



Ground systems specialist

Based in Toulouse, France, Integral Systems Europe is a systems integrator, a specialist in ground station software, and provides commercial-off-the-shelf products. Helen Jameson speaks to Bruno Dupas, President of Integral Systems Europe.

Question: Would you kindly begin by telling us about Integral Systems Europe and the work that the company does?

Bruno Dupas: Integral Systems Europe is a French subsidiary of Integral Systems Inc (ISI). Our role is to provide satellite ground systems, based on ISI products, in Europe, Middle East and Central Asia. Our role is atypical in the corporation: we are a systems integrator. We do build some products, but primarily we provide systems. These systems often include third-party products from partners such as Optimal Satcom, IN-SNEC, Globecom systems-UK, and others.

Question: ISE is involved with several European projects including METOP, SAR-LUPE and Spainsat. What is the nature of your involvement in projects such as these?

Bruno Dupas: We are providing Satellite ground control software on these projects. METOP and SAR-Lupe are remote sensing satellites, Spainsat is a geo-communications satellite. But all systems use the same Commercial-off-The-Shelf (COTS) product: EPOCH Integrated Product Suite. METOP has been our first project and initiated the incorporation of Integral Systems Europe. We

have provided this system to EUMETSAT, the European Space Weather agency. It has been a very complex and challenging project both on the technical and management side. SAR-Lupe and Spainsat were provided on a much more commercial basis. But, the fact that we are using the same COTS products and the same processes is a remarkable achievement, and allowed us to be very successful on all of these projects, despite their apparent differences.

Question: Where are your satellite control centres based?

Bruno Dupas: METOP is based in Darmstadt, Germany. SAR-Lupe is installed in Gelsdorf and Spainsat in Spain.

Question: Which markets in the EMEA region do you serve and where are you currently doing most business? Are there any emerging regions we should be looking out for?

Bruno Dupas: We serve Europe, Middle East and Central Asia, up to India. One of the most dynamic markets we serve is related to Payload Management Systems: satellite spectrum monitoring, satellite interference detection and characterisation. We have provided systems in France, UK, Israel, Italy, Norway, Sweden, UAE... We are very active in the booming economic areas such as Eastern Europe.

Question: There are various different companies that comprise Integral Systems. Can you please explain how they inter-relate and work together?

Bruno Dupas: Integral Systems include five companies:

- Integral Systems Inc focused mainly on Satellite Control Centres with our flagship product, EPOCH IPS;
- SAT Corporation provides Carrier System Monitoring, with its MONICS product, the most advanced product on the market;
- Newpoint Technologies builds Monitoring and Control systems with its COMPASS products for Earth Stations and networks. Its Manager of Managers

(MoM) capability is unique in the industry;

- RT Logic are the hardware people. They provide baseband, frequency conversion and in general RF-over-IP systems; and
- Lumistar is focused on telemetry products.

In this corporate structure, Integral Systems Europe is playing the role of systems integrator of all these products for the EMEA markets, just as Integral Systems Inc. does for the US and Asian markets.

Question: Congratulations on ISE's recent contract win to provide a mission control facility for Rascomstar-QAF. Can you please tell us more about the contract and what it will entail?

Bruno Dupas: This RASCOM contract is the first example of Payload Management systems: it integrates our MONICS CSM product with the COMPASS M&C and the Optimal SATCOM COMPLAN product, all connected to Globecom Systems Antenna. We have developed for this new operator a fully integrated solution where these COTS products can freely share useful data between the products to maximise the functionality of the system and while ensuring the operator has full situational awareness. It is a very attractive, state-of-the-art, scalable solution for new satellite operators. They get with this system an effective solution to manage the most critical resource on their satellite: the payload! The system will be deployed in Cameroon.

Question: Your customer base appears to be very diverse. Can you please tell us about the different customer types that you serve?

Bruno Dupas: As a system integrator, we can support many different types of customers, and are focused primarily on customizing a solution based on COTS products tailored to our customers' needs. We currently serve customers who are satellite operators, government agencies, teleports, service providers and satellite manufacturers.

Question: What are ISE's plans for the next twelve months?

Bruno Dupas: The plan for ISE is to continue to expand our commercial customer base by providing integrated solutions that help companies improve their availability and customer service, while lowering their operations costs. We are looking to continue to expand our "systems" business to more government customers. ●

