

### Main assumptions in developping the baseline recurrent training

The baseline is developed for a small operator, according to the assumption below.

fleet 10 aircrafts

pilots (capitans and FO): 100

instructors: 10

60 line checks per year for all 100 pilots which are performed in 60 working days

400 sim session OPC/LPC per year for all pilots (50 crews 4 session per crew); 200

sessions per crew; coefficient of 1.4 due to the inefficiency; 280 sim session OPC/LPC per year for the company

1 FTE = 180 working days (flying, training)

The crew need to travel to the main basis, where the training is carried out. It is assumed that the main basis is in UK.

Development and update of the training programme is 10 working days.

Fees and charges for approval of the recurrent training programme (included in the development of training programme) 8400 EUR

Costs for 1 FTE training manager 200,000 EUR per year

There are 1 LPC and 2 OPC per year per crew and 1 training session per year per crew.

Every 6 months 2 days training and checking: 1 session (1 day) LPC and OPC combined and 1 session of training (1 day); Once per year: 2 session (2 days): 1 session in OPC and 1 session of training. **In total, there are 4 sessions per year and each session is 3-4 hours in 2 consecutive days which is equivalent to 8 working days.** For 3 years, it is considered that the baseline operator is doing 48 hours simulator per crew.

Annual remuneration per pilot is estimated at around 200,000 EUR (full cost for the operator, including gross salary plus the social securities for the operator). It is calculated on the basis of the average remuneration of captain and first officer per year.

The baseline operator is considered that has not a main basis/HQ in the place, where the simulators are. Therefore, he needs to pay the travel of the pilots to the main crew base/HQ. 80% of pilots are travelling to the main basis/HQ for simulator exercise. 20% are not travelling. A coefficient of 0.8 is considered to capture this assumption. For the sake of the exercise, it is assumed that the HQ is in UK. The per diem rate is taken for UK which is currently 280 EUR per day.

The trip for OPC and LPC is for 2 days every 6 months which equals to 4 days per year per pilot/FO.

In legacy training: TRI/TRE do OPC/LPC every 6 months 2.5 days. In total, they are engaged for 5 days per year per pilot.

Ideally when OPC and LPC are rostered, 1 TRI/TRE does OPC and LPC in 2.5 days every 6 months 5 days in total per pilot. In reality the FC are coupled for the OPC and LPC. If the people are coupled within the same day 2 pilots do the OPC and LPC. Therefore a coefficient of 0.6 is considered.

Annual remuneration of instructor/examiner is estimated at 200,000 EUR.

The cost for simulator per session is 1200 EUR per crew.

Annual remuneration of captain, performing the line check is estimated at 200,000 EUR.

Ground training is 1 day per year per pilot.

A trainer, conducting ground training is involved 1 day for 4 Pilots. For 100 pilots a trainer is engaged for 25 working days.

Annual remuneration of a trainer performing the ground training is estimated at 100,000 EUR.

The trip for ground training is for 2 days per year per pilot/FO. 80% of all 100 pilots are travelling to the main basis.

Remedial training for OPC/LPC is provided to 2.6% of the pilots/FO who failed in OPC and LPC checks, e.g. 2.6 pilots.

Remedial training for line check is provided to 0.25% of the pilots/FO who failed in line checks, e.g. 0.25 pilots of all 100 pilots. Since it is negligible, it is not considered in the analysis.

After the remedial training, pilots pass OPC, LPC.

It is assumed that the pilots in remedial training need to fly to the main basis to do the OPC/LPC.

### **Main assumptions in EBT**

#### **Preparatory costs**

Operator is using an external consultant to help develop the EBT competency framework, to develop the training programme and to train EBT manager and instructors for EBT

EBT training of a training manager is 5 days (one-off).

Development of the training programme by the manager is 10 days (one-off).

Update of EBT training programme per year 10 days and is done by the EBT training manager (recurrent)

CA fees for approval of EBT programme is the same as in the legacy training (no change).

Costs for 1 FTE EBT training manager 200,000 EUR per year

Training of instructors to deliver EBT training: each trainee/instructor is trained for 3 working days. 1 day training is 500 EUR instructor/day.

Instructor wage is 200 000 EUR (including gross salary and social securities)

Instructor/TRE competency assessment is 1 working day. (one-off)

Annual refresher training for the EBT instructor/TRE is 1 working day. (recurrent) same as above

Recurrent costs are the same as in the legacy training.

Failure rate is decreased progressively, but the first 2 years in the EBT implementation they remain the same as in the legacy training (2.6%).

EBT benefits are spread as follows: 30% the first year, 60% the second year, 100% third year.

#### **CBA model**

The model is prepared for 10 years' period in order to capture the different distribution of the costs and benefits over the time.

The discount rate is 4%, applied according to the European Commission guidance for conducting CBA ([http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/cba\\_guide.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf))