

Paper for Consideration by NCWG

New abbreviations

Submitted by:	S-101 Portrayal subWG
Executive Summary:	Endorse new abbreviations to support S101 portrayal rules.
Related Documents:	S-52 PL; S-98 Annex C; S-101 Portrayal Catalogue; S-4; INT1
Related Projects:	S-100WG; S101PT

Introduction / Background

The S101 Portrayal sub WG (S101PsWG), endorsed by the S101 Project team (S101PT) decided to use new abbreviations for the terms 'Statute Mile', 'Yards' and 'Manual' in order to enhance the portrayal of some S101 features in ECDIS. The terms in question are linked to the feature attributes *distanceUnitOfMeasurement* and *signalGeneration*.

Abbreviations of terms to be used in ECDIS are listed in S-52 PL Part I and were originally transferred to S-98 Annex C (*please note that this has been partially discontinued in Ed 1.1.0 - see accompanying screenshots in the next page*).

These first two abbreviations are neither listed in S-98 nor mentioned in S-4 or INT1. The third abbreviation ('man' for 'Manual'), despite not being listed in S-98 is a recognized International abbreviation in S-4 and INT1.

The S101PsWG lead was tasked to submit change proposals to S-98 Annex C, which was done by submitting the corresponding change request form to S100WG6 meeting in January 2022.

The decision at S100WG6 was to submit the proposal to the NCWG first. The S100WG noted that 'This kind of Abbreviation should be registered in the GI registry and then S-98 would be referring to the GI registry'.

Based on this comment and other findings while preparing this paper, a recommendation regarding the management of abbreviations by the IHO has been included for consideration of this WG.

Analysis / Discussion

The need for new abbreviations for some 'units of measurement' was thoroughly discussed by the S101PsWG via GitHub and face to face (under the topic DistanceMarks), and their recommendations have been endorsed by the S101PT.

Note that the abbreviation 'man' already exists in the documents managed by the NCWG. The original intention of the S101PsWG proposal to S100WGs was only to include this abbreviation in S-98. This requires further discussion now that some tables have been excluded from S-98 Ed 1.0.0.

Of interest to the NCWG though is that S-4 and INT1 show this abbreviation slightly different and it requires harmonisation. S-4 uses 'man' and INT1 Ed 8 (UKHO) uses 'Man'.

Man	man, Mn	Manganese Manually Activated	J n P 56, R 2
man	(1852 m) or sea mile(s) Manually activated		B 45, P 14 P 56, R 2
min	Minute(s) of time		R 50

The following tables define a map between the ENC attribute values textual output.

Extract from S-52 Ed 4.0.3 Appendix I Section 10.6.3

Not Transferred to S-98 Ed 1.0.0

S-57 Attribute CATLIT - Category of Light

ENC Input		ECDIS Output
S-57 Attribute Code ID	S-57 Category of Light Attribute Value	Abbreviation
1	directional function	Dir
5	aero light	Aero
7	fog detector light	Fog Det Lt

S-57 Attribute - Status

ENC Input		ECDIS Output
S-57 Attribute Code ID	S-57 Status Attribute Value	Abbreviation
2	occasional	occas
7	temporary	temp
8	private	priv
11	extinguished	exting
17	un-watched	U

S-57 Attribute - Light Characteristic

ENC Input		ECDIS Output
S-57 Attribute Code ID	S-57 Light Characteristic Attribute Value	Abbreviation
1	fixed	F
2	flashing	Fl
3	long-flashing	LFl
4	quick-flashing	Q
5	very quick-flashing	VQ
6	ultra quick-flashing	UQ

Extract from S-98 1.1.0 Annex C

C-11.4 Abbreviations

The abbreviations listed below are to be used on the ECDIS display. The meanings of the abbreviations should be available to the Mariner through the ECDIS Pick Report.

C-11.4.1 Text abbreviations

The abbreviations in Table C-19 are used with text instructions and Lua format specifiers.

NOTE: See the Lua documentation for further details.

Prefixes		Suffixes	
bn	= beacon (INT1)	kn	= knots (INT1)
by	= buoy	deg	= degrees
clr	= overhead clearance		
clr cl	= clearance closed		
clr op	= clearance open		
sf clr	= safe clearance		
No	= number (INT1)		
Plt	= pilot		
Prod	= offshore production (INT1)		
LtV	= light vessel		
Varn	= magnetic variation		
ch	= communication channel		
NMT	= not more than "CLEARING BEARING"		
NLT	= not less than "CLEARING BEARING"		

Table C-19 - Abbreviations and format specifiers used with text instructions

Extracts from INT1 Ed 8

LHo	L' Ho	Lighthouse	P 1	Pk.	P ⁿ	Peak	—
LtV	L' V	Light-vessel	Q 32	PO	Pm, pum	Pumice	J J
	Lv, lv	Lava	J i		P.O.	Post Office	F 63
LW	L.W.	Low Water	H b		Po, pol	Polyzoa	J y
	L.W.F. & C.	Low Water Full and Change	—	pos (priv)	posn, pos ⁿ priv., (Priv.)	Position	—
	L.W.O.S.	Low Water Ordinary Springs	—			Private	P 65, Q 70
M	m	Mud	J 2	prohib	Prohib ^d	Prohibited	—
M	M.	Sea or Nautical Mile(s)	B 45, P 14	proj	proj ^d , Proj ^d	Projected	—
m		Medium	J 31	prom	prom ^t , Prom ^t	Prominent	—
m	m.	Metre(s)	B 41, P 13	Prom.	Promy, Prom ^y (prov), (prov ^y)	Promontory	—
Mag	mad, Md	Madrepore	J g	PSSA		Particularly Sensitive Sea Area	N 22
	Mag.	Magnetic	—	Pt.	pt	Point	—
	Magz, Mag ^z	Magazine	—	Pt.	Pt, pt	Pteropods	J x
	man, Mn	Manganese	J n	Pyl		Pylon	D 26
Man		Manually Activated	P 56, R 2				
		Radio beacon	—				Q 130.5
S.	St, S'	Saint	—	Water Tr	Water T ^r	Water tower	E 21
s	s	Sand	J 1	wd	wd	Weed	J 13.1
S	S.	South	B 11	Well		Wellhead	L 20, L 21
s	sec, sec.	Second(s) of time	B 51, P 12	WGS		World Geodetic System	S 50
SALM		Single Anchor Leg Mooring	L 12	Wh ^t	Wh ^t	Wharf	F 13
SBM		Single Buoy Mooring	L 16	Whis	Whs.	White	R 15
SC	S.C.	Sailing Club	—	Wk, Wks	W ^k	Wreck(s)	K 20-30
Sc	Sc, sc	Scoriae	J i		W/T	Radio (Wireless/Telegraphy)	—
Sc	Sc.	Scanner	E 30.3	Y	y	Yellow, amber, orange	J ai, P 11.8
Sch	Sch.	School	—	YC	Y.C.	Yacht Club	Q 3
SD	S.D.	Sailing Directions	—		y ^d , yds	Yard(s)	—
SD		Sounding of doubtful depth	I 2				
Sd.	sd	Sound	—				
SE	S.E.	South-east	B 14				
Sep	Sem, Sem.	Semaphore	—				
st	stf	Stiff	J 36				
sg		Seagrass	J 13.3				
Sh	sh	Shells	J 11				
Sh.		Shoal	—				
Sl		Silt	J 4				
	Sig, Sig.	Signal	R 1, T 25.2				
	sk, spk	Speckled	J ad				
	sm	Small	J as				
SMT	SMT	Seamount	—				
	Sn, shin	Shingle	J d				
so	sft	Soft	J 35				
Sp	Sp.	Spire	E 10.3				
	Sp, sp	Sponge	J r				

Conclusions

- New abbreviations are required to support S101 portrayal rules.
- We need to work towards a unique 'point of truth' for IHO supported abbreviations.

Recommendations

1. Approve the use of the abbreviations 'SM' for *Statute Miles* and 'yd' for *Yards*.
2. Update S-4 and INT-1 as required.
3. Harmonize S-4 and INT1 regarding the spelling of the abbreviation used for 'Manual/Manually'.
4. Recommend S100WG to task the GI Registry manager to include all approved International abbreviations in the GI Registry by consolidating, with NCWG support, existing entries in S-4/INT1 and S-98 Annex C.
 - o Remove all abbreviations from S-98 Annex C

Justification and Impacts

New abbreviations have been identified as necessary to provide better S101 portrayal in ECDIS.

Minor effort to update S-4 and INT1 and Medium effort to update the GI Registry if recommendation # 4 is endorsed.

Action required of NCWG

The NCWG is invited to:

- a. endorse the recommendations
- b. liaise with the S100WG chair regarding recommendation # 4.