

SESAR		Achieved							ECAC		
ATC02.2		Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for en-route operations									
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP	

## Subject matter and scope

Implement and make operational use of the Short Term Conflict Alert (STCA) ground based safety net for en-route operations in line with the EUROCONTROL Specification for STCA and the related guidance material.

An explanation of the difference between Level 1 and 2 is described below.

Before starting first operations, air traffic controllers must receive training, aimed at creating an appropriate level of trust in the concerned safety net. The time-criticality of alerts and the need for immediate attention or action must be well understood, but also the situations in which safety nets are less effective.

Safety nets performance must be monitored and regularly analysed, not only to improve the safety nets but also to identify other safety improvement opportunities. For example, "hot spots" could be identified and removed by making changes to airspace structure or procedures.

**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 MIL Authorities.

Military ATC authorities are invited to consider implementation of STCA level 2 when providing ATS surveillance services to GAT.

## Applicability Area(s) & Timescale(s)

Applicability Area	All ECAC+ States		
Timescales:	From:	By:	Applicable to:
Initial operational capability	01/01/2008		Applicability Area
Full operational capability		31/01/2013	Applicability Area

## References

### European ATM Master Plan

Ol step -	<a href="#">[CM-0801]-Ground Based Safety Nets (TMA, En-Route)</a>						
Enablers -	CTE-S01	CTE-S01a ATC02.8, ATC12.1	ER APP ATC 133	PRO-059 ATC02.8	PRO-219 ATC02.8		
Legend:	WXYZ-001	Covered by SLoA(s) in this objective	WXYZ-002 zzz	Covered by SLoA(s) in another objective Objective covering the enabler		WXYZ-003	Not covered in the Implementation Plan

### Applicable legislation

-none-

### Essential Operational Changes

- none -

### SESAR Solution

### ICAO GANP - ASBUs

SNET-B0/1	Short Term Conflict Alert (STCA)
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### Deployment Programme

- none -

### European Plan for Aviation Safety

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- none -
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**Operating Environments**

En-Route Terminal Airspace
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**Stakeholder Lines of Action (SLoAs)**

SloA ref.	Title	From	By
<b>ATC02.2-REG01</b>	Conduct safety oversight of the changes	<b>DELETED</b>	
<b>ATC02.2-ASP01</b>	Implement STCA function for en-route operations	01/01/2008	31/01/2013
<b>ATC02.2-ASP02</b>	Align ATCO training with the use of STCA ground-based safety tools	01/01/2008	31/01/2013
<b>ATC02.2-ASP03</b>	Develop safety assessment for the changes	01/01/2012	31/01/2013

Description of finalised and deleted SLoAs is available on the eATM Portal @ [https://www.eatmportal.eu/working/depl/essip\\_objectives](https://www.eatmportal.eu/working/depl/essip_objectives)

**Expected Performance Benefits**

<b>Safety:</b>	The systematic presentation of potential infringements of separation minima to controllers ahead of their occurrence, as provided by STCA, is a major safety assurance tool.
<b>Capacity:</b>	N/A
<b>Operational Efficiency:</b>	-
<b>Cost Efficiency:</b>	Standardisation of STCA enables cost-effective use of resources and is in particular a critical success factor for smaller ASP.
<b>Environment:</b>	N/A
<b>Security:</b>	N/A

**Detailed SLoA Descriptions**

<b>ATC02.2-ASP01</b>	<b>Implement STCA function for en-route operations</b>	<b>From:</b> 01/01/2008	<b>By:</b> 31/01/2013
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Implement STCA systems and associated procedures in line with EUROCONTROL Specification and related guidance material in en-route airspace.		
<b>Supporting material(s):</b>	EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - August 2017 Url : <a href="https://www.eurocontrol.int/sites/default/files/publication/files/safety-nets-guide-august-2017.pdf">https://www.eurocontrol.int/sites/default/files/publication/files/safety-nets-guide-august-2017.pdf</a> EUROCONTROL - GUID-159 - EUROCONTROL Guidelines for Short Term Conflict Alert - Part I to III - Edition 1.0 / 01/2017 Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-guidelines-short-term-conflict-alert-stca">https://www.eurocontrol.int/publication/eurocontrol-guidelines-short-term-conflict-alert-stca</a> EUROCONTROL - SPEC-108 - EUROCONTROL Specification for Short Term Conflict Alert - Edition 1.0 / 11/2007 Url : <a href="https://www.eurocontrol.int/publication/eurocontrol-specifications-short-term-conflict-alert-stca">https://www.eurocontrol.int/publication/eurocontrol-specifications-short-term-conflict-alert-stca</a>		
<b>ATM Master Plan relationship:</b>	<a href="#">[ER APP ATC 133]-Upgrade Ground Safety Nets to provide Area Penetration Warning (APW), Minimum Safe Altitude Warning (MSAW) and Approach Path Monitoring to Controller Workstations.</a>		
<b>Finalisation criteria:</b>	1 - STCA function is implemented, documented and in operational use.		
<b>ATC02.2-ASP02</b>	<b>Align ATCO training with the use of STCA ground-based safety tools</b>	<b>From:</b> 01/01/2008	<b>By:</b> 31/01/2013
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Train operational staff in the use of STCA in line with guidelines based on the EUROCONTROL Specification for STCA and related guidance material.  The tasks to be done are as follows: <ul style="list-style-type: none"> <li>- Develop a training package (material);</li> <li>- Update the training plans;</li> <li>- Determine staff population to be trained;</li> <li>- Apply the training plans.</li> </ul>		

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<b>Finalisation criteria:</b>	1 - The training plans have been updated and a training package has been developed by the ANSP.		
<b>ATC02.2-ASP03</b>	<b>Develop safety assessment for the changes</b>	<b>From:</b> 01/01/2012	<b>By:</b> 31/01/2013
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Develop safety assessment of the changes, notably ATC systems and procedures that will implement Short Term Conflict Alert (STCA) - level 2 functionality and associated procedures.  The tasks to be done are as follows:  - Conduct hazard identification, risk assessment in order to define safety objectives and safety requirements mitigating the risks; - Develop safety assessment; - Deliver a safety assessment report to the NSA, if new standards are applicable or if the severity class of identified risks is 1 or 2.  This safety assessment shall be based on fully validated/recognised method.		
<b>Supporting material(s):</b>	EC - COMMISSION IMPLEMENTING REGULATION (EU) 2017/373 - (OJ L 62, 8.03.2017, p. 1) - COMMISSION IMPLEMENTING REGULATION (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 03/2017 Url : <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0373&amp;from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0373&amp;from=EN</a> EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - August 2017 Url : <a href="https://www.eurocontrol.int/sites/default/files/publication/files/safety-nets-guide-august-2017.pdf">https://www.eurocontrol.int/sites/default/files/publication/files/safety-nets-guide-august-2017.pdf</a> EUROCONTROL - EAM 4 - ESARR 4 - Risk Assessment and Mitigation in ATM - Edition 1.0 / 04/2001 Url : <a href="https://www.eurocontrol.int/publication/esarr-4-risk-assessment-and-mitigation-atm">https://www.eurocontrol.int/publication/esarr-4-risk-assessment-and-mitigation-atm</a> EUROCONTROL - Air Navigation Systems Safety Assessment Methodology (SAM) - Version 2.1 / 11/2006 Url : <a href="https://www.eurocontrol.int/tool/safety-assessment-methodology">https://www.eurocontrol.int/tool/safety-assessment-methodology</a>		
<b>Finalisation criteria:</b>	1 - The Safety assessment report including safety arguments for the changes has been delivered to the NSA and a notification of acceptance was received.		