

GAF AG

Twenty Years in Earth Observation

GAF AG started out in October 1985 as privately owned company that offered services in satellite remote sensing and image processing. Over time, this core competence has developed and expanded into spatial technology, geo-information, and related consulting services.

With its headquarters in Munich, GAF AG began as the Gesellschaft für Angewandte Fernerkundung mbH (GAF). Founding fathers were Dr Rupert Haydn, together with Agrar- und Hydrotechnik GmbH (AHT), Essen, and the JBK Management Company of the Wittelbacher Compensation Fund in Munich. The company started with a team of five, and currently employs over eighty experts in the fields of geo-information and remote sensing technologies, covering a wide range of thematic backgrounds relating to earth sciences. With a yearly average growth in turnover of 20%, this is today at 13.5 Million. By 2001 GAF had become a non-public stock company, and the shares held by AHT and JBK were acquired by the Italian company Tele-spazio in 2003.

Global Consulting

As a global consulting company, GAF AG has acquired its reputation within both the private and public sector as a provider of project conception, management and implementation services. Our goal is to develop products and services that match the needs of customers and market and that exceed the expectations of users and clients. Company philosophy is reflected in a flat and effective management hierarchy, and working with a quality management system (certified ISO EN DIN 9000:2000). Euromap Satellitendaten-Vertriebsgesellschaft mbH, founded in 1996, is a fully owned subsidiary focusing on receiving, processing and distributing data from the constellation of Indian satellites IRS-1C, IRS-1D and IRS-P6 (Resourcesat-1).

The German Aerospace Centre (DLR) has taken over receipt of this data using antenna systems in Neustrelitz (North of Berlin). Today Euromap works from Neustrelitz on behalf of GAF AG to provide the German and European market with data from almost all commercially available Earth Observation (EO) satellites. Our five core competencies now lie in geo-data, software, image processing and analysis, Information Systems (IS) and geo-information management consulting.

Geo-data: All Sources

Geo-data available through us encompasses Earth Observation Imagery, Digital Elevation Models (DEM) and Land Cover Data. Virtually all types of higher-resolution imagery sources can be supplied, from resolutions of hundreds of metres down to 0.6m, (under exclusive arrangements). The choice relating to DEMs ranges from off-the-shelf to custom-generated, high-accuracy models. We also maintain a stock of previously generated landcover (DLU) datasets.

With respect to software, we allocate substantial resources to the design and development of specialised software solutions for the processing of geo-information. A number of tailor-made software packages have been developed as stand-alone and customised applications. Successful examples are the LaFIS family (agriculture), Patch-edit (landcover), and GeoRover (geology).

Since 1975 we have been involved in the development and application of thematic image processing and analysis software. We have carried out high-quality thematic image enhancement and semi-automated image data analysis for land and coastal applications. Over recent years experience has been gained in the setting up of production lines for large-scale ortho-image generation, mosaic, topographic and thematic feature extraction.

IS: Cradle to Maturity

To get remote sensing work as a spatial data source for various applications, GIS systems are indispensable and crucial to most projects. We design and implement GIS/DB solutions from cradle to maturity, for a wide range of land and water-related management disciplines. Typically, services comprise a detailed application, DB and system design, followed by DB and GIS application programming, database generation, prototyping and benchmarking; and then system procurement, integration and training. A further phase consists of system maintenance and potential system expansion. The actual GIS and DB application programming, database generation, prototyping, database and model integration and finally benchmarking are executed according to international software development standards. An important source of internationally gathered user-driven experience is the planning, implementation and management of complex projects based on GIS and remote sensing in a wide range of fields. These may include environmental issues, geology and water, agriculture, forestry, land resources cadastre, and infrastructure support. From the start, GAF has been an internationally active company, with project references in more than sixty countries and in all disciplines.

Customer Portfolio

Our clients include commercial companies, public institutions, government departments and supranational organisations: telecommunication companies, oil & gas, and mining firms. Also included are international financial organisations such as the World Bank, the Inter-American Development Bank, Kuwait Fund, KfW, and the European Union, ESA (European Space Agency) and UNDP. Some examples of recent projects are:

- EU subsidy controls for several federal L  nders in Germany
- implementation of EO-based forestry information products to support the Kyoto protocol
- establishment of EO monitoring systems for groundwater consumption in north-west Africa and Yemen
- establishment of mining cadastres in Namibia, Congo and Madagascar; and Geological and Mining databases in Madagascar and Papua New Guinea.

Our customer portfolio provides a good reflection of the EO market, which is primarily driven by public interest. Nevertheless, lack of regulation and budgetary shortfalls have hampered adequate implementation of capabilities offered by fast-developing EO satellite technologies. Recognising this situation, the EU and ESA are currently putting strong effort into the development of professional and operational services (the GMES initiative). In addition, a systems industry whose large hardware and system contracts have up until now meant that it enjoyed a preferential position has now recognised the significance of a developed service industry for its own future and is aggressively preparing itself to cater for this. In contrast, the IS industry has experienced over-proportional growth in the past and it is now evident that all EO market developments are intimately linked to IS technology.

Sound Prospects

Boosted by the GEO process and regional initiatives such as GMES, the European and the Global market for EO-related services is expected to grow faster than over the past fifteen years, a period marked by consistent under-performance. Any marketing approach from the IT and space technology side is much more difficult than from the consultancy side, which is more competitive and end-user orientated. Though there are many small companies active in the EO sector within today  s Europe, we have a very limited number of competitors. It is difficult to find in one company our own mix of domestic, European and global customers covering all major land services. Given this, GAF AG, born of a consulting scenario and having in the meanwhile accumulated twenty years application service experience, has excellent opportunities for further growth. It looks confidently towards becoming an even more significant player.

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