

Organization

Communications Department

October 16, 2016

1 Scope

At the Project Charter the scope of our department was fixed to the following items.

- An analysis will be done to clarify how many ground stations must operate and the possibility of placing a central one in UPC ESEIAAT.
- The requirements and costs of the ground station will be determined.
- Communication logistics will be defined.
- Communication logistics will be defined. Thus, how the satellites decide whether to send the data or to store it, and if they are to send, where they should do it, is going to be approached. In other words, a high level communications protocol is going to be defined.

2 Tasks

In the project charter we had 3 major tasks. It is needed to divide these tasks into more detailed tasks so a proper following of the project could be done.

Communication protocol The communication protocol task lasts 100 hours. It can be divided into:

- Physical topology of the constellation: 15 hours.
- Working frequency: 10 hours.
- Communication logistics definition: 20 hours.
- Study of existing protocols: 25 hours.
- Protocol definition (by creating it or adapting an existing one): 30 hours.

Ground station This part will take 80 hours. It is composed by the following tasks:

- Number of Ground Station required: 20 hours.
- Systems (antenna) needed: 30 hours.
- Estimation of the cost: 30 hours.

End of life strategy It will take 80 hours and is composed by:

- Legislation: 20 hours.
- Study of the existing end of life protocols: 30 hours.
- Adapt or create and end of life strategy: 30 hours.

Management Management of the group, progress and processes used. This task does not have subtask and the estimated time employed is 20 hours.