

**Summary of the 41st Meeting  
 Special Committee 206  
 Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services**

**Executive Summary**

**SG-1/6 — MASPS for AIS/MET Data Link Services**

- The information required for Annex A (OSD / Use Cases), Annex B (OPA), and Annex C (OSA) is now largely available. The three services descriptions (uplink, downlink, and crosslink use cases) are pretty mature. Leads have been assigned for every section in the MASPS.
- SG-1/6 is requesting to slip the due date to September 2016. The plan to get there: By the December plenary, the annexes are mature and sections 1, 2, and 3 are more than 70% complete. By February have a complete draft MASPS. At the March plenary review it. At the June plenary present it for approval for FRAC release. At the September plenary complete FRAC. This is an aggressive schedule but due to FAA programmatic budget realities the MASPS needs to be delivered in FY16.

**SG-4 — MOPS for Eddy Dissipation Rate (EDR)**

- A draft template for an EDR MOPS intended use / performance objectives table was developed. The table is to be populated in a phased approach with input from industry and the FAA.
- SG-4 is requesting to slip the due date to September 2017 due to a dependency on the FAA Peak EDR recommendations report expected in late February 2017. The plan through 2016: Approve the intended use table template at the December plenary. Assign MOPS sections writing responsibilities. Complete the intended use table. Develop and mature MOPS material for Mean EDR. Begin drafting MOPS. Develop and mature MOPS material for Peak EDR.

**SG-7 — Guidance for Uplinking Wind Information**

- High-level hypotheses have been defined for wind information needs for Wake, RTA, and IM operations. Responsible lead parties were identified for Wake (FAA led Wake Team) and RTA (MIT LL). Need responsible lead party for IM. The hypotheses approach will allow the document to have data and analysis behind the recommendations. Priorities were established (IM, Wake, RTA) with a view to where industry and the FAA are on these and the maturity and availability of documents.
- SG-7 is requesting to slip the due date to December 2016. Next steps: Meet with ATC and PMO for IM and RTA TBO concepts to review hypotheses. Coordinate responsible lead party for IM. Determine assignments and meeting schedule. Have an initial draft of document for the next plenary.

**Tentative SC-206 plenary roadmap:**

SG	Deliverable	2015	2016				2017			
		Dec	March	June	Sept	Dec	March	June	Sept	Dec
		DC	ATL	Ottawa	DC	DC	TBD	TBD	DC	N/A
1/6	AIS/MET MASPS			Fapp	Fres	PMC				
7	Winds Guidance				Fapp	Fres	PMC			
4	EDR MOPS							Fapp	Fres	PMC

Fapp = Approve for release for FRAC process

Fres = Resolve FRAC comments

PMC = RTCA Program Management Committee document approval decision

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

## Monday

### Opening Plenary

Co-chairs Rocky Stone and Allan Hart welcomed the attendees to the 41st meeting of SC-206. The meeting was held September 14 – 18, 2015, at United Airlines headquarters in Chicago.

Opening plenary agenda:

1. Announcement from the Designated Federal Officer (DFO)
2. RTCA proprietary references policy
3. Welcoming remarks from the chairmen and host
4. Attendee introductions
5. Agenda for the week
6. Approve previous meeting minutes
7. Review open action items
8. Sub-Groups status and plans for the week
9. Wake Vortex Tiger Team update
10. Presentations:
  - a) AC 120-76D (FAA EFB guidance) Update
  - b) EUROCAE WG-76 Report
  - c) Time Based Separation (TBS) System at London Heathrow airport

See RTCA Workspace for documents and briefings presented at this meeting:

[http://workspace.rtca.org/apps/org/workgroup/sc-206/documents.php?folder\\_id=4481](http://workspace.rtca.org/apps/org/workgroup/sc-206/documents.php?folder_id=4481)

#### 1. DFO announcement —

Pursuant to the Federal Advisory Committee Act, Eldridge Frazier was the DFO for this meeting. *In accordance with the Federal Advisory Committee Act, this Advisory Committee meeting is open to the public. Notice of the meeting was published in the Federal Register. Attendance is open to the interested public. With the approval of the Chairs, members of the public may present oral or written statements at the meeting. Persons wishing to present or obtain information should coordinate with the RTCA Program Director and Chairs of SC-206.*

#### 2. RTCA proprietary references policy —

Patented technology and copyrighted material required for compliance with an RTCA standard may be included in the standard if RTCA determines it provides significant benefit. If your company holds a patent relevant to a document being developed, advise RTCA and SC-206.

#### 3. Remarks from the chairmen and host —

Rocky Stone provided logistical information for the meeting.

Major goals this week:

- AIS/MET MASPS: Complete the service descriptions, OSA, and OPA. Start body of MASPS.
- EDR MOPS: Resolve peak requirements with A4A and create the first draft of the MOPS.
- Winds Uplink Guidance: Resolve hypotheses and methods for testing deliverables.

#### 4. Attendee introductions

- |                          |                            |
|--------------------------|----------------------------|
| 1. Allan Hart, Co-chair  | Honeywell                  |
| 2. Rocky Stone, Co-chair | United Airlines            |
| 3. Moin Abulhosn         | FAA Aircraft Certification |

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

- |                              |                                |
|------------------------------|--------------------------------|
| 4. Farid Aknine (telecom)    | North Star Group               |
| 5. Laurence Audenaerd        | MITRE                          |
| 6. Louis Bailey              | Boeing                         |
| 7. Andy Borgyos              | GE Aviation                    |
| 8. Sophie Bousquet (telecom) | RTCA                           |
| 9. Joe Bracken               | AvMet                          |
| 10. Bill Carson              | MITRE                          |
| 11. Brian Collins            | Southwest Airlines             |
| 12. Stephen Darr             | Dynamic Aerospace              |
| 13. Ernie Dash               | AvMet                          |
| 14. Michael Emanuel          | FAA                            |
| 15. Tom Evans (telecom)      | NASA Langley Research Center   |
| 16. Tom Fahey                | Delta Air Lines                |
| 17. Tammy Farrar             | FAA Aviation Weather           |
| 18. Eldridge Frazier         | FAA Aviation Weather           |
| 19. Kory Gempler             | FedEx                          |
| 20. Izabela Gheorghisor      | MITRE                          |
| 21. Yan Glina                | MIT LL                         |
| 22. Brian Hint               | FAA Flight Standards           |
| 23. Karan Hofmann            | RTCA                           |
| 24. Amanda Hoprich           | AvMet                          |
| 25. Ed Johnson               | NASA (representing FAA)        |
| 26. Polina Kurovskaya        | IANS                           |
| 27. Matthew Lug              | US Air Force                   |
| 28. Clark Lunsford           | MITRE                          |
| 29. Michael McPartland       | MIT Lincoln Labs               |
| 30. Joel Metcalf             | GE Aviation                    |
| 31. Jim Mills (telecom)      | US Air Force                   |
| 32. Karol Molnar             | Honeywell                      |
| 33. Steve Mueller            | Lockheed-Martin                |
| 34. Dan Mulally (telecom)    | Panasonic Avionics             |
| 35. Mark Mutchler            | FAA Small Airplane Directorate |
| 36. Lee Nguyen               | FAA Aircraft Certification     |
| 37. John Pace (telecom)      | North Star Group               |
| 38. Stephan Paris (telecom)  | Airbus                         |
| 39. Tim Rahmes (telecom)     | Boeing                         |
| 40. Lauren Reid (telecom)    | UK MET Office                  |
| 41. Boris Resnick            | IANS                           |
| 42. Dale Tyler               | Panasonic Avionics             |
| 43. Bill Watts               | Delta Air Lines                |
| 44. Jeff Wright              | Delta Air Lines                |

**5. Agenda for the week:**

Monday	Tuesday	Wednesday	Thursday	Friday
Opening plenary	SG meetings	SG meetings	SG meetings	Closing plenary
— SG meetings				

**6. The minutes of the previous meeting (Hampton, VA) were approved.**

**7. Open action items were reviewed.**

**8. Sub-Group plans for the week**

**SG-1/6: AIS/MET MASPS — Bill Carson (MITRE) and Steve Darr (Dynamic Aerospace)**

- Objective: Move from Service Description (SD), OSA, and OPA work to MASPS work
- 1<sup>st</sup> Priorities
  - Generate OSA results for uplink SD
  - Generate OPA results for downlink and uplink SD's
- 2<sup>nd</sup> Priorities
  - Present each final SD, including results of OSA and OPA
  - Develop strategy for combining SD/OSA/OPA results in MASPS
- 3<sup>rd</sup> Priority: Organize SG-1/6 for MASPS writing, by section

**SG-4: MOPS for EDR — Tammy Farrar (FAA) and Bill Watts (Delta Air Lines)**

- Discussions/Decisions: Plans for the week, Scope, A4A, International concerns
- EDR Standards Team Update – Michael Emanuel
- A4A/SG4/FAA EDR Standards Team face-to-face session on “peak” EDR objectives
- Working sessions on MOPS draft

**SG-7: Wind Information Guidance — Ernie Dash (AvMet) and Michael McPartland (MIT LL)**

- Each day: Review background documents and wind information hypotheses
- Wake Operations
- RTA Operations
- IM Operations
- Next steps / develop work plan and schedule

**9. Rocky Stone: Wake Vortex Tiger Team (WVTT) White Paper**

- The WVTT was set up almost 2 years ago to address:
  - Industry requests for standards to support wake vortex safety systems
  - The need for standards for transmitting weather parameters from aircraft
- The objective of the White Paper was to move standards forward through industry-wide consensus for not just wake vortex, but also for ATM and weather applications.
- It was set up by RTCA outside of their normal methodology as an ad hoc group, but there was significant participation from Europe. Later it was brought under the Federal Advisory Committee Act process. That meant a public plenary announced in the Federal Register (July 27-28, 2015), a DFO (Wayne Gallo), and FRAC comments (from ALPA, EASA, FAA, NCAR, SpectraSensors, Rockwell Collins, WMO; all addressed to their satisfaction).
- The White Paper will be an official recommendation from RTCA to the FAA once it's published, and provide a “blue print” for future research and standards development activity.
- Key recommendations:
  - Include weather information at a low rate in ADS-B or other “near real-time” data-link
    - Makes the information available ubiquitously
  - Consider initiating standards activity for transferring weather info via request/reply schemes
    - For ensured delivery of information, or higher update rates than available via ADS-B
- Slight modifications to SC-206's TORs will be submitted to the PMC in December to clarify that we are addressing the White Paper's recommendations. This will not be a major change in direction for SC-206, more a tweak to what we are doing.

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

Comments/Questions:

Regarding the bullet on the “next step” after the WVTT White Paper:

- Collaborate with the FAA on the decisions necessary to implement the recommendations in the White Paper
  - How can weather data be transmitted in near real-time to support ATM, wake vortex, and weather applications
  - ADS-B, request/reply via Enhanced Mode S, others?”

What does “Collaborate with FAA” mean? There needs to be a conversation, but the WVTT doesn’t officially exist anymore. Collaboration through the PMC may not be at the management and technical level you’re looking for.

We know about the FAA’s Wake Turbulence Research Program Office, but we need to better understand what parts of the FAA represent the other two key components you mentioned: ATM and Weather.

Each SC-206 Sub-Group also needs to understand the impact of this on them.

Regarding request/reply via Enhanced Mode S, it is not clear that there is written FAA policy. Most vendors are implementing Mode S solutions and then an ADS-B overlay on top of it. When the ADS-B Out mandate hits in 2020, that’s how some airlines will get there.

Rocky took an action to provide a better understanding of what “Collaborate with FAA” means.

## 10. Presentations

### a. Brian Hint: Update on FAA EFB Policy

- SC-206 does not appear to be going down the EFB path in the AIS/MET MASPS.
- AC 120-76 (FAA EFB guidance) is undergoing a complete rewrite
  - Expect it to be available for public review and feedback by early spring of 2016 and finalized and released around late summer 2016. The logistics are a little tricky because it’s a joint standard between AFS and AIR.
- Changes are also being made to OpSpec A061 because:
  - Over 3,000 OpSpecs issued for EFBs
  - AC 120-76D will focus on EFB program (not hardware)
    - References to EFB Classes removed
    - Reference to Type C software removed
  - ICAO EFB Manual was published August 20, 2015
- Specific policy changes:
  - EFB application names (e.g., Aero) may differ from the general function performed (e.g., aeronautical charts). Appendices 1 and 2 of AC 120-76 identify general function descriptions by underlining key terms.
  - Amendments to the Operations Manual must be accepted by the PI prior to use. However, unless the following list of factors is identified, the PI should must make every attempt to approve the Operations Manual in an expeditious manner:
    1. Initial EFB Program Authorization.
    2. Major Type B EFB Application updates or changes requiring a change to flightcrew training or procedures.

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

3. Major Operating System Software updates or changes requiring a change to flightcrew training or procedures.
4. EFB Hardware updates or changes.
5. EFB Program Procedural/Checklist changes.

Question: How are we coming with ownship?

--Guidance on display of ownship position on the ground was published last year. Jeppesen has taken the lead to represent industry to describe display of ownship position in flight as an EFB function. There has been no change in FAA leadership's position of not allowing display of ownship in flight for certificated operators. There is another alternative he has been working on. They're trying to keep the conversation going.

**b. Boris Resnick & Stephane Paris: EUROCAE WG-76 (AIS/MET Data Link Apps)**

- Boris chairs WG-76 and Stephane is Secretary.
- SC-206 and WG-76 jointly developed DO-308/ED-151 (OSED, Dec 2007) and DO-324/ED-175 (SPR, Dec 2010). The first joint meeting was 10 years ago. After publication of the SPR, WG-76 suspended activities.
- WG-76 has been officially reactivated by the EUROCAE Council with new approved TORs. They meet in October 12-13 in Toulouse under the new TORs. SC-206 and WG-76 are not joint at this time.
- Current WG-76 deliverables:
  - Q2 2016: New SPRs, either as an update to ED-175 (DO-324) or as the publication of a separate document.
  - Q1 2018: AIS/MET MASPS targeting 17 services. This is the main deliverable.
- The 17 services:
  - MET uplink services:
    1. Winds & Temperatures Aloft
    2. Wind/Temp Data for Flight Management
    3. Aerodrome Weather
    4. Hazardous Weather
    5. Hazardous Weather in Critical Flight Phases (wind shear, downburst, WV)
    6. Volcanic Ash
  - AIS uplink services:
    7. Airspace Restrictions
    8. Airspace Information Update
    9. Digital NOTAM
    10. Digital ATIS
    11. Runway Visual Range
    12. Taxiway Information
    13. Obstacle Information
  - Mixed AIS/MET uplink services:
    14. Winter Conditions
    15. Runway Information
  - Downlink and Crosslink services:
    16. Special AIREP/AUTOMET
    17. Real-time Aircraft-Derived Data
- Proposed coordination with SC-206:
  - Continue leadership discussions after each meeting of WG-76 or SC-206.

Summary of the 41st Meeting  
RTCA SC-206 – *AIS/MET Data Link Services*

- Update of SPR should be coordinated specifically if published as separate document.
- As soon as identical services are defined by SC-206 and WG-76, the requirements should be coordinated.
- There are no near-term plans for SC-206 and WG-76 to meet jointly.
- Proposed coordination with other groups:
  - WG-78/SC-214 (Data Comm): To properly use their results on FIS, including direct usage of draft INTEROP format where appropriate.
  - WG-72/SC-216 (Aeronautical Systems Security): To address security requirements for each of the 17 services
  - WG-51/SC-186 (ADS-B) and WG-85/SC-227 (Navigation Performance): To ensure proper definition of ATC Winds Service. Interoperability formats and data content should be coordinated with WG-51. WG-85 may define operational requirements for this service.
- Recommendations from the Wake Vortex Tiger Team White Paper may be in scope:
  - SC-206 to develop MASPS with end-to-end performance standards for representative wake/ATM/weather applications as described in DO-339. SPR's should be developed as necessary to support the MASPS.
  - WG-76 to develop follow on documents to DO-339 (e.g. MASPS, SPR, INTEROP) as appropriate to support transmission of aircraft-derived data for immediate decision making.
  - These are already partially in scope of WG-76 as the Real-Time Aircraft-Derived Data Service.

Additional remarks from Stephane:

WG-76 has proposed some specific services on which they would like to instantiate the existing standards. WG-76 decided to first work on the SPR in order to instantiate the requirements for the services they are proposing to define. The idea is to try to answer comments that DO-324/ED-175 SPR requirements would be difficult to implement and that stakeholders did not find a clear and precise definition of the services that would have to be developed, and for which standards would have to be defined. They tried to gather the different operational expressions of the needs of getting information (e.g. MET) onboard or sending MET information to the ground. This resulted in the list of 17 services. They intend to consolidate these in the next months and to start working on the instantiation of safety and performance requirements. Some of the services may be merged together or may be simplified or may be rearranged so that they fit properly into the actual operational need. The list of 17 services is a first draft of services that they would like to come up with standards for in the coming years.

Comments from SC-206:

WG-76's document delivery schedule looks optimistic.

The security of aeronautical systems has become a hot topic in the industry. SC-206 has not done much with security yet but probably will in the future.

SC-206, in its first attempt at the AIS/MET MASPS, tried to identify a set of services that was widely agreed upon within SWIM, NextGen, SESAR, and industry but was unsuccessful. SC-206 has now taken the approach of Uplink, Downlink, and Crosslink services, with an example of a Service Description for each. The fact that WG-76 has come up with a list of services is interesting.

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

There is not much interest within SC-206 in reopening DO-324 (SPR). Instead, SC-206 is attempting to supersede the SPR with the Annexes in the AIS/MET MASPS.

Sophie has been very good about trying to keep SC-206 and WG-76 talking. This will probably now fall on Karan's shoulders. Leadership of the two committees does talk after major events. Coordination between the two groups will continue and it is possible that they will come back together. We can't say that they will but will keep working toward that.

**c. Steve Mueller: "Intelligent Approach" Traffic Separation**

- The Intelligent Approach tool suite was developed by Lockheed Martin and United Kingdom air navigation service provider, UK NATS. It optimizes approach spacing for aircraft through distance-based separation (DBS) and time-based separation (TBS). TBS reduces separation minima during certain wind conditions by using current wind data derived from arriving aircraft via the European mandated ADS-B Enhanced Surveillance (EHS) capability which includes downlink of additional aircraft parameters (DAP).
- Wake vortices dissipate more quickly in strong headwind conditions. Therefore the distance between certain aircraft can be reduced and the time between landings can be kept similar to those arriving in light headwinds.
- Historically, strong head winds have been the biggest cause of arrival delays at London Heathrow (LHR). TBS minimizes the impact of strong headwinds on landing rates, thereby reducing delays and cancellations. With TBS, delays due to headwinds at LHR were reduced by 50%. The system went operational at LHR in March 2015. The EU has required TBS to be implemented at other specified major airports by 2024.

This concluded the opening plenary session. Sub-group meetings were held the rest of the day.

**Tuesday through Thursday**

Sub-group meetings were held throughout each day.

**Friday - Closing Plenary**

**11. Sub-Group status**

**SG-4: MOPS for EDR**

- The TOR says that EDR calculated by different algorithms should be "operationally comparable." SG-4 is trying to better define that.
- In scope for the MOPS:
  - Onboard sensors and calculations
  - Data validation at ODLP and GDLP (presuming QC function addressed by developer)
  - User requirements: Aircraft, ground, MET info sources, Wake info sources, MET apps
- A draft EDR MOPS intended use table template was developed following discussions with Airlines for America (A4A) representatives. The table is to be populated in a phased approach with input from industry, FAA, and SG-4. The goal is for the table template to be approved at the next plenary.



Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

User		Intended Use	Decision Point	Decision	EDR Value	Accuracy*	POD*	False Alarm Rate*
Example	Flightcrew	Cabin Management	Report of moderate or extended light turbulence	Altitude change	0.3	30	75	15
				Seatbelt sign ON				
				Suspend cabin service				
Aircraft operator	Dispatch	Preflight Route Planning						
		Enroute Flight Following						
	Flightcrew	Cabin Management						
		Route Decisions (lateral / vertical)						
	Meteorology	Forecast Development						
		Forecast Validation						
	Crosslink	Route Decisions						
MET	Forecasters	Forecast Development						
	Modelers	Application Development						
		Forecast Validation						
Wake	Application(s)	Decay-Modeling / Decay Estimating						
ANSP		Airspace Management						

- A 6-month schedule slip has been discussed previously. This will be tight due to the dependency on the FAA Peak EDR recommendation report expected only one month before the plenary meeting that would release the MOPS for FRAC. This will be a challenge.

Feedback from SC-206:

Given the dependency on the FAA report, wouldn't it be better to ask for a 9-month slip than a 6-month slip? Are there any organizations in need of this MOPS that don't want that extra delay?

--None that are known.

It was the preference of SC-206 that SG-4 ask for a 9-month slip in the TOR update.

**SG-7: Guidance for Uplinking Wind Information**

- Accomplished this week:
  - Wake Operations – Aircraft Winds
    - 3 high-level hypotheses
    - Identified responsible parties – FAA led Wake Team
  - RTA Operations
    - 5 high-level hypotheses
    - Identified responsible parties – MIT LL
  - IM Operations
    - 4 high-level hypotheses
    - Need to identify responsible party (to be coordinated with FAA and NASA)
    - Example IM hypothesis: NAS-wide, time separation performance requirements of IM operations can be met in descents to the achieve by point (ABP) at the TRACON boundary (~10,000 ft MSL) in absence of forecast data specifically for the track of the traffic to follow prior to the ABP
  - Reviewed Hypotheses
    - Established priorities (IM, Wake, RTA, etc.) with a view to where industry and the FAA are on these, the level of maturity, and availability of documents

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

- Next Steps
  - Meeting with ATC and PMO for IM and RTA TBO concepts to review hypotheses
  - SG-7 meeting or telecon to determine assignments and meeting schedule
  - Coordinate lead responsibility for IM
  - Initial draft of document for December Plenary
- TOR update
  - SG-7 proposes a 6-month slip for its deliverable.

**Comments / questions:**

The hypothesis stuff is really good. It will allow the document to have data and analysis behind the recommendations.

This is a guidance doc, not a typical RTCA standard (MASPS, MOPS, SPR, etc.). Is it clear to SG-7 what kind of doc you will produce?

--SG-7 has come to consensus on the approach and that is driving the structure, essentially:

1. Introductory material
2. Quality of wind information
3. IM
4. 4D TBO
5. Wake mitigation
6. Conclusions and recommendations
7. Appendices for examples/scenarios

**SG-1/6: AIS/MET MASPS**

- SG-1/6 accomplished everything that they set out to do this week. Thanks to everyone for their work, it's allowed us to make good progress.
- The information required for Annex A (OSED / Service Descriptions (SD) for the use cases), Annex B (OPA), and Annex C (OSA) is now largely available, but the annexes are not fully developed yet. The SD's (one each for uplink, downlink, and crosslink) are pretty mature.
- The body of the MASPS (especially section 3) depends on the content of the annexes, so progress on the annexes has enabled leads for sections 1 – 5 to be assigned. There is also material developed previously by SG-6 that can be reused in some sections.
- MASPS structure and leads:
  1. Purpose and Scope (Allan Hart, Brian Hint)
  2. Approach and Methodology (Allan Hart)
  3. SPR / System Performance Requirements (Mark Mutchler)
  4. Interop Requirements (Jim Mills, Joe Bracken, Tom Evans)
  5. Performance Verification (Joel Metcalf)
  6. Membership (Tom Evans, Karan Hofmann)
    - A. OSED / Use Cases (Steve Darr)
    - B. Operational Performance Assessment (Izabela Gheorghisor)
    - C. Operational Safety Assessment (Bill Carson)
- The goal from now until the December plenary is to get sections 1, 2, and 3 to more than 70% complete, and to mature Annexes A, B, and C. It is expected that sections 4 and 5 will still need input at that time.
- A first complete draft is expected in the January/February timeframe. The goal for the March plenary is to review the draft MASPS. At the June plenary the MASPS will be presented to SC-206 for approval to release for FRAC. This is a fairly aggressive schedule.

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

- Potential impact to TOR: Desire to validate downlink parameters through incorporation into body of MASPS
  - Could create a further delay beyond current 6-month requested slip
  - Plan is to resolve prior to December plenary
  - Rocky and Steve Darr will look at what is necessary to use what has been done for the downlink service description to justify putting the parameters into the body of the MASPS and using that as a means to validate the coverage, rates, resolution, etc. of the downlink parameters.

Comments:

Eldridge said due to FAA programmatic budget realities we must keep this to a 6-month slip. The MASPS can't slip beyond that. This needs to be delivered within FY16.

**12. Rocky Stone: TOR update discussion**

- Rocky showed a modified version of the current TORs as a basis for discussion.
- We have delivered the FIS-B UAT MOPS, so references to that deliverable were removed.
- Proposed revised due dates:
  - AIS/MET MASPS – Sept 2016
  - Winds Guidance – Dec 2016
  - EDR MOPS – Sept 2017
- There are small but significant changes to the description of each deliverable. For the MASPS, the downlink parameter list was added, and the types of uplink information was updated. For the EDR MOPS, the requirement that the outputs are not only operationally comparable, but accurate, was added. The wording for the Winds Guidance element was also clarified.
- The recommended changes to the TOR need to be finalized in the coming weeks and submitted to the PMC by November 30 for approval or adjustment at their December meeting. These changes should not be controversial.
- Some editorial work may be needed, but now is the time to raise major changes.  
--No major issues or objections to the revised TOR were raised.

**13. Allan Hart: Future meeting dates discussion, decisions**

- December 7 – 11, 2015, DC / RTCA
- March 7 – 11, 2016, Atlanta / Delta Air Lines (TBC)
- June 13 – 17, 2016, Ottawa / Nav Canada
- September 2016 (dates to be set at next plenary), DC / RTCA
- December 2016, DC / RTCA

**14. Industry coordination**

Eldridge will attend EASA's "Weather Information Provided to Pilots" workshop in Cologne on October 28 - 29. He will brief on EDR uplink activities at Delta and SC-206 status and documents.

**15. Action item review**

#	Assignee	Action	Date Assigned	Status
263b	Eldridge	Ask Jim Baird to brief SC-206 on the 1090 MHz congestion analysis after the report comes out from FAA Systems Engineering. --Chicago update: Jim is not ready yet.	Dec 2011 DC	Open

Summary of the 41st Meeting  
RTCA SC-206 – AIS/MET Data Link Services

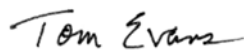
269	Rocky	Coordinate with ARINC re data labels for SG-1 (EDR, weight, wake circulation) --Chicago update: ARINC doesn't want to build a standard until SC-206 knows very definitively what we want, for example what the parameters and rates will be. FAA suggests to keep this action open.	June 2012 Atlantic City	Open Ongoing
282	Moin	Clarify what type of AIS/MET data link MOPS would be needed, if one or multiple MOPS are needed, or one with different sections for different systems.	March 2014 Kansas City	Open
287	Rocky	Talk with leadership of SC-214 about an old open ISRA requesting SC-206 develop safety and performance requirements for D-HzWx applications for SC-214's SPR. See whether SC-206 still needs to deliver something or this ISRA can be closed.	Dec 2014 DC	Open
290	Rocky Stone	Regarding the "next step" after the WVTT White Paper: <ul style="list-style-type: none"> <li>o Collaborate with the FAA on the decisions necessary to implement the recommendations in the White Paper</li> <li>o How can weather data be transmitted in near real-time to support ATM, wake vortex, and weather applications</li> <li>o ADS-B, request/reply via Enhanced Mode S, others?"</li> </ul> Provide a better understanding of what "Collaborate with FAA" means.	Sept 2015 Chicago	Open

**16. Any other business**

Concern was expressed that there could be possible conflict between the Winds Guidance and MASPS documents if they both address downlink. The updated TOR will clarify what Winds Guidance covers. There should be no overlap with the MASPS.

Thanks to Rocky for hosting at United's facilities. Thanks everyone for your effort. This concluded the 41st meeting of SC-206.

CERTIFIED as a true and accurate summary of the meeting.

  
Tom Evans, Secretary

  
Rocky Stone, Co-chair

  
Allan Hart, Co-chair