

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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STEP UP STUDENT INVOLVEMENT IN ASTRONAUTICS THANKS TO ASSOCIATIVE ACTIVITY
DEVELOPMENT - FOCUS ON ESO (ESTACA SPACE ODYSSEY) CASE**Abstract**

The space sector is facing new challenges. Taken into account the satellite market changes, and the desire of a more effective cost controls in space projects, there is a need to change the way we approach our projects. The arrival of private companies in the development of U.S. space program is a perfect example. This trend requires develop new skills and qualities among young engineers, by implementing new methods of project management that encourages creativity and collaborative work. Estaca Space Odyssey, a student aerospace association ESTACA has built a model and methods in order to develop cost efficient and innovative projects.

The aim of our association is to give engineering students the opportunity to get involved in real space projects managed entirely by them. It allows everyone to master every conception steps and give them a good overview of the processes in place in space industry. These activities provide practical sense which develops skills required to design cost-efficient projects.

One of the key challenges to overcome is the transmission of knowledge. As there are no permanent person to transmit the information, specific platform have to be developed to gather the data. The ESO organization has developed a large range of tool answering this issue as an online management system and a Wiki platform. Moreover, we encourage the collaborative work between all ESO projects, and we assure the formation of new members who will be in charge futur project. Our organization has proven its ability to renew itself and to involve more and more students each year. All this structure and methodologies allow us to capitalize on our experience.

The aim of aerospace organizations such as ESO is to create a bridge between scholarship and professional life. They have a key role in the young professional insertion as they allow students to make their proof in a semi professional environment. Since 20 years, ESO has been creating a link between industry, students and academics research center. The more young people are aware of the "how" they can imagine a concept, the easier they will be able to take up the new challenges.

That is why we would like to share our practice and our vision of the evolution of space industry in a middle-term. We hope this will help developing more student organizations in aerospace area.