

SPACE OPERATIONS SYMPOSIUM (B6)

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IMPROVING PRIORANET GLOBAL GROUND NETWORK OPERATIONAL EFFICIENCY BY
AUTOMATION AND INTEGRATION OF THE SSC CHILE GROUND STATION FACILITY INTO
THE ESRANGE NMC (NETWORK MANAGEMENT CENTRE)

Abstract

The Chile ground station was established in 1958 in order to support the first NASA global network. The station has been successfully supporting both NASA, other agencies and missions from commercial companies with a high proficiency. Since 2008 the station is part of SSC Group and the PrioraNet global network. In 2012, a project was started to consolidate the antenna park, bring modern automation and remote operations from the PrioraNet NMC (Network Management Centre) located at Esrangle in Kiruna, Sweden. Due to the high initial build quality, two legacy antennas were kept and refurbished and a new

one was acquired. Unsupported equipment in the system has been replaced, and digital control has been added, ensuring that the behavior and digital IP interface are similar to modern antennas. The SSC automation system OASIS has been introduced on the site, with special security measures for autonomous operation to ensure a continued high proficiency. The paper presents the overall approach, lessons-learnt, as well as some technical details that were solved in the project.