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SN.1/Circ.243/Rev.1  
23 May 2014

**AMENDED GUIDELINES FOR THE PRESENTATION OF  
NAVIGATIONAL-RELATED SYMBOLS, TERMS AND ABBREVIATIONS**

1 The Maritime Safety Committee, at its seventy-ninth session (December 2004), approved *Guidelines for the presentation of navigational-related symbols, terms and abbreviations* (SN/Circ.243) prepared by the Sub-Committee on Safety of Navigation (NAV), at its fiftieth session (July 2004) and encouraged their use for all shipborne navigational systems and equipment.

2 The Maritime Safety Committee, at its eighty-fifth session (26 November to 5 December 2008), approved the amendment to the *Guidelines for the presentation of navigation-related symbols, terms and abbreviations* (SN.1/Circ.243/Add.1) regarding an addition to table 3 of the appendix to annex 1 of the *Guidelines for the presentation of navigation-related symbols, terms and abbreviations* (SN/Circ.243), introducing a new symbol for AIS Search and Rescue Transmitter (AIS-SART) prepared by the Sub-Committee on Safety of Navigation (NAV), at its fifty-fourth session (July 2008).

3 The Sub-Committee on Safety of Navigation (NAV), at its fifty-ninth session (2 to 6 September 2013), agreed on improved symbols for portrayal of AIS Aids to Navigation (AIS AtoN) in annexed new tables 4.1, 4.2 and 4.3 for the replacement of existing symbols for AIS-based AtoN in existing table 4 of annex 1 of the *Guidelines for the presentation of navigation-related symbols, terms and abbreviations* (SN/Circ.243).

4 The Maritime Safety Committee, at its ninety-third session (14 to 23 May 2014), concurred with the Sub-Committee's views, and approved the *amended Guidelines for the presentation of navigation-related symbols, terms and abbreviations*, as set out in the annex.

5 Member Governments are invited to bring the amended *Guidelines for the presentation of navigation-related symbols, terms and abbreviations* to the attention of all parties concerned.

6 This circular revokes SN/Circ.243 and SN.1/Circ.243/Add.1.

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## ANNEX 1

### GUIDELINES FOR THE PRESENTATION OF NAVIGATION-RELATED SYMBOLS

#### 1 Purpose

The purpose of these annexed Guidelines is to provide guidance on the appropriate use of navigation-related symbols to achieve a harmonized and consistent presentation.

#### 2 Scope

The use of these Guidelines will ensure that the symbols used for the display of navigation-related information on all shipborne navigational systems and equipment are presented in a consistent and uniform manner.


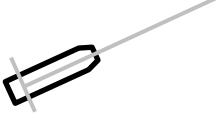
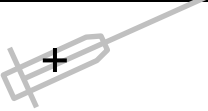
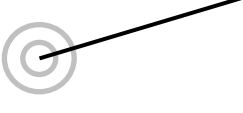

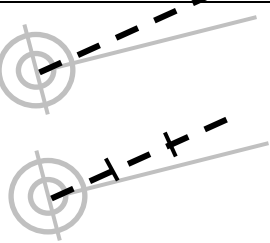

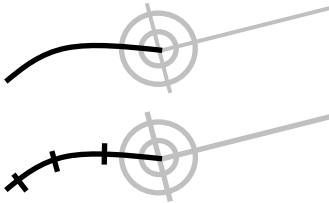
#### 3 Application

These Guidelines apply to all shipborne navigational systems and equipment. The symbols listed in the appendix should be used for the display of navigation-related information to promote consistency in the symbol presentation on navigational equipment.

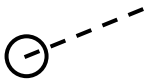


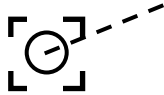
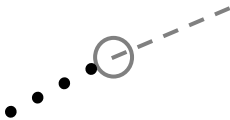

The symbols listed in the appendix should replace symbols which are currently contained in existing performance standards. Where a standard symbol is not available, another symbol may be used, but this symbol should not conflict with the symbols listed in the appendix.

**APPENDIX**  
**NAVIGATION-RELATED SYMBOLS**


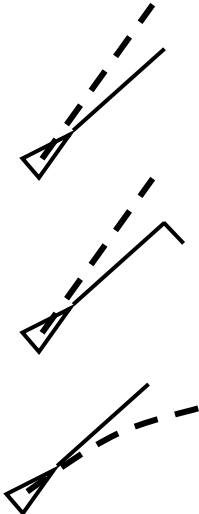
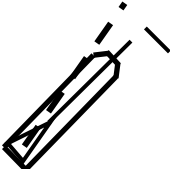


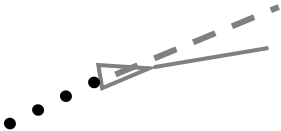

**Table 1: Own Ship Symbols**

Topic	Symbol	Description
<b>Own ship</b>		Double circle, located at own ship's reference position. Use of this symbol is optional, if own ship position is shown by the combination of Heading Line and Beam Line.
<b>Own Ship True scale outline</b>		True scale outline located relative to own ship's reference position, oriented along own ship's heading. Used on small ranges/large scales.
<b>Own Ship Radar Antenna Position</b>		Cross, located on a true scale outline of the ship at the Physical location of the radar antenna that is the current source of displayed radar video.
<b>Own Ship Heading line</b>		Solid line thinner than the speed vector line style, drawn to the bearing ring or of fixed length, if the bearing ring is not displayed. Origin is at own ship's reference point.
<b>Own Ship Beam line</b>		Solid line of fixed length; optionally length variable by operator. Midpoint at own ship's reference point.
<b>Own Ship Speed vector</b>		Dashed line – short dashes with spaces approximately twice the line width of heading line. Time increments between the origin and endpoint may optionally be marked along the vector using short intersecting lines. To indicate Water/Ground stabilization optionally one arrowhead for water stabilization and two arrowheads for ground stabilization may be added.
<b>Own Ship Path prediction</b>		A curved vector may be provided as a path predictor.
<b>Own Ship Past Track</b>		Thick line for primary source. Thin line for secondary source. Optional time marks are allowed.

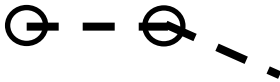



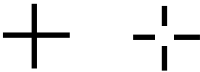

**Table 2: Tracked Radar Target Symbols**

Topic	Symbol	Description
<b>Tracked Target including Dangerous Target</b>		<p>Solid filled or unfilled circle located at target position.</p> <p>The course and speed vector should be displayed as dashed line, with short dashes with spaces approximately twice the line width.</p> <p>Optionally, time increments, may be marked along the vector.</p> <p>For a "<b>Dangerous Target</b>", bold, red (on colour display) solid circle with course and speed vector, flashing until acknowledged.</p>
<b>Target in Acquisition State</b>		<p>Circle segments in the acquired target state.</p> <p>For automatic acquisition, bold circle segments, flashing and red (on colour display) until acknowledged.</p>
<b>Lost Target</b>		<p>Bold lines across the circle, flashing until acknowledged.</p>
<b>Selected Target</b>		<p>A square indicated by its corners centred around the target symbol.</p>
<b>Target Past Positions</b>		<p>Dots, equally spaced by time.</p>
<b>Tracked Reference Target</b>		<p>Large R adjacent to designated tracked target.</p> <p>Multiple reference targets should be marked as R1, R2, R3, etc.</p>

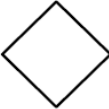
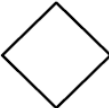
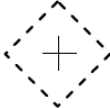
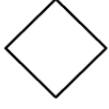
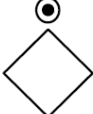
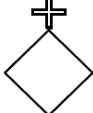
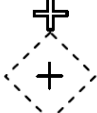
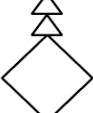

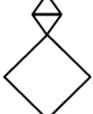

**Table 3: AIS Target Symbols**

Topic	Symbol	Description
<b>AIS Target (sleeping)</b>		An isosceles, acute-angled triangle should be used. The triangle should be oriented by heading, or COG if heading missing. The reported position should be located at centre and half the height of the triangle. The symbol of the sleeping target should be smaller than that of the activated target.
<b>Activated AIS Target Including Dangerous Target</b>		An isosceles, acute-angled triangle should be used. The triangle should be oriented by heading, or COG if heading missing. The reported position should be located at centre and half the height of the triangle. The COG/SOG vector should be displayed as a dashed line with short dashes with spaces approximately twice the line width. Optionally, time increments may be marked along the vector. The heading should be displayed as a solid line thinner than speed vector line style, length twice of the length of the triangle symbol. Origin of the heading line is the apex of the triangle. The turn should be indicated by a flag of fixed length added to the heading line. A path predictor may be provided as curved vector. For a " <b>Dangerous AIS Target</b> ", bold, red (on colour display) solid triangle with course and speed vector, flashing until acknowledged.
<b>AIS Target – True Scale Outline</b>		A true scale outline may be added to the triangle symbol. It should be: Located relative to reported position and according to reported position offsets, beam and length. Oriented along target's heading. Used on low ranges/large scales.
<b>Selected target</b>		A square indicated by its corners should be drawn around the activated target symbol.
<b>Lost target</b>		Triangle with bold solid cross. The triangle should be oriented per last known value. The cross should have a fixed orientation. The symbol should flash until acknowledged. The target should be displayed without vector, heading and rate of turn indication.
<b>Target Past Positions</b>		Dots, equally spaced by time.
<b>AIS Search and Rescue Transmitter (AIS-SART)</b>		A circle containing a cross drawn with solid lines.

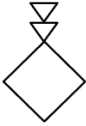

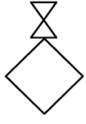

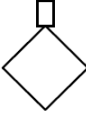

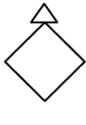

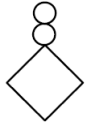
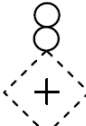
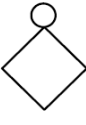

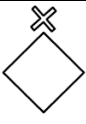

**Table 4: Other Symbols**

Topic	Symbol	Description
<b>Monitored Route</b>		Dashed bold line, waypoints (WPT) as circles.
<b>Planned or Alternate Route</b>		Dotted line, WPT as circles.
<b>Trial Manoeuvre</b>		Large T on screen.
<b>Simulation Mode</b>		Large S on screen.
<b>Cursor</b>		Crosshair (two alternatives, one with open centre).
<b>Range Rings</b>		Solid circles.
<b>Variable Range Markers (VRM)</b>		Circle. Additional VRM should be distinguishable from the primary VRM.
<b>Electronic Bearing Lines (EBL)</b>		Dashed line. Additional EBL should be distinguishable from the primary EBL.
<b>Acquisition/ Activation Area</b>		Solid line boundary for an area.
<b>Event Mark</b>		Rectangle with diagonal line, clarified by added text (e.g. "MOB" for man overboard cases).


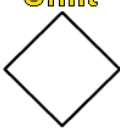
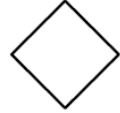
**Table 4.1: Improved symbols for portrayal of AIS Aids to Navigation (AIS AtoN)**

Type of AIS AtoN (Type of code in AIS msg. 21)	Symbol (Physical)	Symbol (Virtual)	Description
Portrayal when indication of type is not selected			Solid diamond (Shown with chart symbol. Chart symbol not required for radar.) <b>Note:</b> Applicable only for Physical AIS AtoN
Default, type not specified (0) Reference point (1) Light, without sectors (5) Light, with sectors (6) Leading Light Front (7) Leading Light Rear (8)			Physical: Solid diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position
Fixed structure offshore/obstruction (3) Light Vessel/LANBY/Rigs (31)			Solid diamond (Shown with chart symbol. Chart symbol not required for radar.) <b>Note:</b> Fixed structure offshore/obstruction and Light Vessel/LANBY/Rigs versions are not applicable for Virtual AIS AtoN
Racon (2)			Solid diamond with double circle of black inner circle on the top of diamond <b>Note:</b> Racon version is not applicable for Virtual AIS AtoN
Emergency Wreck Mark (4)			Physical: Solid diamond with cross on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and cross on the top of diamond
Beacon, Cardinal N (9) Floating, Cardinal Mark N (20)			Physical: Solid diamond with 2 triangles, one above the other, point upward, on top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and 2 triangles, one above the other, points upward, on the top of diamond
Beacon, Cardinal E (10) Floating, Cardinal Mark E (21)			Physical: Solid diamond with 2 triangles, one above the other, base to base, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and 2 triangles, one above the other, base to base, on the top of diamond




Type of AIS AtoN (Type of code in AIS msg. 21)	Symbol (Physical)	Symbol (Virtual)	Description
Beacon, Cardinal S (11) Floating, Cardinal Mark S (22)			Physical: Solid diamond with 2 triangles, one above the other, point downward, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and 2 triangles, one above the other, points downward, on the top of diamond
Beacon, Cardinal W (12) Floating, Cardinal Mark W (23)			Physical: Solid diamond with 2 triangles, one above the other, point to point, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and 2 triangles, one above the other, point to point, on the top of diamond
Beacon, Port hand (13) Beacon, Preferred Channel Port hand (15) Port hand Mark (24) Preferred Channel Port hand (26)			Physical: Solid diamond with rectangle, short side up, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and rectangle, short side up, on the top of diamond
Beacon, Starboard hand (14) Beacon, Preferred Channel Starboard hand (16) Starboard hand Mark (25) Preferred Channel Starboard hand (27)			Physical: Solid diamond with triangle, points upward, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and triangle, points upward, on the top of diamond
Beacon, Isolated danger (17) Isolated danger (28) Beacon, Safe			Physical: Solid diamond with 2 circles, one above the other, on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and 2 circles, one above the other, on the top of diamond
Beacon, Safe water (18) Safe Water (29)			Physical: Solid diamond with circle on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and circle on the top of diamond
Beacon, Special mark (19) Special Mark (30)			Physical: Solid diamond with bold outlined "X" on the top of diamond (Shown with chart symbol. Chart symbol not required for radar.) Virtual: Dotted diamond with cross hair centred at reported position and bold outlined "X" on the top of diamond

**Table 4.2 – Portrayal of AIS AtoN indicating off position or failure**

Type of failure condition	Symbol (Physical)	Description
AIS AtoN indicating to be in Off Position		Failure is indicated using yellow caution colour for the basic diamond part of the symbol with cross hair centred at reported position and for text "Off Posn" in top of the Physical AIS AtoN.  <b>Note:</b> Physical AIS AtoN indicates realtime EPFS position of drifting AtoN (obstacle).
AIS AtoN indicating Lights failure	<b>Unlit</b> 	Failure is indicated using yellow caution colour with text "Unlit" in top of the Physical AIS AtoN.
AIS AtoN indicating Racon failure	<b>Racon err</b> 	Failure is indicated using yellow caution colour with text "Racon err" in top of the Physical AIS AtoN

**Table 4.3 – Portrayal of AIS AtoN indicating the absence of a charted Physical AtoN**

Type of failure condition	Symbol (Virtual)	Description
AIS AtoN indicating the absence of a charted Physical AtoN	<b>Missing</b> 	The absence of a charted AtoN is indicated using yellow caution colour for both the basic diamond part of the symbol and for text "Missing". The basic diamond part is always empty without symbol of the type of the AtoN.  <b>Note:</b> This case is communicated as a combined state of "Virtual" and "off position". Type of absent AtoN can be determined be the underlying charted object, or selecting the Virtual AIS AtoN Object.

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## **ANNEX 2**

### **GUIDELINES FOR THE PRESENTATION OF NAVIGATION-RELATED TERMS AND ABBREVIATIONS**

#### **1 Purpose**

The purpose of these Guidelines is to provide guidance on the use of appropriate navigation-related terminology and abbreviations intended for presentation on shipborne navigational displays. These are based on terms and abbreviations used in existing navigation references.

#### **2 Scope**

These Guidelines are issued to ensure that the terms and abbreviations used for the display of navigation-related information on all shipborne navigation equipment and systems are consistent and uniform.

#### **3 Application**

These Guidelines apply to all shipborne navigational systems and equipment including, radar, ECDIS, AIS, INS and IBS. When navigation-related information is displayed as text, the standard terms or abbreviations listed in the appendix should be used, instead of using terms and abbreviations which are currently contained in existing performance standards.

Where a standard term and abbreviation is not available, another term or abbreviation may be used. This term or abbreviation should not conflict with the standard terms or abbreviations listed in the appendix and provide a clear meaning. Standard marine terminology should be used for this purpose. When the meaning is not clear from its context, the term should not be abbreviated.

Unless otherwise specified, standard terms should be shown in lower case while abbreviations should be presented using upper case.

## APPENDIX

### List of Standard Terms and Abbreviations

Term	Abbreviation	Abbreviation	Term
Acknowledge	ACK	ACK	Acknowledge
Acquire, Acquisition	ACQ	ACQ	Acquire, Acquisition
Acquisition Zone	AZ	ADJ	Adjust, Adjustment
Adjust, Adjustment	ADJ	AFC	Automatic Frequency Control
Aft	AFT	AFT	Aft
Alarm	ALARM	AGC	Automatic Gain Control
Altitude	ALT	AIS	Automatic Identification System
Amplitude Modulation	AM	ALARM	Alarm
Anchor Watch	ANCH	ALT	Altitude
Antenna	ANT	AM	Amplitude Modulation
Anti Clutter Rain	RAIN	ANCH	Anchor Watch
Anti Clutter Sea	SEA	ANCH	Vessel at Anchor (applies to AIS)
April	APR	ANT	Antenna
Audible	AUD	APR	April
August	AUG	AUD	Audible
Automatic	AUTO	AUG	August
Automatic Frequency Control	AFC	AUTO	Automatic
Automatic Gain Control	AGC	AUX	Auxiliary System/Function
Automatic Identification System	AIS	AVAIL	Available
Auxiliary System/Function	AUX	AZ	Acquisition Zone
Available	AVAIL	BITE	Built in Test Equipment
Background	BKGND	BKGND	Background
Bearing	BRG	BRG	Bearing
Bearing Waypoint To Waypoint	BWW	BRILL	Brilliance
Brilliance	BRILL	BWW	Bearing Waypoint To Waypoint
Built in Test Equipment	BITE	C	Carried (e.g. carried EBL origin)
Calibrate	CAL	C UP <sup>(See note 2)</sup>	Course Up
Cancel	CNCL	CAL	Calibrate
Carried (e.g. carried EBL origin)	C	CCRP	Consistent Common Reference Point
Centre	CENT	CCRS	Consistent Common Reference System
Change	CHG	CENT	Centre
Circular Polarised	CP	CHG	Change
Clear	CLR	CLR	Clear
Closest Point of Approach	CPA	CNCL	Cancel
Consistent Common Reference Point	CCRP	COG	Course Over the Ground
Consistent Common Reference System	CCRS	CONT	Contrast
Contrast	CONT	CORR	Correction
Correction	CORR	CP	Circular Polarised
Course	CRS	CPA	Closest Point of Approach
Course Over the Ground	COG	CRS	Course
Course Through the Water	CTW	CTS	Course To Steer
Course To Steer	CTS	CTW	Course Through the Water
Course Up	C UP <sup>(See note 2)</sup>	CURS	Cursor
Cross Track Distance	XTD	D	Dropped (e.g. dropped EBL origin)
Cursor	CURS	DATE	Date
Dangerous Goods	DG	DAY/NT	Day/Night
Date	DATE	DEC	December
Day/Night	DAY/NT	DECR	Decrease
Dead Reckoning, Dead Reckoned Position	DR	DEL	Delete

<b>Term</b>	<b>Abbreviation</b>	<b>Abbreviation</b>	<b>Term</b>
December	DEC	DELAY	Delay
Decrease	DECR	DEP	Departure
Delay	DELAY	DEST	Destination
Delete	DEL	DEV	Deviation
Departure	DEP	DG	Dangerous Goods
Depth	DPTH	DGAL <sup>(See note 2)</sup>	Differential Galileo
Destination	DEST	DGLONASS <sup>(See note 2)</sup>	Differential GLONASS
Deviation	DEV	DGNSS <sup>(See note 2)</sup>	Differential GNSS
Differential Galileo	DGAL <sup>(See note 2)</sup>	DGPS <sup>(See note 2)</sup>	Differential GPS
Differential GLONASS	DGLONASS <sup>(See note 2)</sup>	DISP	Display
Differential GNSS	DGNSS <sup>(See note 2)</sup>	DIST	Distance
Differential GPS	DGPS <sup>(See note 2)</sup>	DIVE	Vessel Engaged in Diving Operations (applies to AIS)
Digital Selective Calling	DSC	DPTH	Depth
Display	DISP	DR	Dead Reckoning, Dead Reckoned Position
Distance	DIST	DRG	Vessel Engaged in Dredging or Underwater Operations (applies to AIS)
Distance Root Mean Square	DRMS <sup>(See note 2)</sup>	DRIFT	Drift
Distance To Go	DTG	DRMS <sup>(See note 2)</sup>	Distance Root Mean Square
Drift	DRIFT	DSC	Digital Selective Calling
Dropped (e.g. dropped EBL origin)	D	DTG	Distance To Go
East	E	E	East
Electronic Bearing Line	EBL	EBL	Electronic Bearing Line
Electronic Chart Display and Information System	ECDIS	ECDIS	Electronic Chart Display and Information System
Electronic Navigational Chart	ENC	ENC	Electronic Navigational Chart
Electronic Position Fixing System	EPFS	ENH	Enhance
Electronic Range and Bearing Line	ERBL	ENT	Enter
Enhance	ENH	EP	Estimated Position
Enter	ENT	EPFS	Electronic Position Fixing System
Equipment	EQUIP	EQUIP	Equipment
Error	ERR	ERBL	Electronic Range and Bearing Line
Estimated Position	EP	ERR	Error
Estimated Time of Arrival	ETA	ETA	Estimated Time of Arrival
Estimated Time of Departure	ETD	ETD	Estimated Time of Departure
Event	EVENT	EVENT	Event
Exclusion Zone	EZ	EXT	External
External	EXT	EZ	Exclusion Zone
February	FEB	FEB	February
Fishing Vessel	FISH	FISH	Fishing Vessel
Fix	FIX	FIX	Fix
Forward	FWD	FM	Frequency Modulation
Frequency	FREQ	FREQ	Frequency
Frequency Modulation	FM	FULL	Full
Full	FULL	FWD	Forward
Gain	GAIN	GAIN	Gain
Galileo	GAL	GAL	Galileo
Geometric Dilution Of Precision	GDOP	GC	Great Circle
Global Maritime Distress and Safety System	GMDSS	GDOP	Geometric Dilution Of Precision

<b>Term</b>	<b>Abbreviation</b>	<b>Abbreviation</b>	<b>Term</b>
Global Navigation Satellite System	GNSS	GLONASS	Global Orbiting Navigation Satellite System
Global Orbiting Navigation Satellite System	GLONASS	GMDSS	Global Maritime Distress and Safety System
Global Positioning System	GPS	GND	Ground
Great Circle	GC	GNSS	Global Navigation Satellite System
Grid	GRID	GPS	Global Positioning System
Ground	GND	GRI	Group Repetition Interval
Group Repetition Interval	GRI	GRID	Grid
Guard Zone	GZ	GRND	Vessel Aground (applies to AIS)
Gyro	GYRO	GYRO	Gyro
Harmful Substances (applies to AIS)	HS	GZ	Guard Zone
Head Up	H UP (See note 2)	H UP (See note 2)	Head Up
Heading	HDG	HCS	Heading Control System
Heading Control System	HCS	HDG	Heading
Heading Line	HL	HDOP	Horizontal Dilution Of Precision
High Frequency	HF	HF	High Frequency
High Speed Craft (applies to AIS)	HSC	HL	Heading Line
Horizontal Dilution Of Precision	HDOP	HS	Harmful Substances (applies to AIS)
Identification	ID	HSC	High Speed Craft (applies to AIS)
In	IN	I/O	Input/Output
Increase	INCR	ID	Identification
Indication	IND	IN	In
Information	INFO	INCR	Increase
Infrared	INF RED	IND	Indication
Initialisation	INIT	INF RED	Infrared
Input	INP	INFO	Information
Input/Output	I/O	INIT	Initialisation
Integrated Radio Communication System	IRCS	INP	Input
Interference Rejection	IR	INT	Interval
Interswitch	ISW	IR	Interference Rejection
Interval	INT	IRCS	Integrated Radio Communication System
January	JAN	ISW	Interswitch
July	JUL	JAN	January
June	JUN	JUL	July
Latitude	LAT	JUN	June
Limit	LIM	LAT	Latitude
Line Of Position	LOP	LF	Low Frequency
Log	LOG	LIM	Limit
Long Pulse	LP	LOG	Log
Long Range	LR	LON	Longitude
Longitude	LON	LOP	Line Of Position
Loran	LORAN	LORAN	Loran
Lost Target	LOST TGT	LOST TGT	Lost Target
Low Frequency	LF	LP	Long Pulse
Magnetic	MAG	LR	Long Range
Manoeuvre	MVR	MAG	Magnetic
Manual	MAN	MAN	Manual
Map(s)	MAP	MAP	Map(s)
March	MAR	MAR	March
Maritime Mobile Services Identity number	MMSI	MAX	Maximum
Maritime Pollutant (applies to AIS)	MP	MAY	May

<b>Term</b>	<b>Abbreviation</b>	<b>Abbreviation</b>	<b>Term</b>
Maritime Safety Information	MSI	MENU	Menu
Marker	MKR	MF	Medium Frequency
Master	MSTR	MIN	Minimum
Maximum	MAX	MISSING	Missing
May	MAY	MKR	Marker
Medium Frequency	MF	MMSI	Maritime Mobile Services Identity number
Medium Pulse	MP	MON	Performance Monitor
Menu	MENU	MP	Maritime Pollutant (applies to AIS)
Minimum	MIN	MP	Medium Pulse
Missing	MISSING	MSI	Maritime Safety Information
Mute	MUTE	MSTR	Master
Navigation	NAV	MUTE	Mute
Normal	NORM	MVR	Manoeuvr
North	N	N	North
North Up	N UP (See note 2)	N UP (See note 2)	North Up
November	NOV	NAV	Navigation
October	OCT	NORM	Normal
Off	OFF	NOV	November
Officer of the Watch	OOW	NUC	Vessel Not Under Command (applies to AIS)
Offset	OFFSET	OCT	October
On	ON	OFF	Off
Out/Output	OUT	OFFSET	Offset
Own Ship	OS	ON	On
Panel Illumination	PANEL	OOW	Officer of the Watch
Parallel Index Line	PI	OS	Own Ship
Passenger Vessel (applies to AIS)	PASSV	OUT	Out/Output
Performance Monitor	MON	PAD	Predicted Area of Danger
Permanent	PERM	PANEL	Panel Illumination
Person Overboard	POB	PASSV	Passenger Vessel (applies to AIS)
Personal Identification Number	PIN	PDOP	Positional Dilution Of Precision
Pilot Vessel (applies to AIS)	PILOT	PERM	Permanent
Port/Portside	PORT	PI	Parallel Index Line
Position	POSN	PILOT	Pilot Vessel (applies to AIS)
Positional Dilution Of Precision	PDOP	PIN	Personal Identification Number
Power	PWR	PL	Pulse Length
Predicted	PRED	PM	Pulse Modulation
Predicted Area of Danger	PAD	POB	Person Overboard
Predicted Point of Collision	PPC	PORT	Port/Portside
Pulse Length	PL	POSN	Position
Pulse Modulation	PM	PPC	Predicted Point of Collision
Pulse Repetition Frequency	PRF	PPR	Pulses Per Revolution
Pulse Repetition Rate	PRR	PRED	Predicted
Pulses Per Revolution	PPR	PRF	Pulse Repetition Frequency
Racon	RACON	PRR	Pulse Repetition Rate
Radar	RADAR	PWR	Power
Radius	RAD	RACON	Racon
Rain	RAIN	RAD	Radius
Range	RNG	RADAR	Radar
Range Rings	RR	RAIM	Receiver Autonomous Integrity Monitoring
Raster Chart Display System	RCDS	RAIN	Anti Clutter Rain
Raster Navigational Chart	RNC	RAIN	Rain
Rate Of Turn	ROT	RCDS	Raster Chart Display System
Real-time Kinematic	RTK	REF	Reference
Receiver	RX (See note 2)	REL (See note 3)	Relative

Term	Abbreviation	Abbreviation	Term
Receiver Autonomous Integrity Monitoring	RAIM	RIM	Vessel Restricted in Manoeuvrability) (applies to AIS)
Reference	REF	RM	Relative Motion
Relative	REL (See note 3)	RMS	Root Mean Square
Relative Motion	RM	RNC	Raster Navigational Chart
Revolutions per Minute	RPM	RNG	Range
Roll On/Roll Off Vessel (applies to AIS)	RoRo	RoRo	Roll On/Roll Off Vessel (applies to AIS)
Root Mean Square	RMS	ROT	Rate Of Turn
Route	ROUTE	ROUTE	Route
Safety Contour	SF CNT	RPM	Revolutions per Minute
Sailing Vessel (applies to AIS)	SAIL	RR	Range Rings
Satellite	SAT	RTK	Real-time Kinematic
S-Band (applies to Radar)	S-BAND	RX (See note 2)	Receiver
Scan to Scan	SC/SC	S	South
Search And Rescue Transponder	SART	SAIL	Sailing Vessel (applies to AIS)
Search And Rescue Vessel (applies to AIS)	SARV	SART	Search And Rescue Transponder
Select	SEL	SARV	Search And Rescue Vessel (applies to AIS)
September	SEP	SAT	Satellite
Sequence	SEQ	S-BAND	S-Band (applies to Radar)
Set (i.e., set and drift, or setting a value)	SET	SC/SC	Scan to Scan
Ship's Time	TIME	SDME	Speed and Distance Measuring Equipment
Short Pulse	SP	SEA	Anti Clutter Sea
Signal to Noise Ratio	SNR	SEL	Select
Simulation	SIM (See note 4)	SEP	September
Slave	SLAVE	SEQ	Sequence
South	S	SET	Set (i.e., set and drift, or setting a value)
Speed	SPD	SF CNT	Safety Contour
Speed and Distance Measuring Equipment	SDME	SIM (See note 4)	Simulation
Speed Over the Ground	SOG	SLAVE	Slave
Speed Through the Water	STW	SNR	Signal to Noise Ratio
Stabilized	STAB	SOG	Speed Over the Ground
Standby	STBY	SP	Short Pulse
Starboard/Starboard Side	STBD	SPD	Speed
Station	STN	STAB	Stabilized
Symbol(s)	SYM	STBD	Starboard/Starboard Side
Synchronisation	SYNC	STBY	Standby
Target	TGT	STN	Station
Target Tracking	TT	STW	Speed Through the Water
Test	TEST	SYM	Symbol(s)
Time	TIME	SYNC	Synchronisation
Time Difference	TD	T	True
Time Dilution Of Precision	TDOP	TCPA	Time to CPA
Time Of Arrival	TOA	TCS	Track Control System
Time Of Departure	TOD	TD	Time Difference
Time to CPA	TCPA	TDOP	Time Dilution Of Precision
Time To Go	TTG	TEST	Test
Time to Wheel Over Line	TWOL	TGT	Target
Track	TRK	THD	Transmitting Heading Device
Track Control System	TCS	TIME	Ship's Time
Track Made Good	TMG (See note 5)	TIME	Time
Trail(s)	TRAIL	TM	True Motion
Transceiver	TXRX (See note 2)	TMG (See note 5)	Track Made Good



<b>Term</b>	<b>Abbreviation</b>	<b>Abbreviation</b>	<b>Term</b>
Transferred Line Of Position	TPL	TOA	Time Of Arrival
Transmitter	TX (See note 2)	TOD	Time Of Departure
Transmitting Heading Device	THD	TOW	Vessel Engaged in Towing Operations (applies to AIS)
Trial	TRIAL (See note 4)	TPL	Transferred Line Of Position
Trigger Pulse	TRIG	TRAIL	Trail(s)
True	T	TRIAL (See note 4)	Trial
True Motion	TM	TRIG	Trigger Pulse
Tune	TUNE	TRK	Track
Ultrahigh Frequency	UHF	TT	Target Tracking
Universal Time, Co-ordinated	UTC	TTG	Time To Go
Unstabilised	UNSTAB	TUNE	Tune
Variable Range Marker	VRM	TWOL	Time to Wheel Over Line
Variation	VAR	TX (See note 2)	Transmitter
Vector	VECT	TXRX (See note 2)	Transceiver
Very High Frequency	VHF	UHF	Ultrahigh Frequency
Very Low Frequency	VLF	UNSTAB	Unstabilised
Vessel Aground (applies to AIS)	GRND	UTC	Universal Time, Co-ordinated
Vessel at Anchor (applies to AIS)	ANCH	UWE	Vessel Underway Using Engine (applies to AIS)
Vessel Constrained by Draught (applies to AIS)	VCD	VAR	Variation
Vessel Engaged in Diving Operations (applies to AIS)	DIVE	VCD	Vessel Constrained by Draught (applies to AIS)
Vessel Engaged in Dredging or Underwater Operations (applies to AIS)	DRG	VDR	Voyage Data Recorder
Vessel Engaged in Towing Operations (applies to AIS)	TOW	VECT	Vector
Vessel Not Under Command (applies to AIS)	NUC	VHF	Very High Frequency
Vessel Restricted in Manoeuvrability) (applies to AIS)	RIM	VID	Video
Vessel Traffic Service	VTs	VLF	Very Low Frequency
Vessel Underway Using Engine (applies to AIS)	UWE	VOY	Voyage
Video	VID	VRM	Variable Range Marker
Voyage	VOY	VTs	Vessel Traffic Service
Voyage Data Recorder	VDR	W	West
Warning	WARNING	WARNING	Warning
Water	WAT	WAT	Water
Waypoint	WPT	WOL	Wheel Over Line
West	W	WOT	Wheel Over Time
Wheel Over Line	WOL	WPT	Waypoint
Wheel Over Time	WOT	X-BAND	X-Band (applies to Radar)
X-Band (applies to Radar)	X-BAND	XTD	Cross Track Distance

### List of Units of Measurement and Abbreviations

Unit	Abbreviation	Abbreviation	Unit
cable length	cbl	cbl	cable length
cycles per second	cps	cps	cycles per second
degree(s)	deg	deg	degree(s)
fathom(s)	fm	fm	fathom(s)
feet/foot	ft	ft	feet/foot
gigahertz	GHz	GHz	gigahertz
hectopascal	hPa	hPa	hectopascal
hertz	Hz	Hz	hertz
hour(s)	hr(s)	hr(s)	hour(s)
kilohertz	kHz	kHz	kilohertz
kilometre	km	km	kilometre
kilopascal	kPa	kPa	kilopascal
knot(s)	kn	kn	knot(s)
megahertz	MHz	MHz	megahertz
minute(s)	min	min	minute(s)
Nautical Mile(s)	NM	NM	Nautical Mile(s)

#### Notes:

1. Terms and abbreviations used in nautical charts are published in relevant IHO publications and are not listed here.
2. In general, terms should be presented using lower case text and abbreviations should be presented using upper case text. Those abbreviations that may be presented using lower case text are identified in the list, e.g. "dGNSS" or "Rx".
3. Abbreviations may be combined, e.g. "CPA LIM" or "T CRS". When the abbreviation for the standard term "Relative" is combined with another abbreviation, the abbreviation "R" should be used instead of "REL", e.g. "R CRS".
4. The use of the abbreviations "SIM" and "TRIAL" are not intended to replace the appropriate symbols listed in annex 1.
5. The term "Course Made Good" has been used in the past to describe "Track Made Good". This is a misnomer in that "courses" are directions steered or intended to be steered with respect to a reference meridian. "Track Made Good" is preferred over the use of "Course Made Good".
6. Where other information is presented using SI units, the respective abbreviations should be used.