



Study of an Application of Mobile Communication Systems

The objective of this research paper is the contact of the students with applications of the mobile communications systems taught in the course, which have not been dealt with in the classes. Each team, composed of 3 students, should choose an application from the list presented at the course's website or propose one of their own, which will need to be validated by the prof. in charge of the course.

The paper consists of the study of the chosen application from the perspective of implementation in Portugal, addressing, among others:

- evolution up to the current days (evolution since its appearance up to nowadays);
- description and characteristics (description of the characteristics, from the user viewpoint);
- requirements and challenges (quantifiable requirements and challenges for implementation);
- technical implementation (network implementation, identifying the impact in network structure);
- involved entities (identification of the entities involved in the application commercialisation);
- economic aspects (economic aspects to be considered in the application implementation);
- future evolution perspective (possible evolution in future networks).

The paper will be evaluated via a presentation before the class. The presentation, an oral one supported on Power Point, should last 15 minutes, and it will be held at the end of the quarter, in a seminar mode for the entire class, on Tuesday, April 2nd, in a room still to be defined. The presentation should be structured according to the recommendations provided in the “Communication in Engineering” course (<https://fenix.tecnico.ulisboa.pt/disciplinas/CEnge/2023-2024/1-semester/classes>).

By Monday, March 25th, at 12h00, you have to upload to Fenix a compressed file (*name.zip*, *name* being the theme of the paper), with 3 files:

- *name.pptx* with the presentation, which will be used for the oral presentation, containing at the end the list of references, which however should not be presented;
- *name.pdf*, corresponding to *name.pptx* simply printed to pdf;
- *name_comm.pdf*, corresponding to *name.pptx* printed to pdf, formatted in 3 presentation pages per A4 sheet, with comment lines on the side.