

#### **EASA** activities towards

## **EGNOS-based operations**

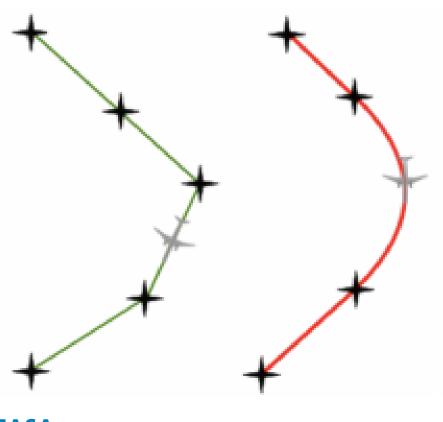
Manuel RIVAS VILA

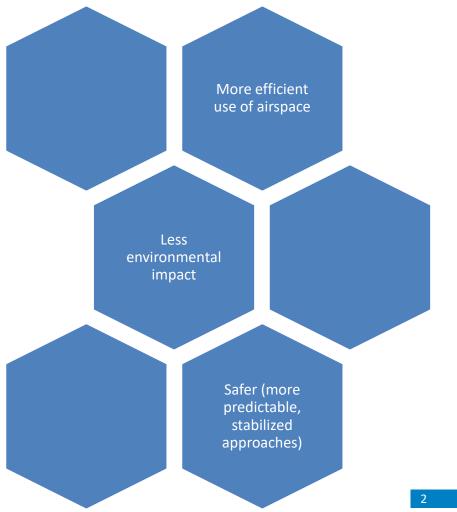
**EGNOS Workshop 2021** 

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# Why PBN?



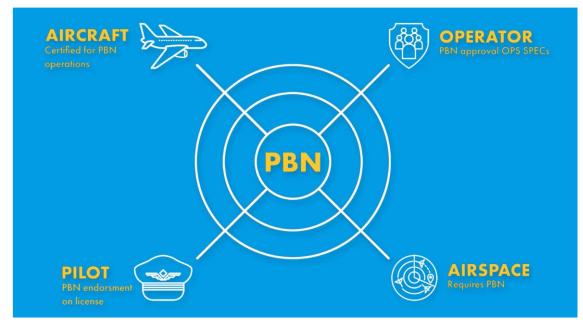




### What is needed?







CNS



**ASM** 

DAT

FPD

**ADR** 

AIS



### **Route towards PBN**



**Product Certification** 



Rulemaking





Standardisation



Organisation Approvals





Safety Assessment of Foreign Aircraft



**Third Country Operators** 

Safety Analysis and Research







European Aviation Safety Programme

International Cooperation





**Technical Training** 



## Rulemaking activities

- → Regulatory framework for PBN comprehensive
- → PBN IR [(EU) 2018/1048] describes airspace usage requirements and operating procedures



- → PBN is fully integrated into pilot training and air operations rules
- → Current rulemaking limited to the maintenance and revision of the existing rules, i.e. no specific RMTs in EPAS 2021-2025

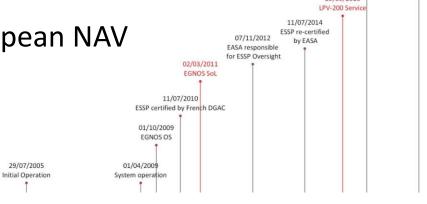


## Certification and oversight

EASA oversees ESSP as Pan European NAV service for EGNOS

- → NPA (from March 2011)
- → APV-I (from March 2011)
- → LPV-200 (from September 2015)

	Basic criteria	Supplementary criteria							
	Subsection	Subsection	Subsectio	Subsection	Subsection	Subsection	Subsectio	Subsectio	Subsection
	s	3	n	5	6	7	n	n	10
	1 & 2	LNAV in	4	VNAV in	RNP AR	Advanced-		9	Parallel
PBN	LNAV	final	VNAV	final		RNP	RF	FRT	offset
specification		approach		approach					
RNP 4	Required							Optional	Required
RNP 2	Required							Optional	Optional
RNP 1	Required		Optional				Optional		
RNP 0.3	Required		Optional				Optional		
RNP APCH	Required	Required	Optional	Required			Optional		
RNP AR	Required	Required	Required	Required	Required		Required		
A-RNP	Required	Required	Optional	Required		Required	Required	Optional	Required



### → Aircraft eligibility

→ CN-ACNS Issue 3 published on June/2021



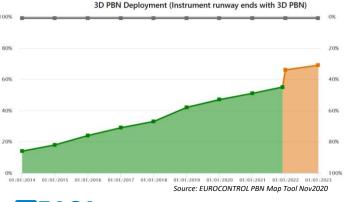
ESSP moved to

08/07/2016 ESSP re-certified

## Standardisation

 EASA Standardisation process checks correct implementation of EU aviation rules by EU MS

→ PBN IR implementation is a priority



#### By 25 January 2024 <= C

- AP: RNP APCH (plus RF) or RNP AR APCH procedures to all IREs
- A/D: RNAV 1 or RNP 1(+) for at least one established SID/STAR
- A/D: RNP 0.3 or RNP 1 or RNAV 1 for at least one established SID/STAR for rotorcraft operations
- EN: RNAV 5 for ATS routes established below FL150
- EN: RNP 0.3 or RNP 1 or RNAV 1 for ATS routes established below FL150 for rotorcraft operations

PBN IR fully implemented

#### **Transitions Plans**

#### => By 3 December 2020

- AP: RNP APCH (plus RF) or RNP AR APCH procedures to all IREs without precision approach, except at those airports listed in point 1.2.1 of the PCP Regulation (later)
- EN: RNAV 5 for all ATS routes at or above FL150

#### => By 6 June 2030

- A/D: RNAV 1 or RNP 1(+) applicable to all SIDs/STARs where established
- A/D: RNP 0.3 or RNP 1 or RNAV 1 applicable to all SIDs/STARs for rotorcraft operations where established





## **Any Questions?**

easa.europa.eu/connect











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