# Academic Year 2015/16 Spring Semester

## **GPE Project**

#### **Specific Component**

The access to Internet via smartphones or tablets (not to mention by laptop computers) is very common these days, especially by youngsters, which poses a number of challenges to Mobile Communications Operators. The increased usage of other communications services besides the more conventional ones, e.g., VoIP via Skype or Instant Messaging via WhatsApp, is making a difference in the way networks are managed and expanded. As a consequence, Operators need to expand their network of Base Stations, providing both coverage and capacity, namely by installing system "upgrades" from the 3<sup>rd</sup> Generation to the 4<sup>th</sup> one.

Your project is the installation of a Base Station for an operator of Mobile Communications Systems, in the centre of a city in Portugal that is close to the border with Spain (which requires coordination with ANACOM, and Spanish operators, for the use of frequencies). A detailed description of the project is given at a theoretical class.

You play the role of Project Leader from the Project Development Department of the operator.

You should clearly identify all entities with which you have to interact, and their roles.

#### **General Component**

Each group needs to elaborate its own Project with autonomy, using the concepts and competences acquired in the course, simulating a fictional project that you manage using MS Project. You will need to learn how to use MS Project by yourself.

Your Project should present: objectives, stakeholder's framework, requirements, quality control, risk assessment and contingency plan, communication plan, work breakdown structure, resource allocation, cost analysis, responsibility matrix, Gantt chart, and Pert diagram.

You need to "play" with the resource costs using only three different costs associated to three different categories of people: 50 € / hour; 75 € /hour and 100 € /per hour. Additionally, you should assume some costs for equipment and installation, but there is no need to provide a sound justification for them.

You need to justify all relevant decisions taken, and stress interesting details about your Project.

### **Report and Evaluation**

Your final report (identifying the group and all elements) should have a maximum of 20 pages, containing all supporting information, following the template that is given in the course. Reports will be evaluated by: 1 – Structure; 2 – Content (project management approach, innovative details, critical distance, and technical rigour); 3 – Synthesis; 4 – Quality of writing; 5 – Context (contextual approach to your Project and presentation).

A presentation of the Project, using Power Point, with a duration of 15 minutes, needs to be done at the discussion by all group elements. The presentation should follow the template that is given at the course.

You should deliver your work at the Theoretical class, in a CD: the pdf version of the full report; the MS Project file; the pdf and ppt versions of your presentation. YOUR PRESENTATION AND DISCUSSION will be based on the delivered documents.

The discussion will begin with the presentation, after which the report and the MS Project files will be discussed. Project discussions should last for half an hour.

On **March 3rd** at the Theoretical class, we will present the project to you. On the practical classes, we will discuss about your Project, your solutions and any details you intend to clarify. On **May 16th**, you have to deliver the CD with the Project. From May 16th on and using classes time we will have project discussions. The discussion schedule will be arranged with the groups on delivering, May 16th.