**DESIGN DOCUMENT**

**MAXIMUM of 20 pages document, including appendices, using Verdana font, size 11**

1. **Introduction**

*In this section you should answer these questions:*

*Who is the team/basic information?*

*What does the team intend to do?*

*Why do you choose this scientific subject?*

*(if you participate to the secondary mission)*

1. **Project description**
   1. **Mission overview**

*Describe with more detail the goal of your missions (primary or secondary) and briefly list the equipment used.*

* 1. **Mechanical design**

*Describe the mechanical parts: parachute, chassis, … (3D views, calculations, …)*

* 1. **Electronic design**

*Describe the electronic components, justify your choice, use electronic schema to show connection between the different parts, …*

* 1. **Ground station design**

*Describe your ground station: computer, antenna, data storage, …*

* 1. **Software design**

*Describe our software (do not copy your code here!). Use schematic, diagram, graph, … to show the process (condition, loop, computation, …)*

* 1. **Recovery system**

*The recovery system is really important.*

*Without it you could never recover your CanSat… (So Sad!)*

*Explain your recovery system.*

* 1. **Testing**

*Do not forget to test all the previous part! (And check the requirements) Explain how you are going to test and give results if it is done. Explain also your failures and your improvements.*

1. **Requirements**

*Check all the design requirements listed in the “Teams Manual” section 2.4*

*Be aware that we will verify them*

1. **Overall progress** 
   1. **Human resources**

*List your team members, present them, explain the work repartition*

* 1. **Planning**

*Create a planning for your project (for example you can use a Gantt diagram), explain planning adaptations (why, how, …) and keep track of your work.*

*For each part you should use a statue DONE, IN PROGRESS, DELAYED or a percentage (0% NOTHING to 100% DONE)*

* 1. **Budget**

*List the electronical and mechanical parts of your system. For each part, indicate where you bought it, when you bought it and the price. (Sponsoring: indicate a real price if someone gives you some stuff)*

*For 3D printed parts, you could compute the total price: material and electricity. Use the mass of the part, the material and the price of the material per kilo to compute a price. Use the printing time, the power consumption of the printer and the price of electricity (euro/kWh) to compute a price. (An estimation of the power consumption could be found on internet; it is related the printer and to the material used. Do not hesitate to ask for any question related to this point.)*

* 1. **Outreach**

*Explain how you communicate your work to your entourage. It important to communicate your work since science and technology should be share to everyone.*

1. **Scientific results**

*Of course, this part will come after the launching. Explain your results using graphics, tables, …*

1. **Discussion**

*Give your opinion about your project, results, future improvements, …*

1. **Conclusion**

*Create a half page to write a conclusion (Present your initial goal, your realization and your results)*

**References**

*Bibliographic references*

*For a website, add the link and date of your reading. If possible, add the author and the publication date. To cite a reference in the text, use number related to your reference section*

**Appendix**

*If you want to add files (keep in mind the max 20 pages)*