



ITY-AGVCS2 — 8,33 kHz Air-Ground Voice Channel Spacing below FL195

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This SES-type objective is derived from Implementing Regulation (EU) No 1079/2012 of 16 November 2012, amended by Commission Implementing Regulation (EU) No 657/2013 of 10 July 2013, laying down requirements for voice channels spacing for the single European sky.

The Regulation applies to:

1. all radios operating in the 117,975-137 MHz band ('the VHF band') allocated to the aeronautical mobile route service, including systems, their constituents and associated procedures;
2. all flights operating as general air traffic, within the airspace of the ICAO EUR region where States are responsible for the provision of air traffic services in accordance with Regulation (EC) No 550/2004.

The conversion requirements of the Regulation do NOT apply to frequency assignments:

- (a) that will remain in 25 kHz channel spacing on the following frequencies:
 - (i) the emergency frequency (121,5 MHz);
 - (ii) the auxiliary frequency for search and rescue operations (123,1 MHz);
 - (iii) the VHF digital link (VDL) frequencies (136,725 MHz, 136,775 MHz, 136,825 MHz, 136,875 MHz, 136,925 MHz and 136,975 MHz);
 - (iv) the aircraft communications addressing and reporting system (ACARS) frequencies (131,525 MHz, 131,725 MHz and 131,825 MHz);
- (b) where offset carrier operation within a 25 kHz channel spacing is utilised.

According to Article 14 of Regulation (EU) No 1079/2012, for cases having limited impact on the network, States may take local measures granting exemptions from compliance with:

- Article 4(5) on the obligation for all radios to have 8,33 kHz channel spacing capability by 31 December 2017 at the latest (except ground radios operated by air navigation service providers);
- Article 5(4) on the obligation for aircraft to be equipped with an 8,33 kHz-capable radio from 1 January 2018 to operate in airspace where carriage of radio is required;
- and 6(10) on the obligation to convert all frequency assignments to 8,33 kHz channel spacing by 31 December 2018 at the latest (except frequency assignments that stay in 25 kHz as a result of a safety requirement, or 25 kHz frequency assignments used to accommodate State aircraft).

However, the State shall provide the Commission with detailed information justifying the exemption at the latest one year before the dates identified in the relevant articles. Within six months of receiving the information and after consultation with the Network Manager, the Commission may review the exemption if the impact on the network is not limited.

The terms used in this objective are defined in Article 2 of Regulation (EC) No 549/2004 and Article 2 of Regulation (EU) No 1079/2012.

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 / Airport Operator / Airspace Users / Network Manager
Type	SES
Scope	EU+
Status	Active

Context

Related Elements



Applicability Area(s) and Timescales


Applicability Area:

All ECAC States except: Armenia, Georgia, Maastricht UAC, Moldova, Türkiye, Ukraine

Timescales	From	By	Applicable to
Entry into force	07-12-2012	-	Applicability Area
New and upgraded radio equipment	17-11-2013	-	Applicability Area
New or upgraded radios on State aircraft	01-01-2014	-	Applicability Area
Interim target for freq. conversions	-	31-12-2014	Applicability Area
All radio equipment	-	31-12-2017	Applicability Area
All frequencies converted	-	31-12-2018	Applicability Area
State aircraft equipped, except those notified to EC	-	31-12-2018	Applicability Area
State aircraft equipped, except those exempted [Art 9(11)]	-	31-12-2020	Applicability Area

Links to ATM Master Plan Level 2

EN Enablers

Code	Title	IOC	Related Elements
CTE-C01a	Existing Voice radio (VHF 25/8.33KHz)	31-12-2012	    

SOL Links to SESAR Solutions

Code	Title	Program	Related Elements
No record found			

PCP Links to PCP ATM Sub-Functionalities

Code	Title	Related Elements
No record found		

 ICAO Block Modules: No associated data

References

Applicable legislation

Regulation (EU) No 1079/2012 of 16 November 2012 laying down requirements for voice channels spacing.

Applicable ICAO Annexes and other references

ICAO Annex 10;

ICAO PANS-ATM Doc. 4444.

Deployment Programme 2022

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Operating Environments

Airport

Terminal Airspace

En-Route

Network

Expected Performance Benefits

Safety	-
Capacity	-
Operational efficiency	Optimisation of the use of the bandwidth, which is a prerequisite to a number of crucial operational improvements that will deliver benefits such as reduced delays and increased capacity. Such benefits will be postponed or even impossible if the additional frequencies required are not readily available.
Cost efficiency	-
Environment	-
Security	-

Stakeholder Lines of Action

Code	Title	From	By	Related Enablers
REG01	Ensure radios have 8,33 kHz channel spacing capability		31-12-2017	
REG02	Ensure the achievement of the interim target for 8,33 kHz frequency conversions	FINALISED		
REG03	Ensure compliance with the requirements on 8,33 kHz frequency conversions		31-12-2018	
ASP01	Ensure conformity of voice communications systems and associated procedures		31-12-2018	
ASP02	Convert 25 kHz frequencies to 8,33 kHz to achieve the interim target	FINALISED		EN
ASP03	Convert all 25 kHz frequencies to 8,33 kHz		31-12-2018	EN
ASP04	Develop safety assessment		31-12-2018	
ASP05	Organise personnel training and awareness		31-12-2018	
MIL01	Equip State aircraft with radio equipment with 8,33 kHz channel spacing capability		31-12-2020	
MIL02	Organise personnel training and awareness of military aircrew		31-12-2020	
APO01	Convert all 25 kHz frequencies to 8,33 kHz		31-12-2018	EN
APO02	Accommodate non-equipped vehicles		31-12-2017	
APO03	Organise personnel training and awareness		31-12-2018	
USE01	Equip aircraft with radio equipment with 8,33 kHz channel spacing capability		31-12-2017	
USE02	Organise personnel training and awareness		31-12-2017	
NM01	Ensure the centralised flight planning processing and distribution service complies with the Regulation	FINALISED		

Supporting Material

Title	Related SLoAs
EUROCONTROL - 8.33kHz Voice Channel Spacing (VCS) implementation handbook https://www.eurocontrol.int/publication/833khz-voice-channel-spacing-vcs-implementation-handbook	APO01, ASP01, ASP03, ASP04, REG01, REG03
EUROCONTROL - EAM 4 - ESARR 4 - Risk Assessment and Mitigation in ATM - Edition 1.0 / 04/2001 https://www.eurocontrol.int/publication/esarr-4-risk-assessment-and-mitigation-atm	ASP04
EUROCONTROL - GUID-174 - EUROCONTROL Guidelines on 8.33kHz Channel Spacing for Military Operators - Edition 2.0 / 07/2018 https://www.eurocontrol.int/publication/eurocontrol-guidelines-833khz-channel-spacing-military-operators	MIL01, MIL02
ICAO - Annex 10, Volume III, Part 2 - Aeronautical Telecommunications, Volume III Communication Systems, Part 2 (incorporating Amendment No 85), Chapter 2, Sections 2.1, 2.2, 2.3.1 and 2.3.2 (excluding Subsection 2.3.2.8) - Second Edition / 07/2007 http://store1.icao.int/	ASP01, MIL01, REG01, USE01
ICAO - Doc 4444 - Air Traffic Management, Section 12.3.1.4 '8,33 kHz channel spacing' - Edition 16 https://store.icao.int/	ASP01, MIL01, REG01, USE01

Consultation & Approval

Working Arrangement in charge	CNS / COM SG
Outline description approved in	-
Latest objective review at expert level	04/2013
Commitment Decision Body	Provisional Council (PC)
Objective approved/endorsed in	07/2013
Latest change to objective approved/endorsed in	-