

**RTCA Special Committee 186, Working Group 3
EUROCAE WG-51, SG-1**

ADS-B 1090ES MOPS Maintenance

Meeting #26

**RTCA, Washington, D.C.
31 March – 3 April, 2009**

**Updated Proposal to BDS 6,2 Target State and Status Message
Revision 1**

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Summary
Response to Action Item 24-06 25-20. This Working Paper updates proposed changes to the BDS 6,2 Target State and Status Message pursuant to discussion during Meeting #26 in DCA on April 1, 2009, and therefore represents WP26-22_R1.

Table 1. BDS 6,2 UPDATED PROPOSED TARGET STATE AND STATUS MESSAGE		
PROPOSED NEW "MB" FIELD DEFINITION		COMMENTARY OR CHANGES
1	MSB	
2		
3		
4		
5	LSB	
6	MSB	
7	LSB	
SUBTYPE CODE = 0		
8	BACK CAPABILITY FLAG (0) / (1)	Reassigned based on ACSS Input
9	SELECTED ALTITUDE TYPE (0 = MCP/FCU, 1 = FMS)	Modified as per Brussels Meeting discussion.
10	MSB = 32,768 feet	
11		
12	MCP / FCU SELECTED ALTITUDE	
13	(when Selected Altitude Type = 0)	
14	FMS SELECTED ALTITUDE	
15	(when Selected Altitude Type = 1)	
16	Coding: 111 1111 1111 = 65,472 feet	
17	*** **** *****	
18	000 0000 0010 = 32 feet	
19	000 0000 0001 = 0 feet	
20	000 0000 0000 = No Data or Invalid	
21	LSB = 32 feet	
22	STATUS OF MCP / FCU MODE BITS (0 = INVALID, 1 = VALID)	
23	AUTOPILOT ENGAGED (0 = NOT ENGAGED, 1 = ENGAGED)	
24	VNAV MODE ENGAGED (0 = NOT ENGAGED, 1 = ENGAGED)	
25	ALTITUDE HOLD MODE (0 = NOT ENGAGED, 1 = ENGAGED)	
26	APPROACH MODE (0 = NOT ENGAGED, 1 = ENGAGED)	
27	SIGN = +/- 180 degrees (or just 180 degrees in Angular Weighted Binary)	
28	MSB = 90 degrees	
29		
30	SELECTED HEADING	
31	Range = [0.0 – 359.296875] degrees Resolution = 0.3515625 degrees	
32	(Typical Selected Heading Label = "101")	
33	Coding: 11 1111 1111 = 359.296875 degrees	
34	** **** *****	
35	00 0000 0010 = 0.3515625 degrees	
36	00 0000 0001 = 0.0000000 degrees	
37	00 0000 0000 = No Data or Invalid	
38	LSB 0.3515625 degrees (180/512)	
39		
40	NAVIGATION ACCURACY CATEGORY__ POSITION (NAC _p)	Moved entire subfield up by 1 bit: otherwise, no change from that previously proposed in Brussels meeting.
41	NAVIGATION INTEGRITY CATEGORY_BARO (NIC _{BARO})	Moved up 1 bit; no change from BRU.
42	SYSTEM INTEGRITY LEVEL (SIL)	Moved up 1 bit; no change from BRU.
43	MSB = 204.8 millibars	
44		
45	BAROMETRIC PRESSURE SETTING	
46	MINUS 800 millibars	
47	Range = [0, 408.8]	
48	Coding: 1 1111 1111 = 408.00 millibars	
49	* **** *****	
50	0 0000 0010 = 0.800 millibars	
51	0 0000 0001 = 0.000 millibars	
52	0 0000 0000 = No Data or Invalid	
53	LSB = .8 millibars	
54	SPARE	SPARE
55	TCAS OPERATIONAL (0 = NOT OPERATIONAL, 1 = OPERATIONAL)	Changed to 1 bit as RA is now broadcast
56	EMERGENCY / PRIORITY STATUS	No change from prior defintions.