#### IHO CSMWG 17 NHS Stavanger, Norway 11-13 June 2007

## List of S-57 objects not symbolized according to the Pres Lib Look-up tables (Edition 3.3)

#### **Summary:**

This comparison confirms that all S-57 objects that are allowed in ENC are also listed in the PL look-up tables. This means that current version of S-57 (Ed. 3.1) contains no ENC objects that are displayed with a question mark.

On the other hand, it appears that definition of "not symbolized objects" as "question mark symbolized" is not quite correct. I have found several "No symbol" S-57 object classes which seem deliberately not symbolized by the Pres Lib. The table below lists these "No symbol" objects and gives added explanation.

	GEO Object classes	Meta Objects classes
<b>Points</b> – " <b>No symbol</b> " (empty "symbolization instruction" in look-up table)	CHKPNT; CURENT (No ORIENT); DAMCON; GRIDRN; PIPSOL; PRDARE (CATPRA<>1;5;6;8;9); RAPIDS; ROADWY; RUNWAY; SMCFAC; TUNNEL; VEGATN; WATFAL	
Lines – "No symbol" (empty "symbolization instruction" in look-up table)		M_SREL
Areas – "No symbol" (empty "symbolization instruction" in look-up table)	SLOGRD (CATSLO<>6); VEGATN	M_ACCY; M_HOPA; M_NPUB; M_SDAT; M_SREL; M_VDAT

\*There are no symbolization rules for Collection object classes (C\_AGGR, C\_ASSO)

# 'No symbol' Objects definition (extract from PresLib Ed. 3.3, clause 8.3.3.10)

In some cases the "symbolization instruction" – field (field 3) in a look-up table line is empty. Such an explicitly "empty" instruction means that no actual presentation for the respective object is required. Such objects are not symbolized and they are not shown on the screen. For example, an object of the class EXEZNE (exclusive economic zone) which covers the breadth of the territorial sea is not shown since it is an object of administrative meaning that would be read out only on cursor inquiry.

### GEO Object Definitions (extract from S-57 Ed. 3.1 App A Chapter 2)

• CHKPNT (Checkpoint) - An official place to register, declare or check goods and people

- CURENT (**Current non-gravitational**) Currents (non-gravitational) include either singly or in combination: ocean currents (wind and/or density driven), inter-oceanic equalizing currents, currents of navigable rivers, river outflow effects offshore and other non-tidal flows
- DAMCON (**Dam**) A barrier to check or confine anything in motion; particularly one constructed to hold back water and raise its level to form a reservoir, or to prevent flooding. (IHO Dictionary, S-32, 5th Edition, 1196)
- GRIDRN (**Gridiron**) A timber structure in the intertidal zone serving as a support for vessels at low stages of the tide to permit work on the exposed portion of the vessel's hull. Also called careening grid. (adapted from IHO Dictionary, S-32, 5th Edition, 649)
- PIPSOL (**Pipeline, submarine/on land**) A pipeline is a string of interconnected pipes used for the transport of matter, nowadays mainly oil or gas. (IHO Dictionary, S-32, 5th Edition, 3857)

A submarine or land pipeline is a pipeline lying on or buried under the seabed or the land.

- PRDARE (**Production/storage area**) An area on land for the exploitation or storage of natural resources
- RAPIDS (**Rapids**) Portions of a stream with accelerated current where it descends rapidly but without a break in the slope of the bed sufficient to form a waterfall. Usually used in the plural. (IHO Dictionary, S-32, 5th Edition , 4228)
- ROADWY (**Road**) A road is an open way for the passage of vehicles. (United States Geological Survey, Jan.89)
- RUNWAY (**Runway**) A defined rectangular area, on a land aerodrome, prepared for the landing and take-off run of aircraft along its length. (IHO Dictionary, S-32, 5th Edition, 4465) A site on which helicopters may land and take off. (IHO Dictionary, S-32, 5th Edition, 2232)
- SMCFAC (Small craft facility) A place at which a service generally of interest to small craft or pleasure boats is available
- TUNNEL (**Tunnel**) A passage that is open to the atmosphere at both ends, buried under the sea bed or laid over the sea floor or bored under the ground or through mountains
- VEGATN (Vegetation) Collections of, or individual plants
- WATFAL (Waterfall) A sudden descent of water over a step in the bed of a river. In place names commonly shortened to fall or falls, e.g. Niagara Falls
- SLOGRD (**Sloping ground**) An inclined surface (adapted from IHO Dictionary, S-32, 5th Edition, 4776).

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