



ITY-AGDL — Initial ATC Air-Ground Data Link Services

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This SES-related implementation objective is derived from Regulation (EU) No 2015/310 of 26 February 2015, amending Regulation (EC) No 29/2009 of 16 January 2009 and repealing Regulation (EU) No 441/2014, laying down requirements on data link services for the single European sky.

Regulation (EC) No 29/2009 applies to air-ground data communications systems, their constituents and associated procedures and to flight data processing systems serving air traffic control units providing services to general air traffic, their constituents and associated procedures [Ref. Article 1(2)].

Regulation (EC) No 29/2009 requires the interoperable implementation of the first set of en-route non-time critical air-ground data link services DLIC, ACL, ACM and AMC [Ref. Annex II].

This regulation applies to all flights operating as general air traffic in accordance with instrument flight rules above FL 285, within the defined airspace areas [Ref. Article 1.1 of Regulation (EU) 2015/310].

The terms used in this objective are defined in Article 2 of Regulation (EC) No 549/2004 and in Article 2 of Regulation (EC) No 29/2009.

In 2016, what is known as the ELSA Consortium Study was finalised. The Study addresses the recommendations made by EASA in their report from 2014 on the technical issues in the implementation of Data Link Services (DLS). Also in 2016, the SESAR Deployment Manager has been mandated by the EC to act as DLS Implementation Project Manager and on this basis the SDM has developed a DLS Recovery Plan.

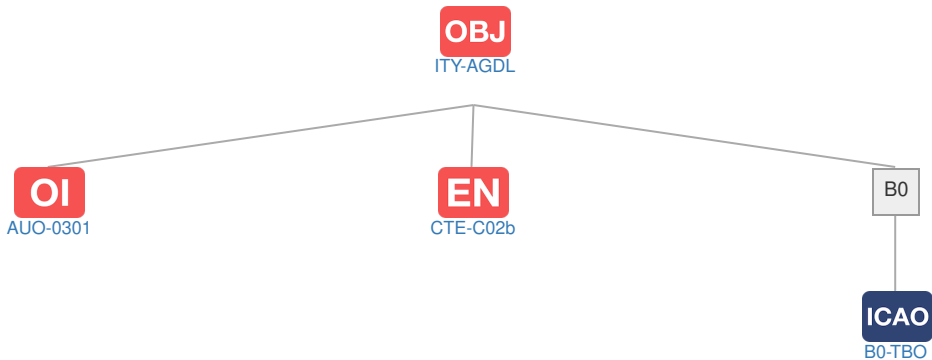
NOTE: The implementation objective is aligned with Regulation (EU) No 2015/310, amending Regulation (EC) No 29/2009 and repealing Regulation (EU) No 441/2014.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each military authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the military authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to military authorities.

Edition	2022
Stakeholders	Regulator / Air Navigation Service Provider / Military / Airspace Users
Type	SES
Scope	ECAC+
Status	Active

Context

Related Elements



Applicability Area(s) and Timescales

Applicability Area 1:

All EU SES States except: Luxembourg




Applicability Area 2:

Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Montenegro, Morocco, North Macedonia, Serbia, Türkiye, United Kingdom




Timescales	From	By	Applicable to
Entry into force	06-02-2009	-	Applicability Area 1
ATS unit operational capability	-	05-02-2018	Applicability Area 1 + Applicability Area 2
Aircraft capability	-	05-02-2020	Applicability Area 1 + Applicability Area 2

Links to ATM Master Plan Level 2

Operational Improvement Steps

Code	Title	IOC	FOC	Related Elements
AUO-0301	Voice Controller-Pilot Communications (En-Route) Complemented by Data Link	31-12-2011	31-12-2017	  

Enablers

Code	Title	IOC	Related Elements
CTE-C02b	A/G Datalink over ATN/OSI - Single frequency	31-12-2005	    



Links to SESAR Solutions

Code	Title	Program	Related Elements
No record found			

Links to PCP ATM Sub-Functionalities

Code	Title	Related Elements
No record found		

ICAO Block Modules

Designator	Title	Related Elements
B0		
B0-TBO	Improved Safety and Efficiency through the initial application of Data Link En-Route	 

References

Applicable legislation

Commission Regulation (EC) No 29/2009 of 16 January 2009 (the AG-DLS Regulation);
Commission Implementing Regulation (EU) N° 1034/2011 of 17 October 2011 on safety oversight in air traffic management and air navigation services and amending Regulation (EU) N° 691/2010 18-10-2011

Applicable ICAO Annexes and other references

- EUROCAE Documents ED-120, ED-111
- ETSI EN 303 214 V1.2.1 Data Link Services (DLS) System

Deployment Programme 2022

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Operating Environments

En-Route
Network

Expected Performance Benefits

Safety	Through the delivery of standard and unambiguous messages (significant error and fatigue reduction), provision of a communications backup and the possibility of immediate message retrieval.
Capacity	Through both reduction of voice congestion and increase in controller and sector productivity. Capacity gain is expected from 3.4 % (if 25% of flights is equipped) up to 11% (if 75% of flights is equipped). This will lead to reduction of delays.
Operational efficiency	-
Cost efficiency	-
Environment	-
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
REG01	Ensure that safety is assessed before any change to the existing system	DELETED		
REG02	Ensure the processing and the distribution of the information on the data link capability by the IFPS	DELETED		
REG03	Ensure the publication of relevant information in the national aeronautical information publication		05-02-2018	
REG04	Ensure ATN/VDL-2 availability, security policy and address management procedures		05-02-2018	
REG05	Approve the operational use of air-ground data link services	DELETED		
REG06	Notify potential exemption cases to the European Commission	FINALISED		
ASP01	Ensure the conformity of communications, flight data and initial flight plan processing systems and associated procedures		05-02-2018	EN
ASP02	Organise personnel awareness and training		05-02-2018	
ASP03	Ensure ground communication systems comply with air-ground communication requirements		05-02-2018	EN
ASP04	Deploy communication infrastructure to handle air-ground data link services		05-02-2018	EN
ASP05	Implement Logon Forward process		05-02-2018	EN
ASP06	Implement Next Authority Notified process		05-02-2018	EN
MIL01	Equip transport-type State aircraft		01-01-2019	
USE01	Equip aircraft with data link equipment supporting the identified services		05-02-2020	EN
USE02	Specify relevant operational procedures		05-02-2020	
USE03	Arrange air-ground ATS data link service provision		05-02-2020	
USE04	Organise personnel awareness and training		05-02-2020	
IND01	Provide avionics and ground systems for data link services	DELETED		

Supporting Material

Title	Related SLoAs
ARINC - 631-5 - VHF Digital Link (VDL) Mode 2 Implementation Provisions - ARINC 600 Series / 12/2008 -	ASP04
ARINC - 631-6 - VHF Digital Link (VDL) Mode 2 Implementation Provisions Standards - ARINC 600 Series / 11/2010 -	ASP04
EUROCAE - ED-111 - Functional specifications for CNS/ATM Recording - Including Amendment N°1 - 30 July 2003 07/2002 https://eshop.eurocae.net/eurocae-documents-and-reports	ASP01
EUROCONTROL - GUID-176 - EUROCONTROL Guidelines for On-Line Data Interchange (OLDI) - Edition 1.1 / 07/2020 https://www.eurocontrol.int/publication/eurocontrol-guidelines-line-data-interchange-oldi	ASP05, ASP06
EUROCONTROL - SPEC-106 - EUROCONTROL Specification for On-Line Data Interchange (OLDI) - Edition 5.0 / 07/2020 https://www.eurocontrol.int/publication/eurocontrol-specification-line-data-interchange-oldi	ASP05, ASP06
EUROCONTROL - SPEC-107 - EUROCONTROL Specification for ATS Data Exchange Presentation (ADEXP) - Edition 3.3 / 07/2020 https://www.eurocontrol.int/publication/eurocontrol-specification-ats-data-exchange-presentation-adexp	ASP05, ASP06
EUROCONTROL - SPEC-116 - EUROCONTROL Specification on Data Link Services - Edition 2.1 / 01/2009 https://www.eurocontrol.int/publication/eurocontrol-specification-data-link-services	ASP01, ASP04, MIL01, USE01, USE02
ICAO - Annex 10, Volume III, Part 1 - Aeronautical Telecommunications, Volume III Communication Systems, Part 1 Digital Data Communication Systems - Edition 2.0 http://store1.icao.int/	ASP01

Consultation & Approval

Working Arrangement in charge	CNS / COM SG
Outline description approved in	-
Latest objective review at expert level	04/2009
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	07/2009
Latest change to objective approved/endorsed in	07/2014