	Product Cos	Hours	Labour Cost
SATELLITE DESIGN			
Spacecraft subsystems			
Electrical power system			
Primary Resources	17,000€	17	340 €
Secondary Resources	3,000 €	25	500 €
Distribution & Control	2,000€	4	80 €
Thermal Management			
Requirements	-	18	360 €
ACTS	-	18	360€
PCTS	-	17	340 €
Telemetry & Command	8,500€	25	500 €
AOCS			
AOCE	10,000€	60	1,200€
Sensors	5,000€	15	5,000 €
Actuators	10,000€	15	10,000 €
Structure			
Mechanical design	4,500 €	25	500 €
Thermal/rad protection	3,000€	40	800 €
Antenna deployable	6,500€	50	1,000 €
Solar panel deployable	16,000€	40	800 €
Payload			
Antenna	6,000€	30	600 €
PDHS	7,000€	50	1,000 €

TOTAL	98,500€	449	23,380 €	Total Cost
TOTAL ESTIMATED	98,500€	449	23,380 €	121,880 €

	Product Cos	Hours	Labour Cost
ORBITAL DESIGN			
Parameters of the orbit			
General	-	25	500.00€
Altitude	-	30	600.00€
Inclination	-	30	600.00€
Drifts	-	25	500.00€
Legislation		15	300.00€
Constellation Architecture			
Types of constellation	-	45	900.00€
Growth and replenish	-	40	800.00€
Phase shifts	-	40	800.00€

TOTAL	250	5,000.00€	Total Cost
TOTAL ESTIMATED	250	5,000.00€	5,000€

	Product Cos	Hours	Labour Cost
LAUNCH SYSTEMS			
Market study of vehicles			
Launch requirements	-	6	120 €
Main Companyies' Launch Systems	-	10	200 €
Decision and hiring			
Satellite deployer			
Deployment Requirements	-	6	120 €
Main Companies Deployment Systems	-	5	100 €
Decision and hiring	-		

TOTAL	27	540 €	Total Cost
TOTAL ESTIMATED	27	540 €	540 €

	Product Cos	Hours	Labour Cost
OPERATION			
Communication protocol			
On-orbit	-	16	320 €
Ground	-	6	120 €
End of life strategy	-	20	400 €
Ground station			
Operational protocol	-	5	100 €
Design			
Antenna	4,000 €	2	40 €
Transceiver	4,500 €	2	40 €
Tracking mechanism	1,500 €	2	40 €
Software	-	2	40 €
	-		

TOTAL	11,100€	55	1,100€	Total Cost
TOTAL ESTIMATED	11,100€	55	1,100€	12,200€

Product Cos	Hours	Labour Cost
-	21	420€
-	7	140 €
-	10	200 €
-	15	300 €
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TOTAL	-	53	1,060 €	Total Cost
TOTAL ESTIMATED	-	60	1,200€	1,200 €

	Product Cos	Hours	Labour Cost
MANAGEMENT			
Project planning	-		
Organization and meetings	-	340	6,800.00€
Project Charter	-	68	1,360.00€
Task management & tracking	-		- €
Client updates	-	20	400.00 €
Team Tasks monitoring	-	20	400.00 €
WBS Update and Gant update	-	10	200.00 €

TOTAL	458	9,160.00€	Total Cost
TOTAL ESTIMATED	458	9,160.00€	9,160.00€

	Product Cos	Hours	Labour Cost
TECHNOLOGY DEMONS.			
Constellation simulation		7	140.00€
Satellite Rendering			
CAD design		10	200.00€
Animation design		5	100.00€
Satellite prototype			
Materials selection and acquisition		10	200.00€
Manufacturing		20	400.00€
Functionalities Testing		10	200.00€
Other			
3DS Max License	200/month		
Row Materials (prototype)	30 €		
Tools (prototype	20 €		

TOTAL	250	62	1,240.00€	Total Cost
TOTAL ESTIMATED	250	62	1,240.00€	1,240.00€

TOTAL	1361	151,220 €