



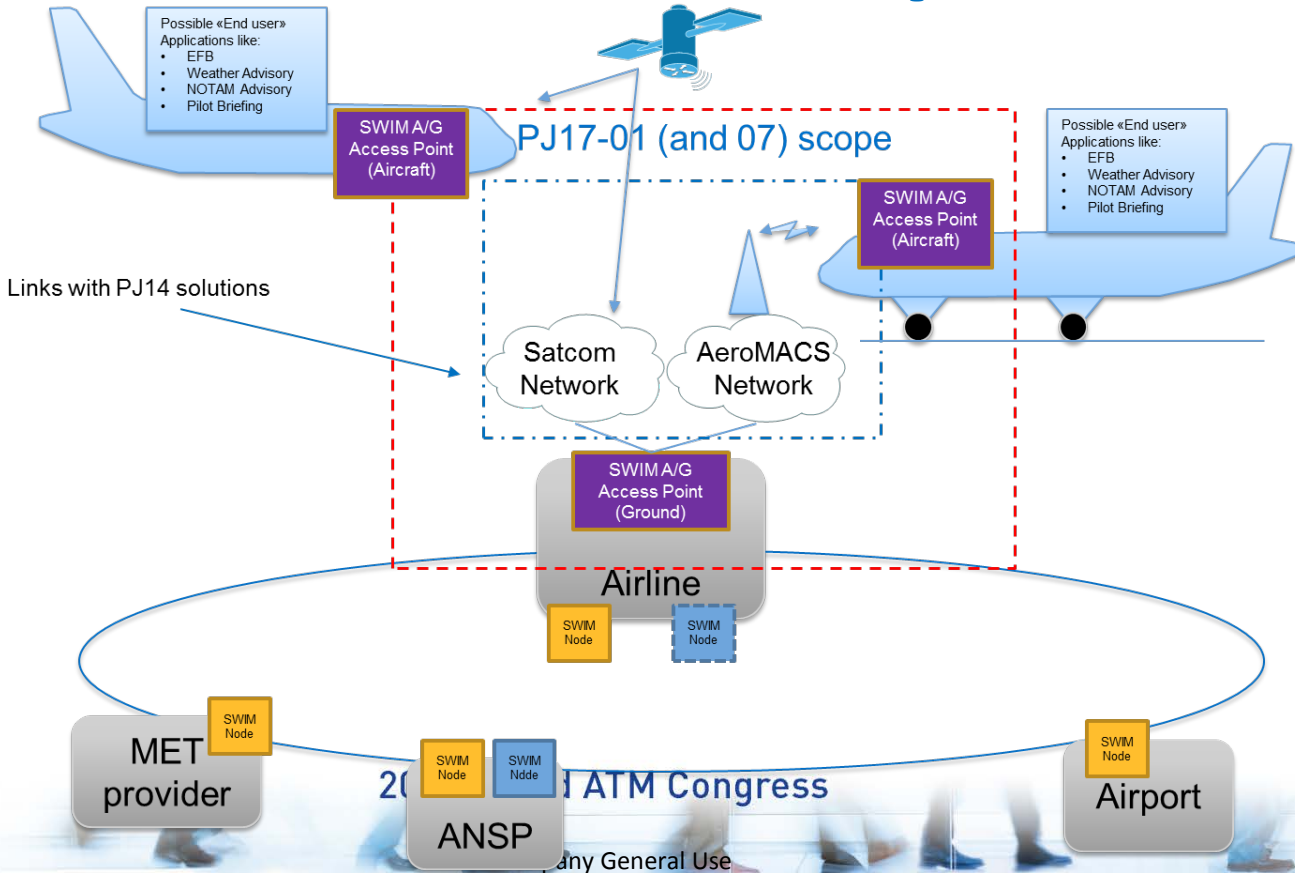
2018
World ATM Congress



PJ17-01

- PJ17-01 (SWIM-TI Purple Profile for Air/Ground Advisory Information Sharing) is one of the 3 solutions included in PJ17 (SWIM Technical Infrastructure)
- It supports ATM operational improvements that depend on Air/Ground (A/G) information exchanges in order to **enable a better situational awareness and collaborative decision making**, with a focus on advisory information.
 - 20 participants (13 beneficiaries + 7 LTPs)
 - Intending to reach TRL6 by the end of 2019 (S2020 Wave1)
 - Currently undergoing TRL4 verification activities
 - 3 different EXEs from different groups of project participants

PJ17-01 HL scope



S2020 PJ17-01 Approach



EUROCAE ED-151 - Operational Services and Environment Definition (OSD) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services, December 2007.

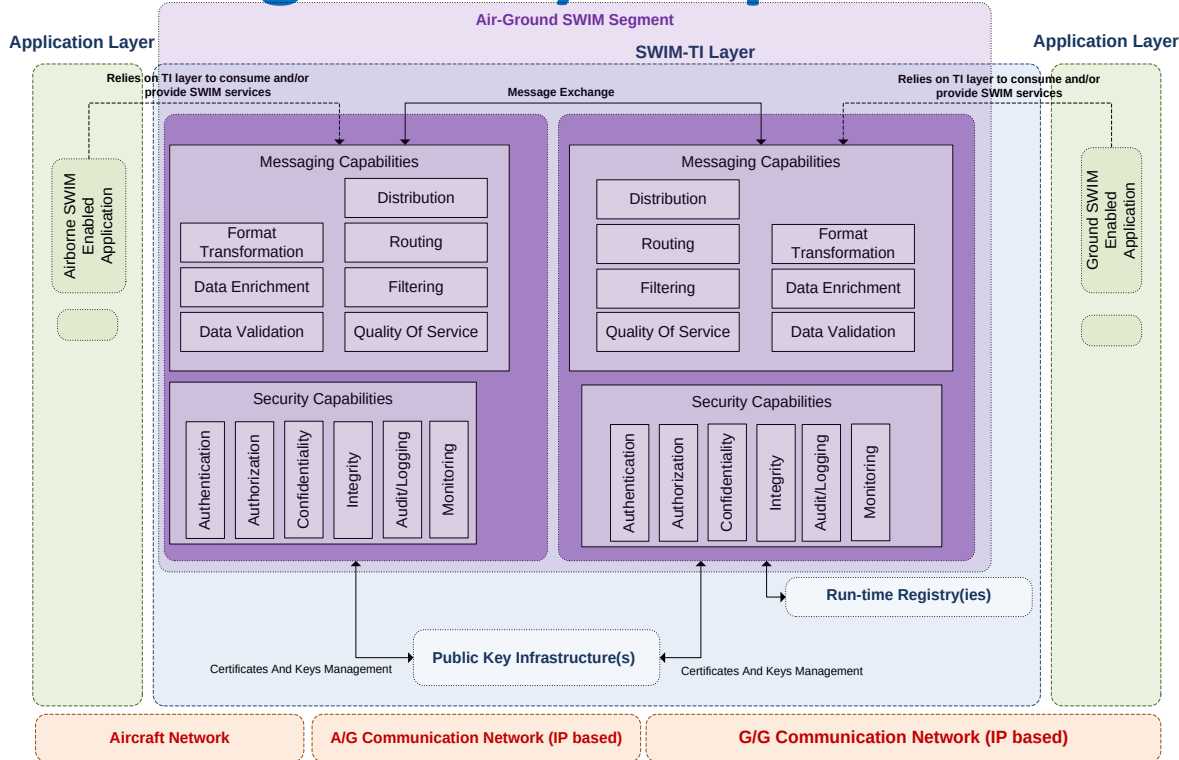


Data link mode	MEP/MEP Family
(ED-151)	
Broadcast	Publish/Subscribe Push (PSPUSH-MEP)
	Request/Response (FDRR-MEP)
Demand	Publish/Subscribe Pull (PSPULL-MEP)
	Request/Multi-Response (FDRMR-MEP)
Contract	Request/Response (FDRR-MEP)
	composed with
	Publish/Subscribe (PS*-MEP)
	Publish/Subscribe (PS*-MEP)



UCID	UC Title	Aircraft role	Ground-based system role	MEP Family	Brief description
PPUC-01a	Aircraft initiated Request/Response information exchange	Consumer	Provider	Request/Response	An aircraft consumes a Request/Response SWIM service provided by a ground-based system (FDRR-MEP).
PPUC-01b	Aircraft initiated Request/Multi-Response information exchange	Consumer	Provider	Request/Response	An aircraft consumes a Request/Response SWIM service provided by a ground-based system (FDRMR-MEP).
PPUC-02	Ground-based system provided Publish/Subscribe information exchange	Consumer	Provider	Publish/Subscribe	An aircraft consumes a Publish/Subscribe SWIM service provided by a ground-based system (PS*-MEP).
PPUC-03a	Ground-based system initiated Request/Response information exchange	Provider	Consumer	Request/Response	A ground-based system consumes a Request/Response SWIM service provided by an aircraft (FDRR-MEP).
PPUC-03b	Ground-based system initiated Request/Multi-Response information exchange	Provider	Consumer	Request/Response	A ground-based system consumes a Request/Response SWIM service provided by an aircraft (FDRMR-MEP).
PPUC-04	Aircraft provided Publish/Subscribe information exchange	Provider	Consumer	Publish/Subscribe	A ground-based system consumes a Publish/Subscribe SWIM service provided by an aircraft (PS*-MEP).

(Some insights on) Purple Profile Design



An example of EXE Set-up



- Leonardo, Selex-GmbH, Frequentis EXE

Leonardo Cockpit
Simulator equipped with
SWIM Airborne Access
Point (@Turin)



Frequentis ePIB (Electronic Preflight
Information Bulletin) Service (@Wien)



Leonardo Lab equipped with SWIM
Ground Access Point and SWIM
Certification Authority (@Rome)



