



**Network Manager**  
nominated by  
the European Commission



# Harmonised FRA AIP publication

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# Harmonised FRA publication in ECAC States' AIP

- Users' needs for clear and consistent information on States' FRA implementation.
- A harmonised publication approach amongst the ECAC States an advantage.
- European harmonising FRA publication guidelines exist since 2012.

ENR 1.3-3  
1 FEB 2018

**4. FREE ROUTE AIRSPACE - GENERAL PROCEDURES**

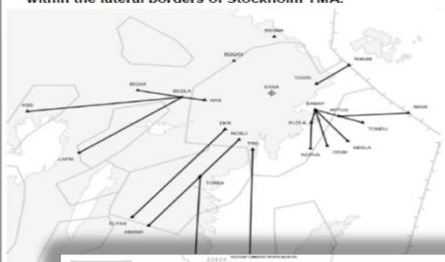
**4.1. Applicability**

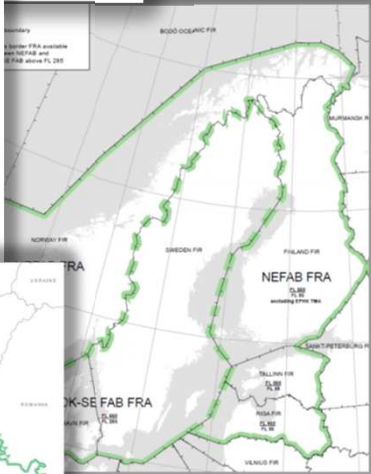
4.1.1. Area of applicability: For lateral and vertical limits of SECSI FRA see:  
 - ENR 2.2 of AIP Austria, AIP Bosnia and Herzegovina, AIP Croatia, AIP Serbia/Montenegro, AIP Slovenia,  
 - ENR 6 of AIP Austria, AIP Bosnia and Herzegovina, AIP Croatia, AIP Serbia/Montenegro, AIP Slovenia.

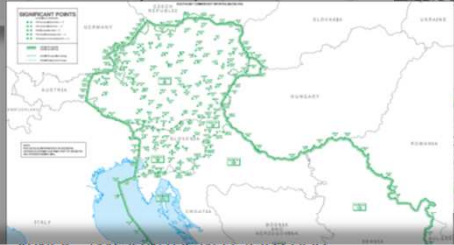
**3.5 Other routes**

FRA Connecting Routes.

**1** Departing/arriving traffic from/to aerodromes within the lateral borders of Stockholm TMA.







Coordinates	FRA relevance E = Entry X = Exit I = Intermediate A = Arrival D = Departure	R
2	3	
40N 046E	(X)	EVEN FLs #
15N 845E	(A)	First way po procedure ft
03N 912E	(X)	EVEN FLs #

ABNEK	445259N 0252455E	SID LROP	FRA (I)
ABOLO	470001N 0271959E	T74, Y33, SID LRIA, IAC LRIA	FRA (A); LRBS
ABORA	443308N 0262027E	STAR, IAC LRBS	FRA (I); FL175-FL660
ABRUT	442701N 0251059E	T285, T995, STAR LRBS	FRA (I)
ABTER	461511N 0255030E	N145, P159, Z924	FRA (E)
ADINA	434812N 0303018E	L40, L5, L624, L851, M977	FRA (X)
ADUKU	465526N 0220000E	N133	FRA (I)
ADULI	442719N 0255211E	STAR, IAC LRBS	

# Guidelines for harmonised AIP publication of FRA information

- ICAO AIS provisions
  - Annex 15
  - PANS-AIM (new)
  - AIS Manual (Doc 8126)
  
- European Route Network Improvement Plan – Part 1
  - FRA Concept
  - FRA AIP publication
  - FRA Checklist



ICAO Annex 15 - Procedures for the Preparation, Issuance and Distribution of Aeronautical Information Services (17th Edition, July 2014)

ICAO Doc 10066 - Aeronautical Information Management (1st Edition, 2016)

ICAO Annex 14 - Procedures for the Preparation, Issuance and Distribution of Aeronautical Information Services (17th Edition, July 2014)

European Route Network Improvement Plan - PART 1 European Airspace Design Methodology - Guidelines

European Network Operations Plan 2016-2019/20

Publication of FRA relevance on SLNC and navigation aids - en-route falls under:

- ENR 4.1 Radio navigation aids - en-route, and
- ENR 4.4 Name-code designators for significant points.

For information on FRA (ref. Annex 15, Appendix 1), the Remarks column in ENR 4.1 and ENR 4.4 tables shall be used to specify specific information with respect to FRA usage, if needed.

Note: Specific conditions of utilization e.g. use for arrivals/departures from specific aerodromes shall be described in the RAD, or, by an extension to the ENR 4.1 and 4.4 tables, by adding one column.

The FRA relevance of the significant points shall be indicated by the following letters and published within brackets:

- (E), for "FRA Horizontal Entry Point"
- (X), for "FRA Horizontal Exit Point"
- (I), for "FRA Intermediate Point"
- (D), for "FRA Departure Connection Point"

FRA Chart symbols

The examples are available in the Example 1 below.

- a) FRA boundary in coincidence with FIR with on-request entry/exit point,
- b) Independent FRA boundary with compulsory entry/exit point.

**Example 1**



BUMAB (EX)

ENR 4.4 Name-code designator for significant points

Legend for FRA relevance: (E) = "Horizontal Entry point", (X) = "Horizontal Exit point", (I) = "Intermediate point", (A) = "Arrival Connecting point", (D) = "Departure Connection point".

Name-code designator	Coordinates	ATS route or other route	FRA relevance	Remarks/Usage
1	2	3	4	5
LIMAK	58030N 027260E	NA		FIR BDRY FRA (E)
LLO3PA	57020N 021260E	M111, P31, Q33, Q41		FIR BDRY FRA (E)
NE03VA	69020N 044850E	NS		FIR BDRY FRA (E)

Additional column added for FRA relevant information

Name-code designator	Coordinates	ATS route or other route	FRA relevance	Remarks/Usage
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LLO3PA	57020N 021260E	M111, P31, Q33, Q41	(E)	FIR BDRY
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# ERNIP Part 1 – FRA Publication Guidelines

- AIP placeholders for FRA related information.
- Instructions to support publication.
- Some options, depending on implementation/States' choice.
- Solutions to encompass FRA specific information, compared with ICAO AIS provisions.

GEN	2.2	Terminology/Abbreviations
ENR	1.3	Instrument flight rules – General FRA procedures
	1.10	Flight planning
	2.1	FIR, UIR, TMA and CTA
	2.2	Other Regulated Airspace, incl. ATS delegation and cross-border application
	4.4	FRA related significant points
	5.1/5.2	Airspace reservations for FRA
	6	FRA charts
AD	2.24	Related terminal charts

## AIS challenges

- Evolving FRA concept and implementation, e.g.:
  - Associated information to the FRA relevance on significant points.
  - No Planning Zone.
  - Harmonised publication guidelines process ‘starts again’.
    - Publication format
    - Data coding aspects
    - Quick facilitation (perception of a “*moving target...*”)
- Data management challenges
  - AIS to overcome/mitigate technical constraints of AIXM data coding.
  - Automation/data driven AIS production.

## Recommendations

- Early involvement with AIS in FRA developments.
- Continue the AIS coordination.
- AIRAC adherence.
- Follow the harmonising FRA publication guidelines.
- ERNIP Part 1 – 6.5 - FRA Checklist

Thank you for your attention!

