

CHANGE ISSUE – RTCA/DO-242

MASPS for ADS-B

Rev B

Tracking Information (committee secretary only)	
Change Issue Number	82
Submission Date	18 November 2009
Status (open/closed/deferred)	CLOSED
Last Action Date	09/15/2010

Short Title for Change Issue:	Removal of the CDTI Capability Flag and replacing it with an ADS-B IN Flag
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MASPS Document Reference:		Originator Information:	
Entire document (y/n)	y	Name	Thomas Pagano, FAA
Section number(s)		Phone	609-485-5387
Paragraph number(s)		E-mail	thomas.pagano@faa.gov
Table/Figure number(s)	Tables	Other	

Proposed Rationale for Consideration (originator should check all that apply):	
<input type="checkbox"/>	Item needed to support of near-term MASPS/MOPS development
X	DO-260()/ED-102 1090 MHz Link MOPS / SARPS
X	UAT MOPS / SARPS
<input type="checkbox"/>	STP/ASAS MOPS
<input type="checkbox"/>	ASA MASPS
<input type="checkbox"/>	ADS-B or related TSO's, AC's or other regulatory guidelines
<input type="checkbox"/>	Item needed to support applications that have well defined concept of operation
<input type="checkbox"/>	RTCA OSED / SPR/Interop: (Approved/In Progress)
<input type="checkbox"/>	RFG OSED / SPR/Interop: (Approved/In Progress)
<input type="checkbox"/>	Has supporting analysis, if candidate stressing application
<input type="checkbox"/>	Item needed to support Ground Station Requirements/Specifications
<input type="checkbox"/>	Item identified during recent ADS-B development activities and operational evaluations
<input type="checkbox"/>	ADS-B MASPS clarifications and/or correction item
<input type="checkbox"/>	Validation/modification of questioned MASPS requirement item
X	New requirement item (must be associated with traffic surveillance to support ASAS or ATC Services)
<input type="checkbox"/>	Other: (Explain)

Nature of Issue:	<input type="checkbox"/>	Editorial	<input type="checkbox"/>	Clarity	<input type="checkbox"/>	Performance	X	Functional
<u>Issue Description:</u>								
<p>In a Working Paper presented to the RTCA SC-186 Plenary meeting and recorded as SC186-WP43-02, Don Walker [at the time] with Honeywell indicated that Honeywell was in the process of updating a transponder to comply with the expected ADS-B OUT Rule requirements, as originally expressed in the FAA draft NPRM. The Working Paper detailed several parameters outlined in DO-242A which were believed not to provide operational benefit in the ADS-B OUT Rule environment. Among these parameters was the “CDTI Traffic Display Capability” flag.</p>								

Originator’s proposed resolution if any:

The subject of deleting the CDTI Capability Flag from the ADS-B Link MOPS was then presented to the Joint WG-3/SG-1 Meeting #24 in Working Paper 1090-WP24-06R1. It was also pointed out during the Meeting discussion that a more efficient spectrum usage (FAA SBS Ground Station TIS-B/ADS-R transmissions) would also be possible with a change to this subfield.

Working Paper 1090-WP26-13 was presented by Tom Pagano to propose redefining the CDTI Capability bit to the “1090ES IN” bit, and to propose an additional bit to define the “UAT IN” capability. Action Item 26-04 was accepted by Tom to produce a working paper containing specific proposed 1090ES MOPS changes to conform to his basic proposal. During Joint WG-3/SG-1 Meeting #28 the bits to accomplish this were specifically defined, reviewed and agreed upon in Working Paper 1090-WP28-28, and the changes were implemented into the drafts of DO-260B/ED-102A and later after discussion by WG-5, into the draft of DO-282B.

Note: Attach additional sheets to capture supporting discussion with source and date.

Issue History:

Issue Paper IP 12 was originally proposed by Captain Bob Hilb, who was at the time with UPS Airlines. IP 12 outlines several sections of what became DO-242A dealing with the CDTI Capability Flag and the TCAS Installed and Operational Flag. These parameters were included in DO-242A, DO-260A, DO-282A, and the 1090ES and UAT SARPs documents.

Beginning with the discussion surrounding Working Paper SC186-WP43-02, it was agreed by RTCA, EUROCAE and ICAO ASP that the CDTI Capability Flag should be deleted from the updated drafts of the Link MOPS and SARPs, and replaced by the 1090ES IN and UAT IN Flags.

It now becomes a matter of searching through DO-242A and deleting references to the “CDTI Traffic Capability Flag” and replacing them appropriately with references to the 1090ES IN and UAT IN Flags.

Working Group 6 Deliberations:

9/15/2010 – Meeting #17

The reconvened WG-6 reviewed this Issue Paper and agreed that all of the proposed changes have been made to the respective Link MOPS and to the working draft of DO-242B as it will be combined with DO-289.