Standard class B equipment position report

Submitted by jvgils on Sat, 01/24/2015 - 13:30
Physical link: AIS
msg_ID: 18
Extended description: Standard position report for Class B shipborne mobile equipment to be used ins
Message 1, 2 or 3
Priority: 1
Access scheme: SOTDMA
ITDMA
CSTDMA
Communication state: SOTDMA
ITDMA
Transmitted by: Mobile station
The Standard Class B equipment position report should be output periodically and autonomously instead of Messages 1, 2, or 3 by Class B shipborne mobile equipment, only. The reporting interval should default to the values given in Table 2, Annex 1, unless otherwise specified by reception of a Message 16 or 23; and depending on the current SOG and navigational status flag setting.

TABLE 70[1]

Parameter	Number of bits	Description
Message ID	6	Identifier for Message 18; always 18
Repeat indicator	2	Used by the repeater to indicate how many times a message has been repeated. See § 4.6.1, Annex 2; 0-3; 0 = default; 3 = do not repeat anymore; should be 0 for “CS” transmissions
User ID	30	MMSI number
Spare	8	Not used. Should be set to zero. Reserved for future use
SOG	10	Speed over ground in 1/10 knot steps (0-102.2 knots) 1 023 = not available, 1 022 = 102.2 knots or higher
Position accuracy	1	1 = high (£10 m) 0 = low (>10 m) 0 = default The PA flag should be determined in accordance with Table 50

Parameter	Number of bits	Description
Longitude	28	Longitude in 1/10 000 min (±180°, East = positive (as per 2's complement), West = negative (as per 2's complement); 181° ($6791AC0_h$) = not available = default)
Latitude	27	Latitude in 1/10 000 min (±90°, North = positive (as per 2's complement), South = negative (as per 2's complement); 91 = (3412140_h) = not available = default)
COG	12	Course over ground in 1/10= (0-3 599). 3 600 ($E10_h$) = not available = default; 3 601-4 095 should not be used
True heading	9	Degrees (0-359) (511 indicates not available = default)
Time stamp	6	UTC second when the report was generated by the EPFS (0-59 or 60 if time stamp is not available, which should also be the default value or 61 if positioning system is in manual input mode or 62 if electronic position fixing system operates in estimated (dead reckoning) mode or 63 if the positioning system is inoperative) 61, 62, 63 are not used by "CS" AIS
Spare	2	Not used. Should be set to zero. Reserved for future use
Class B unit flag	1	0 = Class B SOTDMA unit 1 = Class B "CS" unit
Class B display flag	1	0 = No display available; not capable of displaying Message 12 and 14 1 = Equipped with integrated display displaying Message 12 and 14
Class B DSC flag	1	0 = Not equipped with DSC function 1 = Equipped with DSC function (dedicated or time-shared)
Class B band flag	1	0 = Capable of operating over the upper 525 kHz band of the marine band 1 = Capable of operating over the whole marine band (irrelevant if "Class B Message 22 flag" is 0)
Class B Message 22 flag	1	0 = No frequency management via Message 22, operating on AIS 1, AIS 2 only 1 = Frequency management via Message 22
Mode flag	1	0 = Station operating in autonomous and continuous mode = default 1 = Station operating in assigned mode
RAIM-flag	1	RAIM (Receiver autonomous integrity monitoring) flag of electronic position fixing device; 0 = RAIM not in use = default; 1 = RAIM in use see Table 50

Parameter	Number of bits	Description
Communication state selector flag	1	0 = SOTDMA communication state follows 1 = ITDMA communication state follows (always “1” for Class-B “CS”)
Communication state	19	SOTDMA communication state (see § 3.3.7.2.1, Annex 2), if communication state selector flag is set to 0, or ITDMA communication state (see § 3.3.7.3.2, Annex 2), if communication state selector flag is set to 1 Because Class B “CS” does not use any Communication State information, this field should be filled with the following value: 1100000000000000110
Number of bits	168	Occupies one slot

[1] 1 Nautical mile = 1 852 metres.
1 knot = 1 852 m/h.