

**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
<b>Requirements definition</b>			
	Project management	51	42
	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	20	10
	Purchase of system	€ 250.000	€ 250.000
<b>Tuning and validation</b>			
	Tuning, validation and optimisation, including site adaptation and parameter setting	60	30
<b>Operation and monitoring</b>			
	ATCO and engineer training	250	250
	Maintenance (per year, over ten years)	€ 40.000	€ 40.000
	Performance monitoring	100	100
	Cost per man day	600	600
	Number of Man Days	556	466
<b>Total costs</b>			
	Manpower	€ 330.000	€ 280.000
	External costs	€ 290.000	€ 290.000
	<b>Total</b>	<b>€ 620.000</b>	<b>€ 570.000</b>
<b>SAVINGS</b>			<b>8,1%</b>

% Benefit through knowledge sharing and guidance material	
~10%	Due to reduction in overall effort
	No change
50%	Benefit from using the reference MSAW system and guidance material
60%	Due to 30 days reduction in safety case, due to guidance material and 50% policy and procedures reduction
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
	No change