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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**

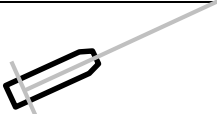
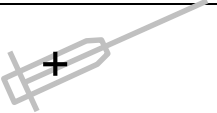
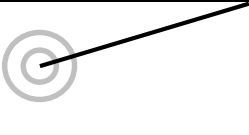
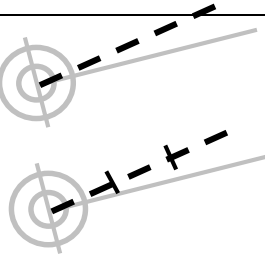
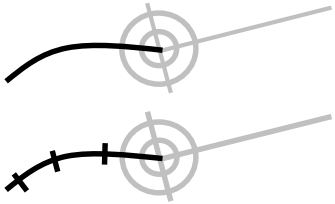
These Guidelines apply to all shipborne navigational systems and equipment. The symbols listed in the appendix should be used for the display of navigation-related information to promote consistency in the symbol presentation on navigational equipment.

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.

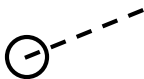
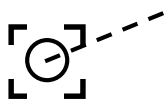
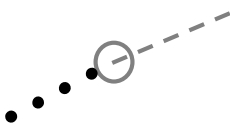
## APPENDIX

### NAVIGATION-RELATED SYMBOLS

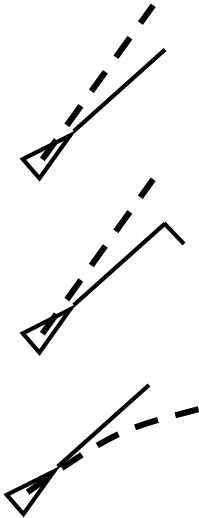
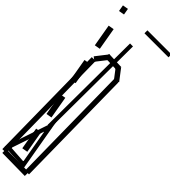
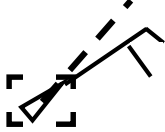
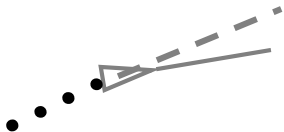
**Table 1: Own Ship Symbols**

| Topic                           | Symbol                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Own ship                        |    | Double circle, located at own ship's reference position.<br>Use of this symbol is optional, if own ship position is shown by the combination of Heading Line and Beam Line.                                                                                                                                                                                                  |
| Own Ship True scale outline     |    | True scale outline located relative to own ship's reference position, oriented along own ship's heading.<br>Used on small ranges/large scales.                                                                                                                                                                                                                               |
| Own Ship Radar Antenna Position |    | 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.                                                                                                                                                                                                                        |
| Own Ship Heading line           |   | 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.                                                                                                                                                                                            |
| Own Ship Beam line              |  | Solid line of fixed length; optionally length variable by operator. Midpoint at own ship's reference point.                                                                                                                                                                                                                                                                  |
| Own Ship Speed vector           |  | Dashed line – short dashes with spaces approximately twice the line width of heading line.<br>Time increments between the origin and endpoint may optionally be marked along the vector using short intersecting lines.<br>To indicate Water/Ground stabilization optionally one arrowhead for water stabilization and two arrowheads for ground stabilization may be added. |
| Own Ship Path prediction        |  | A curved vector may be provided as a path predictor.                                                                                                                                                                                                                                                                                                                         |
| Own Ship Past Track             |  | Thick line for primary source. Thin line for secondary source.<br>Optional time marks are allowed.                                                                                                                                                                                                                                                                           |

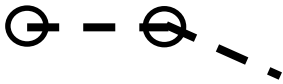
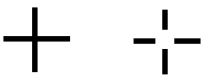
**Table 2: Tracked Radar Target Symbols**

| 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>                                                                                                                                                                                                                                                                                                  |

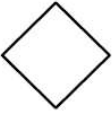
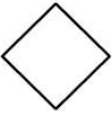
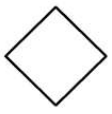
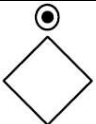
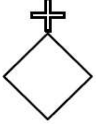
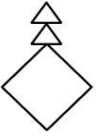
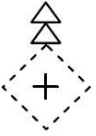
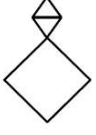
**Table 3: AIS Target Symbols**

| 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.<br><br>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.<br><br>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.<br><br>The turn should be indicated by a flag of fixed length added to the heading line.<br><br>A path predictor may be provided as curved vector.<br><br>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:<br>Located relative to reported position and according to reported position offsets, beam and length.<br>Oriented along target's heading.<br>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.<br><br>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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

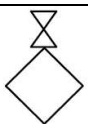
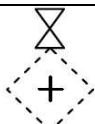
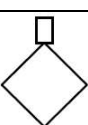
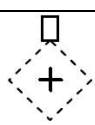
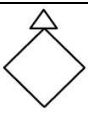
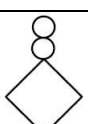
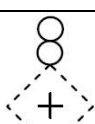
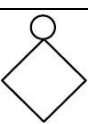
**Table 4: Other Symbols**

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

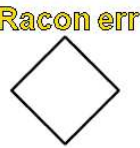
**Table 4.1: Improved symbols for portrayal of AIS Aids to Navigation (AIS AtoN)**

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



| Type of AIS AtoN<br>(Type of code in AIS<br>msg. 21)                                                                                                          | Symbol<br>(Physical)                                                                | Symbol<br>(Virtual)                                                                 | Description                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Beacon, Cardinal S (11)<br>Floating, Cardinal Mark S<br>(22)                                                                                                  |    |    | Physical: Solid diamond with 2 triangles, one above the other, point downward, on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>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)<br>Floating, Cardinal Mark W<br>(23)                                                                                                  |    |    | Physical: Solid diamond with 2 triangles, one above the other, point to point, on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>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)<br>Beacon, Preferred<br>Channel Port hand (15)<br>Port hand Mark (24)<br>Preferred Channel Port<br>hand (26)                           |    |    | Physical: Solid diamond with rectangle, short side up, on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>Virtual: Dotted diamond with cross hair centred at reported position and rectangle, short side up, on the top of diamond                                                  |
| Beacon, Starboard hand<br>(14)<br>Beacon, Preferred<br>Channel Starboard hand<br>(16)<br>Starboard hand Mark (25)<br>Preferred Channel<br>Starboard hand (27) |  |  | Physical: Solid diamond with triangle, points upward, on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>Virtual: Dotted diamond with cross hair centred at reported position and triangle, points upward, on the top of diamond                                                    |
| Beacon, Isolated danger<br>(17)<br>Isolated danger (28)<br>Beacon, Safe                                                                                       |  |  | Physical: Solid diamond with 2 circles, one above the other, on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>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)<br>Safe Water (29)                                                                                                                    |  |  | Physical: Solid diamond with circle on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>Virtual: Dotted diamond with cross hair centred at reported position and circle on the top of diamond                                                                                        |
| Beacon, Special mark (19)<br>Special Mark (30)                                                                                                                |  |  | Physical: Solid diamond with bold outlined "X" on the top of diamond<br>(Shown with chart symbol. Chart symbol not required for radar.)<br>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.<br><br><b>Note:</b> Physical AIS AtoN indicates realtime EPFS position of drifting AtoN (obstacle). |
| AIS AtoN indicating Lights failure        |  | Failure is indicated using yellow caution colour with text "Unlit" in top of the Physical AIS AtoN.                                                                                                                                                                                                 |
| AIS AtoN indicating Racon failure         |  | 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 |  | 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.<br><br><b>Note:</b> This case is communicated as a combined state of "Virtual" and "off position". Type of absent AtoN can be determined by 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**

| <b>Term</b>                            | <b>Abbreviation</b> | <b>Abbreviation</b> | <b>Term</b>                        |
|----------------------------------------|---------------------|---------------------|------------------------------------|
| 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 (See note 2)   | 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 (See note 2)   | 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                             |

| Term                                            | Abbreviation          | Abbreviation          | Term                                                                 |
|-------------------------------------------------|-----------------------|-----------------------|----------------------------------------------------------------------|
| December                                        | DEC                   | DELAY                 | Delay                                                                |
| Decrease                                        | DECR                  | DEP                   | Departure                                                            |
| Delay                                           | DELAY                 | DEST                  | Destination                                                          |
| Delete                                          | DEL                   | DEV                   | Deviation                                                            |
| Departure                                       | DEP                   | DG                    | Dangerous Goods                                                      |
| Depth                                           | DPTH                  | DGAL (See note 2)     | Differential Galileo                                                 |
| Destination                                     | DEST                  | DGLONASS (See note 2) | Differential GLONASS                                                 |
| Deviation                                       | DEV                   | DGNSS (See note 2)    | Differential GNSS                                                    |
| Differential Galileo                            | DGAL (See note 2)     | DGPS (See note 2)     | Differential GPS                                                     |
| Differential GLONASS                            | DGLONASS (See note 2) | DISP                  | Display                                                              |
| Differential GNSS                               | DGNSS (See note 2)    | DIST                  | Distance                                                             |
| Differential GPS                                | DGPS (See note 2)     | 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 (See note 2)     | DRIFT                 | Drift                                                                |
| Distance To Go                                  | DTG                   | DRMS (See note 2)     | 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                                         |

| Term                              | Abbreviation      |
|-----------------------------------|-------------------|
| Maritime Safety Information       | MSI               |
| Marker                            | MKR               |
| Master                            | MSTR              |
| Maximum                           | MAX               |
| May                               | MAY               |
| Medium Frequency                  | MF                |
| Medium Pulse                      | MP                |
| Menu                              | MENU              |
| Minimum                           | MIN               |
| Missing                           | MISSING           |
| Mute                              | MUTE              |
| Navigation                        | NAV               |
| Normal                            | NORM              |
| North                             | N                 |
| North Up                          | N UP (See note 2) |
| November                          | NOV               |
| October                           | OCT               |
| Off                               | OFF               |
| Officer of the Watch              | OOW               |
| Offset                            | OFFSET            |
| On                                | ON                |
| Out/Output                        | OUT               |
| Own Ship                          | OS                |
| Panel Illumination                | PANEL             |
| Parallel Index Line               | PI                |
| Passenger Vessel (applies to AIS) | PASSV             |
| Performance Monitor               | MON               |
| Permanent                         | PERM              |
| Person Overboard                  | POB               |
| Personal Identification Number    | PIN               |
| Pilot Vessel (applies to AIS)     | PILOT             |
| Port/Portside                     | PORT              |
| Position                          | POSN              |
| Positional Dilution Of Precision  | PDOP              |
| Power                             | PWR               |
| Predicted                         | PRED              |
| Predicted Area of Danger          | PAD               |
| Predicted Point of Collision      | PPC               |
| Pulse Length                      | PL                |
| Pulse Modulation                  | PM                |
| Pulse Repetition Frequency        | PRF               |
| Pulse Repetition Rate             | PRR               |
| Pulses Per Revolution             | PPR               |
| Racon                             | RACON             |
| Radar                             | RADAR             |
| Radius                            | RAD               |
| Rain                              | RAIN              |
| Range                             | RNG               |
| Range Rings                       | RR                |
| Raster Chart Display System       | RCDS              |
| Raster Navigational Chart         | RNC               |
| Rate Of Turn                      | ROT               |
| Real-time Kinematic               | RTK               |
| Receiver                          | RX (See note 2)   |

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



| Term                                                                 | Abbreviation       | Abbreviation       | Term                                                 |
|----------------------------------------------------------------------|--------------------|--------------------|------------------------------------------------------|
| 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.