

INPUTS

1 How many ATCOs require training in total?	30
2 Select a reduction in procurement costs due to collaboration	0%
3 Select a reduction in maintenance costs due to collaboration	0%

	Case A Independent Base	Case B Knowledge sharing Base
	days/€	days/€
Definition of objectives		
Project management	25	17
Definition of roles and responsibilities	5	5
Operational requirements definition	15	7
Development of policy, procedures and safety case	55	22
Implementation or change		
System verification	15	7
Purchase of system	€ 250.000	€ 250.000
Tuning and validation		
Tuning, validation and optimisation, including site adaptation and parameter setting	30	15
Operation and monitoring		
ATCO and engineer training	30	30
Maintenance (per year, over ten years)	€ 35.000	€ 35.000
Performance monitoring	100	80
Cost per man day	€ 600	€ 600
Number of Man Days	275	183
Total costs		
Manpower	€ 165.000	€ 110.000
External costs	€ 285.000	€ 285.000
Total	€ 450.000	€ 395.000
SAVINGS		12%

% Benefit through knowledge sharing and guidance material	
~30%	Due to reduction in overall effort
	No change
50%	Benefit from using the reference APM system and guidance
60%	Due to 30 days reduction in safety case, due to guidance material
50%	Sharing of best practice and guidelines should reduce the effort
0%	Up to 40% is thought to be possible through joint procurement
50%	Benefit through best practice, guidelines and lessons learnt through case studies
	No change
20%	Possible reduction through joint procurement
	Sharing of knowledge, experience and manpower