

PBN and CNS rationalisation

An Aircrew perspective

Photo credit: Bram Hopman

VERT. SPEED

A/P ENGAGE

COURSE

RADIO MINS. BARO

PRY

HTKS

W. BARO

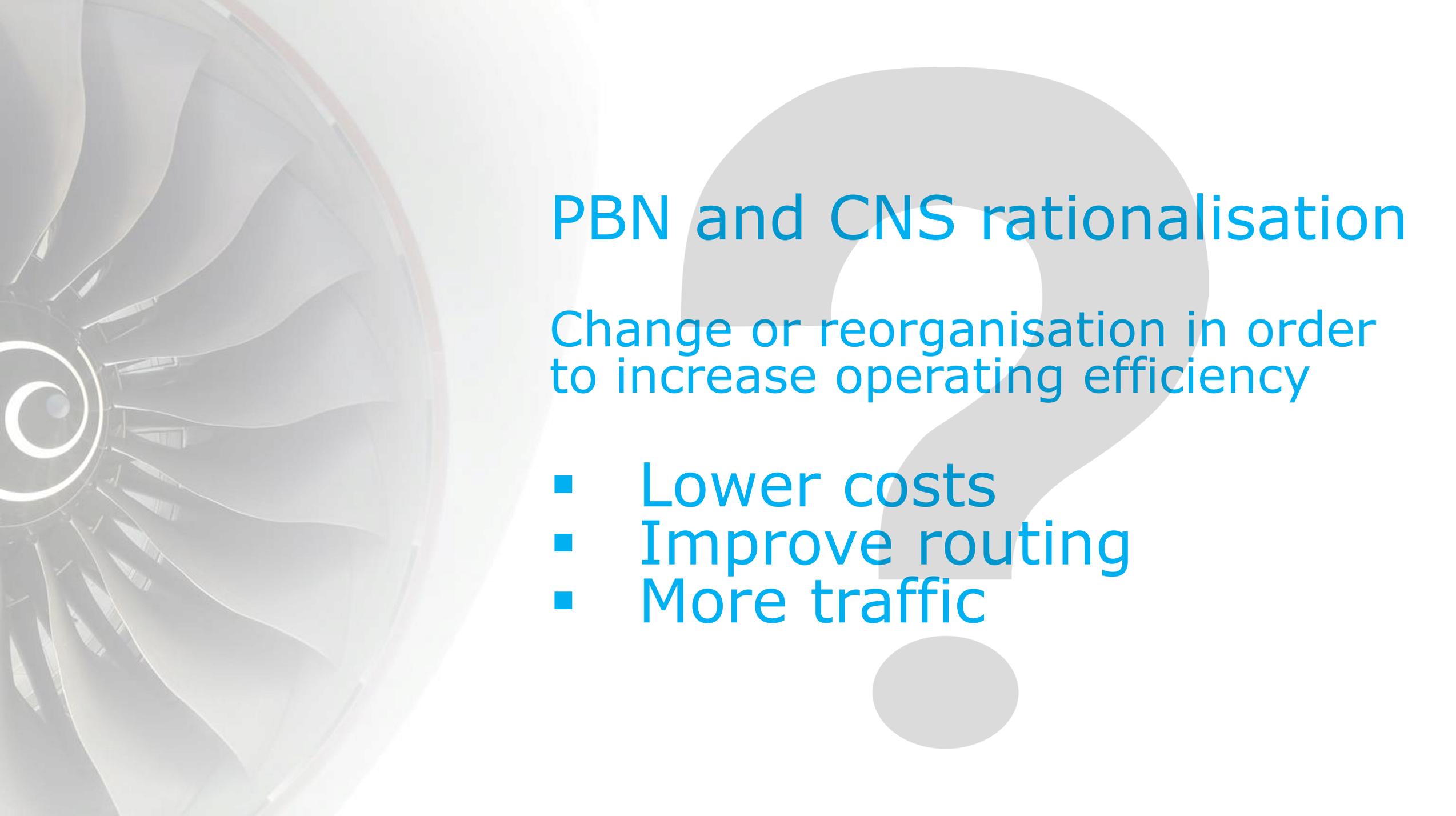
CMD

CMD

RST

STD

FIRE



PBN and CNS rationalisation

Change or reorganisation in order to increase operating efficiency

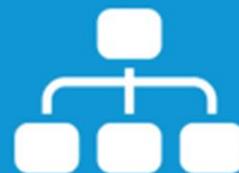
- Lower costs
- Improve routing
- More traffic

AIRCRAFT

- Certified for PBN operations
[965/2012: CAT.IDE.345]



OPERATOR



- PBN approval OPS
SPECs
[965/2012: ANNEX V, subpart
B / CAT.OP.MPA.175 and 182]

PBN

PILOT

- PBN endorsement
on license
[1178/2011: Article 4a, AMC1
FCL.310;FCL.515(b);FCL615(b) /
APPX 7+9 to ANNEX I



AIRSPACE



- Requires PBN
[applicable AIP]



- (EU) No 2018/1048
Transition to PBN 2030

- Approach Minima RNP vs
LPV(CAT I) and CAT II/III

- CPDLC



OPERATOR



- PBN approval OPS
SPECS
- [965/2012: ANNEX V, subpart
B / CAT.OP.MPA.175 and 182]

Investment needed in:

- Aircraft
- Crew training
- Approvals (LPV/RNP AR)

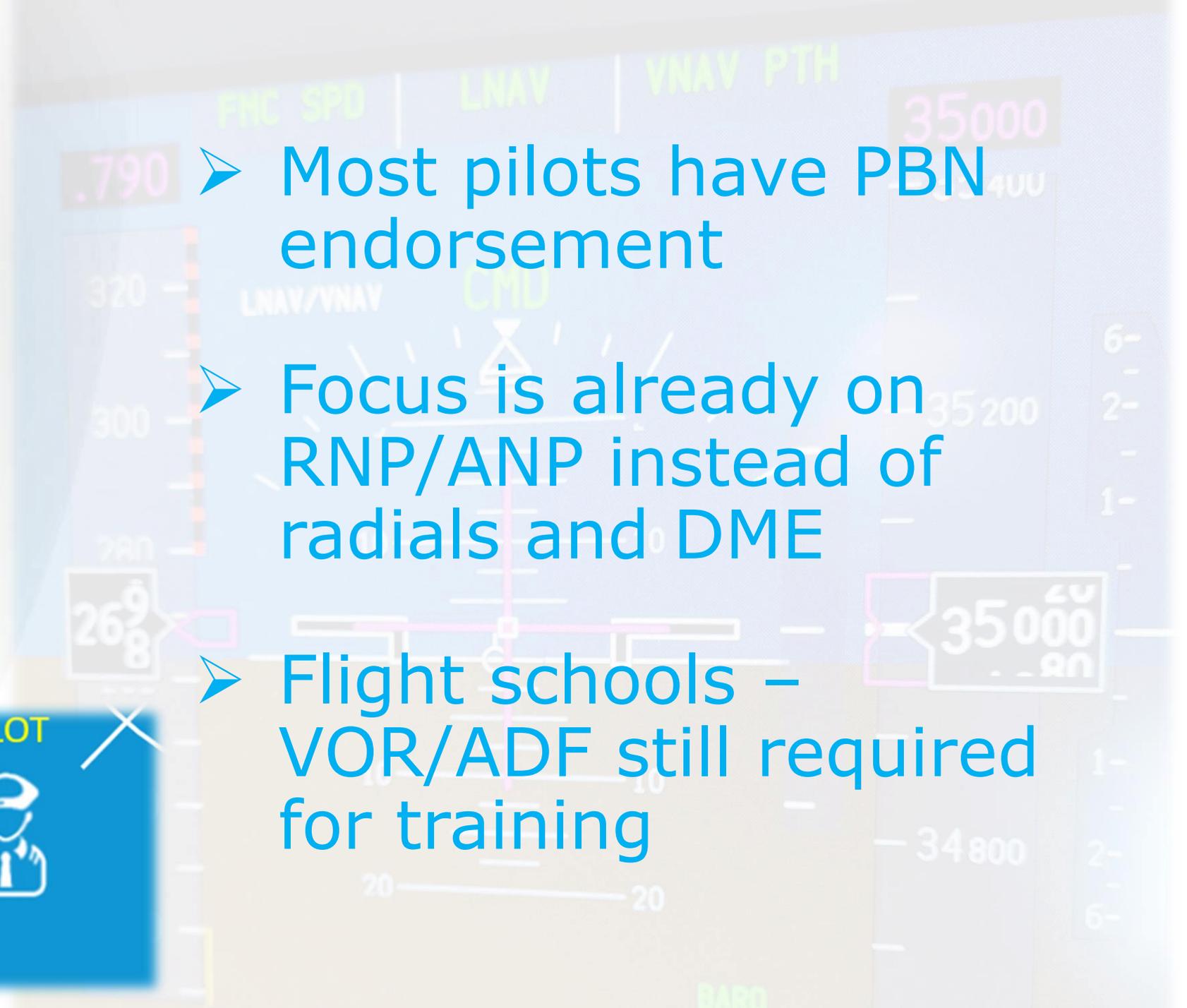
AIRCRAFT

- Certified for PBN operations
[965/2012: CAT.IDE.345]



Approved
RNP 1, RNP AR

Investment
RNP (LPV)
A-RNP



- Most pilots have PBN endorsement
- Focus is already on RNP/ANP instead of radials and DME
- Flight schools – VOR/ADF still required for training

PILOT



- PBN endorsement on license
[1178/2011: Article 4a, AMC1
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