G - Ports, Waterways

G.1 Bridges, Tunnels, Overhead Obstructions

G.1.11 Foot Bridge / Catwalk (M)

A bridge structure used only for pedestrian traffic, commonly found crossing navigable waterways, but also found along waterways over non-navigable water.

Graphics		Encoding Instructions	Object Encoding
Real World (Foot Bridge over navigable water)	A)	Pylons shall be encoded as PYLONS (refer to G.1.10 – Pylons, Piers and Bridge, Cable, Pipeline	Object Encoding Object Class = bridge(A)
<image/> <caption></caption>		Support)	(M) CATBRG = [9 (footbridge)]
	B) C)	Create separate bridge objects for spans over navigable channel when attributes of navigable spans are different (e.g. vertical clearance, horizontal clearance). US: If separate spans are required,	 (C) HORCLR = [xx.x] (metres), e.g., 34.2 (C) VERCLR = [xx.xz] (metres), e.g., 13.27
			(C) $VERCCL = [xx.x]$ (metres), e.g., 13.2
			(C) VERCOP = [xx.x] (metres), e.g., 23.4
		each span's INFORM should indicate whether it is the "Primary Navigation Span", "Secondary Navigation Span" or "Not to be used for Navigation".	(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 GIW)), 35 (Highest Shipping Height of Water (German HSW)), 36
	D)	Bridge approaches (over the bankline) should be encoded.	(Reference low water level according to Danube Commission), 37 (Highest shipping
	E)	Place LIGHTS, if applicable, on navigable span and piers bounding the navigable span.	height of water according to Danube Commission), 38 (Dutch river low water reference level (OLR)), 39 (Russian project water level), 40 (Russian normal backwater
	F)	VERCLR, HORCLR, VERCCL and/or VERCOP, 'wtwdis' and 'hunits' must be encoded for foot bridges and catwalks over navigable water.	level), 41 (Ohio River Datum)]
			(C) unlocd = [ISRS code](C) wtwdis = [xxxx.xxx] (units defined in hunits), e.g., 2451.732
	G)	VERCLR should not be encoded for foot-bridges and catwalks over non- navigable water.	(C) hunits = [3 (kilometres), 4 (hectometres), 5 (statute miles), 6 (nautical miles)]
	H)	All objects of a bridge which belong to one bridge must be combined to one aggregation area (C_AGGR), e.g.	(C) PICREP = (Refer to Section B, General Guidance)
			(O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)]
		- pylons - notice marks	(M) SCAMIN = [90000]
		- bridge lights	(C) SORDAT = [YYYYMMDD]
		- buoys at bridge pillar	(C) SORIND = (Refer to Section B, General Guidance)
		- two way route parts	Object Encoding
		- communication area	Object Class = C_AGGR()
		- fenders	(M) OBJNAM = [name and/or operator/owner]
		- ice breakers	(O) NOBJNM = (Refer to Section B, General Guidance)
		- vertical clearance indicators	(O) TXTDSC = (Refer to letter K)

	- signal stations	(C) unlocd = [ISRS code]
	- radio call-in points	(C) SORDAT = [YYYYMMDD]
I)	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.	(C) SORIND = (Refer to Section B, General Guidance)
J)	Use 'verdat' only if vertical datum differs:	
	- From DSPM VDAT subfield and	
	 From Meta object 'm_vdat' attribute 	
K)	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.	
L)	For Notice marks on bridges see O.3.2	
M)	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 1.3.4.	