



**Escola Tècnica Superior d'Enginyeries
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UNIVERSITAT POLITÈCNICA DE CATALUNYA

STUDY OF A NEW APPROACH FOR AIR TRAFFIC CONTROL AND AIRPORT MANAGEMENT IN SPAIN

- PROJECT MANAGEMENT PLAN AND BUDGET -

Aeronautical Engineering
Final Project

UPC – ETSEIAT
September 2012

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0. DESCRIPTION OF CONTENTS

This volume presents the project management plan and budget.

Developed at the definition phase of the project, the management plan was conceived in order to effectively sequence tasks and optimize resource allocation, allowing for flexibility along its deployment in order to successfully overcome unexpected delays or commitment of additional resources.

The budget has been defined under certain assumptions in order to estimate cost of resources as accurate as possible with the available information.

1. PROJECT MANAGEMENT PLAN

Within its definition phase, the project was initially divided into four stages, which accounted for the nature and volume of contents originally planned to be included in the report:

- Defining project
- Gathering information
- Analyzing information
- Interpreting information
- Formatting project

These phases are graphically represented through a Gantt Diagram (Figure 1), including time resources to be committed to each workload unit.

The amount of literature available on the subject studied led to a particular emphasis on the phase of information gathering, which was deemed especially significant to ensure a comprehensive factual input to the project.

Initially established sequence of contents was adapted after release of the Gantt Diagram, thus the represented list does not accurately coincide with the definitive contents included in the report.

As far as the diagram's legend is concerned, the horizontal axis displays blocks of 5 hours. Accordingly, the total planned time to conclude the project amounted 400 hours.

This estimation has been exceeded since the report includes some contents which were not initially envisaged to form part of the scope of the project.

Project Management Plan

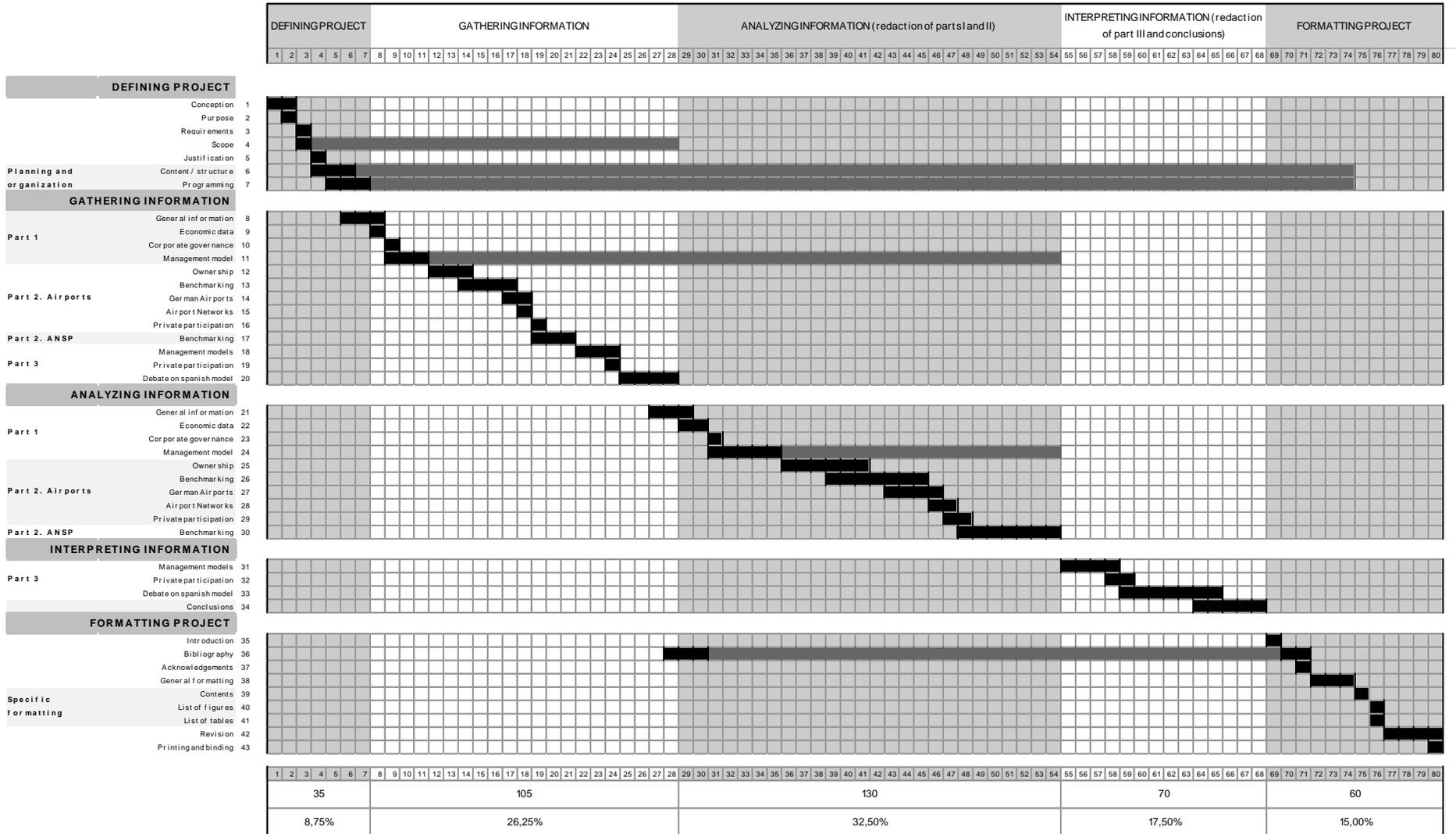


Figure 1 Gantt Diagram

2. BUDGET

For the purpose of budgetary planning, total resources committed are considered to comprise:

- Full-time employment of a trainee student for a period of three months, perceiving a gross monthly salary of € 600,00.
- Urban transport expenses, estimated as of € 90,00 per month.
- Consultation sessions and factual assessment, amounting a total of 25 h. Expenses involved shall account for cost of expertise, including fees, travel and subsistence expenses. Nevertheless, these costs are not accounted for, since the consultants offered their guidance free of cost, due to the status of trainee student of the author.
- Use of certified copy of Office-Software, whose cost is not accounted for since it was not acquired ad-hoc for the project.
- Reprography costs, amounting a total of € 37,00.

These items and the total resulting costs is shown in Table 1.

It shall be hereby remarked that items accounted for within this budget are restrained by the expense limitation of the author, due to his condition of student.

If the project had been conducted by a consulting company, further resources might have been committed, such as subscriptions to publications or acquisition of support material.

In this regard, the author had access to documentation material of the “Centro de Documentación y Publicaciones de Aena”, whose selling costs would have been unaffordable according to the financing conditions of this project.

Thus, the author thanks expressly all the collaborators who offered their support selflessly.

Budget

Item	Unit cost	Quantity	Total cost	Remarks
Full-time trainee student	€ 600	3	€ 1800	“Unit cost” refers to monthly salary. “Quantity” specifies the amount of months within the contractual period.
Urban transport expenses	€ 90	3	€ 270	“Unit cost” refers to monthly cost. “Quantity” specifies the amount of months within the period of development of the project.
Consultation sessions for factual assessment and guidance	-	25	-	These costs are not accounted for, since consultants offered their guidance free of cost. “Quantity” refers to the total amount of hours.
Office-Software	-	-	-	Costs are not accounted for, since licenses were not acquired ad-hoc for the project.
Reprography costs - digital format	€ 9,50	2	€ 19,00	Items include acquisition and labeling of CDs.
Reprography costs - printed format	€ 18,00	1	€ 18,00	Items include printing and binding.
Total			€ 2.107,00	

Table 1 Costs per item and total costs