

## **AEEC Project Initiation/Modification (APIM)**

- 1.0 Name of Proposed Project** **APIM: 11-011**  
**Supplement 2 to ARINC Specification 633: AOC Air –Ground Data and Message Exchange Format**
- 1.1 Name of Originator and/or Organization**  
Dirk Zschunke – Lufthansa German Airlines
- 2.0 Subcommittee Assignment and Project Support**
- 2.1 Suggested AEEC Group and Chairman**  
AEEC Data Link (DLK) Systems Subcommittee
- 2.2 Support for the activity (as verified)**  
Airlines: Lufthansa, Fed Ex (To be confirmed)  
Airframe Manufacturers: TBD  
Suppliers: TBD  
Others:
- 2.3 Commitment for Drafting and Meeting Participation (as verified)**  
Airlines: Lufthansa, TBD  
Airframe Manufacturers: Airbus (To be confirmed), Boeing (To be confirmed)  
Suppliers: Honeywell (To be confirmed), Rockwell Collins (To be confirmed)  
Others: ARINC (To be confirmed), SITA (To be confirmed)
- 2.4 Recommended Coordination with other groups**  
DLK Users Forum, SAI
- 3.0 Project Scope**
- 3.1 Description**  
This project enhances ARINC 633 Flight Plan data model, as well as adding new data structures:
1. ICAO 2012 – enhancement of ATC Flightplan
  2. Add FinalReserve Fuel to the each FuelHeader/AlternateFuels
  3. Add TerrainClearanceAdditionalfuel as a separate fuel element (if required it's mandatory to keep the flight legal)
  4. Add Terrain clearance procedures incl. escape routes
  5. Correction of /FlightPlan/ContingencySavingHeader/AlternateRoute - Max 1 Alternate route should be allowed
  6. Add attribute "sequence" to AlternateRoutes/AlternateRoute and to AlternateFuels/AlternateFuel e.g., as for Waypoint

7. Add Pre-estimated Load
8. Add Pre-estimated Zero Fuel Weight (ZFW)
9. Add Pre-estimated AdditionalFuel
10. Add additional comments/recommendations/best practices to increase the interoperability and the common understanding.
11. Add additional XML file examples for different scenarios ETOPS; Reclearance; ETOPS+Reclearance, complete eff.xml file, etc.
12. Add new simple Structure for MEL Items which have been considered for the flight planning. Containing the Elements: Mel ID, MEL Description, MEL Remark, #Other
13. Add windComponent to the UpperAirData structure as a separate value (now either wind direction/speed or windComponent are allowed, but not both together)
14. Add FlightPlanHeader/TaxiFuelFlow
15. TakeOffAlternate issue and how to deal with it? We could use the current AlternateRoutes structure (which is actually only meant for destination alternates) or create a new one of the same type
16. Schema for Oceanic Tracks
17. Definition of Loadsheets format
18. Definition of ATIS format

### 3.2 **Planned usage of the envisioned specification**

- New aircraft developments planned to use this specification      yes  no
- Modification/retrofit requirement      yes  no   
     Specify: TBD      (aircraft & date)
- Needed for airframe manufacturer or airline project      yes  no   
     Specify: TBD      (aircraft & date)
- Mandate/regulatory requirement      yes  no   
     Program and date:      (program & date)
- Is the activity defining/changing an infrastructure standard?      yes  no   
     Specify      (e.g., ARINC 429)

When is the ARINC Standard required?

September 2012

What is driving this date? \_\_\_\_\_(state reason)\_\_\_\_\_



| Product/Activity | Mtgs | Mtg-Days (Total) | Expected Start Date | Expected Completion Date |
|------------------|------|------------------|---------------------|--------------------------|
| ARINC 633-2      | 3    | 2-3 days         | 10/2011             | 09/2012                  |

The ARINC 633-2 meeting/s may take place at the same time as the DLK Systems Subcommittee meeting. Monthly web conferences as necessary.

**6.0 Comments**

**6.1 Expiration Date for this APIM**

April 2013

|  |                  |
|--|------------------|
| For IA staff use only  |                  |
| Date Received: _____   | IA staff : _____ |
| Potential impact: _____  |                  |
| (A. Safety      B. Regulatory      C. New aircraft/system      D. Other) |                  |
| Resolution: _____  |                  |
| <i>Authorized, Deferred, Withdrawn, More Detail Needed, Rejected)</i>    |                  |
| Assigned to SC/WG: _____   |                  |

*Submit completed form to the AEEC Executive Secretary.*