



THE GOLD STANDARD FOR AVIATION SINCE 1935

RTCA SC-206

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OGC RFI and the AAtS Standards Harmonization

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RTCA SC-206 Overview

- Established in February of 2005 at the request of the FAA
- Complete title is:

Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services



Relevant work to date

DO-308 Operational Services and Environment Definition (OSED) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services



DO-324 Safety and Performance Requirements (SPR) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services



DO-340 Concept of Use (CONUSE) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services

DO-339 (down-link MET service description) was released recently however its relevance to AAtS is not directly mappable



Current Work

- Terms of Reference (TOR) list four standards in development:
 - DO-252A update – MIS
 - Due for delivery in Mid-2014
 - UAT FIS-B Minimum Operational Performance Specification – MOPS
 - Due for delivery in Mid-2014
 - Architecture Recommendations for Aeronautical Information (AI) and Meteorological (MET) Data Link Services – Recommendations
 - Released for Final Review and Comment (FRAC) on October 1st, 2013
 - Aeronautical Information (AI) and Meteorological (MET) Data Link Services Minimum Aviation System Performance Standard – MASPS
 - Scheduled for delivery in Mid-2014; however an extension to Mid-2015 is being considered



RELEVANCE

Context of SC206 and AAtS



Context

- While:
 - Not all of SC206 functionality and services are applicable to AAtS – Example:
 - Locally provided data link services (Alerting services, D-WIDS, etc.)
 - Crosslink
 - Data link specification
 - Not all of AAtS functionality and envisioned available products and uses are applicable to SC206 – Examples:
 - Air Traffic Management information exchanges (reroute information, SWAP routes, EDCT times, etc.)
 - Flight Plans
 - There remains considerable overlap between the two



Data Link Concept

- Concept based on the data link system described in DO-308/ED-151, DO-324/ED-175, DO-339, and DO-340
- DO-339 and DO-340 described a wide range of intended uses
 - Intended use dictates performance requirements for data link services
- Wide variety of users able to leverage data link services
- Data Link : a generic term that encompasses different types of data link systems and sub-systems
 - Leveraged from ICAO GOLD
 - RTCA SC-206 is responsible for defining data link standards for aviation



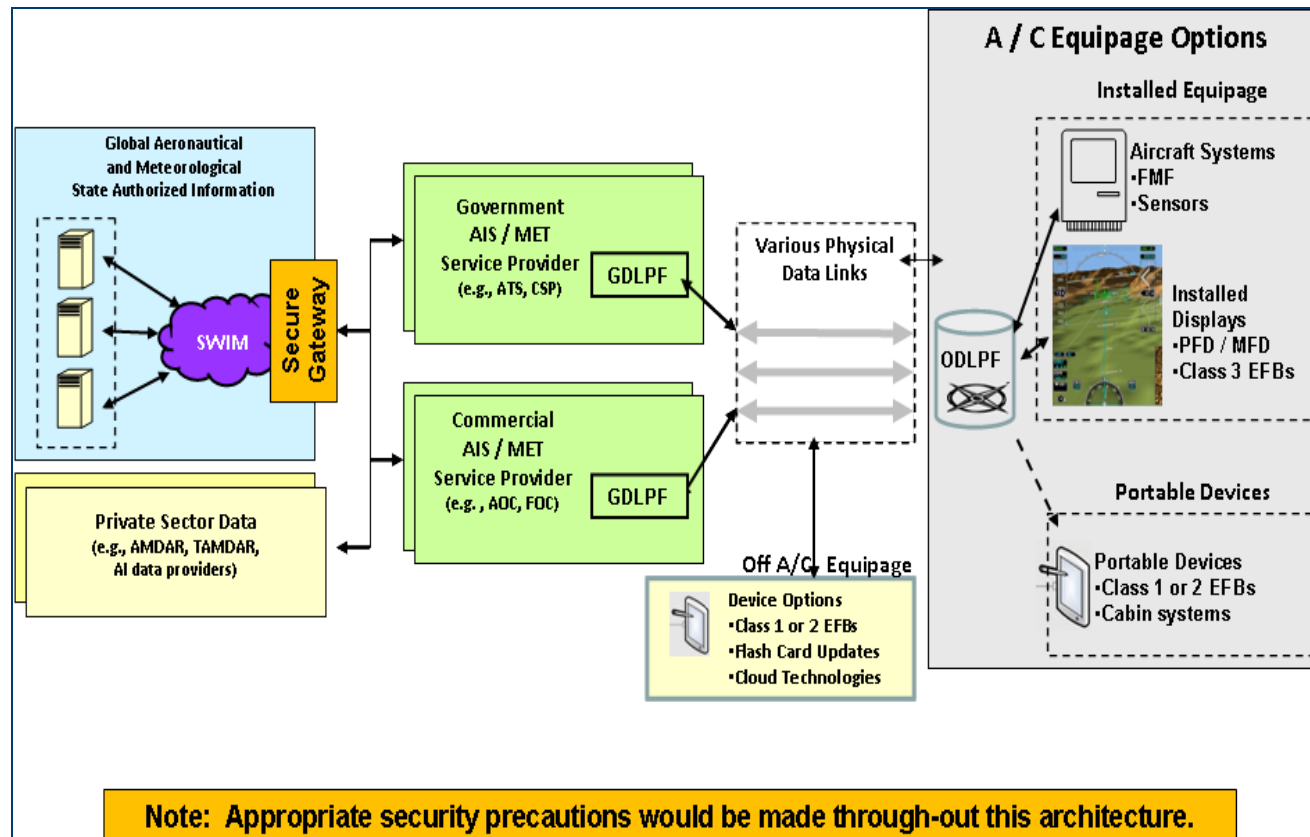
Concepts and Intended Uses

- AIS and MET Delivery Services Concept
 - Category 1: Primary means of communication. Supports the ATS Function
 - Future applications with specific minimum performance requirements
 - Category 2: Useful for communications
 - Currently Exist and Rapidly Expanding with minimal or no performance requirements
- Intended uses define performance: being defined
 - Range from replacing specific pilot/controller procedures; to,
 - Situational awareness; and,
 - Everywhere inbetween



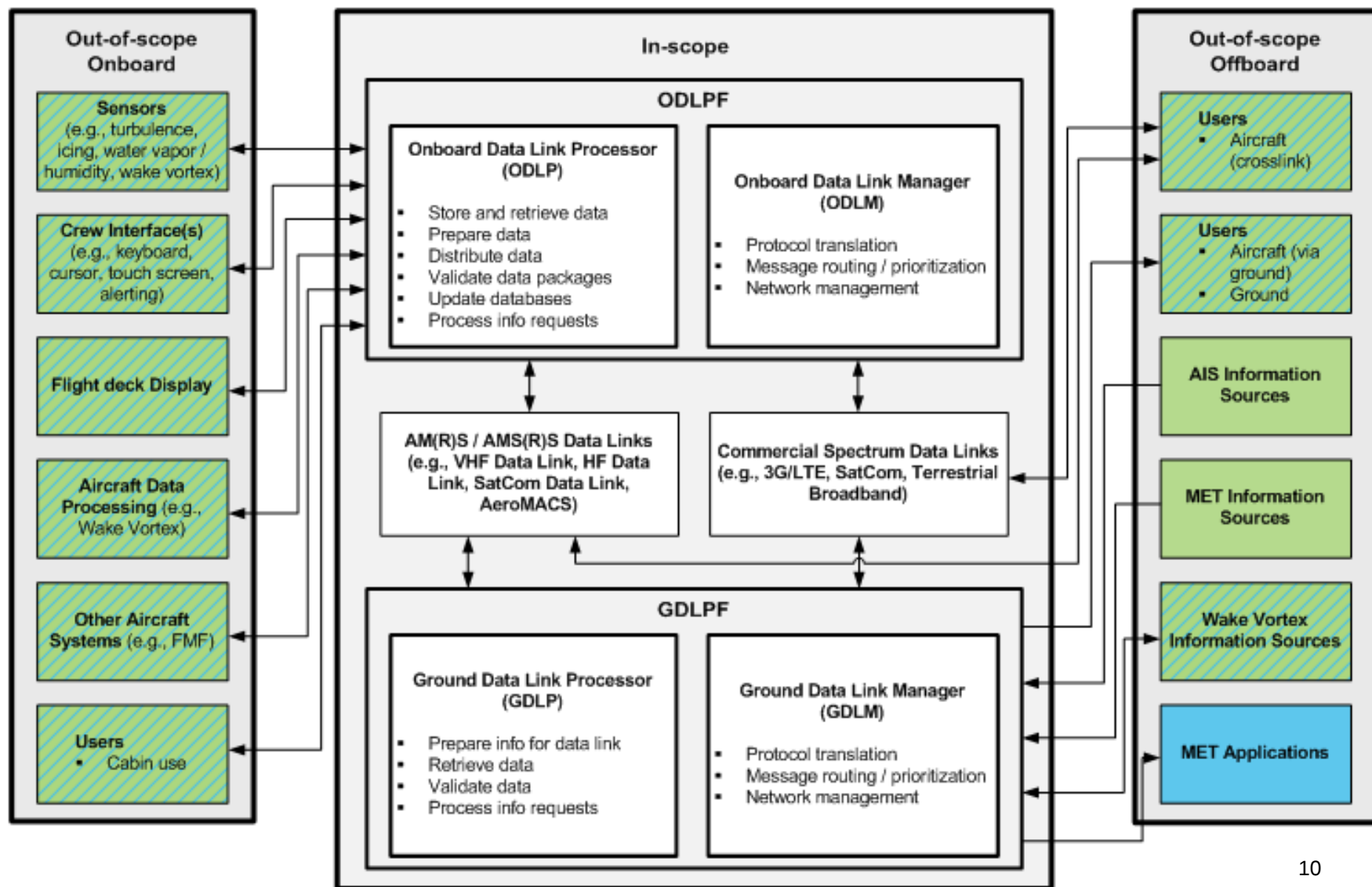
Conceptual Architecture

1. Functional illustration, not a systemic description
2. Based on DO-340 which refined notional architecture in DO-324
3. Describes data link service functions: GDLPF, ODLPF, connecting media (DLSPF)



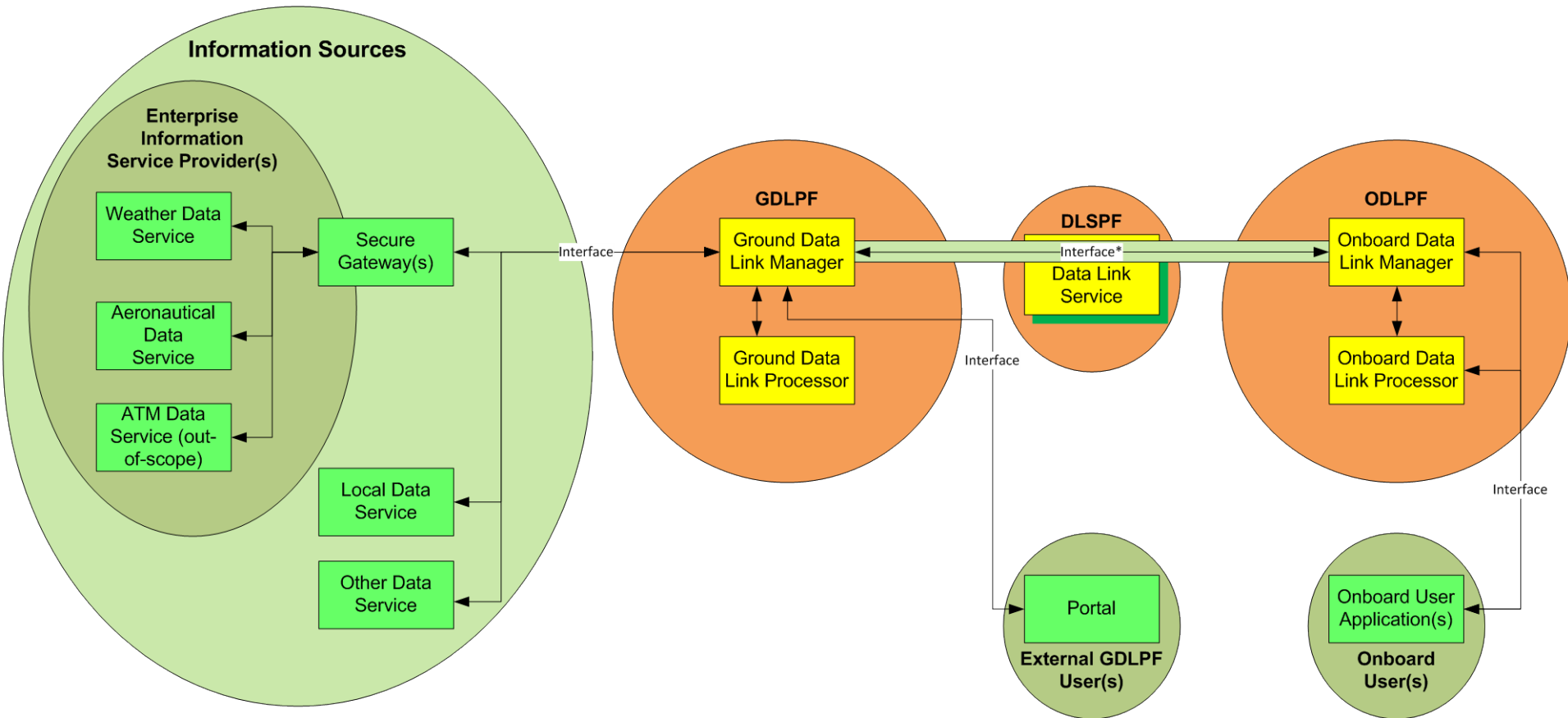


Scope





Logical System and Interfaces



Note

- = System Node
- = System Entity

Green = Systems or services that are out of the scope

Yellow = Systems or services that are wholly defined by these recommendations

Yellow with green shadow = Systems or services that are partially within the scope

* = Application to Application interface where the interface is independent of the delivery media



AIS and MET data link services functions

