



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Escola Superior d'Enginyeries Industrial,
Aeroespacial i Audiovisual de Terrassa

Bachelor's Degree Thesis

Bachelor's Degree in Aerospace Vehicle Engineering (GrEVA)

Study of a preliminary value-cost model of Earth Observation (EO) satellites operating in Very Low Earth Orbit (VLEO) and Low Earth Orbit (LEO) for an ocean cleanup organization

Budget

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POLYTECNICAL UNIVERSITY OF CATALONIA

BUDGET

This document means to provide the information related with the cost of the study that has been done. The total cost of this study is directly related with the number of hours dedicated. Thus, a number of three tables have been displayed in order to provide full information about this study.

In the following table, the cost per hour that has been established is 20€, including the salary of a junior engineer and the expenses related with energy, computers, communication tools and trips, etc. Then, each small part of this thesis has been evaluated in order to provide their individual cost (see table 1).

	Activities	Hours	Cost (€)
1	Latex Format	10	200 €
2	Introduction/Justification	30	600 €
3	Relevant Concepts	15	300 €
4	Satellite Research	43	860 €
5	Ocean Cleanup Organisations' Contact and Research	45	900 €
6	Sample Analysis	65	1,300 €
7	Values and Needs	30	600 €
8	Technological Coverage	52	1,040 €
9	Implementation of the Costs	30	600 €
10	Target	25	500 €
11	Willingness-To-Pay Cost	40	800 €
12	Value-Cost Model	30	600 €
13	Risk Analysis	20	400 €
14	Extrapolation to Other Markets	15	300 €
15	Environmental Study	15	300 €
16	Final Conclusions and Possible Follow-ups	10	200 €
17	Citation and Correction	45	900 €
18	Annexes	55	1,100 €
19	Budget document and Self-Assessment	15	300 €
20	Interviews' duration	10	200 €
	Total:	600	12,000 €

Table 1: *Cost of the engineer*

In addition, it must be pointed out the time invested by the supervisors of this study and the collaborators of the different organisations who helped providing information. In this case, 60€ per hour has been established, since they are fully professionals who dedicated their time in particular moments (see table 2)

	Activities	Hours	Cost (€)
1	Supervisor and Co-supervisor	25	1,500 €
2	Collaborators from each organisation/company	15	900 €
	Total:	40	2,400 €

Table 2: *Cost of the supervisors and collaborators*

Therefore, the total amount is the sum of the costs stated on the last two tables. The final cost of this study is (see table 3):

Cost of the junior engineer	12,000 €
Cost of the professionals	2,400 €
Total Cost of the Thesis	14,400 €

Table 3: *Final Cost of the thesis*