



AGENDA FOR TODAY

10:00 - 10:10

Welcome by Francisco Arenas (EASA)

10:10 – 11:00

Presentation of the Case study and Use Cases

Current status and stakeholder participation to DATAPP

Identified limitations and proposed solutions
Live survey and Q & A (slido)

Next steps

11:00 – 11:30

Success story for instructor concordance analysis –

by A. Grammaticas from easyJet

Q & A

EASA DATAPP PROJECT WORKSHOP

WAY FORWARD ON FLIGHT TRAINING DATA TO DESIGN AND DELIVER EFFECTIVE EBT PROGRAMMES

14th November, 2023



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EASA
European Union Aviation Safety Agency

WE NEED YOUR INPUT

1

Each area will have a **topic-specific live survey and Q&A session**

2

You can **access the survey and Q&A under the Slido tab**

3

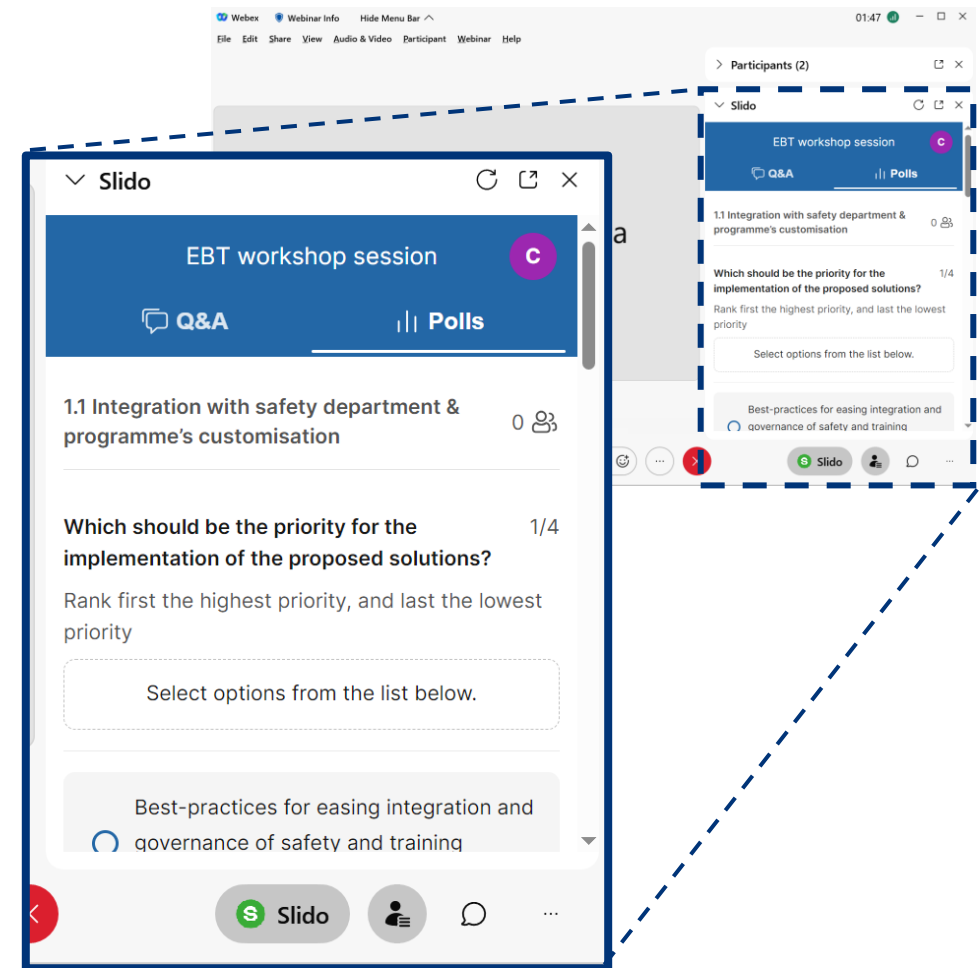
You can participate in the survey while we answer a few questions

4

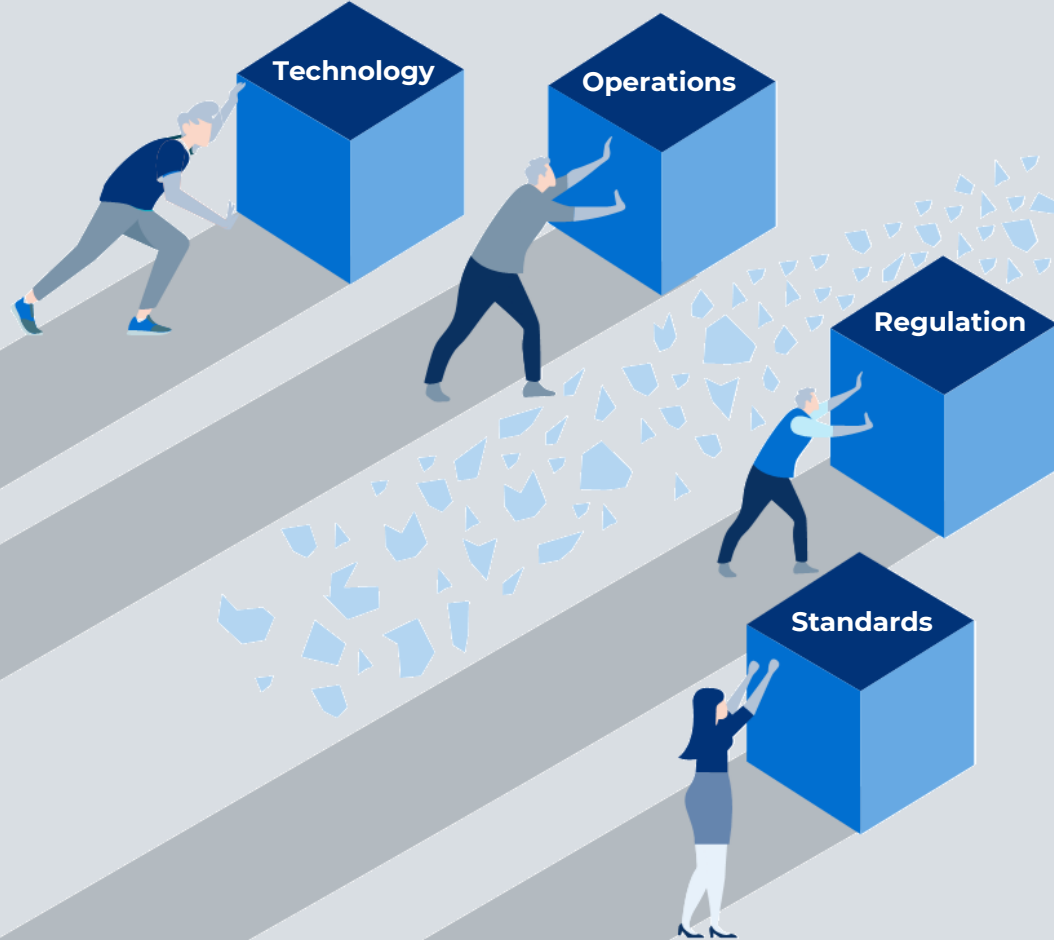
Remember to **hit the Send button** once finished

Send

slido



DIGITAL TRANSFORMATION



Can we keep the pace in
all dimensions?

THE DATAPP PROJECT

EASA's Research Project

CASE STUDIES

The DATAPP project focuses its research on three different aviation fields, structured and particularised each on a Case Study

CS3 Flight training data for EBT and CBTA



CS4 Digital fuel management

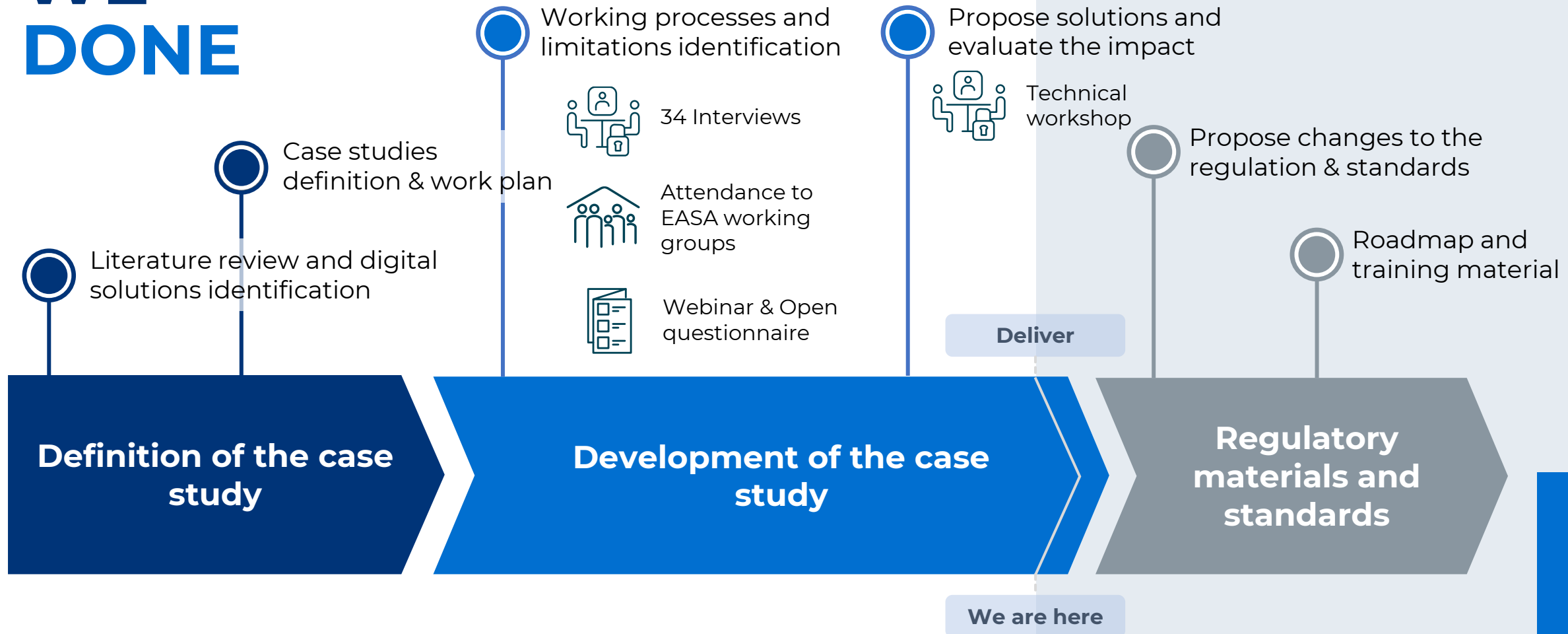


CS5 Flight data models for safety



WHAT HAVE WE DONE

TO DO



DEVELOPMENT OF THE CASE STUDY

STAKEHOLDER CONSULTATION PROCESS

Big thank you to the many organizations and experts who have invested their time and effort with us to make us aware of the current situation and existing constraints!



CASE STUDY #3

FLIGHT TRAINING DATA FOR EBT/CBTA

What are the **proposed solutions for addressing the identified limitations and challenges** on the implementation of EBT/CBTA programmes?



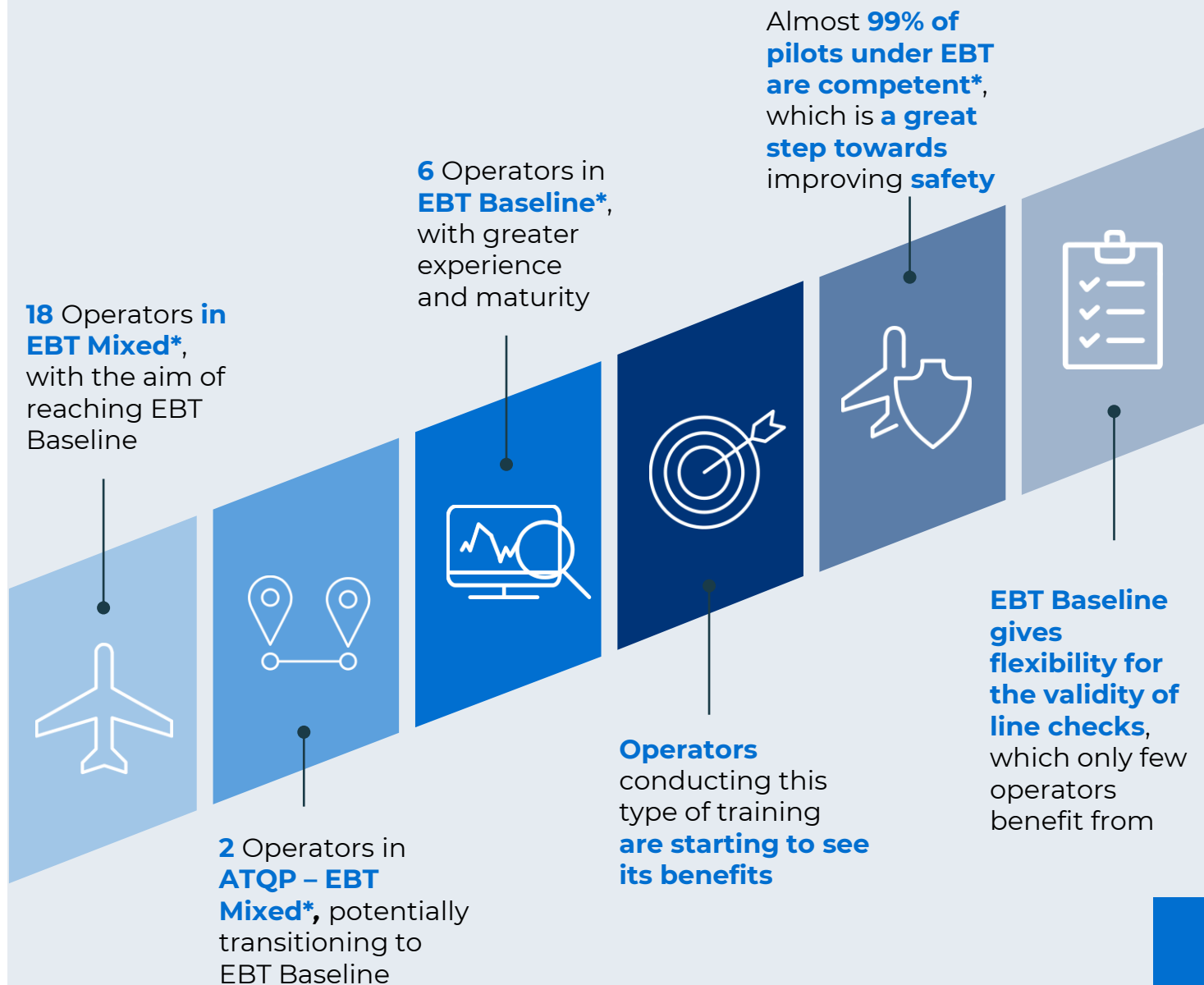
STATUS & MATURITY

EBT involves a **shift in the approach to pilot training, first steps for implementation** taken in **2015 at regulatory level** and **operators progressively aligning to it** since **2017**

EBT **is evolving, since it is a relatively new concept with few operators in EBT Baseline and limitations still** to be addressed

Mature **operators have acquired relevant experience and** several **more are on the way**

EBT must continue to be promoted as it **is the future of training**, with the aim to be extended to other licenses



* Source: EASA survey for EBT implementation status to which 9 authorities & 26 operators replied

PROPOSED SOLUTIONS

TOP 4 MAIN AREAS

DIGITAL AND DATA-RELATED
SOLUTIONS TO ADDRESS THE
IDENTIFIED LIMITATIONS ON THE
IMPLEMENTATION OF EBT/CBTA
PROGRAMMES

1

**Cooperation
with safety
department &
programme's
customisation**

2

Evaluation of
pilots **and** key
**training data
gathering**

3

**Instructor
Concordance
Assurance
Programme**

4

Link with the
authorities and
their **role in EBT**

1 - Cooperation with safety department & programme's customisation

LIMITATIONS

- 1** Need for strengthening the collaboration between training and safety departments
- 2** Need to share more than just the most serious occurrences
- 3** Lack of common taxonomy between safety and training

PROPOSED SOLUTIONS

- Best-practices for **easing integration and governance of safety and training department cooperation**
- Best-practices to **integrate or fuse inner loop data for customisation and contextualisation of scenarios**
- Best-practices to **standardise taxonomy between FDM methods and EBT competencies** and training topics

2 - Evaluation of pilots and key training data gathering

LIMITATIONS

- 1 Lack of clarity on the assessment method
- 2 Instructors' high workload and limited time for debriefing
- 3 Risk of automating assessment
- 4 Programme difficulty metric

PROPOSED SOLUTIONS

- GM on **how to satisfy** the established **Observable Behaviours**
- GM for **standard application of grading system** and **assessment method and techniques**
- GM explicitly **highlighting** the **importance of the debriefing**
- GM capturing **desirable capabilities for EBT software supporting EBT evaluations, and its associated risks**
- Definition and introduction of a **metric for programme difficulty**

3 - Instructor Concordance Assurance Programme

LIMITATIONS

- 1 Lack of consensus on metrics to be used for ICAP
- 2 Challenge on assessing the alignment & complexity of golden standard creation
- 3 Need for support to manage the data
- 4 Absence of guidance for normalising instructors' data
- 5 Risk of forced concordance

PROPOSED SOLUTIONS

- Best-practices for **standardised metrics and methods to assess agreement and alignment**
- **Creation** and provision of **“Golden Standards”** as reference videos **to be used by any operator**
- **Implementation** of a **tool** that allows the operators to **manage the ICAP** related **data**
- Guidance Material for **normalisation of instructors' data**
- Definition of a **framework of indicators to assess** the appearance of **forced concordance**

4 - Link with the authorities and their role in EBT

LIMITATIONS

- 1 Lack of input for programme definition
- 2 Undefined framework for monitoring EBT programmes
- 3 Need for further transparency and benchmarking capabilities
- 4 Limited capacity to exploit the data
- 5 Ensuring consistency of EBT programmes

PROPOSED SOLUTIONS

- Best-practices for **sharing authority data with operators**
- Incentivise the **creation of collaborative data-sharing mechanisms** among Authorities and operators
- GM **defining** a recommended **framework of KPIs for oversight of EBT programmes** by Authorities
- Support the **definition of specific trainings for the enhancement of the authorities' data analytics capabilities**
- Development of Industry best-practices for standardised metrics to monitor the consistency of EBT programmes

TIME TO ADJUST THE
REGULATORY FRAMEWORK

WHAT'S NEXT?

Now, our research will focus on the identification of regulatory materials and standards modifications needed to fill the existing regulatory gaps.

Afterwards, the final objective will be to develop the roadmap for smoothing the route to achieving regulatory change and to develop a detailed solution.

1

Identify regulatory materials and standards **modifications**

2

Develop the roadmap for smoothing **regulatory change**

3

Develop a detailed solution for the case study

QUESTIONS & ANSWERS



ABOUT US

About Us

ALG AT A GLANCE

Global strategy and business consulting firm specialized in logistics, infrastructure and transportation with 25+ years in the business

Aviation



We provide in-depth knowledge of the industry (air transport, airport infrastructure, air navigation, UTM and drones, space and civil aviation)

Maritime



We identify opportunities to take advantages of trends in global trade, cruise markets and marina concessions, and support the development of maritime transportation and infrastructure throughout the value chain

Land



Leading players in the highway and railway sectors and public transport authorities trust us (the highest rate of client repetition) to achieve more efficient and sustainable transport

Intermodal & RE



We draw on our in-depth understanding of all modes of transport to assess and define the role of logistics zones in global supply chains and to design new strategies and modern logistics processes

OUR DIGITAL DEPARTMENT

Our team of hybrid profiles, supporting transportation organisations along their path towards digital transformation

WHAT DO WE OFFER?



**Digital
strategy**



**Digital
capabilities**



**Digital
technologies**

Introducing the panellists

OUR TEAM



Núria Alsina

Principal at ALG and head of digitalisation and advanced analytics in the Transportation practice. Aeronautical engineer with specialisation in air navigation and systems, certified in project management and scrum methodology.



Antonio Cabeza

Engagement Manager at ALG. Aeronautical engineer with a MSc in Big Data and Advanced analytics. Specialises in strategical projects in airport and air traffic operations with wide expertise in digitalisation and regulatory related projects.



Andrada Bujor

Team Leader at ALG. Aeronautical engineer with a MSc in Business Intelligence and Big Data and expertise in strategic business projects, ATM research, impact assessment and digital initiatives mainly in the European context.



Alex Olivera

Consultant at ALG. Aeronautical engineer with relevant background in data analysis and information management, cost-benefit analysis, and business development plans.



Tim Ramsdale

Flight Operations and Training Inspector / Training Standards Lead at UK CAAi with extensive experience in instructing and examining in multi-crew aeroplanes and helicopters, as well as a regulator in the UK CAAi.



David Asgeirsson

Flight Operations & Training Inspector - EBT&CBTA Subject-Matter Expert in addition to B737 pilot & A320 TRI/TRE/SE. He actively promotes safety regulation and the implementation of training standards.

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**Funded by
the European Union**

* This project is funded by Horizon Europe