

LDACS –Webinar 2

LDACS: ANSP perspective

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LDACS: ANSP perspective



1. What do ANSPs need in terms of communications means?
2. What do ANSPs have today to meet those needs?
3. Facing the future: CNS Roadmap
4. LDACS within the framework of multilink
5. What can LDACS do for ANSPs?
6. Is there room for all these A/G technologies?
7. LDACS service model from ANSPs' perspective
8. Conclusions

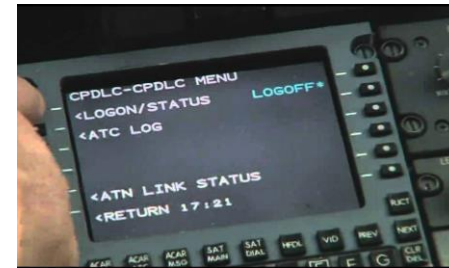
LDACS: ANSP perspective

What do ANSPs need in terms of communications means?



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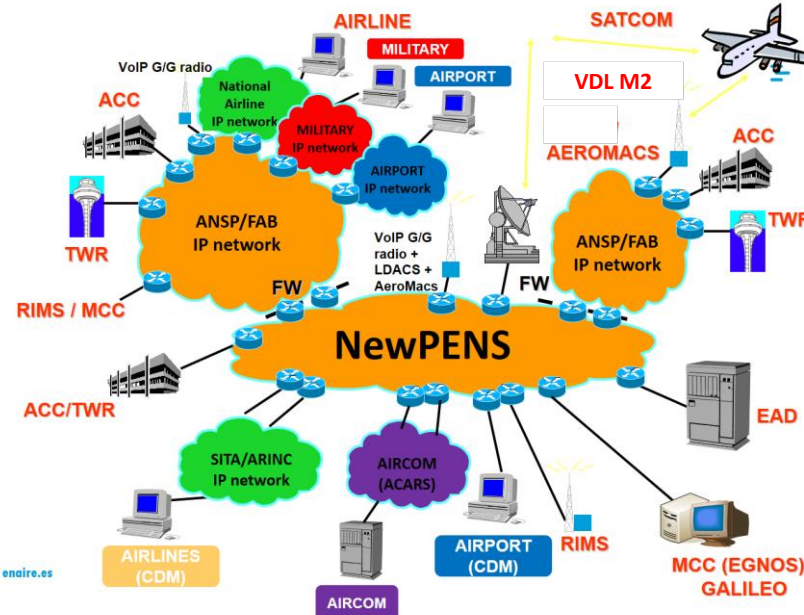
What do ANSPs have today to meet those needs?



Voice & data communications



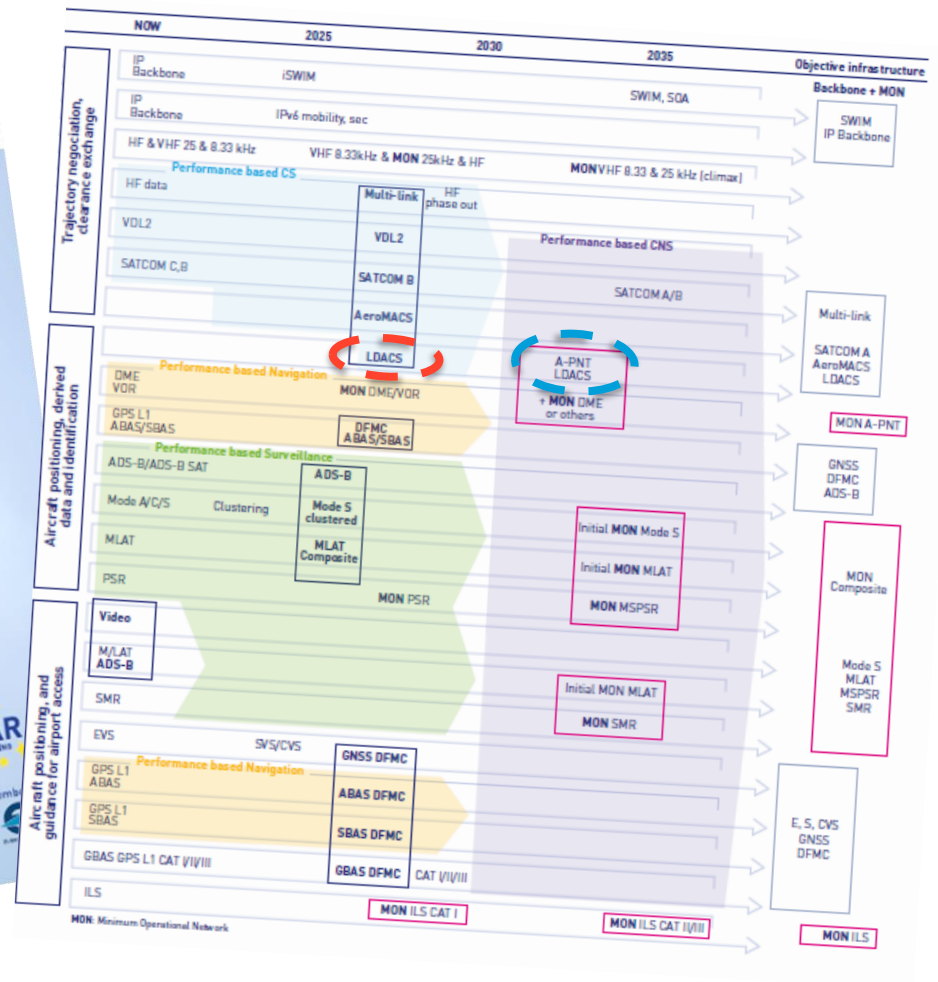
- ✓ Reliable IP networks
- ✓ High BW IP networks
- ✓ IP based comm systems



- ✗ Scarce frequency spectrum
- ✗ VDL Mode 2 reaching its capacity limit

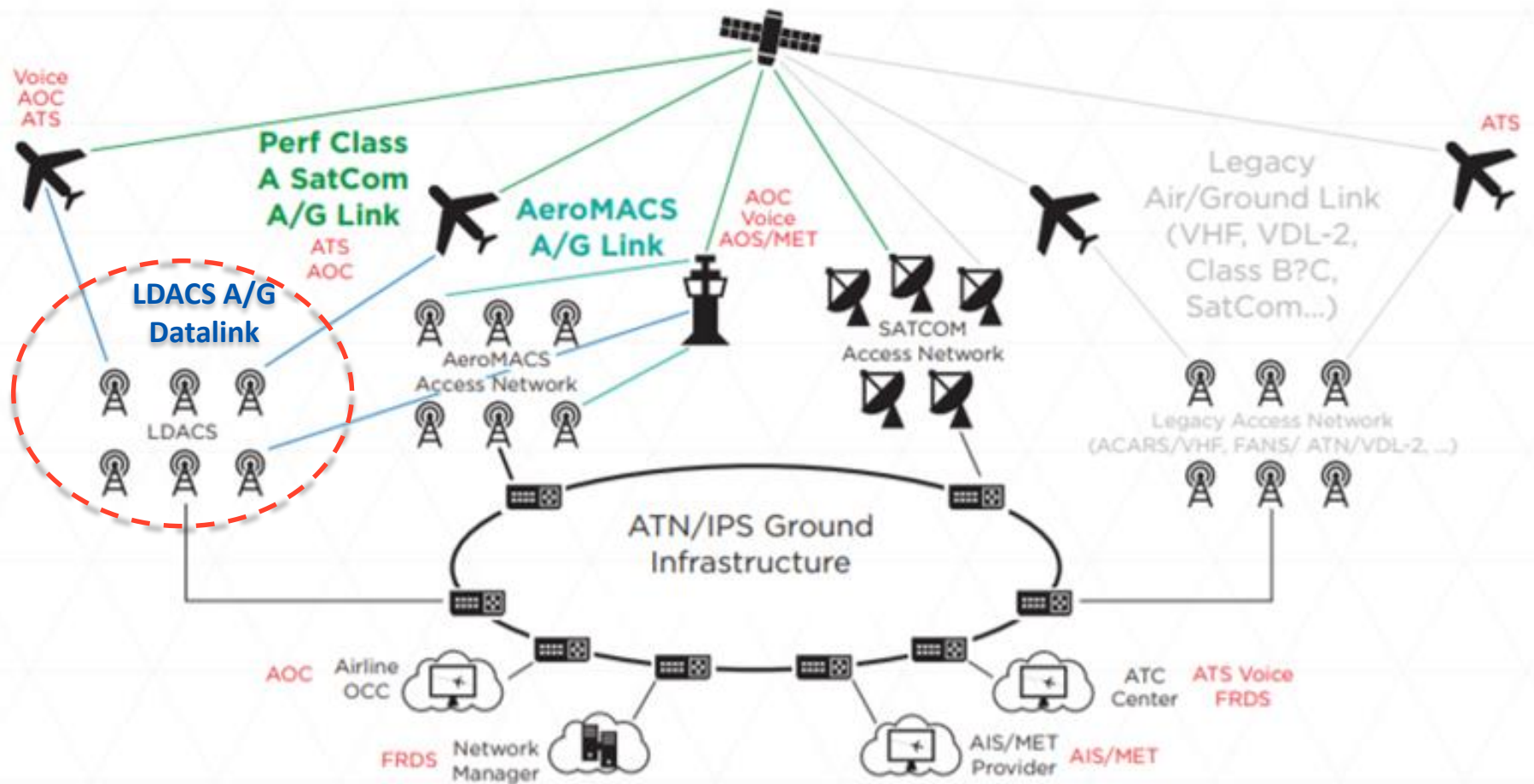
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CNS Roadmap



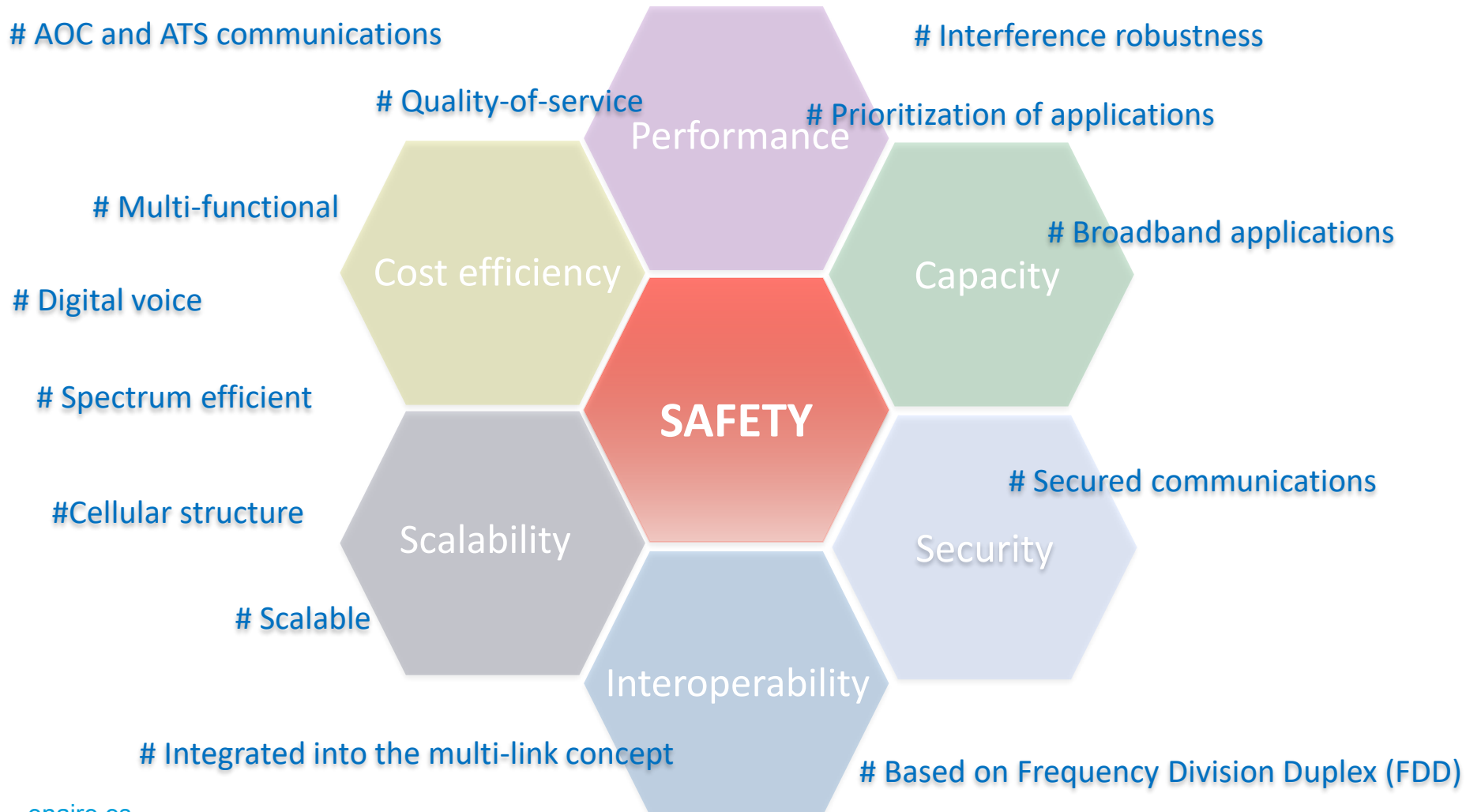
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LDACS within the framework of multilink



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What can LDACS do for ANSPs?



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What can LDACS do for ANSPs?

Communications Viewpoint:

IPS communications

More channels available

Bigger bandwidth

More capacity



More demanding services



Better and more advanced functionalities:
security,
encryption,
compression, etc.



Better performance, more reliability →
better separation minima → more traffic
with a better overall service





Current A/G technologies:

VDL

AeroMACS (very few airports all over the world)

SATcom (Inmarsat, Iridium, others) →
"Class C"

Conventional technologies → 3G/4G →
for AOC communications



BUT we need a rationalized approach and deployment

ANSP perspective
Is there room for all these A/G technologies?



Future A/G technologies we'll have in the medium/long run

VDL? → Most probably, residual use

LDACS → Natural evolution of VDL in terms of use and services (ATC and AOC)

AeroMACS → Hopefully, more widely deployed

Satcom (Inmarsat, Iridium, others) →
"Classes B and A"

Conventional future technologies → 4G/5G, others? → for ATC & AOC communications

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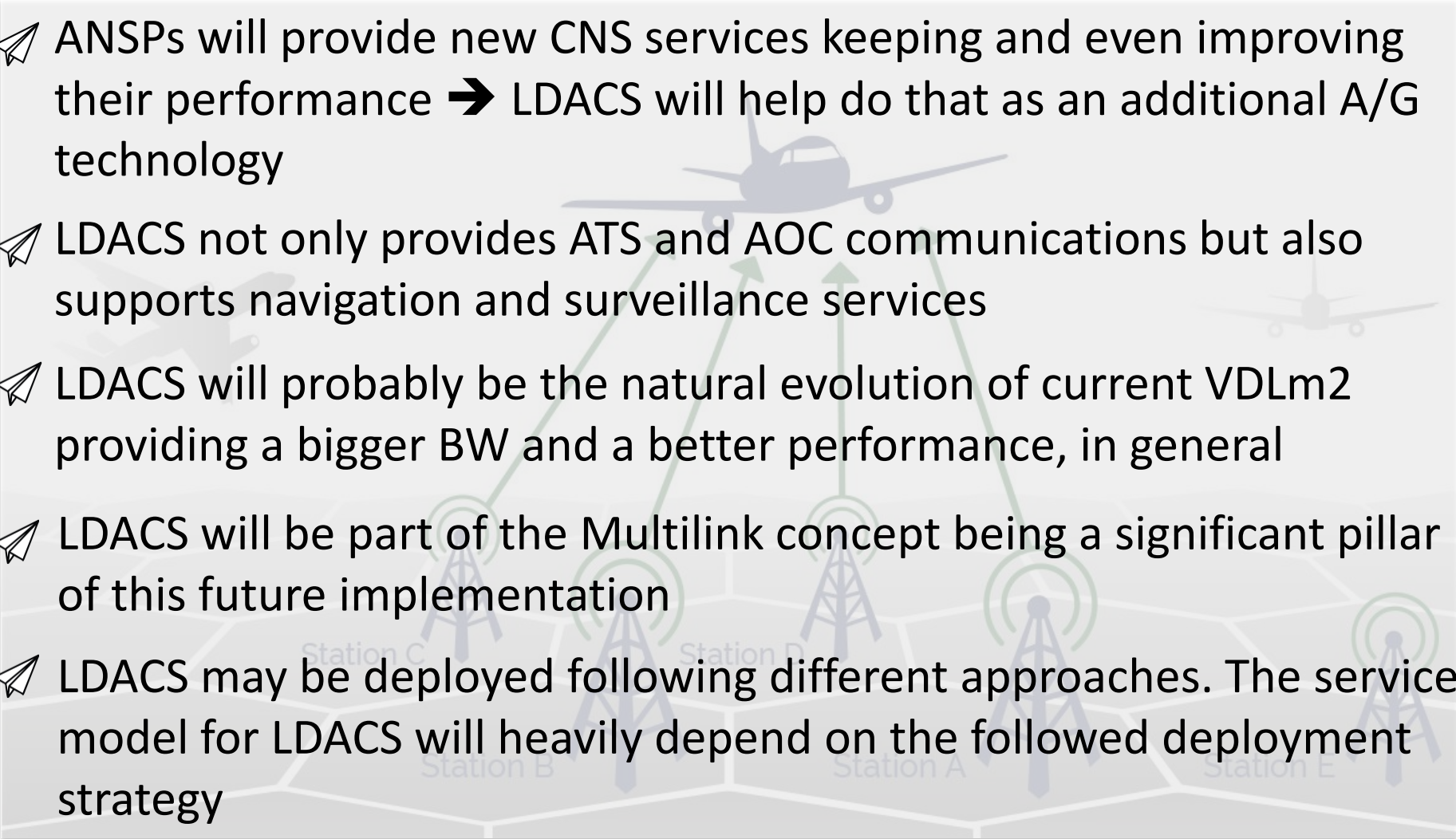
LDACS service model from ANSPs' perspective

Through the CSPs (like VDL service model)?

Own deployment strategy and service provision by ANSPs?

Centralized deployment and service provision?



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- ✈ ANSPs will provide new CNS services keeping and even improving their performance → LDACS will help do that as an additional A/G technology
 - ✈ LDACS not only provides ATS and AOC communications but also supports navigation and surveillance services
 - ✈ LDACS will probably be the natural evolution of current VDLm2 providing a bigger BW and a better performance, in general
 - ✈ LDACS will be part of the Multilink concept being a significant pillar of this future implementation
 - ✈ LDACS may be deployed following different approaches. The service model for LDACS will heavily depend on the followed deployment strategy

Thank you!

