>G) 'wtwdis' and 'hunits' shall be encoded if the attribute VERCLR is used.</p> <p>H) All objects of one Opening Barrage must be combined to one aggregation area (C_AGGR), e.g.</p> <ul style="list-style-type: none"> - notice marks - two way route parts - communication area - fenders - ice breakers - vertical clearance indicators - signal stations - radio call-in points 	<p><u>Object Encoding</u></p> <p>Object Class = DAMCON(L,A)</p> <p>(M) CATDAM = [3 (flood barrage)]</p> <p>(O) NATCON = [1 (masonry), 2 (concreted), 3 (loose boulders), 4 (hard surfaced), 5 (unsurfaced), 6 (wooden), 7 (metal), 8 (glass reinforced plastic (GRP))]</p> <p>(O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)]</p> <p>(M) SCAMIN = [EU: 90000; US: 45000]</p> <p>(C) SORDAT = [YYYYMMDD]</p> <p>(C) SORIND = (Refer to Section B, General Guidance)</p> <p><u>Object Encoding</u></p> <p>Object Class = GATCON(L,A)</p> <p>(M) CATGAT = [2 (flood barrage gate)]</p> <p>(M) HORCLR = [xx.x] (metres), e.g., 34.2</p> <p>(C) VERCLR = [xx.xx] (metres) (Refer to letter E)</p> <p>(O) OBJNAM = [Name]</p> <p>(O) NOBJNM = (Refer to Section B, General Guidance)</p> <p>(O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)]</p> <p>(M) SCAMIN = [90000]</p> <p>(C) SORDAT = [YYYYMMDD]</p> <p>(C) SORIND = (Refer to Section B, General Guidance)</p> <p><u>Object Encoding</u></p> <p>Object Class = gatcon(L,A)</p> <p>(M) CATGAT = [2 (flood barrage gate)]</p> <p>(M) HORCLR = [xx.x] (metres), e.g., 34.2</p> <p>(C) VERCLR = [xx.xx] (metres) (Refer to letter E)</p> <p>(O) verdat = [12 (Mean lower low water), 31 (Local low water reference level), 32 (Local</p>

	<p>- overhead cables and pipelines</p> <p>I) The object name of a barrage is assigned to the respective C_AGGR object using OBJNAM.</p> <p>J) 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.</p> <p>K) Opening barrages shall be encoded if they are located in navigable water.</p> <p>L) EU: Use 'gatcon' to encode opening barrages that are in navigable water.</p>	<p>high water reference level), 33 (Local mean water reference level), 34 (Equivalent height of water (German GIW)), 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)]</p> <p>(C) wtwdis = (Refer to letter G)</p> <p>(C) hunits = (Refer to letter G)</p> <p>(C) unlocd = [ISRS code]</p> <p>(O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)]</p> <p>(M) SCAMIN = [90000]</p> <p>(C) SORDAT = [YYYYMMDD]</p> <p>(C) SORIND = (Refer to Section B, General Guidance)</p> <p><u>Object Encoding</u></p> <p>Object Class = C_AGGR()</p> <p>(M) OBJNAM = [name and/or operator/owner]</p> <p>(O) NOBJNM = (Refer to Section B, General Guidance)</p> <p>(C) unlocd = [ISRS code]</p> <p>(O) TXTDSC = (Refer to letter K)</p> <p>(C) SORDAT = [YYYYMMDD]</p> <p>(C) SORIND = (Refer to Section B, General Guidance)</p>
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