

Bryan Jolly Senior ATM/ANS Expert

ICAO

Surveillance Implementation Regulator View



EASA

Operational objectives



Safety

Capacity

CNS underpinning technology



Operational objectives

How to take a decision ?			cost / LS expansion cost / LS expanse coss efficient to charge ligacy system which
Before the decision	Issue analysis	What is the problem?	Impact Assessment
	Objective	What do I want to achieve?	
	Definition of options	What are the different solutions?	
	Analysis of options	Which consequences of these solutions?	
Decision	Conclusion	What do I decide?	







Some Questions

Safety and interoperability objectives;

Performance objectives;

Suitable equipment for general aviation, RPAS;

Surveillance infrastructure and ground systems;

Spectrum protection;

Surveillance data sharing and its use thereof;

Minimum aircraft derived data (ADD) to be transmitted and used;

Global harmonisation of technical requirements

Exemption/derogation criteria;

Monitoring and anomalies.

State aircraft and military





EU Framework

Solid regulatory framework making life simpler and consistent for aviation



Applicability

Requirements

Rules for Standardised European Rules of the Air(SERA) (Regulation 923/2012)

Air Traffic Management/Air Navigation Services (Regulation (EU) 2017/373) Interoperability of surveillance for the single European sky (SPI) (Regulation 1207/2011)

Requirements on aircraft identification for surveillance for the single European sky (ACID) (Regulation 1206/2011)

Rules for Air Operations Regulation (EU) No 965/2012

Airborne Communications, Navigation and Surveillance (CS-ACNS)

Rules for Aerodromes (Regulation (EU) No 139/2014)

Acceptable Means of Compliance and Guidance Material to Commission Implementing Regulation (EU) No 1207/2011

Reg 1207/2011 - SPI

All aircraft operating IFR/GAT need to be compliant with Mode S ELS

Airborne

All aircraft operating IFR/GAT with a first CoA on or after 7 December 2020 need to be compliant with ADS-B Version 2 & Mode S EHS ADS-B & Mode S EHS equipage for aircraft operating IFR/GAT with a fist CoA before 7 December 2020 :

 A retrofit program has been established prior to 7 December 2020 demonstrating compliance prior to 7 June 2023

MTOW exceeding 5 700 kg or Max cruising true airspeed greater than 250 knots ADS-B & Mode S EHS equipage not required for aircraft operating IFR/GAT:

- with a individual CoA first issued on or before 7 June 1995
- that cease operations within the airspace prior to 31 October 2025

To ensure that the assignment of 24-bit ICAO aircraft addresses to aircraft equipped with a Mode S transponder complies Annex 10 and implemented correctly by aircraft operators.

Reg 1207/2011 - SPI

Formal arrangements of data transfer

Ground

ANSPs shall ensure that, before putting into service the surveillance systems, they are implementing the most efficient solutions

Ensure that aircraft transponders are not subject to excessive interrogations

Ensure that the use of a ground based transmitter do not produce harmful interference on other surveillance systems.

Reg 1206/2011 - ACID

ANSPS shall ensure that the surveillance system has capability to establish individual aircraft identification using the downlinked aircraft identification feature.

ICAO EMERGING

TECHNOLOGIES Symposium

exceptional military contingency measures require air navigation service providers to assign discrete SSR codes to aircraft

Privacy

THANK YOU

