

Monetary values are quoted to the nearest thousand Euros

**INPUTS**

1	How many ATCOs require training in total?	250
2	Select a reduction in procurement costs due to collaboration	0%
3	Select a reduction in maintenance costs due to collaboration	0%

	Independent	Knowledge sharing
	Base	Base
	days/€	days/€
<b>Definition of objectives</b>		
Project management	54	44
Definition of roles and responsibilities	5	5
Operational requirements definition	15	7
Development of policy, procedures and safety case	55	22
<b>Implementation or change</b>		
System verification	15	7
Purchase of system	€ 250.000	€ 250.000
<b>Tuning and validation</b>		
Tuning, validation and optimisation, including site adaptation and parameter setting	45	22
<b>Operation and monitoring</b>		
ATCO and engineer training	250	250
Maintenance (per year, over ten years)	€ 35.000	€ 35.000
Performance monitoring	100	80
Cost per man day	600	600
Number of Man Days	539	437
<b>Total costs</b>		
Manpower	€ 323.000	€ 262.000
External costs	€ 285.000	€ 285.000
<b>Total</b>	<b>€ 608.000</b>	<b>€ 547.000</b>
<b>SAVINGS</b>		<b>10%</b>

% Benefit through knowledge sharing and guidance material	
~20%	Due to reduction in overall effort
	No change
50%	Benefit from using the reference APW 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
	Possible reduction through joint procurement
	20% saving possible through saring experience, knowledge and manpower