

ADS-B MASPS DO-242A AdHoc Working Group Workplan Overview

Chairman: Thomas E. Foster
Rockwell Collins
Ph: 319-295-5441
FAX: 319-295-3331
tefoster@collins.rockwell.com

Secretary/Editor: Stuart Searight
FAA Tech Center
Ph: 609-485-5036
stuart.searight@tc.faa.gov

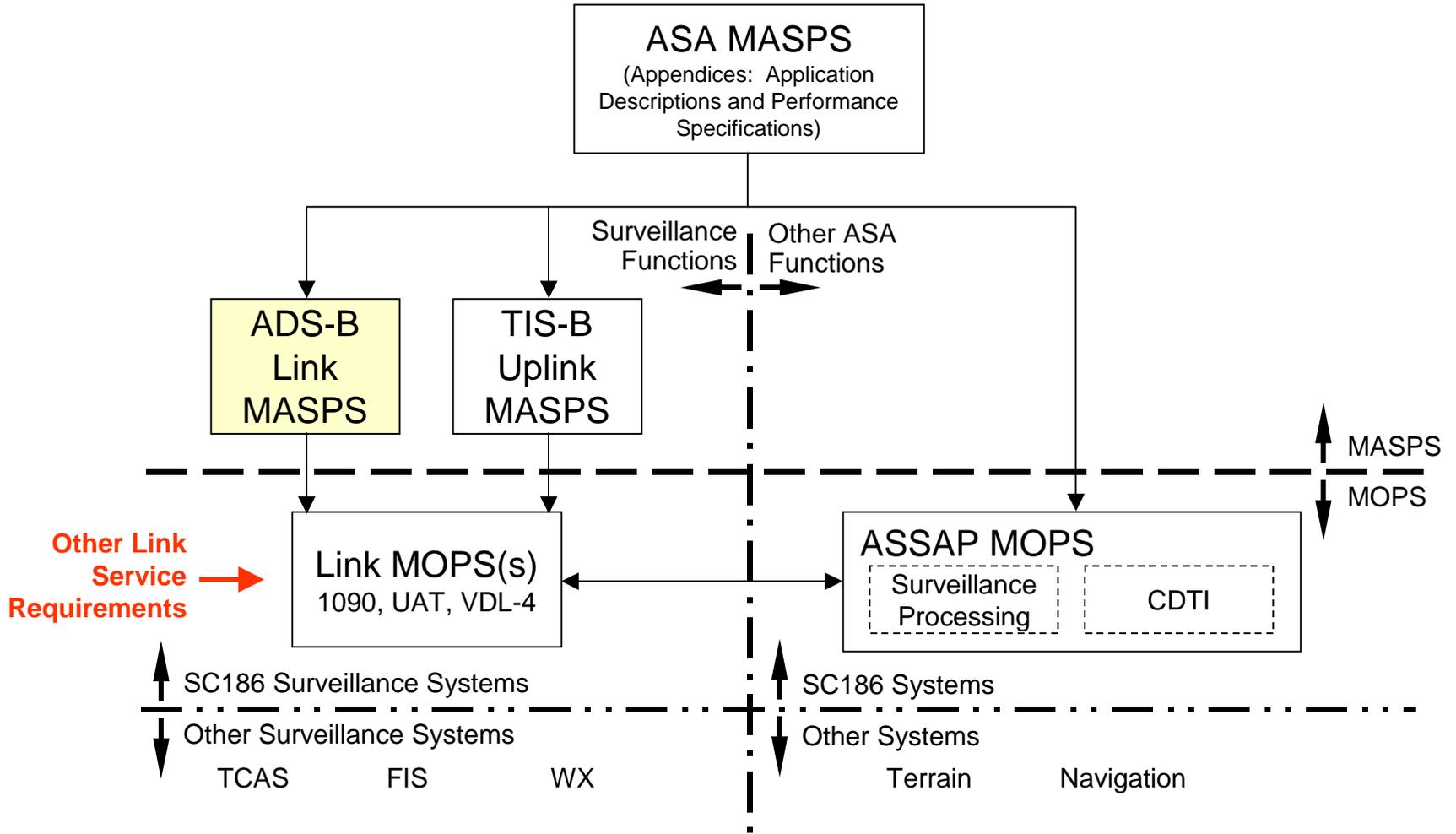
Web Site: <http://adsb.tc.faa.gov>

DO-242A ADS-B MASPS Work Plan

(As reported at December 2000 Plenary meeting)

- Rev. A to support near term related MASPS and MOPS development timelines. Therefore:
 - Need to identify change areas/items needed
 - Prioritize and limit to achieve schedule
- Target completed draft to plenary in 6-9 months
(Revised to December 2001 at February Plenary meeting)
- Work as AdHoc Working Group reporting to Plenary
- Work by frequent working meetings and interim coordination telecons
 - Most meetings to be held in Washington DC area
 - One or two meetings in Europe
- Assemble a Distribution List and use a Web site for dissemination of AdHoc Group materials

SC-186 Document Relationship Chart



MASPS Change Process

- Criteria defined for considering changes for inclusion in Rev A
- Use of Change Issue Papers (IP) to document issues and considerations
 - Change Issue Paper template available on Web
 - Use Tracking Matrix for quick summary
- Current Status
 - 30 IP Total
 - 24 Open
 - 2 Deferred
 - 3 Rejected
 - 1 Closed

Criteria for Selecting Change Items

- MASPS issues that need to be addressed to support near-term MASPS/MOPS development
 - DO-260/ED-102 1090 MHz Link MOPS Rev A (6/2002)
 - ASA MASPS (12/2001)
 - TIS-B MASPS (6/2001)
 - UAT Link MOPS (1/2002)
- Address applications change items only for applications that have well defined concepts of operation. At least one of the following:
 - Have complete application descriptions
 - Initial validation through early operational evaluation experience
 - Have supporting analysis for candidate stressing applications
- Address items needed for harmonization with international requirements
- Address items identified during recent ADS-B development activities and operational evaluations
- MASPS document clarifications and corrections
- Validation/modification of questioned MASPS requirements
- For a new requirement to be considered, it should be needed to support surveillance for traffic separation assurance
- Military use provisions

Issue Paper List

<u>IP #</u>	<u>Current Status</u>	<u>Author</u>	<u>Description</u>
IP 01	OPEN	Stephen Heppe, ADSI, Inc	Turn indication is problematic and should be deleted as a required ADS-B message element
IP 02	OPEN	Stephen Heppe, ADSI, Inc	Altitude rate is problematic and should be deleted as a required ADS-B message element.
IP 03	OPEN	Stephen Heppe, ADSI, Inc	Effective received reporting rates should be adjusted to match operational requirements.
IP 04	DEFERRED	Gary Livack, FAA	Comments from 1090 MOPS ballot regarding broadcasting of own aircraft's make and model.
IP 05	OPEN	Gary Livack, FAA	Comment from 1090 MOPS ballot regarding Anonymity Protection for GA aircraft.
IP 06	OPEN	Gary Livack, FAA	Comments from 1090 MOPS ballot regarding broadcasting of information from moving and stationary obstacles in and around airports.
IP 07	REJECTED	Gary Livack, FAA	Comments from 1090 MOPS ballot regarding broadcasting of additional information not currently specified in MASPS for future use.
IP 08	OPEN	James Maynard, UPS-AT	Comments from 1090 MOPS ballot regarding problem with selection of type codes based on accuracy without incorporating integrity.
IP 09	OPEN	Chris Moody, Mitre/CAASD	Comment from 1090 MOPS ballot regarding the use of velocity subtypes 3 and 4.
IP 10	OPEN	Chris Moody Mitre/CAASD	Comment from 1090 MOPS ballot questioning if VFR/IFR distinctions on data source requirements is proper.
IP 11	OPEN	Bob Hilb, UPS	Comment from 1090 MOPS ballot requesting clarification on the use of the "TCP Data Valid" subfield.

Issue Paper List (cont.)

<u>IP #</u>	<u>Current Status</u>	<u>Author</u>	<u>Description</u>
IP 12	OPEN	Bob Hilb, UPS	Comments from 1090 MOPS ballot requesting broadcast of aircraft's CDTI and TCAS/ACAS capabilities and TCAS/ACAS RA information.
IP 13	OPEN	Rick Cassell, Rannoch Corp.	Comment from 1090 MOPS ballot regarding changing of broadcast rate from 0.5 seconds to 5.0 seconds.
IP 14	OPEN	Rick Cassell, Rannoch Corp.	Comments from 1090 MOPS ballot regarding the MOPS not addressing the use of a "certified navigation center" with own position.
IP 15	REJECTED	Stephen Heppe, ADSI, Inc	Proposal to consider altitude differential when determining effective received update rate.
IP 16	DEFERRED	Stephen Heppe, ADSI, Inc	State Vector reporting rate requirements for users transmitting TCPs
IP 17	REJECTED	Stephen Heppe, ADSI, Inc	Use of TIS-B for integrity enhancement
IP 18	OPEN	Gary Livack, FAA	Comments from 1090 MOPS ballot regarding broadcasting of own aircraft's heading at Vstop.
IP 19	OPEN	Gary Livack, FAA	Comments from 1090 MOPS ballot regarding broadcasting of own aircraft's brake "on" or "off" position.
IP 20	CLOSED	Chris Moody, Mitre/CAASD	Comments from 1090 MOPS ballot regarding ambiguity of velocity subtypes.
IP 21	OPEN	Tony Warren, Boeing	TCP Types and parameters to represent trajectory Change segments.
IP 22	OPEN	Gary Livack, FAA	Means needed to support backwards compatibility between ADS-B versions.
IP 23	OPEN	Gary Livack, FAA	Ability to broadcast capability to perform specific applications.

Issue Paper List (cont.)

<u>IP #</u>	<u>Current Status</u>	<u>Author</u>	<u>Description</u>
IP 24	OPEN	Gary Livack, FAA	NAC specificity requirements for surface applications
IP 25	OPEN	Gary Livack, FAA	Military formation flying message set.
IP 26	OPEN	Richard Barhydt, NASA	Format for incorporating Short and Long-Term Intent Information.
IP 27	OPEN	Richard Barhydt, NASA	Benefits of including Heading and Airspeed in State Vector Report.
IP 28	Not yet considered.	Stephen Heppe, ADSI, Inc	Air-referenced parameters should be excluded from normal/default State Vector transmissions.
IP 29	Not yet considered.	Stephen Heppe, ADSI, Inc	The MASPS should not require geometric altitude in all SV reports.
IP 30	Not yet considered.	Stephen Heppe, ADSI, Inc	Proposed clarification for definition of ADS-B

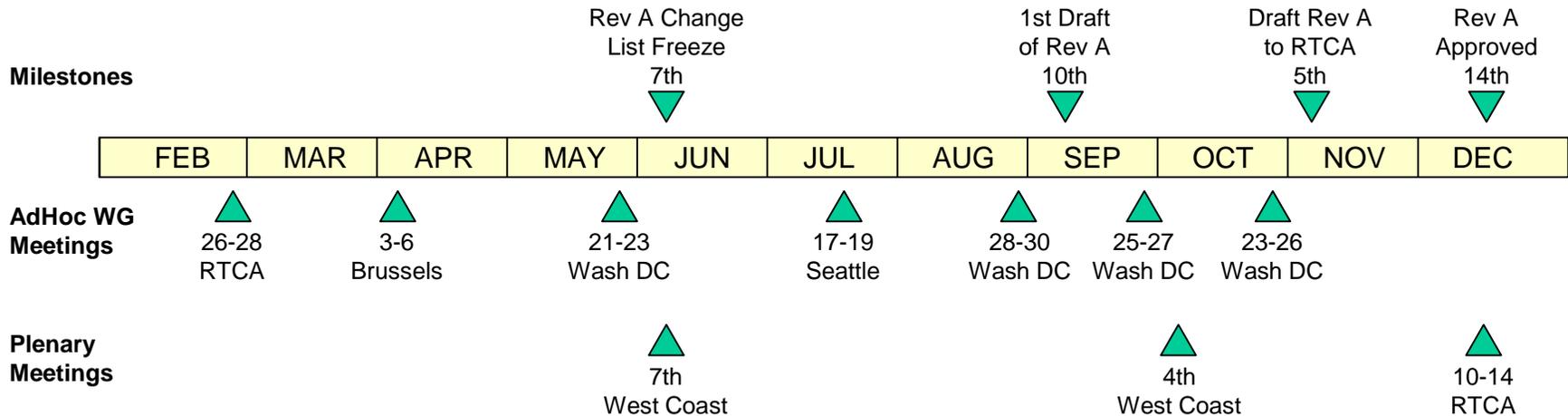
Prior Meeting Summary

- 7-8 Dec at MITRE - Tysons Corner, VA
 - Kick-off meeting
 - ASA MASPS/ADS-B MASPS split
 - NIC/NAC vs NUC discussion
 - Change criteria
- 22-24 Jan at MITRE - Tysons Corner, VA
 - Intent/TCP discussion
 - Eurocontrol ADS-B briefing
 - Change item assessment/task assignments
- 26-28 Feb at RTCA - Wash DC
 - Plenary results
 - Non-TCP intent discussion
 - Integrity change discussion
 - Military use briefing
 - Issue Paper review

Furture AdHoc WG Meeting Schedule

- 3-6 April at Eurocontrol in Brussels ([This meeting](#))
- 21-23 May at Rockwell Collins in Arlington, VA
- 17-19 July in Seattle area
- 28-30 August in Washington DC Area
- 25-27 September in Washington DC area
- 23-26 October in Washington DC area

AdHoc WG Timeline



ADS-B MASPS Web Site

- AdHoc WG Web Site Plan
 - Open communications to parties
 - Contains minutes, working papers, IP template, current IPs, meeting schedule
 - Web Site is Hosted on a FAA TC Web Server

<http://adsb.tc.faa.gov>