

REQUIREMENTS APPLICATION DOCUMENT
(RAD)

RAD – 8.33

**SRC HARMONISED REGULATORY
CRITERIA FOR 8.33 HEP**

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<p>This SRC Requirements Application Document has been prepared by the Safety Regulation Commission. The documents reflects the Safety Regulation Commission harmonised minimum regulatory criteria recommended to be used when assessing the safe implementation of 8.33 within ECAC region.</p>		
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F.3 DOCUMENT APPROVAL

The following table identifies all management authorities who have approved this document.

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* In order to reduce the size of files, all documents placed on the SRC Website do not contain signatures. However, please note that all management authorities have signed the master copies held by the SRU. Requests for copies of master documents should be emailed to: sru@eurocontrol.int.

F.4 DOCUMENT CHANGE RECORD

The following table records the complete history of this document.

EDITION NUMBER	EDITION DATE	REASON FOR CHANGE	PAGES AFFECTED
0.01	13-03-02	Creation of Draft Issue edition 0.01. Circulation to SRC14 for comments.	All
0.02	22-07-02	SRU /SRC comments. Update to include new reference material.	All
0.03	10-08-02	Update to include criteria met by 8.33 kHz programme documentation.	All
1.0	18-02-03	Document status updated to released issue following SRC approval by correspondence. Document format updated (no change to contents).	All

F.5 CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
F.1	Title Page	1
F.2	Document Characteristics	2
F.3	Document Approval	3
F.4	Document Change Record	4
F.5	Contents	5
F.6	Executive Summary	6
1.	Introduction	7
2.	The Role and Use of RAD – 8.33	7
3.	Background on RAD – 8.33	8
	3.1 Frequency Congestion	8
	3.2 EUROCONTROL 8.33 kHz Programme	8
	3.2.1 Description	8
	3.2.2 Interface with Other Programmes	8
	3.2.3 Role of the EUROCONTROL Agency	8
4.	SRC / 8.33 HEP Programme Interface	9
	4.1 Generic Interface	9
5.	8.33 HEP Area of Responsibility	9
6.	Harmonised Regulatory Criteria	9
7.	Reference Material	10
8.	States Readiness	10
	Appendix A – Harmonised Criteria	11
	Appendix B – Reference Material	33
	Appendix C – Programme Areas of Responsibility	34

F.6 EXECUTIVE SUMMARY

This document has been prepared by the Safety Regulation Commission.

The SRC's role calls for the development of harmonised ATM safety regulatory approaches and requirements for implementation by States. SRC is required to respond to current and anticipated developments in ATM across the ECAC area, and wider aspects as necessary, including any new safety demands or expectations by the aviation community.

The documents reflects the SRC harmonised minimum regulatory criteria recommended to be used when assessing the safe implementation of 8.33 kHz operations within ECAC region.

It must be stressed that Requirements Application Documents (RAD) reflect the currently approved regulatory provisions (regulations, requirements and safety regulatory policies), as applied to the specific development in question - in the implementation of 8.33 kHz.

It must further be stressed that the contents of RAD do not represent new provisions, but application of existing generic ones in a specific context. Their status is of recommendations by the Safety Regulation Commission for the benefit and use of national safety regulatory authorities.

1. INTRODUCTION

8.33 kHz is identified within SRC Work Programme (SRC DOC 3, Edition 4) as Task C15, whose objectives are to develop a harmonised SRC position on the safety regulatory aspects of the 8.33 Programme, to develop safety regulatory requirements (where these are needed to supplement the generic ESARRs), and to co-ordinate SRC views on the acceptability of 8.33 implementation. The actions in this subtask are;

- to develop, where necessary, safety regulatory requirements covering appropriate aspects of the 8.33 Programme,
- to review the 8.33 safety policy, as it continues to be developed and implemented, and consolidate an SRC response to the Programme team,
- to undertake a technical and operational assessment of the safety arguments and supporting evidence developed within the 8.33 Programme, and to notify SRC harmonised safety regulatory views on the acceptability of the programme to enter service (*this includes advising the EUROCONTROL Provisional Council*),
- to agree the adequacy of data collection to validate and monitor safety assumptions and requirements (as applicable) as documented in the safety arguments.

2. THE ROLE AND USE OF RAD – 8.33

The role of this Requirements Application Document is to present the minimum harmonised baseline to National ATM Safety Regulators recommended to be used for the assessment of the safely implementation of 8.33 kHz.

However, further benefits of the RAD may include;

- Providing a consistent, harmonised and visible baseline on which the safety regulatory assessments at ECAC level will be made, while giving enough flexibility for national safety approval processes to be followed,
- Providing a harmonised basis, in the form of a task list, on which SRC may co-ordinate the individual activities of national regulators, providing a common approach in which variations in national solutions are minimised,
- Providing a clear statement of the safety regulatory position for the benefit and use by all parties, including the Programme,
- Use of the document as a regulatory report, as a means of tracking the extent to which the specific criteria have been met,
- Use of the document as an assurance check that agreed minimum harmonised safety regulatory provisions have been met.

3. BACKGROUND ON 8.33

3.1 Frequency Congestion

It was realised that the lack of 25 kHz ATC frequencies was restricting the necessary re-sectorisation of airspace that would allow capacity increases.

To produce more communication channels, it was agreed to allow the use of 8.33 kHz ATC channel spacing to make more efficient use of the ATC frequency spectrum.

As this change would require the aircraft users to install additional radio communication equipment, and with the consequent requirement to control the operational environment, it was decided to implement the new 8.33 kHz channels via a centralised agency, namely EUROCONTROL.

3.2 EUROCONTROL 8.33 kHz Programme

3.2.1 Description

The 8.33 kHz project was based on the idea that all the EUR region would be 8.33 kHz compliant. However, as the radio frequency congestion was more significant in the CORE states area, 8 countries implemented 8.33 kHz as a start.

The methodology used was to make the entire EUR region only open to 8.33 kHz aircraft, but to grant exemptions from carriage in the non core area states i.e. those still using 25 kHz.

Phase 2 of the project is termed the Horizontal Expansion Programme. This entails the withdrawal of the exemptions from the remaining EUR states. It then allows these other states to implement 8.33 kHz channels as they wish. The HEP is thus aimed at ensuring that the necessary infrastructure and arrangements are in place in those states to allow the use of 8.33 kHz. The target date for the withdrawal of the exemptions, and therefore effectively the implementation of 8.33 kHz is **30 October 2002**. The programme contributes to the strategic actions of the ATM Strategy for 2000+, specifically the increase of ATC capacity.

3.2.2 Interaction with Other Programmes

The 8.33 kHz programme has no known interactions with other EATMP projects.

3.2.3 Role of the EUROCONTROL Agency

The EUROCONTROL Agency is responsible for developing the overall planning for the 8.33 kHz programme, for co-ordinating programme execution and for undertaking activities requiring international agreements and co-ordinated actions that must be undertaken in common with each other. As overall programme manager, the Agency will monitor progress in the plan execution, identify shortfalls early and initiate necessary proactive actions.

The EUROCONTROL 8.33 HEP Programme shall ensure that correct and complete arguments are established to demonstrate that with the removal of the 8.33 exemptions, the overall ATM System will remain tolerably safe¹. Their role mainly relate to the demonstration of the ‘proof of concept’.

A complementary objective is to co-ordinate and ensure support to States so that national implementation of the 8.33 kHz is carried out within agreed safety minima (i.e. safe implementation of the concept, according to agreed set of safety objectives and requirements).

4. SRC – 8.33 HEP PROGRAMME INTERFACE

4.1 Generic Interface

The ultimate objective when establishing an interface process between the SRC and the Programme is to ensure the production and definition of a harmonised safety regulatory position in respect of the acceptability of the changes to the ATM System that the EATMP is concerned with.

To achieve this, the programme agreed to provide the following documentation that would support the argument for the safe introduction into service of 8.33 kHz.

5. 8.33 HEP AREA OF APPLICABILITY

A map of the countries which this programme effects are presented in Appendix C to this paper.

6. HARMONISED REGULATORY CRITERIA

The introduction of an 8.33 kHz RTF channel would be considered as a change to the current ATM system, and as such, should be assessed against ESARR 4 safety regulatory requirements principles (see ESARR 4 section 5 Safety Requirements). Applicable harmonised criteria should envisage all three system components (people, equipment and procedures) and have to be seen as forming a total aviation perspective, including both ground and airborne elements.

Although the 8.33 kHz HEP programme is not specifically charged with the installation of any such channel, it acts as an enabler. This means the programme intends to put in place all the necessary mechanisms to allow the states to implement the 8.33 kHz channels. When the states implement the 8.33 kHz, they may use the safety argument prepared by the programme for a substantial part of the national safety argument.

Accordingly, a draft list of harmonised criteria for regulators which are intended to be followed is presented at Appendix A to this paper.

¹ i.e. meeting allocated safety objectives and requirements.

7. REFERENCE MATERIAL

A list of further reference material is presented at Appendix C to this paper.

8. STATES READINESS

The mechanism for obtaining information from the states will be on the basis of a Safety Implementation report in the form of a questionnaire.

In addition, through the use of this RAD document as a regulatory report, SRC will separately assess States safety readiness, and the outcome will be considered as an input to the SRC's recommendation to the EUROCONTROL Provisional Council/Commission in respect of the Go/Delay Decision for the implementation of 8.33 HEP.

The SRC recommendation will be based on those criteria presented in Appendix A of RAD-8.33 and any Programme report on the States Preparedness.

APPENDIX A – HARMONISED CRITERIA

Each proposed harmonised criteria has been allocated a precise responsibility (i.e. to discriminate which criteria are to be assessed at the SRC/SRU level and which at the National Safety Regulator level). A further mapping for each criterion with the ESARRs requirements has been included.

In the Annex 1 to APPENDIX-A a detailed checklist was developed in order to;

- show the regulatory criteria consistency with safety regulatory requirements and related SRC documents and policies,
- map the possible means of compliance for each criterion. Additional time-scale is envisaged in order to be able to construct an SRC recommendation on the GO/DELAY decision for EUROCONTROL Provisional Council.
- Indicate the compliance achievement by whom and by when
- Highlight each Criterion status

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Each Safety Regulatory Criterion will be presented in a table as it is shown in the template table below:

Criterion No: <i>(This box will contain a reference criterion no.)</i>	Text of Criterion: <i>(This box will contain the text of the criterion)</i>	
	Means of Compliance: <i>(This box will contain reference to the non-exhaustive existing means of compliance)</i>	
	Requirement Mapping: <i>(This box will contain mapping reference to the SRC safety regulatory requirements and policies. The mapping is intended to provide links to the well established regulatory principles)</i>	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input type="checkbox"/> ASR <input type="checkbox"/> National OPS Approval Body <input type="checkbox"/> Other <input type="checkbox"/>
Compliance status reporting date (by when): <i>(This box will contain the latest acceptable date to report the achievement of the criterion to SRC. The date has been foreseen in order to provide sufficient time for the status of the preparation to be advise to the EUROCONTROL Provisional Council for the July and respectively November sessions. The date provided, by no mean is intending to modify any planned date by 8.33 Programme for their deliverables and milestones)</i>	Tracking Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: <i>(This box will contain notes, remarks and recommendations foreseen fit with the criterion by SRC. It may contain as well sub-criteria and the arguments to the decision on why the overall criterion was declared Achieved or otherwise.)</i>		

A.1 GENERAL CRITERIA

8.33 – 1

a) Assess the 8.33 Hazard model to determine if the risk of the 8.33 kHz introduction will be no more than present 25 kHz implementations.

8.33 – 2

To assess the 8.33 programme Safety Validation study to determine if all hazards have been identified and adequately represented.

Note: The Safety Policy of the 8.33 HEP Programme comprises amongst other elements the objective to conduct the following;

- A preliminary hazard assessment (PHA) identifying applicable hazards and their severity,
- A hazard identification meeting to identify the principal hazards, their severity and the likelihood of occurrence of their contributing factors. Actions to mitigate against risk will also be identified and their potential effectiveness determined,
- A fault tree analysis to determine the likelihood of occurrence of the principle hazards,
- A revised safety validation study using IFPS data and incident reports accumulated through six months of 8.33 operations. This study will verify the effectiveness of risk mitigating actions, proposing new or modified actions as required,
- Guidance and support to individual States as they prepare for 8.33 operations.

8.33 – 3

To assess the mitigations proposed by the programme following the FHA ;

A.2 AIRBORNE

8.33 – 4

To ensure 8.33 kHz approval to those who are operating or intend to operate within EUR continental area;

- a) To certify the aircraft scheduled to operate within EUR airspace (the area of applicability is depicted in Appendix E) The three sets of controls, type approval, production release and continued airworthiness would together constitute the MASPS,
- b) To assess MASPS compliant aircraft population (i.e. to accurately evaluate how many aircraft scheduled to fly in area of applicability are MASPS approved),

- c) To assess/ensure 8.33 OPS approval,
- d) By looking to the above aircraft population to assess the AO readiness,
- e) The overall state readiness for the airborne segment is to be checked at a national level to ensure safe introduction of 8.33.

A.3 GROUND

A.3.1 Procedures

8.33 – 5

Assess the airspace considerations of designating sectors as being 8.33. Particularly attention to be paid, not exhaustively, to the following issues;

- a) a)LOAs - Letters of Agreement updated to reflect the introduction of 8.33 and consequent protection measures for preventing non 833 aircraft from entering region above FL245,
- b) Defining 8.33 within the ENV parameter in IFDP,
- c) All possible contingency procedures.

8.33 – 6

To assess compliance with the flight Planning procedures (users affected : AO, ATM agencies, AROs and CFMU);

8.33 – 7

To assess compliance with ATC generic procedures, specifically on phraseology, 8.33 installation check and handling of state aircraft and SAR and HOSP flights. To verify the documentation for new procedures (e.g. OPS Manual updates);

8.33 – 8

To Assess ATM/CNS provider monitoring practices;

8.33 – 9

To assess State readiness in respect of ATC procedures (including Maastricht UAC);

8.33 – 10

To assess CFMU readiness on procedures (to verify the IFPS capability of handling the mixture of flight plans) including contingency procedures;

8.33 – 11

To assess/verify the development/existence of contingency procedures for in-flight communication failures;

8.33 – 12

To assess/verify the development/existence of contingency procedures in case of neighbouring sectors/centres/ States failure to provide 8.33 or 8.33 verification (both issues affecting possibility of non 8.33 compliant aircraft being allowed into an 8.33 sector);

8.33 –13

Assess local deviation from ICAO/EUROCONTROL publish procedures;

To verify the publication in National AIP of the deviation from ICAO procedures;

A.3.2 Equipment**8.33 – 14**

- a) To assess evidences for FDP modifications for processing and internal distribution of 8.33 and / or UHF status,
- b) To assess evidences for radar display modifications to include 8.33 and / or UHF status,
- c) To assess evidences for flight progress strips (paper or electronic) modifications for inclusion of 8.33 and / or UHF status,
- d) To assess State readiness on equipment (including Maastricht UAC),
- e) To assess CFMU readiness on equipment,
- f) To assess state readiness on UHF installation for state aircraft.

A.3.3 Training**8.33 – 15**

- a) To assess evidences of the ATCOs training in General 8.33 co-ordination procedures,
- b) To assess evidences of the ATCOs training in Procedures for State aircraft,
- c) To assess evidences of the ATCOs training in Phraseology to be used,
- d) To assess State readiness on training (including Maastricht UAC),
- e) To assess CFMU readiness on training (CFMU staff training),
- f) To assess evidences of the ATCOs training in contingency 8.33 procedures,
- g) To assess evidences of the ATCOs training in 8.33 gradual introduction procedures.

A.3.4 Frequency Management

8.33 – 16

To assess evidences of the national frequency managers having achieved the following;

- Collecting 25 kHz frequencies as candidates for conversion,
- Developed an allocation process for new channels,
- Co-ordination with ACC on future RTF usage.

A.3.5 Airspace

8.33 – 17

- a) To assess evidence of AIC publication defining 8.33 implementation,
- b) To assess publication of AIP amendment advising 8.33 sectors and carriage requirements,
- c) To assess withdrawal of exemptions.

APPENDIX A – ANNEX 1 – CRITERIA CHECK-LIST

A1 General Criteria

Criterion No: 8.33 – 1	Text of Criterion: a) Assess the 8.33 Hazard model to determine if the risk of the 8.33 kHz introduction will be no more than present 25 kHz implementations.	
	Means of Compliance: ICAO and SRC Provisions and TLS	
	Requirement Mapping: SRC POL DOC 1; ESARR 4 Req. 5.1., 5.2., 5.3., Section 8.2.3.; ESARR 3 Req. 5.2.3.	Compliance assessment (by whom): SRC <input checked="" type="checkbox"/> National ATM Safety Regulators <input type="checkbox"/> ASR <input type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 30.07.2001 – initial review of Safety Validation Study	Status: Achieved: <input checked="" type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/> As a result of the circulation of the SVS to commissioners, no significant comments were made that suggested the SVS was invalid.	
NOTES/Remarks/Recommendations: The approach taken by the 8.33 programme is to build a FHA based on determining the risk of a non 8.33 aircraft entering 8.33 airspace. This incorporates the risk mitigations planned to prevent the event. The FHA is populated with data based on operational data. <u>Sub-criterion 8.33 1-1: Operational data</u> 8.33 Programme to ensure that the process for collecting operational data provides complete data with high integrity. <u>Suggested regulatory approach</u> SRC to consider the adequacy of the processes for collecting and processing operational data. Comparison with data reported from SRC representatives. <u>Status</u> No commissioner has reported that evidence from their state is in contradiction with the findings of the SVS.		

Criterion No: 8.33 – 2	Text of Criterion: To assess the 8.33 programme Safety Validation study to determine if all hazards have been identified and adequately represented.	
	Means of Compliance: EATMP Safety Assessment Methodology, Programme Safety Policy	
	Requirement Mapping: ESARR 4 Req. 5.1, 5.2 and 5.3 SRC POL DOC 1; ESARR 3 Req. 5.2.3, 5.2.4., 5.2.5	Compliance assessment (by whom): SRC <input checked="" type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 30.07.2002 First review of Safety Validation Study Status; Complete 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input checked="" type="checkbox"/> Not Achieved: <input type="checkbox"/> As a result of the circulation of the SVS to commissioners, no significant comments were made that suggested the SVS was invalid as an argument to the safety of the concept. In the absence of the PISC, there is no identification of all states having completed this action, the status is partially achieved. Feedback from states will allow status to be achieved.	
NOTES/Remarks/Recommendations: <ul style="list-style-type: none"> – <i>Note: The Safety Policy of the 8.33 HEP Programme comprises amongst other elements the objective to conduct the following;</i> <ul style="list-style-type: none"> – A preliminary hazard assessment (PHA) identifying applicable hazards and their severity. – A hazard identification meeting to identify the principal hazards, their severity and the likelihood of occurrence of their contributing factors. Actions to mitigate against risk will also be identified and their potential effectiveness determined. – A fault tree analysis to determine the likelihood of occurrence of the principle hazards. – A revised safety validation study using IFPS data and incident reports accumulated through six months of 8.33 operations. This study will verify the effectiveness of risk mitigating actions, proposing new or modified actions as required. – Guidance and support to individual States as they prepare for 8.33 operations. 		
Sub-criterion 8.33 2-1: Compliance checking		

SRC and National ATM Safety regulators including ASR need to check:

- The Hazard Analysis is verified / validated as suitable for national environments.

Sub-criterion 8.33 2-2: Acceptable Risk

To determine if the approach chosen to limit an analysis to showing risk remains the same is acceptable to ESARR 3 and 4.

Status

That the SVS analysis met the requirements of ESARR 4 and ESARR 3 when originally issued. That the update to the SVS is of such minor nature that the full ESARR 4 analysis was not necessary.

Sub-criterion 8.33 2-3: Safety Accountabilities and Safety Validation study Review

To ensure that the safety arguments presented are the output of a defined organizational process. That the safety accountabilities are defined for this organization. That these safety accountabilities are consistent and provide responsibilities for production, review and approval of safety arguments. In particular that the safety accountabilities are defined for each person submitting safety argument.

Status

Safety accountabilities are sufficiently defined in safety policy.

Criterion No: 8.33 – 3	Text of Criterion: To assess the mitigations proposed by the programme following the FHA ;	
	Means of Compliance: EATMP Safety Assessment methodology & operational judgement ²	
	Requirement Mapping: ESARR 4 Req. 5.1, 5.2 and 5.3 ESARR 3 Req. 5.2.4., 5.2.5 and 5.3.	Compliance assessment (by whom): SRC <input checked="" type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 30.07.2002 – initial review of Safety Validation study Status; Complete 30.07.02 – initial review of National Safety Plan template and Implementation report template. Status; Complete 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input checked="" type="checkbox"/> Not Achieved: <input type="checkbox"/> As a result of the SVS, the mitigations proposed were found acceptable. From the review of the National Safety Plan template, the mechanism for delivering verification information from states was found acceptable. In the absence of the PISC, the states actions to implement the safety requirements as defined in the various Programme deliverables cannot be confirmed hence the status is partially achieved.	
NOTES/Remarks/Recommendations: <u>Sub-criterion 8.33 3-1: FHA Verification</u> That the safety requirements and assumptions made in the FHA are verified in practice. This translates to validating the operational data used and verifying the mitigation is in place. <u>Suggested regulatory approach</u> SRC to consider the national safety plans to determine if the safety requirements and assumptions flow to the necessary part of the national authorities. To consider the policy, review, and structure of evidence proposed for the assessment of the national safety plans SRC and National ATM Safety Regulators to determine whether the PISC confirms that the requirements and assumptions have been verified.		
<u>Status</u>		

² The project Safety Validation Study is considered as a proposed means of compliance to ESARR 3 and 4 for the non airborne parts of the ATM system. For the airborne part, the EUROCAE and RTCA MASPS are considered an acceptable means of compliance.

National Safety Plan and Implementation report template were considered by commissioners and found generally sufficient.

As the PISC has yet to be delivered it is not possible to confirm that all safety requirements and assumptions are verified.

A2 Criteria for AIRBORNE segment

Criterion No: 8.33 – 4	Text of Criterion: To ensure 8.33 kHz approval to those who are operating or intend to operate within EUR continental area; a) To certify the aircraft scheduled to operate within EUR airspace (the area of applicability is depicted in appendix E.) The three sets of controls, type approval, production release and continued airworthiness would together constitute the MASPS. b) To assess MASPS compliant aircraft population (i.e. to accurately evaluate how many aircraft scheduled to fly in area of applicability are MASPS approved); c) To assess/ensure 8.33 OPS approval; d) By looking to the above aircraft population to assess the AO readiness; e) The overall state readiness for the airborne segment is to be checked at a national level to ensure safe introduction of 8.33.	
	Means of Compliance: JAA TGL7 thence EUROCAE or RTCA MASPS and MOPS (ED23b)	
	Requirement Mapping: ESARR 4 Req. 5.1.a. and 5.2.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input type="checkbox"/> ASR <input type="checkbox"/> National OPS Approval Body ³ <input checked="" type="checkbox"/>
Compliance status reporting date (by when): 1.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: In addition to the work to be performed at national level, SRC will verify with the 8.33 Programme the monitoring data available. <u>Sub-criterion 8.33 5-1:- Crew training</u> - To assess evidences of Flight Crew Training in Operating Procedures (8.33 Operations, Contingency Procedures and Flight Planning Procedures)		

³ Depending on the National institutional arrangements those OPS approval bodies might be different from the National ATM Safety regulators (bodies and/or functions) or they could be identified using different references (e.g. State Certification Authorities, etc).

A3. Criteria for GROUND Segment:

A3.1 PROCEDURES

Criterion No: 8.33 – 5	Text of Criterion: Assess the airspace considerations of designating sectors as being 8.33. Particularly attention to be paid, not exhaustively, to the following issues: a) LOAs – Letters of Agreement updated to reflect the introduction of 8.33 and consequent protection measures for preventing non 833 aircraft from entering region above FL245; b) Defining 8.33 within the ENV parameter in IFDP. c) All possible contingency procedures.	
	Means of Compliance: LOA documentation 8.33.	
	Requirement Mapping: ESARR 4 Req. 5.1.b), 5.2.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: <p><i>The following list is covering some identified constraints, where it is strongly recommended to the ATM national regulators, to assess the mitigation means put in place to minimise the risk induced by the introduction of 8.33 :</i></p> <ul style="list-style-type: none"> → Collocation of 8.33 HEP area boundary with State Borders and consequent applicability of national exemptions from carriage); → The ATC operations necessary at the borders to the HEP to control admission of non 8.33 approved flights and / or to confirm 8.33 approval status; → Provision to IFPS of appropriate ENV definitions to allow correct Flight plan checking of 8.33 status.); → The equipment used and / or procedures used for checking / confirming 8.33 status on hand-over between centres (particularly for centres outside IFPS); <p>The map defining the initial, HEP and other states, that defines the states that may be required to confirm 8.33 status, is shown at Appendix C.</p> <p>Potential Mitigation strategies for the above constraints are listed below for the benefit of both safety regulators and service providers.</p> <p>The States potentially affected by the above mentioned issues are urged to make the appropriate actions to secure and document the mitigation strategies in the appropriate national regulations, procedures, manuals, etc.</p> <ul style="list-style-type: none"> → To define procedures within airspace inside the border of the HEP to reconfirm 8.33 status; → To indicate in Radar Label and / or flight strip the 8.33 status. 		

Criterion No: 8.33 - 6	Text of Criterion: To assess compliance with the flight Planning procedures (users affected : AO, ATM service providers, AROs and CFMU).	
	Means of Compliance: 8.33 User guide; ICAO DOC 7030/4 Part EUR/RAC Chapter 3.0 Amendment 200/2000	
	Requirement Mapping: ESARR 4 Req. 5.1.b), 5.2	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
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NOTES/Remarks/Recommendations: None		

Criterion No: 8.33 – 7	Text of Criterion: To assess compliance with ATC generic procedures, specifically on phraseology, 8.33 installation check and handling of state aircraft and SAR and HOSP flights. To verify the documentation for new procedures (e.g. OPS Manual updates);	
	Means of Compliance: ATC Manual; 833 User guide, ICAO DOC 7030/4 Amendment 200/2000	
	Requirement Mapping: ESARR 4 Req. 5.1.b), 5.2	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: None		

Criterion No: 8.33 – 8	Text of Criterion: To assess ATM/CNS providers monitoring practices.	
	Means of Compliance: National Safety Plans	
	Requirement Mapping: ESARR 3 Req. 5.3 particularly 5.3.2. & ESARR 4 Req. 5.3. ESARR 2	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations:		

Criterion No 833 – 9	Text of Criterion: To assess State Readiness in respect of ATC procedures (including Maastricht UAC)	
	Means of Compliance: 833 User Guide, ICAO DOC 7030/4 Amendment 200/2000, National Safety Plans;	
	Requirement Mapping: ESARR 4 Req. 5.2.d & 5.3.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when) 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations:		

Criterion No: 8.33 – 10	Text of Criterion: To assess CFMU readiness on procedures (to verify the IFPS capability of handling the mixture of flight plans) including contingency procedures.	
	Means of Compliance: 833 User Guide, ICAO DOC 7030/4 amendment 200/2000	
	Requirement Mapping: ESARR 4 Req. 5.2.d & 5.3.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: None		

Criterion No: 8.33 – 12	Text of Criterion: To assess/verify the development/existence of contingency procedures in case of neighbouring sectors/centres/ States failure to provide 8.33 or 8.33 verification (both issues affecting possibility of non 8.33 compliant aircraft being allowed into an 8.33 sector);	
	Means of Compliance: National ATC Manual, ICAO DOC 7030/4 Amendment 200/2000; 833 User guide; National ATC training material	
	Requirement Mapping: ESARR 3 Req. 5.2.4. and ESARR 4 Req. 5.2 and 5.3.	Compliance assessment (by whom): SRC <input checked="" type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input checked="" type="checkbox"/> Not Achieved: <input type="checkbox"/> The SVS provides argument for where neighbouring states do not provide 8.33 verification. In the absence of the PISC, there is no indication that states carry out the 8.33 verification as required by the programme deliverables.	
NOTES/Remarks/Recommendations: This criterion is fundamental in respect of SRC recommendation to Provisional Council for the Go/Delay decision. SRC does not have designated representation from all ECAC States and as such has no visibility of the ATM regulatory process in all States affected by 8.33 Programme (see in Appendix C - the Area of applicability). The SRC regulatory assessment process will address those ECAC Member States with no designated representation at SRC through their representatives in the Provisional Council, through the 833 Programme or via the adjacent national regulators as appropriate.		

Criterion No: 8.33 – 13	Text of Criterion: <ul style="list-style-type: none"> • Assess local deviation from ICAO/EUROCONTROL publish procedures • To verify the publication in National AIP of the deviation from ICAO published procedures. 								
	Means of Compliance: 833 User, ICAO DOC 7030;								
	Requirement Mapping: Art. 38 of Chicago Convention; ESARR 3 Req. 5.2.5. and 5.3.4; ESARR 4 Req. 5.3.	Compliance assessment (by whom): <table style="width: 100%; border: none;"> <tr> <td>SRC</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> <tr> <td>National ATM Safety Regulators</td> <td style="text-align: right;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>ASR</td> <td style="text-align: right;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>National OPS Approval Body</td> <td style="text-align: right;"><input type="checkbox"/></td> </tr> </table>	SRC	<input type="checkbox"/>	National ATM Safety Regulators	<input checked="" type="checkbox"/>	ASR	<input checked="" type="checkbox"/>	National OPS Approval Body
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Achieved:	<input type="checkbox"/>								
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NOTES/Remarks/Recommendations: Relates to production of NOTAMS and AIP relating to exemptions and notification of 8.33 mandatory carriage at ACC level.									

A3.2 EQUIPMENT

Criterion No: 8.33 - 14	Text of Criterion: a) To assess evidences for FDP modifications for processing and internal distribution of 8.33 and / or UHF status; b) To assess evidences for radar display modifications to include 8.33 and / or UHF status; c) To assess evidences for flight progress strips (paper or electronic) modifications for inclusion of 8.33 and / or UHF status; d) To assess State readiness on equipment (including Maastricht UAC); e) To assess CFMU readiness on equipment;	
	Means of Compliance: 833 User guide, ICAO DOC 7030/4 amendment 200/2000	
	Requirement Mapping: ESARR 4 Req. 5.1.c., ESARR 3 Req. 5.2.4.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: <u>Sub-criterion 8.33 14-1:- OLDI</u> To assess evidences for On-Line Data Interchange (OLDI) modifications, where applicable.		

A3.3 TRAINING

Criterion No: 8.33 – 15	Text of Criterion: a) To assess evidences of the ATCOs training in General 8.33 co-ordination procedures; b) To assess evidences of the ATCOs training in Procedures for State aircraft; c) To assess evidences of the ATCOs training in Phraseology to be used; d) To assess State readiness on training (including Maastricht UAC); e) To assess CFMU readiness on training (CFMU staff training); f) f) To assess evidence of the ATCOs training in contingency 8.33 procedures.	
	Means of Compliance: 833 User guide, ICAO DOC 7030	
	Requirement Mapping: ESARR 4 Req. 5.1.c., ESARR 3 Req. 5.2.1.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 01.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: None		

Criterion No: 8.33 – 16	<i>Text of Criterion:</i> To assess evidences of the national frequency managers having achieved the following; <ul style="list-style-type: none"> • Collecting 25 kHz frequencies as candidates for conversion • Developed an allocation process for new channels • Co-ordination with ACC on future RTF usage. 	
	<i>Means of Compliance:</i> 833 User guide, ICAO EANPG FMG, EUROCONTROL PLAN FOR THE 8.33 kHz CHANNEL SPACING IMPLEMENTATION IN EUROPE (accepted at EANPG 38)	
	<i>Requirement Mapping:</i> ESARR 4 Req. 5.1.c., ESARR 3 Req. 5.2.1.	<i>Compliance assessment (by whom):</i> SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
<i>Compliance status reporting date (by when):</i> 1.10.02	<i>Status:</i> <i>Achieved:</i> <input type="checkbox"/> <i>Partially achieved:</i> <input type="checkbox"/> <i>Not Achieved:</i> <input type="checkbox"/>	
<i>NOTES/Remarks/Recommendations:</i> None		

Criterion No: 8.33 – 17	Text of Criterion: a) To assess evidence of AIC publication defining 8.33 implementation b) To assess publication of AIP amendment advising 8.33 sectors and carriage requirements c) To assess withdrawal of exemptions	
	Means of Compliance: 833 User guide, ICAO doc. 7030/4 Amendment 200/2000	
	Requirement Mapping: ESARR 4 Req. 5.1.c., ESARR 3 Req. 5.2.1.	Compliance assessment (by whom): SRC <input type="checkbox"/> National ATM Safety Regulators <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> National OPS Approval Body <input type="checkbox"/>
Compliance status reporting date (by when): 1.10.02	Status: Achieved: <input type="checkbox"/> Partially achieved: <input type="checkbox"/> Not Achieved: <input type="checkbox"/>	
NOTES/Remarks/Recommendations: Relates to national regulators being able to legislate 8.33 operation in their state.		

APPENDIX B – REFERENCE MATERIAL

IACO DOC 7030/4 – Regional Supplementary Procedures Amendment 200/2000

JAA – TGL7 Guidance Material on the approval of aircraft and operators for 8.33 kHz operation

EUROCONTROL – The Smith group; 8.33 Safety Validation Study

EUROCONTROL – Updated 8.33 Safety Validation Study

EUROCONTROL – Plan for the 8.33 kHz Channel Spacing Implementation in Europe.

EUROCONTROL – Safety Policy 8.33 kHz Horizontal Expansion programme

EUROCONTROL - 8.33 kHz User Guide

EUROCONTROL – 8.33 kHz Pre Implementation Safety Case

EUROCONTROL – 8.33 kHz National Safety Plan template

EUROCONTROL – 8.33 kHz National Safety Implementation report template

EUROCONTROL - 8.33 kHz Programme, Successes and Opportunities for Improvement

ESARR 2 – Reporting and Assessment of Safety Occurrences in ATM

ESARR 3 – Use of Safety Management Systems by ATM Service Providers

ESARR 4 – Risk Assessment and Mitigation in ATM

ESARR 5 – ATM Services' Personnel

SRC POL DOC 1 – ECAC Safety Minima for ATM

SRC DOC 1 – Safety Minima Study – Review of Existing Standards and Practices

SRC DOC 2 – Aircraft Accidents/Incidents and ATM Contribution – Review and Analysis of Historical data

APPENDIX C – PROGRAMME AREA OF APPLICABILITY

