

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
NEW WORLDS - INNOVATIVE SPACE EDUCATION AND OUTREACH (4)

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PERUVIAN SATELLITE NETWORK - SUPPORT OF THE ISS RADIOAMATEUR PROGRAM

Abstract

The Peruvian Satellite Network (PSN) is a network built of six UHF ground stations distributed in strategical places in Peru. All the ground stations are interconnected. This network will make possible the improvement of satellite data reception achieving longer access contacts with the satellites. It will also be useful as back up system, saving the gathered data in six different places. The proposed radioamateur project will gain a reliable system using the PSN services. Setting the PSN network as a relay system will allow to track the ISS for longer times. That means the six antennas will work as only one big antenna. The antennas can also be used if necessary independent from each other and support several missions in parallel. The PSN will become a partner of the QB50 project supporting its constellation of 50 picosatellites. In a near future the plan to expand the PSN with S-Band antennas is envisaged. The PSN will be a strong ground segment for small satellites, supporting their missions in an efficient manner. This radio amateur project will give the opportunity for many people, especially students, to apply new telecommunications strategies, ideas and developments, testing new software, transmissions protocols, and others. The space industry will have a profit from this program.