



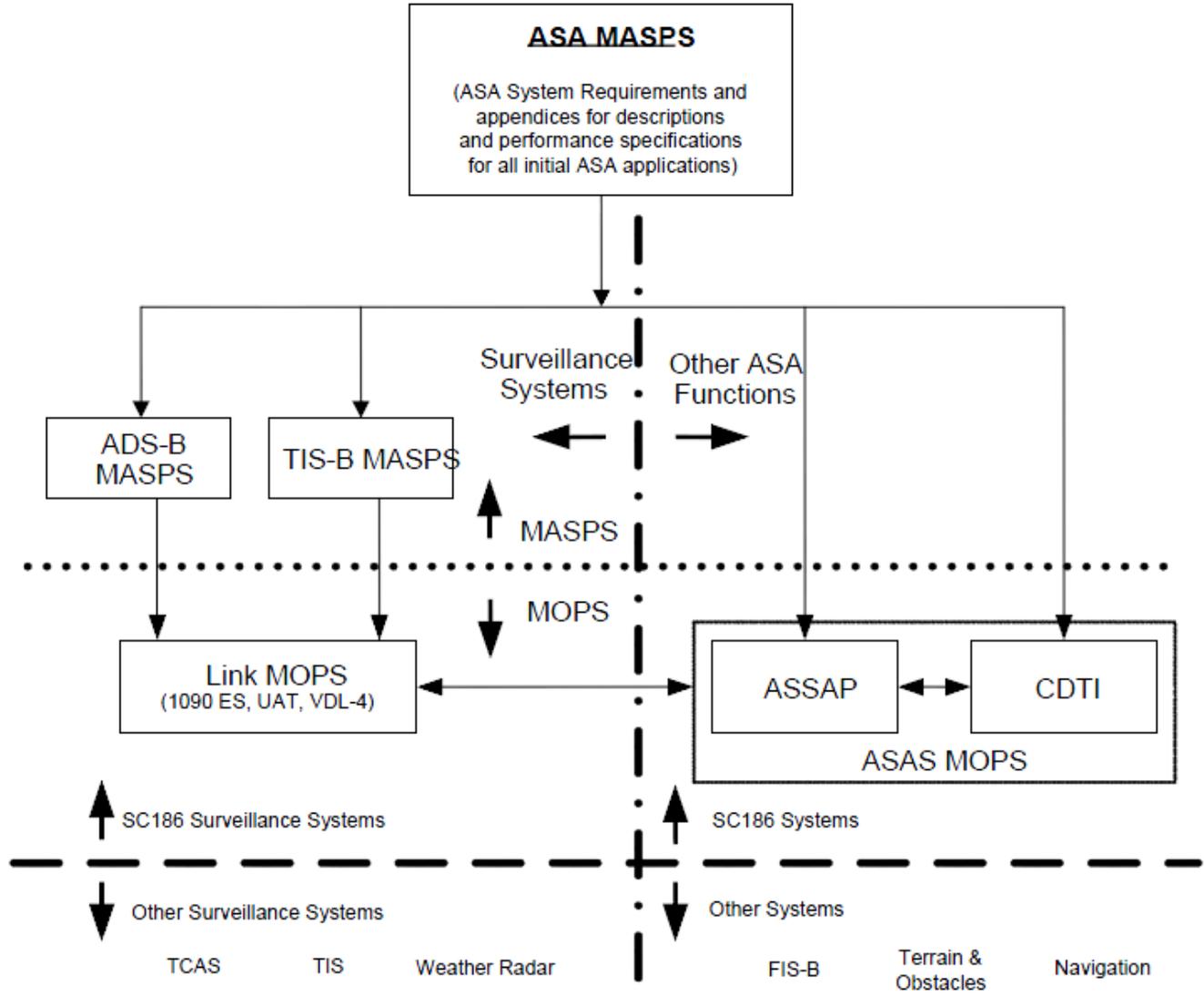
SC-186 Working Group 6 ADS-B & ASA MASPS Status

Presented to SC-186 Plenary

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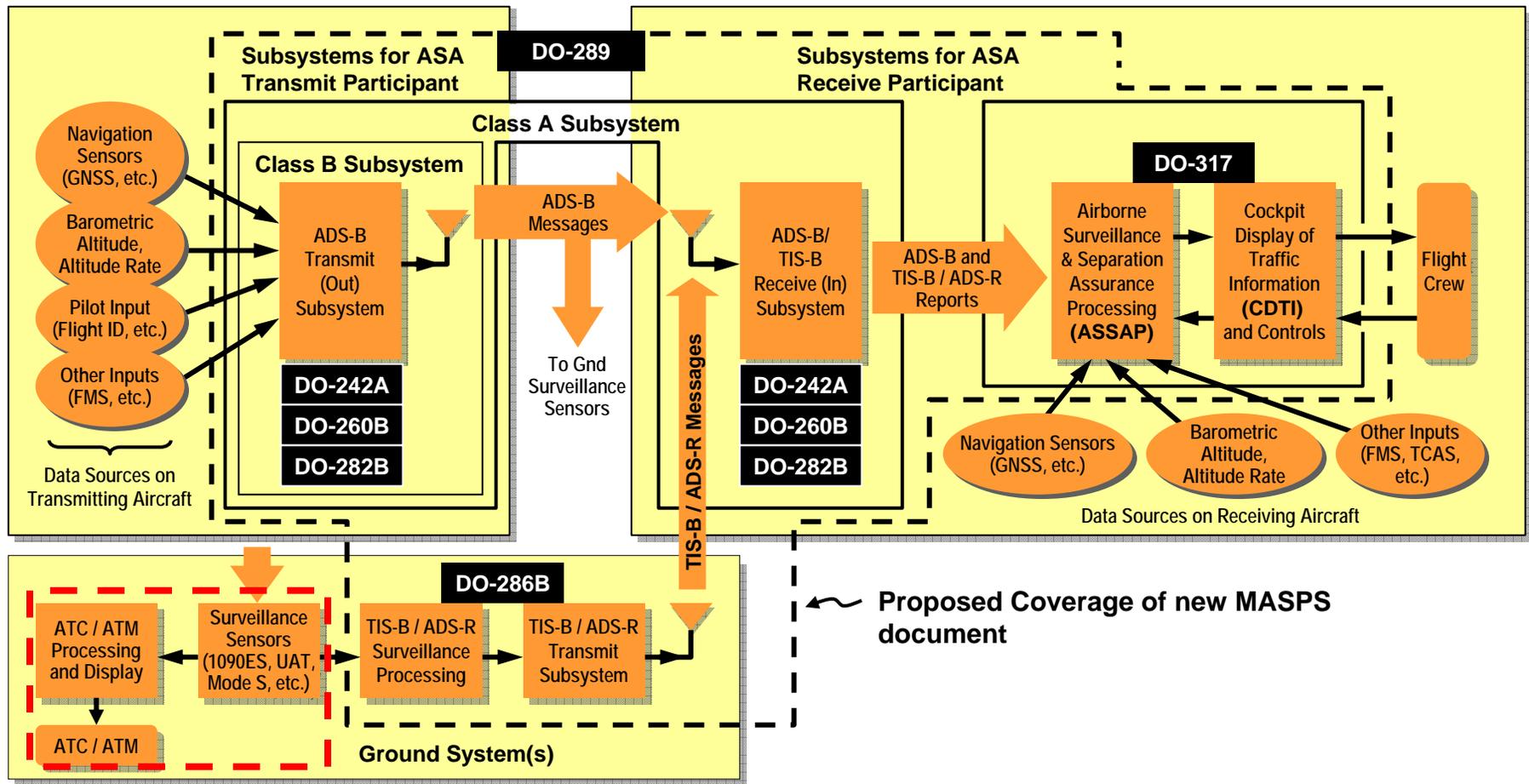
Existing ADS-B Document Structure



Document Process

- **WG6 reviewed existing document outlines and agreed to combine existing MASPS into a new document outline designated as DO-3xx**
- **WG6 agreed that there is a need to preserve existing MASPS documents as reference materials.**
 - Also need to archive inactive reqmts such as TCP / TCP+1 – may be needed for future versions.
- **Recommendation**
 - Have RTCA continue to provide DO-289 including Change 1 and DO-242A including Change 1, as documents available for reference.

Proposed new MASPS Coverage



Should NRA, RAD, APT or GIM be included in the new MASPS document?

New MASPS DO-3xx Outline – Page 1 of 3

1	Purpose and Scope
2	Operational Requirements
2.1	General Requirements
2.2	System Performance – Standard Operational Conditions
3	System Definition and Functional Requirements
3.1	System Scope and Definition of Terms
3.2	System Descriptions
3.3	System Requirements (and ACL)
3.3.1	CDTI
3.3.2	ASSAP
3.3.3	ADS-B Subsystem Requirements
3.4	Messages and Reports
3.5	Subsystem Requirements and Assumptions
3.6	Functional Level Requirements

New MASPS DO-3xx Outline – Page 2 of 3

4	ADS-B IN System Applications Requirements
4.1	Enhanced Visual Acquisition (EVACQ) / ATSA-AIRB (Reference only in DO-3xx)
4.2	Conflict Detection (CD) (TBD)
4.3	Airport Surface Situational Awareness (ASSA) (Reference only in DO-3xx)
4.4	Final Approach and Runway Occupancy Awareness (FAROA) (TBD)
4.5	Enhanced Visual Approach (EVAPP) / ATSA-VSA (Reference only in DO-3xx)
4.6	ATSA – SURF (Reference only in DO-3xx)
4.7	In Trail Procedure (ITP) (Reference only in DO-3xx)
4.8	SURF IA (TBD)
4.9	Flight Deck Interval Management – Spacing (FIM-S) (Reference in DO-3xx and add Appendix “I” for intent)
4.10	Ground-Based Interval Management (TBD)

New MASPS DO-3xx Outline – Page 3 of 3

Appendix A	Acronyms and Definitions of Terms
Appendix B	Bibliography and References
Appendix C	Derivation of Link Quality Requirements for Future Applications
Appendix D	Design Tradeoff Considerations (update old 242A-App_G)
Appendix E	Receive Antenna Coverage Constraints (update old 242A-App_H)
Appendix F	Integrity Considerations for ADS-B Applications (rewrite and retitle old 242A-App_I)
Appendix G	Latency and Report Time Error Data (update old 242A-App_K)
Appendix H	Derivation of Track Acquisition and Maintenance Requirements (update old 242A-App_L)
Appendix I	Intent Guidance Material for Future ADS-B Intent Broadcast (update or rewrite old 242A-App_N)
Appendix J	L/W and Position Offset Coding (old 242A-App_P, renamed and updated with GPS Antenna and L/W Changes)
Appendix K	Future Air-Referenced Velocity (ARV) Broadcast Conditions (update old 242A-App_Q)
Appendix L	Determining the Navigation Accuracy Category for Velocity (NAC _v) (rewrite starting with revised Appendix from Link MOPS)
Appendix M	Compatibility of ASA MASPS with ADS-B Standards and Fielded Systems (update of old 289-App_AE)
Appendix N	MASPS / Link MOPS Compliance Matrices (or in each Link MOPS with Change)

TIS-B / ADS-R

- **Consensus of WG6 is that content in existing TIS-B MASPS DO-286B is outdated.**
- **WG6 recommendation is to incorporate relevant updated system level TIS-B requirements into new DO-3xx document.**
- **WG6 recommendation is to also include system level ADS-R requirements in new DO-3xx document.**

MOPS / MASPS Traceability

- **New MASPS must provide clear requirements traceability for both of the Link MOPS and the ASAS MOPS without duplication of their requirements.**
- **New MASPS will have requirements traceability matrix for link MOPS (DO-260B / DO-282B).**
- **All existing requirements in DO-242A and DO-289 will be tagged during the development process to ensure there is a record of their disposition in new MASPS:**
 - 1. Moved into new document section (& updated if required)
 - 2. Deleted because they were duplicated in other MASPS.
 - 3. Overcome by events

Proposed ADS-B Document Structure

