

**ČESKÁ REPUBLIKA
CZECH REPUBLIC**





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ROUTE AVAILABILITY DOCUMENT (RAD)
Všeobecný popis

ROUTE AVAILABILITY DOCUMENT (RAD)
General description

1. Platnost/Validity: od/from: **19 JUL 18**
do/to: **UFN**
2. Část AIP, které se tento AIP SUP týká/AIP section affected by this AIP SUP: **ENR**
3. Proved'te záznam na straně/Record the AIP SUP on page **GEN 0.3-1**
4. Následující publikace jsou zahrnuty do tohoto AIP SUP a tím zrušeny:
The following publications have been incorporated in this AIP SUP and therefore cancelled:
AIP SUP: 6/17
AIC: NIL
Následující NOTAMy jsou zahrnuty do tohoto AIP SUP a budou zrušeny NOTAMem:
The following NOTAMs are incorporated in this AIP SUP. They will be cancelled by NOTAM.
NOTAM: NIL

ČR nevydává RAD v plném rozsahu. ČR vydává formou AIP SUP pouze RAD general description (příloha tohoto AIP SUP), a části RAD týkající se ČR (zveřejněny v samostatných AIP SUP). Kompletní aktuální RAD je k dispozici na internetu na adrese

CR does not publish full RAD. CR issues by AIP SUP only RAD general description (Appendix of this AIP SUP) and parts of RAD concerning CR (issued as individual AIP SUP). The complete up-to-date RAD is available on the Internet at the address

<https://www.nm.eurocontrol.int/RAD/index.html>

nebo na vyžádání na ARO letiště PRAHA/Ruzyně (LKPR), případně je možno RAD zaslat zájemcům faxem nebo elektronickou poštou.

or on request at ARO of the airport PRAHA/Ruzyně (LKPR). RAD can be sent to the persons concerned, by fax or by e-mail.

Příloha 1:
Route Availability Document (RAD) - všeobecný popis

Appendix 1:
Route Availability Document (RAD) – general description

- KONEC -

- END -

RAD GENERAL DESCRIPTION

(European Route Network Improvement Plan - Part 1, Section 8)

1. INTRODUCTION

- 1.1. The Route Availability Document (RAD) is created based on:
 - a. COMMISSION REGULATION (EU) No 255/2010 of 25 March 2010 laying down common rules on air traffic flow management, Article 4 - General obligations of Member States, paragraph 4; and
 - b. COMMISSION REGULATION (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EU) No 691/2010, Annex I - The European Route Network Design (ERND) Function, Part B - Planning principle 5(d).
- 1.2. The RAD is a common reference document containing the policies, procedures and description for route and traffic orientation. It also includes route network and free route airspace utilisation rules and availability.
- 1.3. The RAD is also an Air Traffic Flow and Capacity Management (ATFCM) tool that is designed as a sole-source flight-planning document, which integrates both structural and ATFCM requirements, geographically and vertically.

2. BASIC PRINCIPLES

- 2.1. The objective of the RAD is to facilitate flight planning, in order to improve ATFCM, while allowing aircraft operators' flight planning flexibility. It provides a single, fully integrated and co-ordinated routing scheme. Except where otherwise specified the RAD affects all areas where the Network Manager provides ATFCM services.
- 2.2. The RAD enables States/FABs/ANSPs to maximise capacity and reduce complexity by defining restrictions that prevent disruption to the organised system of major traffic flows through congested areas with due regard to Aircraft Operator requirements.
- 2.3. The RAD is designed as a part of the Network Manager (NM) ATFCM operation. It is organising the traffic into specific flows to make the best use of available capacity. Whilst, on its own, it will not guarantee the protection of congested ATC sectors during peak periods, it should facilitate more precise application of tactical ATFCM measures.
- 2.4. The RAD should also assist the Network Manager in identifying and providing re-routing options. Global management of the demand will, potentially, lead to an overall reduction of delays. It is important to note that to achieve this, some re-distribution of the traffic may be required through the implementation of Scenarios. This may result in modified traffic/regulations in some areas where, under normal circumstances, they would not be seen.
- 2.5. The content of the RAD shall be agreed between the Network Manager and the Operational Stakeholders through an appropriate Cooperative Decision Making (CDM) process.
- 2.6. The RAD is subject to continuous review by the Network Manager and the Operational Stakeholders to ensure that the requirements are still valid and take account of any ATC structural or organisational changes that may occur.

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- 2.7. The RAD is updated each AIRAC cycle following a structured standard process of:
 - a. Requirement;
 - b. Validation;
 - c. Publication by the Network Manager in cooperation/coordination with all Operational Stakeholders.
- 2.8. The RAD is only applicable to the IFR part of the Flight Plan.
- 2.9. Each State shall ensure that the RAD is compatible with their AIP with regard to the airspace organisation inside the relevant FIR/UIR.
- 2.10. The NM is responsible for preparing of a common RAD reference document, collating, coordinating, validating and publishing it, following the CDM process as described in this section.

3. STRUCTURE

3.1. Document structure

3.1.1. The RAD consists of:

- a. General description;
- b. 6 (six) Appendices:
 - Appendix 2 - Area Definition;
 - Appendix 3 - Flight Level Capping limits;
 - Appendix 4 - En-route DCT limits;
 - Appendix 5 - Airport connectivity;
 - Appendix 6 - Flight Profile Restrictions;
 - Appendix 7 - FUA Restrictions
- c. a Network wide Pan-European Annex;
- d. a separate Annex for special events, if necessary, containing restrictions of temporary nature (i.e. European/World Sport Events, Olympic Games, large scale Military exercises, economic forums ...).

3.1.1.1 General description

- a. It defines the basic principles, general structure of the RAD, the structure of RAD restrictions, period of validity, application, amendment process, temporary changes, some flight planning issues, routeing scenarios, publication, tactical operations and RAD review process.

3.1.1.2 Appendix 2

- a. It defines a number of airfields included in the RAD described by the following terms:
 - “Group” - defines a number of 3 (three) or more airfields that may be subject to the same restrictions. For example a major destination may have a number of minor satellite airfields in the vicinity; this constitutes a “Group”;
 - “Area” - defines as a number of airfields within the same region and may comprise several “Groups”, or individual airfields.
- b. The definition of the Group or Area is the responsibility of the State/FAB/ANSP within which the Group or Area exists; however other States/FABs/ANSPs may use the definition.
- c. If a State/FAB/ANSP wishes to use a defined Group or Area with the exclusion or inclusion of certain airfields, then this should be depicted as follows:

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Fictitious Example

Change record	Group/Area Definition ID	Group/Area Airports Definition
	A..... Group	E___/E___
	B..... Area	L___/L___
	C..... Y/Z Area	L___/L___

- d. By using the above methodology, there can only be one definition of each Group/Area, thus reducing confusion.
- e. However, it is the responsibility of the State/FAB/ANSP to ensure that when corrections are made to Appendix 2 that these amendments are also applicable to any restriction using the defined Group/Area. The Network Manager will endeavour to notify relevant States/FABs/ANSPs of such changes.

3.1.1.3 Appendix 3

- a. It defines FL capping limitations imposed by each State/FAB/ANSP and is applied from airport of departure (ADEP) to airport of destination (ADES).

Fictitious Example

Change record	ID Number	City Pair	FL Capping	Time Availability Restriction Applicability
	E_4001	A..... Group to B..... Group	Not above FL235	08:30 – 10:30 (07:30 – 09:30)
	L_4002	C..... Area from/to L___, E___	Not above FL315	04:00 – 23:00 (03:00 – 22:00)
	L_4004	L___FIR from E___FIR	Not above FL345	03:00 – 20:00 (02:00 – 19:00)

3.1.1.4 Appendix 4

- a. It defines the en-route DCT (Direct) flight plan filing limitations imposed by each State/FAB or ATC Unit in accordance with provisions of ICAO Doc 4444 - ATM (PANS-ATM);
- b. It contains:
 - DCT horizontal limits inside each ATC Unit;
 - Cross-border horizontal DCT limits (between ATC Units);
 - Vertically defined DCTs with availability “No” or “Yes”, with certain traffic flow limitations and with defined Operational goal. Also part of these DCTs are:
 - Free Route Airspace (FRA) DCTs.
- c. It should contain, for DCTs with availability YES, all possible remarks concerning the airspace crossed by the allowed DCTs. Based on relevant State AIPs AOs shall be informed for DCTs passing by: Uncontrolled classes of airspace, Danger areas, Prohibited areas, Restricted areas, TSAs, TRAs, CBAs, CTRs, TMAs, etc.
- d. It should not be considered as an airspace design tool creating a complimentary ATS route network in Europe;
- e. Where DCT applies to Free Route Airspace (FRA) the definition of the FRA shall be found in the relevant AIP;
- f. Each State shall insure that the DCTs are compatible with their AIP with regard to the airspace organisation inside the relevant ATC Units.

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Fictitious Example for DCT segments

Change record	FROM	TO	Lower Vertical Limit (FL)	Upper Vertical Limit (FL)	Available (Y) / Not available (N)	Utilization	DCT Time Availability	ID Number	Operational Goal	Remark/s	Direction of cruising levels	ATC Unit
	AAAAA	BBBBB	315	660	Yes	Only available for traffic	H24	E_5001	Night time direct route	Via TSAxxx	EVEN	E__ACC
	CCCCC	DDDDD	045	245	Yes	Only available for traffic	06:00 - 22:00 (05:00 - 21:00)	L_5002	Traffic DEP ... shall file	Within Class G airspace	ODD	L__ACC

Fictitious Example for DCT vertical and horizontal limits

Change record	ATC Unit Name	ATC Unit Vertical Limit	DCT Horizontal Limit	Cross-border DCT Limits	ID Number DCT limit	ID Number Not allowed Cross-border DCT ----- Cross border country codes in ID number may be bi-directional
	E__ACC	below FL115	50NM	Allowed except to/from	E_1	E_E_400
	L__ACC	below FL245	0NM	Not allowed except to/from	E__1	_E_400

3.1.1.5 Appendix 5

- a. It defines the DCT (Direct) flight plan filing connections defined by each State/FAB/ANSP to/from the airports without SIDs/STARs or with SIDs/STARs which are not able to be complied due to certain aircraft limitations. This is done only to support/facilitate the processing of flight plans. Based on relevant State AIPs AOs shall be informed about the airspace organisation at/around the airports.
- b. It contains:
 - airport DCT horizontal limits;
 - connecting points for ARR/DEP;
 - additional compulsory FRA Departure (D) /Arrival (A) Connecting Point/s from/to a certain TMA/airport and indications on their use for departures / arrivals from / to specific aerodromes;
 - information for some flight plan filing limitations with regard to last/first SID/STAR points and ATS route network, if required;
 - information for AOs to comply with SIDs/STARs, if required.

Fictitious Example

Change Record	DEP AD	Last PT SID / SID ID	DCT DEP PT	DEP Restrictions	DEP Restriction Applicability	DEP ID No	DEP Operational Goal / Remarks	NAS / FAB
	L___ (Note 1)		AAAAA (Only Jet)	Only available above FL065 Via CCCCC DCT LLLL	H24	L_5500		L_

Change Record	ARR AD	First PT STAR / STAR ID	DCT ARR PT	ARR Restrictions	ARR Restriction Applicability	ARR ID No	ARR Operational Goal / Remarks	NAS / FAB
	E___ (Note 1)		AAAAA (Only Jet)	Only available above FL065 Via CCCCC DCT LLLL	H24	E_5500		E_

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3.1.1.6 Appendix 6

- a. It defines the vertical profile elements of the LoAs between adjacent ATC Units. This purely operational data is not published through AIS;
- b. It contains the restrictions which influence how the profile is calculated in NM systems and the Flight Plan will not be rejected (REJ) by IFPS even when there is no reference to the corresponding restriction in Field 15. The Operational Stakeholders are not required to file in the Flight Plan these restrictions. In this case it is the option of the filer to either include or exclude the restriction in the FUEL PLAN.

Note: If there is requirement to hard check any restriction, then the corresponding restriction shall be transferred to the Pan-European Annex.

Fictitious Example

Change record	ID Number	Flow Routing	Utilization	Time Availability	Operational Goal
	L_8001	AAAAA	Not available for traffic above FL235.	H24	To comply with LoA.
	E_8002	AAAAA T1 BBBB	Not available for traffic DEP/ARR X group via MMM below FL075.	00:01 – 04:50 (23:01 – 03:50)	To force traffic via CCCCC.

3.1.1.7 Appendix 7

- a. It defines the airspace restrictions (FUA restrictions) caused by restricted airspace (RSA) activation within each State/FAB/ANSP;
- b. It contains:
 - coded name identification of the relevant restricted airspace;
 - information that restriction is valid only, when the airspace is allocated at EAUP/EUUP.
 - specific conditions for the utilization of FRA Intermediate Point/s (I).

Fictitious Example

Change record	RSA	Restriction Applied during times and within vertical limits allocated at EAUP/EUUP	ID Number	Operational Goal	Affected ATS route/s / DCT/s
	L_R24	Not available for traffic during the times and within the vertical limits allocated at EAUP/EUUP	L_R24R	Traffic is not allowed to flight plan across active military area.	AAA L1 BBBB CCCC M1 DDDDD DCT EEE - FFFFF
	E_TRA51	During the times and within the vertical limits allocated at EAUP/EUUP Only available for traffic 1. DEP/ARR E _ _ _ 2. Military GAT 3. Via AAAAA N3 BBBB 4. Via CCCCC N3 DDDD	E_TRA51R	Traffic is not allowed to flight plan across active military area except specified flows. For avoidance nearby FRA (I) point/s is/are: ZZZZ, FFFF, MMMM.	AAA L1 BBBB CCCC M1 DDDDD GGGG N1 HHHH DCT RRRR - TTTT DCT NNNN - LLLL

3.1.1.8 Network wide Pan-European Annex

- a. The Annex contains a list of restrictions valid for each States/FABs/ANSPs on specific:
 - Significant point/s; or
 - ~~NAVAID/s; or~~
 - ATS route segment/s; or
 - ~~ACC/UAC sector/s;~~
 - **Airspace volume/s (ATC Unit, AoR of relevant ATC Unit - CTA/UTA, TMA, CTR or individual control sector/s within an ATC unit).**
- b. The Annex also contains the relevant restrictions included in Letters of Agreement (LoA) between adjacent ATC Units requested to be “H” Hard checked. These restrictions are named “Cross-border”.

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Fictitious Example

Change record	Airway	FROM	TO	Point or Airspace	Utilization	Restriction Applicability	ID Number	Operational Goal	Remark/s	ATC Unit
	UL1	AAAAA	BBBBB		Not available for DEP ...	H24	L_E_1001	To segregate traffic		E_... ACC
				CCCCC	Only available for traffic ARR ...	23:00 - 05:00 (22:00 - 04:00)	E_L_2033	To dualise the traffic ...	FRA application	L_... ACC
				Airspace E_..._ES	Compulsory for traffic DEP/ARR ...	06:00 - 22:00 (05:00 - 21:00)	E_2002	To force traffic ...		E_... ACC

3.2. **Restriction structure**

3.2.1. Each restriction is hierarchical and specific and has been arranged to facilitate parsing of the information into computer systems.

3.2.2. For the usage of the restricted object (**significant point, ATS route segment, defined DCT, airspace volume (ATC Unit, AoR of relevant ATC Unit - CTA/UTA, TMA, CTR or individual control sector/s within an ATC unit), etc.**) there are 3 (three) main types of restrictions:

- a. Not available for ...
Flight planning via restricted object is forbidden for described flow(s).
- b. Only available for ...
Flight planning via restricted object is allowed exclusively for described flow(s).
- c. Compulsory for ...
Flight planning via restricted object is the only valid option for described flow(s).

3.2.3. For the combination of elements that define the flow of traffic, there are 2 (two) types of restrictions - inclusive and exclusive:

- a. INCLUSIVE restriction - traffic must meet ALL of the conditions to be subject to the restriction. The implicit logical operator between the listed conditions is an “AND” - Logical Conjunction.

Fictitious Example

Airway	From - To	Restriction
UL1	AAAAA - BBBBB	Not available or Only available or Compulsory for traffic Above FL275 With DEP ... With ARR

- b. EXCLUSIVE restriction - traffic only needs to meet ONE of the numbered sub-conditions to be subject to the restriction. The implicit logical operator between the numbered conditions is an “OR” - Logical Disjunction.

Fictitious Example

Airway	From - To	Restriction
UL1	AAAAA - BBBBB	Not available or Only available or Compulsory for traffic 1. ARR 2. Via ... Except a. ARR b. DEP..... 3. Via ... with

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3.2.4. Usage of combinations and terms in utilization expression

If circumstances allow or if it is required for better expression of the utilization, the 3 (three) usage types can be combined as follows:

- a. “Only available” and “Compulsory” might be used in combination, resulting in “Only available and Compulsory”.

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	<i>Only available and Compulsory for traffic</i> ARR

- b. “Only available ...” together with “Not available ...”, are combined by using the formula:
“Only available for ...
Except ...”

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	<i>Only available for traffic</i> ARR Except Via...

- c. Combining “Compulsory... ” with “Not available.... ” is NOT POSSIBLE. The TWO independent numbered expressions shall be given within the same box.

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	1. <i>Compulsory for traffic</i> ARR Via... Above FL245 at... 2. <i>Not available for traffic</i> DEP

- d. term “Except” to define usage:
The expression “Not available for traffic except ...” shall be avoided, “Only available for traffic...” shall be used instead.

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	<i>Not available for traffic</i> Except DEP
It is the same as below which is clearer.		
UL1	AAAAA - BBBBB	<i>Only available for traffic</i> DEP

- e. The expression “Only available for traffic except” shall be used only if the combination of elements is inclusive.

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Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	Only available for traffic ARR Via... Above FL245 at... Except DEP

- f. If the combination of elements is exclusive, it can lead to two different ways of interpretation. To have the required effect TWO (or more) independent numbered expressions shall be given within the same box.

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	Only available for traffic 1. Except DEP 2. ARRVia... 3. ARR...Via...
Shall be expressed as:		
UL1	AAAAA - BBBBB	1. Only available for traffic a. ARRVia... b. ARR... Via... 2. Not available for traffic DEP

- g. The word “except” used in expression of utilization can also be used in between brackets to exclude relevant destinations from Area/Group definitions; FIR/UIR; ACC/UAC; etc. used as terminal conditions.

Fictitious Example

Airway	From - To	Utilization
UL1	AAAAA - BBBBB	Only available for traffic ARR nnnnnnn Group (except nnaa) Via...

- h. The 2 (two) combination of elements types might also be used alone or in combination.

3.2.5. The term Requested FL (RFL) is used for RAD purposes and refers to the actual requested cruising level as specified in the ICAO flight plan field 15. Where it is used it shall be applied only to the State/FAB/ANSP in question unless otherwise specified. If a restriction specifies FL that is understood to be the flight level measured against IFPS calculated profile and is checked accordingly.

3.2.6. ~~All restrictions for the same restricted object (ATS route segment, point, NAVAID, airspace definition, ATC Unit, DCT, etc.) shall be identified by one unique identifier.~~ Restrictions for the same restricted object (significant point, ATS route segment, defined DCT, airspace volume (ATC Unit, AoR of relevant ATC Unit – CTA/UTA, TMA, CTR or individual control sector/s within an ATC Unit), etc) may be identified by more than one unique identifier. A single restriction should aim at containing all the flow elements that concerns a single operational goal or closely relation operational goals.

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- 3.2.7.** State/FAB/ANSP restrictions shall be uniquely identified by a 6 (six) digit alpha/numeric identifier which comprises the ICAO nationality letters for location indicators assigned to the State of origin or 2 (two) letter Regional / FAB naming convention prefix code, together with a 4 (four) digit number (LF2016, DU2001, RE2001). Exception from above rules is allowed for DCT identification in Appendix 4 where a maximum 9 (nine) digit alpha/ numeric identifier containing 5 (five) digit number might be used (LF50001, DU52345, RE54999, DSYX50000) and FUA Restrictions in Appendix 7.
- 3.2.8. Cross-border (RAD) restrictions
- 3.2.9. FUA restrictions Identification**
The FUA restrictions shall be identified as follows:
- Restricted Airspaces Identifier (RSA ID) as published in State AIP followed by 1 letter R, S, T, U, V, W, X, Y (LB TSA11R); or
 - Restricted Airspaces Identifier (RSA ID) as published in State AIP followed by 1 letter Z indicating FBZ existence followed by 1 letter R, S, T, U, V, W, X, Y (LB TSA11ZR).
Note: In case of more than 8 FUA restrictions per RSA the NM RAD Team in coordination with relevant NRC/s and/or other NMOC Team/s is authorised to use other letters starting with Q on reversed order (Q, P, N, M, etc. with no use of letters "O" and "I").
- When more than one FUA restriction is used for same RSA, the last letter shall be assigned based on the following rules:
- R - describes the most restrictive limitation/s in RSA availability;
 - S - describes the less restrictive limitation/s different from those under letter "R";
 - T, U, V, W, X, Y - same descending logic as for letter "S".
- 3.2.10.
- 3.2.8.1 Definition
RAD restrictions, except if otherwise mutually agreed by the States/FABs/ANSPs, shall be categorized as being cross-border when they are referenced to:
- a) boundary significant point;
 - b) ATS route segment or DCT starting from or ending at boundary significant point;
 - c) cross-border ATS route segment via boundary significant point or cross-border DCT.
- 3.2.8.2 The referenced significant point shall be located on common boundary between two adjacent airspaces. The concerned airspaces might be FIRs/UIRs or ACCs/UACs or CTAs/UTAs or FABs or combination of them. These airspaces shall not be inside the same FAB, if FAB prefix code is used in identification.
- 3.2.8.3 Cross-border restrictions might be or might not be part of the relevant LoA. Clear explanation for that shall be given by the appropriate National RAD Coordinator (NRC) in Column "Operational Goal".
- 3.2.8.4 For any State/FAB/ANSP restriction, not defined as cross-border and considered that has impact on adjacent State/FAB/ANSP clear explanation for that shall also be given by the appropriate National RAD Coordinator (NRC) in Column "Operational Goal".
- 3.2.8.5 Identification
Cross-border restrictions shall be identified with an 8 (eight) digit alpha/numeric identifier as follows:
- a) twice ICAO nationality letters for location indicators assigned to the State followed by 4 (four) digit number (EGEB1009); or
 - b) twice 2 (two) letter Regional / FAB naming convention prefix code followed by 4 (four) digit number (DUBM1001); or
 - c) ICAO nationality letters for location indicators assigned to the State and 2 (two) letter Regional / FAB naming convention prefix code or vice-versa followed by 4 (four) digit number (LWBM1001, DULY1001).
- 3.2.8.6 First two letters are identifying the State / FAB / ANSP performing the ATC action, while the second two letters - State / FAB / ANSP affected by that action.

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- 3.2.8.7 The Maastricht UAC restrictions are considered as cross-border and shall be identified as follows:
- inside AoR: ICAO nationality letters for location indicators assigned to the relevant State (EB, ED EH) and 2 (two) letters “YX” followed by 4 (four) digit number (EBYX1009);
 - outside AoR: 2 (two) letters “YX” and ICAO nationality letters for location indicators assigned to the neighbouring State or 2 (two) letter Regional / FAB naming convention prefix code followed by 4 (four) digit number (YXED1001, YXIU1002).

3.2.8.8 Coordination

Cross-border restrictions shall be coordinated between the NRCs of the States/FABs/ANSPs concerned BEFORE submission for inclusion in the RAD.

Any cross-border restriction discovered by the NM RAD Team that has not been coordinated will be removed from the RAD until the coordination process has been completed.

- 3.2.11. Identifiers shall be assigned at RAD document as per tables below:

Group ID	Origin ID	Restriction type	Restriction subtype	Publication
1 - 99	Country code or ATC Units or Regional / FAB ID	DCT	DCT limit inside ATC Units	Appendix 4
400	Country code or ATC Units or Regional / FAB ID	DCT	Cross-border DCT limit	Appendix 4
1000 - 1499	Country code or Regional / FAB ID(s)	Traffic Flow	Cross-border restrictions	Pan-European Annex
2000 - 3999	Country code or Regional / FAB ID	Traffic Flow	State/FAB/ANSP restrictions	Pan-European Annex
4000 - 4999	Country code or Regional / FAB ID(s)	Traffic Flow	City pair level capping	Appendix 3
5000 - 5499 50000 - 54999	Country code or Regional / FAB ID(s)	Traffic Flow	Conditions on DCT segments Point-to-Point	Appendix 4
5500 - 5999	Country code or Regional / FAB ID	Traffic Flow	Conditions on DCT segments to/from airfields	Appendix 5
6000 - 6999	Country code or Regional / FAB ID(s)	Traffic Flow	Plain text notes	Whole document
7000 - 7499	Country code or Regional / FAB ID(s)	Traffic Flow	Military restrictions	Whole document
8000 - 8999	Country / FIR or Regional / FAB code ID	Traffic Flow	Flight Profile Restrictions	Appendix 6
R, S,... Y	RSA ID as per AIP	FUA	FUA	Appendix 7

Prefix code	Region / FAB / ANSP (State / ANSP)
BL	BALTIC FAB (Poland, Lithuania)
BM	BLUE MED FAB (Italy, Greece, Cyprus, Malta)
CE	FAB CE - FAB CENTRAL EUROPE (Austria, Czech Republic, Croatia, Hungary, Slovakia, Slovenia, Bosnia and Herzegovina)
DU	DANUBE FAB (Bulgaria, Romania)
DS	DENMARK / SWEDEN FAB (Denmark, Sweden)
EC	FABEC - FAB EUROPE CENTRAL (France, Germany, Switzerland, Belgium, Netherlands, Luxembourg, Maastricht UAC)
NE	NORTH EUROPEAN FAB (Estonia, Finland, Latvia, Norway)
PE	SOUTH WEST FAB (Spain / Portugal)
IU	UK / IRELAND FAB (United Kingdom, Ireland)
YX	Maastricht UAC
RE	Regional / Pan-European / Axis

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- 3.2.12. Where date/time ranges are used these shall be considered as INCLUSIVE. When time periods are expressed in column RESTRICTION or column UTILIZATION, restrictions are not applied outside those published times unless otherwise specified.
- 3.2.13. A restriction shall not qualify for inclusion in the RAD unless it has a FLOW ELEMENT attached to it. A FLOW ELEMENT is defined as affecting either:
- Departures from an Airfield/Group/Area;
 - Arrivals to an Airfield/Group/Area;
 - Traffic flying between Airfields/Groups/Area;
 - Overflying traffic.

3.3. Time periods

- 3.3.1. The time periods are in Co-ordinated Universal Time (UTC) used by air navigation services and in publications issued by the AIS. The expression “summer period” indicates that part of the year in which “daylight saving time“ is in force. The other part of the year is named the “winter period”. Times applicable during the “summer period” are given in brackets. Daylight saving time is UTC plus 1 hour. The “summer period” in Europe is introduced every year on the last Sunday in MAR at 01:00 UTC and ceases on the last Sunday in OCT at 01:00 UTC. For detailed description in each State the relevant AIP shall be checked.
- 3.3.2. Details of weekend periods, if and when used are included where relevant. The start and end time of the periods relates to the entry to the segment concerned.
- 3.3.3. Additional periods can be declared as weekends (e.g. Busy Fridays, Nights, Bank Holidays), refer to national publication and relevant annex for the details.
- 3.3.4. To access data regarding Public Holidays pertinent to each State, refer to GEN 2.1 of the respective AIP.

3.4. Definition of limits expressed by FL

- 3.4.1. The vertical limits shall be expressed as follows (ref. ERNIP Part 1):
- above the lower limit or minimum en-route altitude and below FL290 - VFR flight levels in accordance with ICAO Annex 2, Appendix 3, page 1 (e.g. FL035 or corresponding altitude... FL285);
 - above FL290 and below FL410 in RVSM areas - number representing the layer/ intermediate level between IFR flight levels ending on ..5 (e.g. FL295 ...FL405);
 - above FL410 or above FL290 in non RVSM areas - number representing the layer/ intermediate level between IFR flight levels ending on ..0 (e.g. FL420 ...FL500 ...).

3.5. Expression of abbreviated words meaning Departure and Destination

- 3.5.1. In all Appendixes and Pan-European Annex, if and when used and required the expression of abbreviated words meaning Departure and Destination from/to certain airport/s or in/outside FIR/UIR / ACC/UAC / ATC Units shall be used based on ICAO Doc. 8400 - Abbreviations and Codes as follows:
- DEP - code meaning “Depart” or “Departure”;
 - ARR - code meaning “Arrive” or “Arrival”.

4. PERIOD OF VALIDITY

- 4.1. The routing organisation is permanently effective and applies daily H24, except where otherwise specified. When it can be identified that capacity is surplus to demand the RAD restrictions may be relaxed from the H24 time constraints.
- 4.2. The RAD may be suspended, or temporarily relaxed, in cases where it has an abnormally adverse impact upon the traffic flows. This action will always be co-ordinated through the CDM process between the Network Manager and its Operational Stakeholders.

5. APPLICATION

- 5.1. The RAD will be fully integrated into the Network Manager Operational systems, including IFPS, through the Route Restrictions computer model. Any changes to the Pan-European Annex will automatically be checked provided the relevant notification period has been observed.
- 5.2. Changes agreed outside the AIRAC cycle will not be handled automatically by IFPS until such time as the system can be updated at the appropriate AIRAC date.

6. CDM PROCESS

- 6.1. Amendments to the General Description of the RAD, or the period of validity, shall be co-ordinated between the Network Manager and the Operational Stakeholders via the RAD Management Group (RMG) and approved by NETOPS team. Inclusion or withdrawal of additional Annexes or Appendixes shall follow the same process.
- 6.2. The Operational Stakeholders shall provide their request for changes to the NM RAD Team, taking into account agreed publication and implementation dates, in accordance with AIRAC procedures and Handbook Supplement for the Provision of Environment data.
- 6.3. All new RAD restrictions, amendments and changes will be checked by the NM RAD Team versus airspace organisation in the area. Any possible discrepancies will be notified to the States/FABs/ANSPs concerned as soon as possible.
- 6.4. Suspension of NAVAIDS, and/or replacement by temporary mobile units will be promulgated via the Pan-European Annex. States should ensure that the NM RAD Team is notified of these changes.
- 6.5. The final content of any amendment to the RAD shall be positively agreed between the NM RAD Team and State/FAB/ANSP concerned. This agreement shall be reached in a form of e-mail confirmation, meeting report/minutes or any other means reflecting final mutual agreement for change. These agreements will be properly recorded by the Network Manager.
- 6.6. Amendments will be published by the NM RAD Team as follows:
 - a. 28 days in advance of the relevant AIRAC cycle;
 - b. **Until the establishment of an automated RAD process** amendments will be highlighted in **RED/BLUE BOLD** and will be annotated by abbreviation **NEW/AMD**;
 - c. Restrictions that have been removed will be annotated abbreviation **DEL**;
 - d. "Last minute" changes:
 - are changes required due to exceptional circumstances and/or only when they have a significant impact on operational requirements;
 - shall be:
 - announced by the NRCs as ordinary amended or new RAD requirements;
 - exceptionally annotated as such;
 - sent via e-mail to the NM RAD Team in accordance with ERNIP Part 4;
 - will be promulgated on the NM NOP portal via the "Increment File".

7. TEMPORARY CHANGES

- 7.1. Temporary changes due to exceptional circumstances (e.g. major equipment failure, industrial action or large-scale military exercises) may necessitate the suspension of part of the RAD for specified periods, and additional routeings will be activated where possible following co-ordination with the relevant FMPs and AOs.

<https://www.nm.eurocontrol.int/RAD/index.html>

- 7.2. Temporary changes will be published by AIM giving details of the traffic affected, the period of activation and the corresponding routeings.

8. FLIGHT PLANNING

- 8.1. The RAD defines restrictions on routes/points, through specified areas during the published period of validity. Aircraft operators planning flights through these areas must flight-plan in accordance with these route restrictions, taking into account any change of validity.
- 8.2. When a route is restricted between two points it must be understood that all segments, between the recorded points, are included in the restriction.
- 8.3. An operator who has submitted a flight plan for a route and wishes to change to another route must either; send a CHG (Change) message giving the new route or; cancel the existing flight plan and submit a new flight plan following the replacement flight plan procedure. This applies equally to re-routeing proposed by the Network Manager and to changes made at the initiative of the AO.
- 8.4. When filing flight plans, AOs must comply with any flight level limitation published in the RAD. AOs shall be aware that when receiving the confirmed FPLs the FLs used are NOT checked against the Flight Level Orientation Scheme (FLOS) applied by the State concerned.
- 8.5. AOs shall also be aware that when receiving the confirmed FPLs using DCT options from Appendixes 4 and 5 these flight plans are NOT checked against Minimum Sector Altitudes (MSA) or Minimum En-route Altitudes (MEA) published by the States in the relevant parts of their AIPs. In accordance with provisions of ICAO Doc 4444 - ATM (PANS-ATM) AOs remains responsible with the checking of MSA and/or MEA.

Note: Refer to IFPS User's Manual for full details.

9. ROUTEING SCENARIOS

- 9.1. For each area expected to be critical, a number of flows could be identified, for which other routeings are available, that follow the general scheme, but avoid the critical area. These are known as routeing scenarios.
- 9.2. When, during the planning phase, the Network Manager identifies the risk of major imbalance between demand and capacity, it may be decided, after agreement with all FMPs concerned, to make part (or all) of the alternative routeings mandatory for the period expected to be critical.
- 9.3. Scenarios may be identified which require the temporary suspension of route restrictions within the RAD for a particular traffic flow.
- 9.4. The list of available scenarios is promulgated on the NM NOP portal.

10. PUBLICATION

- 10.1. The RAD is created in accordance with ICAO publication procedures and is published on the NM NOP website, 28 days in advance prior to the relevant AIRAC cycle.

<https://www.nm.eurocontrol.int/RAD/index.html>

- 10.2. Each State may promulgate the RAD by any one of the following methods:
- Publish the RAD in its entirety as an AIP Supplement (the onus is on the State to ensure that the RAD is kept up to date);
 - Publish relevant Appendices and State/FAB/ANSP part of the Pan-European Annex of the RAD as an AIP Supplement;
 - Publish reference to the NM NOP website in the AIP.

DAY	PROCESS	ACTION
D-63	Notification to States/FABs/ANSPs "One week to Cut-off".	NM
D-56	Finalisation of States/FABs/ANSPs requirements. Cut-off date. States/FABs/ANSPs provide amendments to the NM.	States/FABs/ANSPs
	Three weeks to compile the RAD and to resolve errors/conflicts.	NM
D-28	Publication. Two weeks to assess impact of new restrictions.	NM
D-14	Results of impact assessment of new restrictions. Changes/amendments to be promulgated via the "Increment File" on the NM NOP Portal.	NM
D-10	Freeze of ENVironment tape for AIRAC.	NM

- 10.3. Where applicable, publication of route availability in national aeronautical information publications shall be fully consistent with this common reference document.

11. TACTICAL OPERATIONS

- 11.1. The Network Manager in conjunction with the FMPs will monitor the actual situation during the day of operation to ensure the RAD is achieving the balance of traffic required.
- 11.2. During periods of unanticipated high demand the Network Manager may co-ordinate an extension to the period of validity of routing scenarios with the relevant FMPs. This will be published by AIM, giving at least three hours notice.
- 11.3. During periods of significant improvement to the ATFCM situation, the Network Manager will co-ordinate with the relevant FMP, a reduction in the period of validity of scenarios. This will be published by AIM.
- 11.4. If, due to a major unexpected event, there is a significant disturbance to traffic patterns, after co-ordination with the relevant parties (FMPs and AO's), the Network Manager may suspend part of the RAD and provide alternative routings.
- 11.5. With effect from AIRAC -6 day (D -6), implemented RAD Data is considered as Operational. Management of such changes to the RAD is the responsibility of the NRC of the originating State

<https://www.nm.eurocontrol.int/RAD/index.html>

11.6. If, after AIRAC -6 day (D -6), a State discovers an error or omission to the RAD that is SAFETY RELATED, then it is the responsibility of the NRC to contact the NM RAD Team to request a live update of the NM CACD in order to correct the problem. The safety related RAD error or omission shall be exceptionally annotated as such and shall be sent via e-mail to the NM RAD Team in accordance with ERNIP Part 4. The NM RAD Team will only act after consultation with the NRC or his designated Deputy. Following the consultation process the NM RAD Team shall create the necessary DMR and the change shall be promulgated via the "Increment File". During the weekend, the ACC shall contact the Current Operations Manager and the matter shall be handled MANually. A second alternative is to request that the restriction in question be DISABLED in ENVironment so that there will not be a check at IFPS.

12. RAD REVIEW

12.1. The NM RAD Team is responsible for coordination of the entire RAD review process.

12.2. The RAD review is required to ensure that all data contained within the RAD is current and correct. The review is also the opportunity to ensure that any modifications, within the incremental update to the Network Manager Operational systems, are reflected in the construction of RAD restrictions.

12.3. A RAD review for each and every Annex/Appendix, including cross-border restrictions, shall be completed annually during designated meetings and as a rolling process by the NM RAD Team. The existing South West, South East, North West, North East or Ski - Airspace or ATFCM meetings could be used for RAD review purposes. Additional ad-hoc RAD review meetings could be organised in case of any urgent issues to be discussed.

12.4. The outcome of each RAD review shall be properly documented through the report or minutes. The reports/minutes will be stored by the NM RAD Team.

12.5. Each State/FAB/ANSP shall convene an internal RAD review with the airlines concerned. Such an internal review shall be announced to the NM RAD Team and shall cover as minimum the validity of all restrictions; the timeliness of restrictions; the completeness of all restrictions. The NM RAD Team may offer items to be covered. The results of such an internal review shall be passed to the NM RAD Team as soon as possible.

12.6. For each cross-border RAD review the NM RAD Team shall perform a RAD impact assessment on each relevant restriction. This analysis shall be carried out together with the Operational Stakeholders.

12.7. The NM RAD Team shall maintain a List of proposed/requested by the AOs RAD restrictions for consideration by the States/FABs/ANSPs. The List shall contain the restrictions traceability and shall record the proposal's status as change/removal/update till RAD restriction resolution or deletion.