

CHANGE ISSUE – RTCA/DO-242

# MASPS for ADS-B Rev. A

Tracking Information (committee secretary only)	
Change Issue Number	48
Submission Date	10/18/01
Status (open/closed/deferred)	DEFERRED
Last Action Date	2/01/02

Short Title for Change Issue:	Shared Services Links
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MASPS Document Reference:		Originator Information:	
Entire document (y/n)		Name	Thomas E. Foster
Section number(s)	3.3.6	Phone	319-295-5441
Paragraph number(s)		E-mail	tefoster@rockwellcollins.com
Table/Figure number(s)		Other	Cell 319-651-6711

Proposed Rationale for Consideration (originator should check all that apply):	
<input type="checkbox"/>	Item needed to support of near-term MASPS/MOPS development
	DO-260/ED-102 1090 MHz Link MOPS Rev A
	ASA MASPS
	TIS-B MASPS
	UAT MOPS
<input type="checkbox"/>	Item needed to support applications that have well defined concept of operation
	Has complete application description
	Has initial validation via operational test/evaluation
	Has supporting analysis, if candidate stressing application
<input type="checkbox"/>	Item needed for harmonization with international requirements
<input type="checkbox"/>	Item identified during recent ADS-B development activities and operational evaluations
<input type="checkbox"/>	MASPS clarifications and correction item
X	Validation/modification of questioned MASPS requirement item
<input type="checkbox"/>	Military use provision item
X	New requirement item (must be associated with traffic surveillance to support ASAS)

Nature of Issue:	<input type="checkbox"/> Editorial	<input type="checkbox"/> Clarity	X	Performance	<input type="checkbox"/> Functional
<u>Issue Description:</u>					
<p>Some proposed ADS-B links/networks are not dedicated to the transfer of ADS-B data. These links are shared with other data services concurrently with handling of ADS-B data. A concern with these links is their ability to maintain the specified performance characteristics required by ADS-B while carrying other data services. Potential issues are:</p> <ul style="list-style-type: none"> <li>- Impacts due to continuous or peak link loading from other services</li> <li>- Impacts due to data or link faults from other services</li> <li>- Impacts due to equipment faults associated with other services</li> <li>- Impacts due to subsequent changes to other services</li> </ul>					

Originator's proposed resolution if any:

Add the following new section found on the next page to DO-242A:

**3.3.6.6 ADS-B on Shared Links**

The link media, link equipment, and associated networks selected for ADS-B data may be dedicated or may support other non-ADS-B data link services. When the chosen link provides shared services, these other services shall not adversely affect the validated ADS-B performance as specified by this MASPS. The ADS-B performance areas to be protected include: ADS-B capacity capability in dense traffic environments, message transmission rates, message reception reliability, message latencies, operational ranges, link integrity, link availability, and link continuity of service. Methods shall be established to assure that subsequent on-going changes related to these other shared services do not compromise the validated ADS-B services.

Working Group 6 Deliberations:

February 1, 2001: It was agreed that this Issue Paper is to be DEFERRED to a future revision of the MASPS.