

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
short description	Baseline: Legacy training	Preparatory year: running traditional training +EBT investment one-off costs (training of a manager to be EBT manager and consultancy to develop EBT framework and training programme)	Preparatory year: running traditional training + EBT investment one-off costs (development of EBT training programme, purchase of assessment IT tool, training of instructors for initial course of EBT)	First year of EBT implemenation, discontinue legacy training, no EBT benefits, still high failure rate of pilots (2.6% as in legacy training)	Second year of EBT implemenation, discontinue legacy training, no EBT benefits, still high failure rate of pilots (2.6% as in the legacy training)	All EBT costs; Start all benefits + less failures in OPC/LPC (20% decrease in remedial training, e.g. 2.08% of pilots fail)	All EBT costs; Start all benefits + less failures in OPC/LPC (40% decreased in remedial training, e.g. 1.56% of pilots fail)	All EBT costs; Start all benefits + less failures in OPC/LPC (50% decreased in remedial training,e.g. 1.3% of pilot fail)	All EBT costs; Start all benefits + less failures in OPC/LPC (50% decreased in remedial training, .g. 1.3% of pilot fail)	All EBT costs; Start all benefits + less failures in OPC/LPC (50% decreased in remedial training, .g. 1.3% of pilot fail)	All EBT costs; Start all benefits + less failures in OPC/LPC (50% decreased in remedial training, .g. 1.3% of pilot fail)
years		1	2	3	4	5	6	7	8	9	10
1	Total costs	13,403,338.67	13,525,560.89	14,448,894.22	13,413,338.67	13,413,338.67	13,413,338.67	13,413,338.67	13,413,338.67	13,413,338.67	13,413,338.67
	<i>One-off investment costs for EBT</i>										
2	Training of a EBT training manager (20 days to develop competency framework) (one-off)	22,222.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Consultancy to train EBT manager and develop EBT framework and training programme (one-off)	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Training of instructors to deliver EBT training (costs for consultants and daily wages of the instrutors) (one-off)		834,444.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Purchase of IT tool (one-off)		100,000.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
6	Develop EBT recurrent training programme by the training manager (one-off)		111,111.11								
	<i>Recurrent costs for legacy/EBT training</i>										
7	Legacy training (recurrent costs)	13,403,338.67	13,403,338.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Update of EBT recurrent training programme by the training manager (recurrent, same cost as for the legacy training)	0.00	0.00	88,888.89	88,888.89	88,888.89	88,888.89	88,888.89	88,888.89	88,888.89	88,888.89
9	Costs for instructors/examiners for refresher training for EBT (1 day per instructor/examiner) (recurrent, same cost as for the legacy training)			111,111.11	111,111.11	111,111.11	111,111.11	111,111.11	111,111.11	111,111.11	111,111.11
10	Approval of the changes in the recurrent training programme by the CA (recurrent, same cost as for the legacy training)			8,400.00	8,400.00	8,400.00	8,400.00	8,400.00	8,400.00	8,400.00	8,400.00
11	EBT modules (former OPC and LPC) (recurrent, same cost as for the legacy training)	0.00	0.00	10,583,111.11	10,583,111.11	10,583,111.11	10,583,111.11	10,583,111.11	10,583,111.11	10,583,111.11	10,583,111.11
12	EBT Line check (recurrent, same cost as for the legacy training)	0.00	0.00	666,666.67	666,666.67	666,666.67	666,666.67	666,666.67	666,666.67	666,666.67	666,666.67
13	EBT Ground training (recurrent, same cost as for the legacy training)	0.00	0.00	1,670,000.00	1,670,000.00	1,670,000.00	1,670,000.00	1,670,000.00	1,670,000.00	1,670,000.00	1,670,000.00
14	EBT Remedial training (recurrent, same cost as for the legacy training)	0.00	0.00	275,160.89	275,160.89	275,160.89	275,160.89	275,160.89	275,160.89	275,160.89	275,160.89
15	Costs for maintaining licences for IT tool (recurrent, new cost for EBT)	0.00	0.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
16	delta EBT costs in comparison to legacy training costs: For years 2017 and 2018 (line 1 - line 5) and for all other years (line 15)	122,222.22	1,045,555.56	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
17	TOTAL benefits	0.00	0.00	0.00	0.00	1,143,921.07	1,198,953.24	1,226,469.33	1,226,469.33	1,226,469.33	1,226,469.33
18	Saving due to decrease in % of pilots failed in OPC/LPC: Saving in daily wage of flight crew for the time that he/she does not fly.	0.00	0.00	0.00	0.00	55,032.18	110,064.36	137,580.44	137,580.44	137,580.44	137,580.44
19	Line check (after 2 years of EBT implementation an operator should be allowed to extend the line check)): a pilot's line check requirement is reduced from 1 per year to 1 every two years	0.00	0.00	0.00	0.00	333,333.33	333,333.33	333,333.33	333,333.33	333,333.33	333,333.33
20	Ground training: Safety equipment procedure (SEP) training: A pilot's SEP training requirement is reduced from 1 per year to 1 every two years. The benefit is saving a daily wage of the flight crew. Less CRM training is expected due to the integration of non-technical competencies in the EBT programme (1 day per pilot/year to 1 day pilot/3 years).	0.00	0.00	0.00	0.00	555,555.56	555,555.56	555,555.56	555,555.56	555,555.56	555,555.56

21 Indreict saving (flexibility):A reduction in pilot workload due to flexibility to run SIM away from the peak flying months. The benefit is the 1% of the annual wage of a pilot saved, mulitply by the number of the pilots who would be available to fly instead of going to simulator.	0.00	0.00	0.00	0.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00
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NPV delta EBT costs	122,222.22	966,674.88	8,889.96	8,548.04	8,219.27	7,903.15	7,599.18	7,306.90	7,025.87	6,755.64
NPV EBT beneifts	0.00	0.00	0.00	0.00	940,219.73	947,550.16	932,015.89	896,169.13	861,701.09	828,558.74
Cumulative NPV EBT costs	122,222.22	1,088,897.11	1,097,787.07	1,106,335.11	1,114,554.38	1,122,457.53	1,130,056.71	1,137,363.61	1,144,389.48	1,151,145.12
Cumulative NPV EBT benefits	0.00	0.00	0.00	0.00	940,219.73	1,887,769.90	2,819,785.79	3,715,954.92	4,577,656.00	5,406,214.74
Profitability indicators										
NPV EBT benefits - NPV EBT costs	-122,222.22	-966,674.88	-8,889.96	-8,548.04	932,000.46	939,647.02	924,416.72	888,862.23	854,675.22	821,803.09
Portion of the net benefits as % of the annual turnover					0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
Benefit/Cost ratio (cumulative NPV EBT benefits/cumulative NPV EBT costs)	0.00	0.00	0.00	0.00	0.84	1.68	2.50	3.27	4.00	4.70
Saving per pilot per year					932.00	939.65	924.42	888.86	854.68	821.80
Years for return of investment (break-even point, year when cumulative costs = cumulative benefits)						3-4 years of return of investment after EBT implementation				