

45th STUDENT CONFERENCE (E2)
Educational Pico and Nano Satellites (4)

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LESSONS LEARNED ON THE NATIONAL AND INTERNATIONAL REGULATION IN
DEVELOPMENT AND LAUNCH OF MEXICAN MICRO AND NANO SATELLITES PROJECTS**Abstract**

Microsatellites have proved to be an alternative to replace big satellites because they involve low costs and on the other hand the time required to create a mission of this type is shorter.

Different projects are being developed in Mexico , one of them is the ULISES I which has been created by the Mexican Space Collective with the technical support of INAOE in Puebla and other institutions , being considered as a set of art and science.

Giving continuity to the project ULISES I the ULISES 2.0 project arises , an effort by the Unit of High Technology belonging to the Engineering Faculty UNAM, ULISES 2.0 will obtain photographs of the curvature of the earth's surface , however the effort does not end there , one of the projects currently underway is the Quetzal microsatellite which will have as function monitoring of pollutant gases in the country.

These developments inevitably involve to take into account national and international regulations for the launching , registration process, frequency coordination and it is necessary to have a sustainability plan, these processes are now a fundamental part to prevent a project not be successful and avoid radio frequency interference and danger of collisions between satellites.

Projects should always bear in mind the view and respect the national sovereignty of States and comply with the characteristics of a peaceful mission .

By creating a university satellite project it contributes to a technological evolution and the responsibility not only to know the technical aspects but also acquires legal guidelines to be followed to orbit satellites starting their development in Mexico.