



## GAF AG addresses the Challenges of Transboundary Water Management

### European Space Agency (ESA) selected GAF AG Team for the Aquifer Project

Munich, October, 2004. GAF AG, an internationally active geo-information technology company, has been awarded a contract by the European Space Agency (ESA) to set-up a water management project appropriately known as AQUIFER. AQUIFER is a project within ESA's Data User Element (DUE). This programme aims at establishing a long-term relationship between user communities and Earth Observation by putting the users in focus while supporting European value adding and service companies in the development and demonstration of useful information products and cost-effective services. AQUIFER is at the same time one of the demonstrator projects of ESA's initiative "Earth Observation for Integrated Water Resources Management in Africa", known as TIGER. The broad aim of TIGER is to support African countries in enabling better management and conservation of their precious water resources. AQUIFER focuses on the development and demonstration of EO-based products and services for supporting national authorities and international institutions in the management of two prominent, internationally shared aquifers in Africa, the SASS and lullemeden.

The main objectives of the AQUIFER project are:

- To support the relevant national authorities and international institutions with Earth Observation (EO) based technology in order to enable better management of internationally shared water resources and aquifers
- To strengthen general and integrated water management practices
- To build up an independent service provision capacity that can ensure local service delivery after the project is completed, thus achieving the longer-term goal of service sustainability

Essentially, AQUIFER will support national authorities and international institutions in aquifer management using tailored and GIS-compatible products and services that facilitate daily operations. This is a very challenging goal given the wide spectrum of host countries and client-institutions and authorities, not to mention the diversity of project implementation environments that prevail across Niger, Nigeria, Mali, Tunisia, Libya and Algeria.

To manage this complex undertaking, the project will be implemented over 28 months with three phases, each consisting of six core tasks. The flexible project approach allows for proceed/stop decisions at critical junctures during implementation, based on progress made and milestones achieved. Some of the key tasks will include requirements analysis, product/services design, prototyping and validation, production, operational use, training and overall management.

Responsibility for the development and/or delivery of this broad range of products and services will be sub-divided across the AQUIFER consortium that includes local service providers as well as the European AQUIFER partners: GAF AG, Germany as the lead company; AGRHYMET, Niger; National Center for Remote Sensing (CNT), Tunisia; National Center for Space Techniques (CNTS), Algeria; Joanneum Research, Austria; Libyan Center for Remote Sensing and Space Science (LCRSSS); SCOT of France; Telespazio of Italy; the University of Jena and Vista GmbH both of Germany.

Each partner contributes a unique set of skills, expertise, technical capacity and past experience that will be strategically applied to specific project goals. In addition, the consortium possesses broad international experience across the region with the cultural sensitivity and understanding to proactively engage and strengthen local partners and beneficiaries.

'By any standards, AQUIFER is an ambitious and complex project,' remarks Stefan Saradeth, Project Manager at GAF. 'However, given our past success in collaborating with ESA and international teams of specialist partners, we are confident the outputs will both meet and exceed expectations with significant positive impacts in the client countries.'

An ancient Chinese proverb cautions that 'when you drink water, be careful not to neglect the spring.' Wise words indeed, which highlight the urgent importance of water management and conservation initiatives worldwide. The Aquifer project will contribute to the search for lasting solutions to a complex challenge where the stakes - social, economic and geopolitical - are unquestionably very high.