

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch Services, Missions, Operations, and Facilities (2)

Author: Mr. Stefan Gustafsson
Swedish Space Corporation, Sweden

Mr. Lennart Poromaa
Swedish Space Corporation, Sweden

Mr. Mattias Abrahamsson
Swedish Space Corporation, Sweden

SSC LAUNCHING NEW CAPABILITIES FOR ACCESS TO SPACE AND TO SECURE CYBERSPACE

Abstract

Swedish Space Corporation is launching a decisive program focusing on increased multi-dimensional access to space, new resources for advanced space services and a concept to manage the increasing global challenges from cyber threats. The program will take SSC into the future, strengthened to serve the global space community to enhance the opportunities for humanity to benefit from space.

Located in Sweden in the vast and densely populated arctic regions of northern Europe, Esrange, or European Space Range as the well-known abbreviation and trademark stands for, is excellent for space activities. Founded 1966 in an initiative by the fore runner of ESA, Esrange have been operated by the governmental owned company SSC, Swedish Space Corporation, since 1972.

To leverage on the unique prerequisites for space exploration that Esrange has, SSC is launching New Esrange, a modernizing program that will take Esrange into the future by a unique set up that uses the best technology possible to meet with the needs of coming decades. By leveraging on the vast experience of serving the global space community for 50 years, the focus is set to modernize the existing capabilities of sounding rockets, stratospheric balloons and satellite management.

Equally important is to add on new capabilities such as to launch small satellites into orbit and to provide better support to the science community. This will be carried out by modern infrastructure for launching, and to manage large and complex global and local space campaigns. As well, the handling of payloads, before and after launching is included. New Esrange provides modern capabilities for space exploration making possible new and cost effective concepts for complex large and small campaigns.

As a major provider of satellite networking solutions, SSC place security of communications at a premium. By a new cyber defence concept, SSC will maximize security in the entire end-to-end solution of our vast global satellite communication network. The measures being applied are to defend satellite communications against cyber-attacks and stretches from conceptual customer defined measures to effectively apply standardized training and security policies, standards and protocols, focusing full integrity to customers and all kind of authorities.

Our brief will describe the unique opportunities provided by SSC for New Esrange and Cyber defense, all to foster further globalization, peace, freedom and prosperity for all humanity by cost effective and secured utilization of space.