

➤ Nadia Ilieva

- Background in economics, evaluation and impact assessment
- Special qualifications in Cost-Benefit Analysis, Economic modelling, Financial analysis
- More than 8 years experience in impact assessment, monitoring, evaluating policies for EU legislation and EU spending programmes
- She worked at the European Commission for 3.5 years before joining EASA as an impact assessment officer

Francisco ARENAS ALVARIÑO

- **Started in aviation in 1999 – pilot.**
- **Sa226/227 metroliner, ATR 42/72, A330, A340.**
- **In 2007 EasyJet A319/320 where upgraded to left seat.**
- **SFI A320**
- **Previously Flight safety officer & Consultant**
- **Degree in aviation business by the Universidad Autonoma de Madrid.**
- **Joined EASA early 2014 as regulation officer, acting as focal point for:**
 - **Fuel, project manager RMT.0573,**
 - **All weather operation AWO, project manager for air ops and aircrew RMT0379, and**
 - **Training, Project manager RMT.0696 & 0599 EBT.**



EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

Regulatory Impact Assessment RMT.0599 Evidence-Based Training

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What is regulatory impact assessment?

- Assessment of the advantages and disadvantages of the rule options with regard to defined objectives
- Transparent and evidence-based analysis for the decision-makers to take informed and evidence-based decisions
- Agency's rulemaking procedure requires that every Notice of Proposed Amendment published by the Agency be accompanied by a Regulatory Impact Assessment if relevant impacts are expected

Data collection:

- Data from operators, participating in the Rulemaking group for the task RMT.0599
- Data from other operators who undertake EBT for recurrent training and checking
- Questionnaire to the competent authorities in EASA MS

Methods for analysis:

- Cost-benefit analysis for economic impacts
- Case studies in studying economic impacts
- Multi-criteria analysis for non-quantifiable impacts



Issue analysis

- Traditional recurrent training
 - may not be relevant to the operation of modern multi-crew transport category aeroplanes
 - has not kept up with development and new challenges
 - may not completely reflect the risks of today's operating environment on new generation aeroplanes

No	Short title	Description	Selected
0	No policy change	Continuation of traditional legacy training in delivering recurrent training to pilots. The risks and the problems stay unresolved.	NO
1	Voluntary EBT training	It provides an opportunity for the AOC holders to take a decision to implement EBT system for the recurrent training and checking of their pilots and to swift from following the existing “prescriptive” (traditional/legacy) training or Alternative training and qualification programme to EBT. It envisages a separate processes for the administrative work for revalidation of the pilot licence and a technical work for assessment of the pilot.	YES
2	Mandating EBT	This option envisages mandating EBT for all operators and discontinuation of the legacy training.	NO



Safety impacts

<i>Criteria</i>	<i>Option 0 No policy change</i>	<i>Option 1 Voluntary EBT training</i>	<i>Option 2 Mandating EBT</i>
Safety impact	Safety level is maintained. 0	Very low positive impact, because it would be applied on voluntary basis. Better preparation of pilots to take over highly automated operations and to apply a more consistent and quick decision making. +1	Low positive safety impact, because it would apply to the whole population of flight crew and AOC holders in EASA Member States and would render more safety benefits. +2

Criteria	<i>Option 0</i> <i>No policy change</i>	<i>Option 1</i> <i>Voluntary EBT training</i>	<i>Option 2</i> <i>Mandating EBT</i>
Social impact	No social impacts.	Low positive: Improvement in the skills, knowledge of all stakeholders; more objective revalidation licence process, based on evidence, provided by EBT. Some negative impacts for TRE whose volume of work for licence revalidation would decrease.	Medium positive: Same impacts for all stakeholder as in Option 1, but applied to all AOC holders, flight crew, EBT training developers/providers, etc. Some negative impacts for TRE whose volume of work for licence revalidation would decrease.
	0	+2	+3



Economic impact

Costs:

- External assistance in development of EBT competency framework and EBT training programme
- Training of instructors to deliver EBT training
- Training of a training manager
- Developing an EBT training programme
- Purchasing an IT assessment tool to support the implementation of EBT (optional)

Benefits:

- Line check: Reduced from 1 per year to 1 every two years
- Safety equipment procedure training requirement: Reduced from 1 per year to 1 every two years
- CRM training: Less, integration of non-technical competencies in the EBT programme
- Saving due to decrease in % of pilots who fail in OPC/LPC
- Flexibility: 1% efficiency

Economic impacts



Medium/large operator

Costs for EBT implementation (one-off):
MEUR 1.2

Benefits after EBT implementation:
MEUR 0.7 average per year

Net benefit:
MEUR 0.9 per
year/company

Net benefit:
EUR 900 per
pilot/year

Net benefit:
0.02% of annual
turnover

Return of
investment: > 3
years after EBT
implementation

Small operator

Costs for EBT implementation (one-off):
KEUR 80*

(without non-quantifiable costs)

Benefits after EBT implementation:
KEUR 90 average per year

Net benefit:
KEUR 100 per
year/company

Net benefit:
EUR 1000 per
pilot/year

Net benefit:
0.1% of annual
turnover

Return of
investment: > 4
years after EBT
implementation



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Thank you for your support to EASA rulemaking

Comments and questions
welcome!

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