



L'esperienza e il confronto in Europa sulle procedure PBN per elicotteri

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Participation in most
R&D Programs



Innovative
R&D
concepts

PildoLabs
move smart

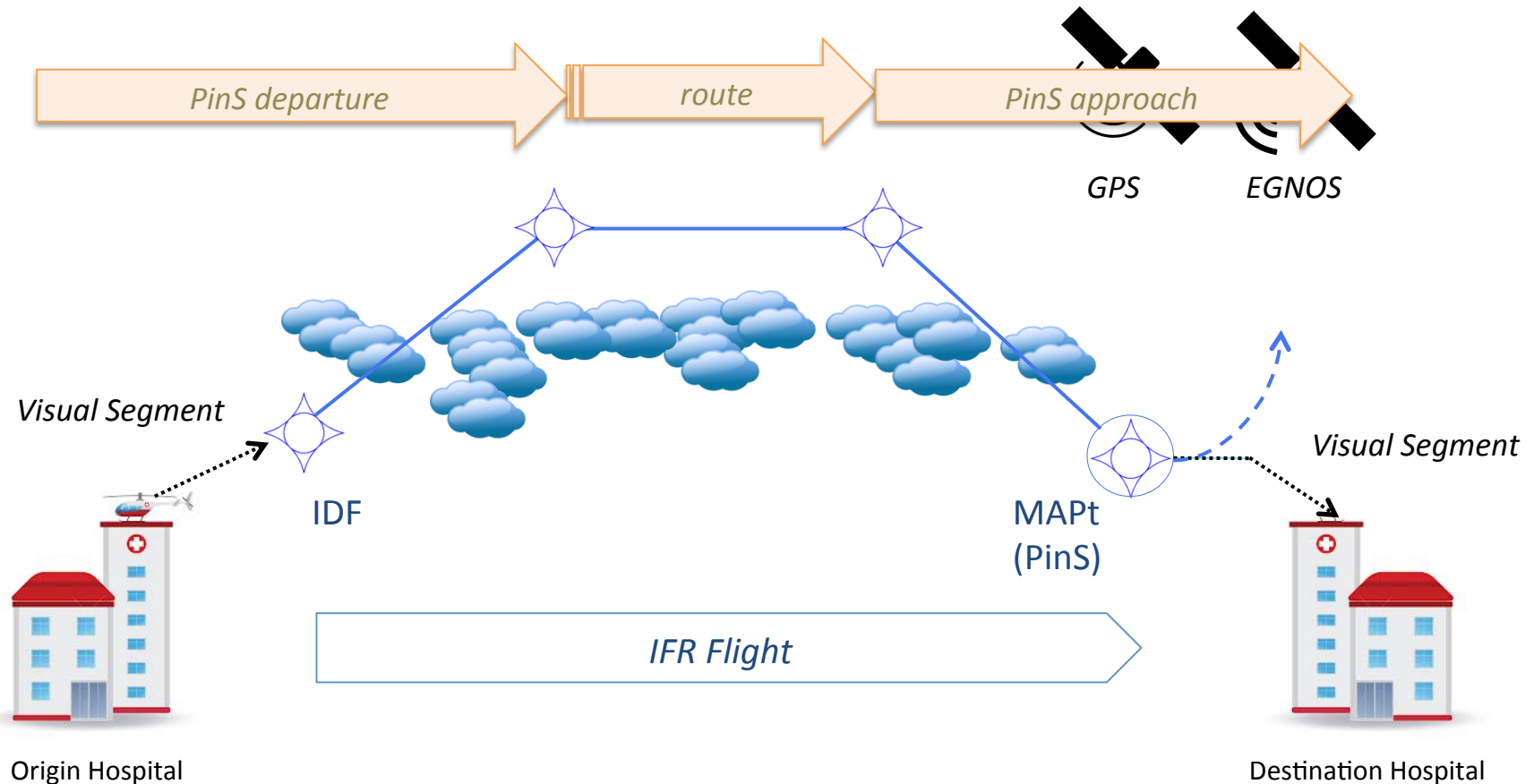


PinS LPV
in Europe



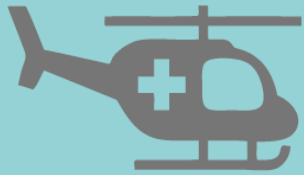
ConOps
& Design Criteria
SNI + RNP-AR

Point-in-Space (PinS): Concept of Operations



A PinS is an IFR procedure specially developed for Helicopter departures and approaches from/to Helipads

The facts



600

flights / year

cannot be performed to patients in need of urgent care



7.350.000
of profit / year
is not perceived

Many lives cannot receive appropriate help when needed



24/7
service



improved
safety



more
efficient

The facts



Presentation Summary

A

Procedure Implementation

Heliport
readiness

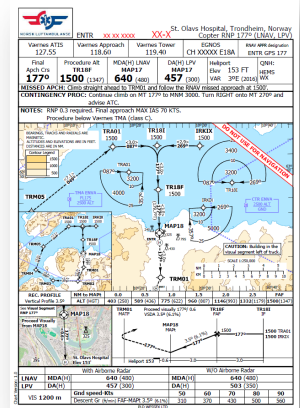
Design &
Validation

Implementation

Airspace

Approval

Promulgation &
Maintenance



B

Procedure usage

Avionics
readiness

Operational Approval

LPV

RNP 0.3

AR



C

Practical Implementation – PIONEERS, FLAG

C

Practical Implementation



Working group for the harmonisation of PinS regulation in national authorities through Europe



Benefit from a safe and sustainable revenue-generating scheme on PinS **operational implementation**

1



Approved
under Single
European Sky rules
by National Authority

2



Platero

Cost effective
Solution to validate
flight procedures

3



Financing model
Implementation and
maintenance of
procedures on a win-
win basis scheme

4



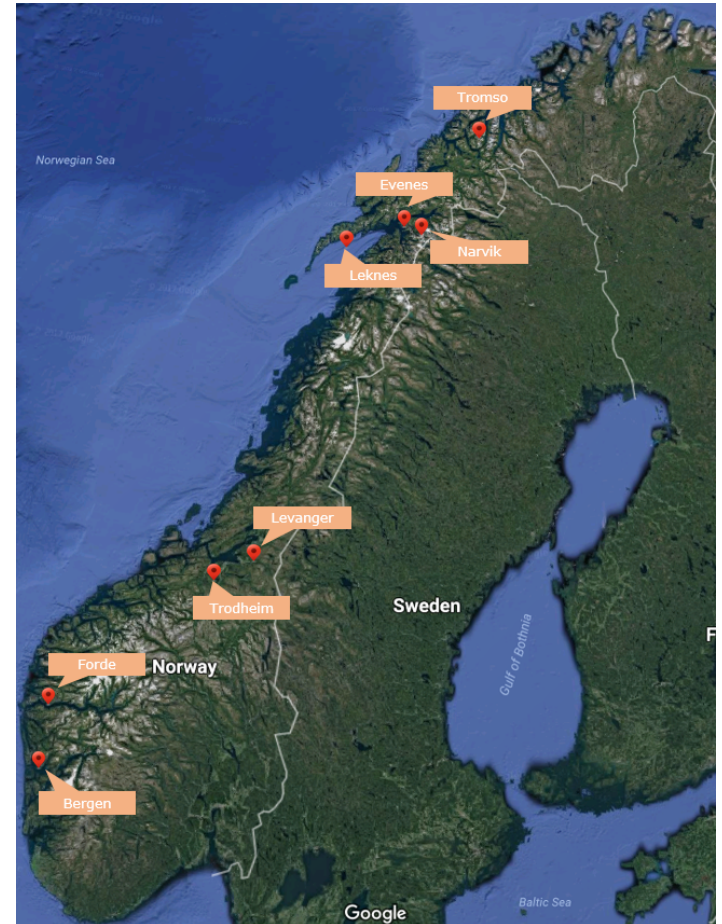
Complete service
that covers all the
different areas



Trondheim hospital with first Helicopter LPV approach approved in Norway



RNP0.3 Low Level Routes with Max ALT 1500'

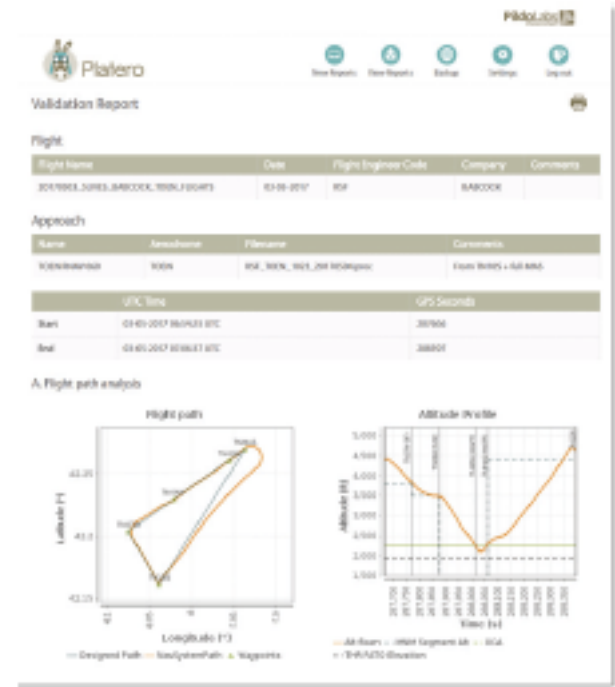


C

Flight Validation



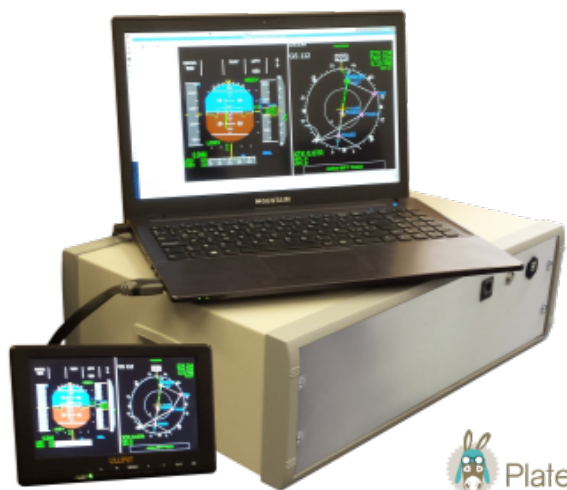
FLIGHT VALIDATION AND INSPECTION SYSTEM
 PERFORMANCE BASED NAVIGATION (PBN)



European patent with n°
 14004025 (EP3026461)

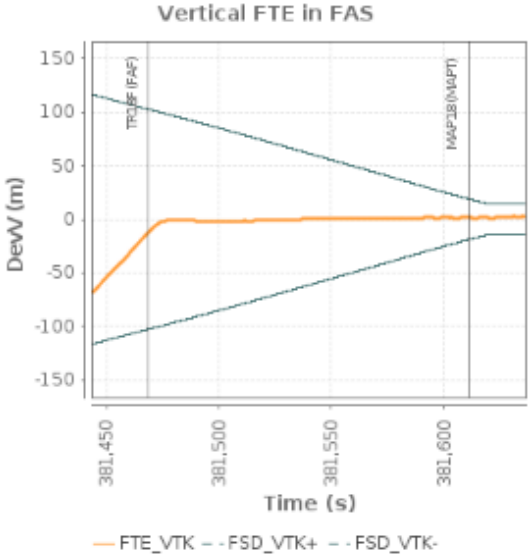
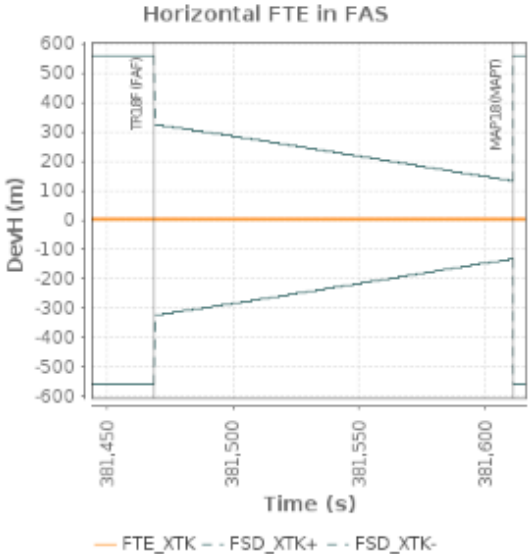
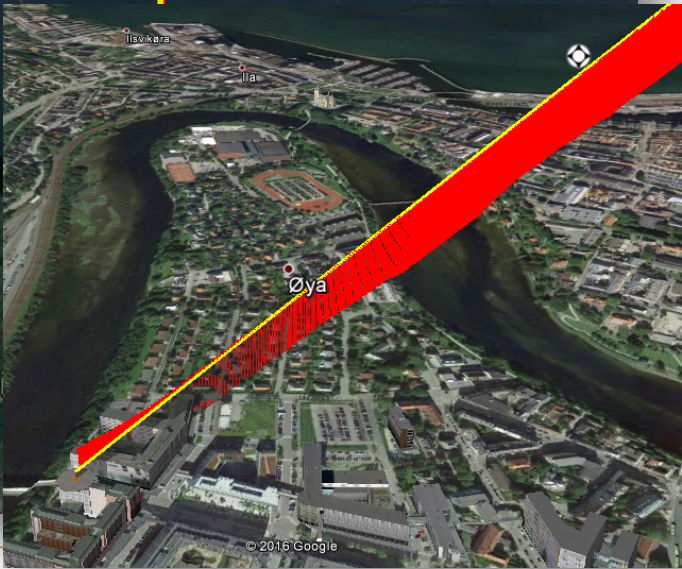
C

Flight Validation

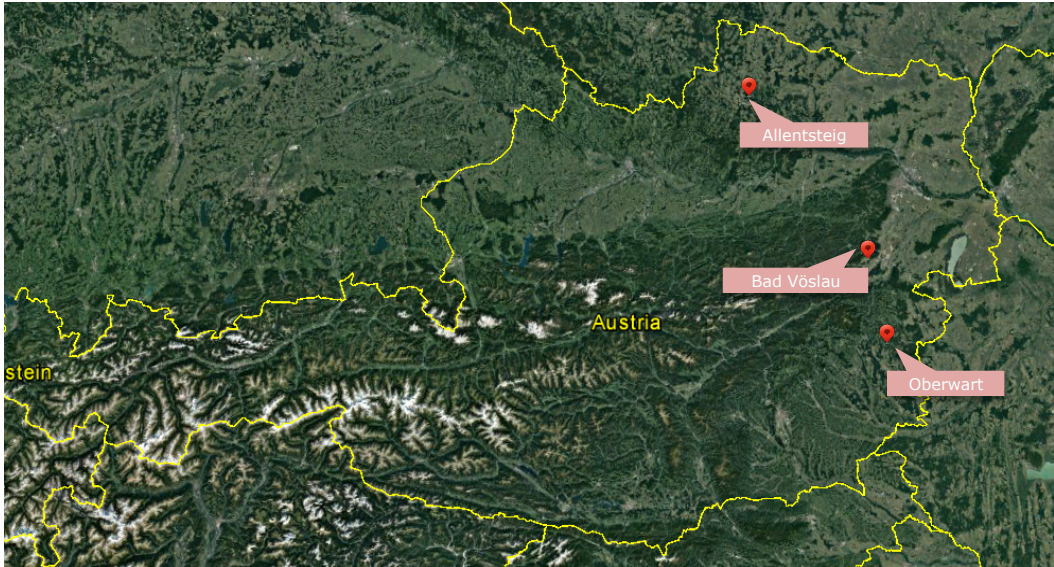


C

Flight Validation

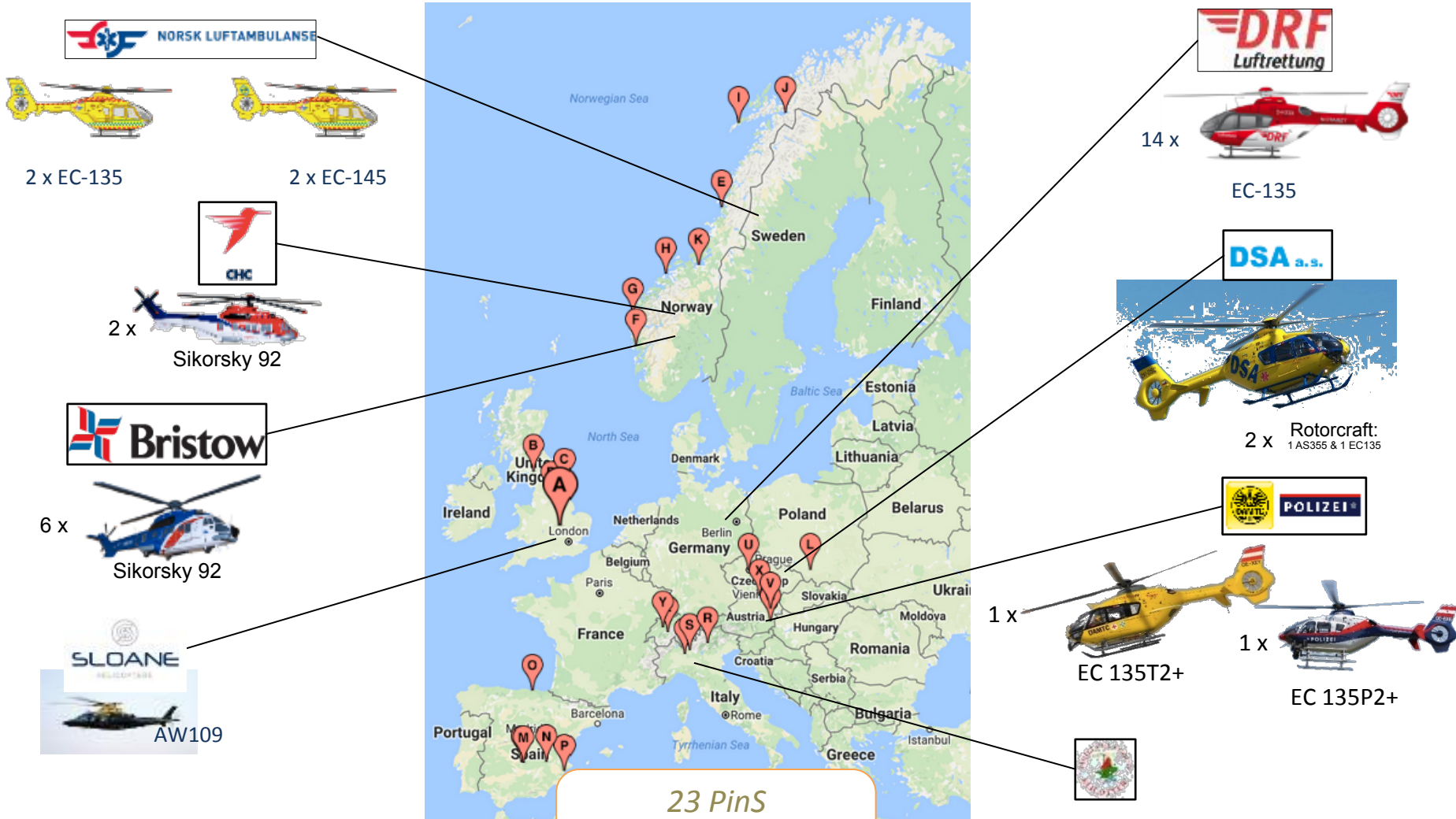


PinS and Low Level Routes at UK and Austria



C

Other implementation programmes





Harmonize the implementation of rotorcraft GNSS operations at European level by establishing **coordination** between Aviation Stakeholders:



C

Working Group

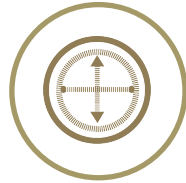


Next meeting September 2018 @ Barcelona

Conclusions



(1) Satellite Navigation (PinS) is an **opportunity** for improving HEMS



(2) **Pioneers** service supports the overall implementation process to avoid being tedious and costly



(3) **Funding opportunities** exist for early implementation towards a sustainable plan



(4) **FLAG** group promotes harmonized practices at European level on PinS implementation



(5) EU regulation evolving to accommodate special operations in particular **for uncontrolled airspace**



(6) **Awareness** to the aviation stakeholders is a key enabler for success