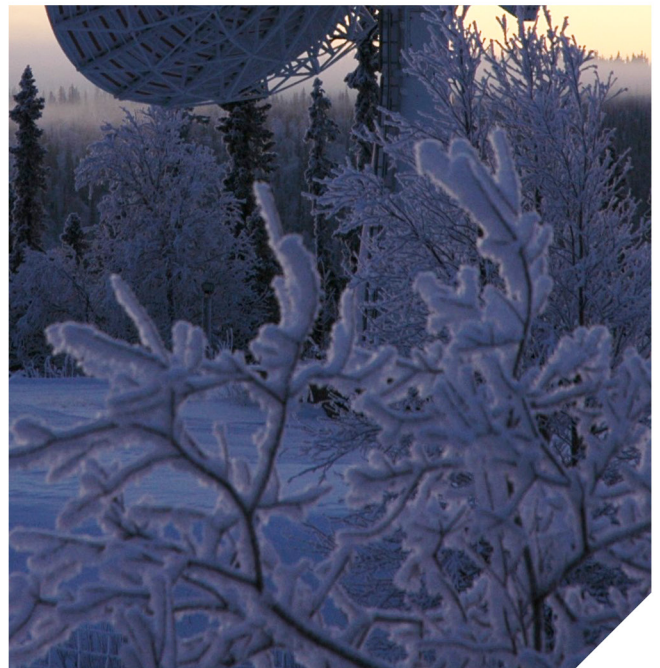


Coromatic

Operations
Secured**24/7**

Swedish Space Corporation

Turnkey data centers





CASE STUDY SWEDISH SPACE CORPORATION

Turnkey data centers

The Swedish Space Corporation (SSC), which has been in operation for almost 50 years, is a global leader and supplier that helps space agencies, businesses, and other commercial players and research institutes gain access to space. The company is owned by the Swedish state and has operations in many different countries. Its services enable space projects within a broad range of fields, including telecommunications, security, meteorology, positioning, scientific research and earth observation.

The company primarily works with three different areas of business; firstly, satellite services, which offer the operation of satellites and communications via a global network of ground stations, both our own and stations owned by partners. Secondly, research services, which develop rocket and balloon systems and experiment modules for research in weightlessness.

The rockets and balloons are launched from the company's launch area in northern Sweden, the Esrange Space Center. And thirdly, SSC provides technology and operating services for satellite projects and manned space programs.

Since 1966, the company's Esrange rocket range near Kiruna has been an important location for both research and commercial space projects in Europe and the rest of the world. The space base is four square kilometers with an impact area of 5,600 square kilometers.

Challenge

One very important part of the Esrange assignment is to ensure that communication between satellites in space and the various clients is uninterrupted. This communication allows clients to access the critical information collected by the satellites.

Since 1966, the company's Esrange rocket range near Kiruna has been an important location for both research and commercial space projects in Europe and the rest of the world.

To meet this need, the space base currently has some 25 ground stations, known as antenna sites. Each year, 1–2 new antenna sites are built.

For each antenna site in the area, there is a data center that ensures that communication between space and the client is functioning and that it can be distributed quickly and securely.



Coromatic ensures that organizations can keep their business operations running without disruption. As the leading provider of Critical Facilities Solutions, such as data centers, we safeguard power and data communication supply.



Some of these antenna sites are owned by SSC while others are owned by various commercial clients that purchase operations, maintenance and monitoring of these sites as a service from the SSC.

The construction of data centers is often complex, and the environment and weather make additional demands on the availability and weather-resistance of the solution. Previously, SSC built these data centers itself, but has now awarded a contract to a supplier that can design, build and deliver turnkey data centers.

The contract was awarded to Coromatic, which has since 2014 collaborated with SSC on new data centers in connection with antenna sites.

— As demand increases for our operations services, we at SSC saw a need to focus on our core competence, in other words operating the entire solution. We therefore held a tender where we considered Coromatic as a safe and experienced supplier that really understands the need for the construction of new data centers for our antenna sites, says Ulf Nygren, Manager Infrastructure and Security for Esrange at SSC.

Solution

Coromatic's assignment consists of building turnkey data centers and installing these beside the antennas. The data centers, which are built in modules using Coromatic's proprietary and highly durable sandwich construction, include all of the required components to operate a completely redundant data center.

They comprise UPSs for uninterruptible power, cooling, emergency power, racks and connections for both fiber and electricity. Each data center is adapted to match the specific customer requirements, including availability and data capacity.

Coromatic has full responsibility for the data centers, from design and construction to installation and even service. Service in particular is an important function to ensure availability, where Coromatic is responsible for regularly servicing the data centers according to an agreed plan. Furthermore, Coromatic is responsible for responding to emergency problems at the data centers.

Each data center is being built by Coromatic at the company's own factory in Piteå.

Results

To date, Coromatic has built four new data centers for SSC and the company can see distinct results in terms of quality improvements, a better comprehensive offering and better cost control. Previously, SSC built the data centers on site from scratch by each antenna, which was both time consuming and also sometimes made it difficult to assess costs.

— Now that Coromatic supplies the data centers as a turnkey solution, we have been able to create a much clearer price scenario for our customers. We also guarantee that this key component in our offering is ready and works when our customers want to begin using it, and is serviced based on specified needs, says Ulf Nygren.

— It feels very secure to work with Coromatic, they are really a partner in the proper sense of the word by being very solutions-driven and by building everything to very high standards, concludes Ulf Nygren.



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