



PROFESSIONAL SERVICES

At Selex ES-Gematronik we accompany our clients with our experience and professional support during all the phases of the design, implementation and operation of a radar system or network. Professional services are an extremely important factor not only in ensuring the successful implementation of a radar system, but also in achieving high system availability during its entire lifetime.

Selex ES-Gematronik, originally incorporated as a service company for radar maintenance, possesses a clear competitive advantage in this field with over 50 years of experience in supporting and servicing clients in more than 80 countries across the globe. Not only this, we are the only company on the market to design and produce all main components of the radar in-house, including transmitters, digital receivers, antenna systems and meteorological software.

This ensures that our personnel possesses extremely deep technical knowledge and is able to respond to any customer request with professional knowledge and extensive field experience. Our service is designed to provide efficient and qualified support to expedite the resolution of problems and maintain high system availability during the entire lifetime of the equipment, in this way protecting your investment.



INSTALLATION SERVICES

Like every location, every installation is unique. The local conditions, the infrastructure and the special needs of the customer vary from project to project. For this reason we plan every project accurately in advance. A site survey is performed way before the planned installation in order to assess the readiness of the site to proceed with installation. A Project Manager is assigned to each project, with the role of coordination and project direction, and a System Engineer with the role of maintaining the technical overview from a system perspective. Highly experienced technicians with global mobility are carefully selected and assigned to the project. Local resources can be used when necessary for ancillary services like logistics or crane services. At the end of installation a full Site Acceptance Test is performed together with the customer to ensure that all functions of the radar are compliant with the contractually agreed technical specifications.

TURNKEY AND INTEGRATED SYSTEMS

Selex ES-Gematronik has evolved during the years to a full solutions supplier. We provide to customers turnkey solutions including e.g. infrastructure to host the radar and integrated, complex meteorological systems. To this extent we employ specialists like meteorologists, civil engineers, and electrical engineers.

Our experience includes the provision of several turn-key network systems and integrated meteorological systems (e.g. Radar, Lidar, meteorological stations, integrated together by a common meteorological software platform). We delivered such systems at several international airports and at a number of weather services worldwide.

CUSTOMIZED SOLUTIONS

Because every customer has his own vision and his own goals, we realize that it is sometimes important to be able to propose customized solutions. Thanks to our in-house development capabilities and expertise, we are strongly positioned to customize our products. Let it be a reflector with higher performance, customized software, or the enhancement of a specific parameter, you can consult with us to examine and discuss your specific needs. Some notable examples are:

- the development of a high-performance transportable S-Band antenna system for NASA, judged the best available on the market
- the development of a Receiver-over-Elevation radar system (now part of our standard portfolio)
- the development of a specific version of our mobile X-Band system able to withstand the extreme climate and road conditions of Iceland

SUPPORT AND CONSULTING SERVICES

The availability of a radar is a critical factor. Few clients can afford downtimes longer than a few hours without painful consequences. For this reason, a professional organization behind you is essential to protect your investment throughout the lifetime. Although our systems are designed for low maintenance and 24/7 operation, you may need time to time consultation or support from our experts. Selex ES-Gematronik offers you a wide variety of support services that include:

- Helpdesk/Phone Support
- Remote login and diagnose
- Preventive maintenance
- Corrective maintenance
- Spare Parts pre-configured for your system
- Participation to a Spare Part Pool program
- Repair of faulty units
- Software updates and upgrades and individual developments
- Consulting and Assessments (e.g. Network Design, Coverage Analysis, Radio Interference Analysis)

For any service inquiry after the warranty period feel free to contact our Customer Service department at service@selex-es-gmbh.com

RADAR REFURBISHMENT AND UPGRADES

With the passing of the years, a well-maintained radar conserves almost intact its performance characteristics. Nevertheless technology evolves and, at a certain point of time, a customer may be interested to upgrade the system with newer technologies. Typically this can involve an upgrade to Dual Polarization to take advan-

tage of the additional possibilities made available by this technique. Or it could be upgrading the digital receiver and the signal processor to a new, faster and higher performance generation. Or the upgrade of the meteorological software to a newer version offering additional products or improved functionalities. For all these needs we can provide analysis and evaluation of investments needed for the upgrade of our older systems. If you decide to perform the upgrade, the same professional project management takes place as in the case of a new installation.

TRAINING

A radar system requires professionally trained users and technicians in order to be able on the one hand to perform the required maintenance and operation of the radar, and on the other hand to use the full potential offered by the meteorological software. At its facilities in Germany Selex ES-Gematronik has its own labs and test ranges and 6 fully equipped training rooms.

Courses are offered both at the factory and at the customer's selected locations. We rely on highly experienced instructors who balance theoretical training with practical, hands-on teaching and assessment exercises related to every aspect of the target system.

Selex ES-Gematronik has developed two main standard courses: a hardware course for maintenance technicians, and a software course for end users.

The training courses will provide a thorough presentation of the complete system, so that the customer's personnel is optimally trained on the system, theoretically as well as practically. Emphasis is put on practice-oriented exercises, together with thorough coverage of theoretical background, adapted to the know-how of the trainees. The courses give the trainees detailed knowledge of the functioning of the weather radar in association with its controlling programs, so that they will, on completion of the course, be able to operate and maintain the weather radar hardware on their own. After the training, the trainees will be able to perform tasks like:

- Operation of the Radar
- Location of failures down to main assemblies, assemblies and subassemblies, in specific cases even down to component level
- Replacement of assemblies and subassemblies considering possible re-calibration steps
- Routine maintenance and safety inspections
- Use of Rainbow® software and products
- Radar operation (product, scan, task and scheduler definition, trouble shooting)
- Software administration (configuration files)
- Software maintenance (backup & restore)

On request, individual courses or workshops can be organized according to the customer's specific needs and goals.