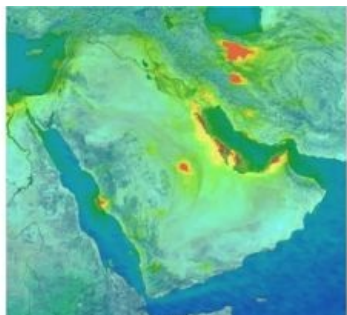


# Environmental Monitoring for Saudi Arabia



A group of Saudi Arabian and European partners has commenced a project to implement and provide satellite-based environmental information products and services to the Presidency of Meteorology and Environment (PME) of the Kingdom of Saudi Arabia (KSA). The environmental monitoring covers all four environmental domains land, air, coast and marine, and follows experience gained in the European "Global Monitoring for Environment and Security" (GMES) programme. The providers are Summit Geoservices (KSA) and a European team lead by GAF and consisting of DLR, Germany and Telespazio, Italy.

Throughout the last decades the Kingdom of Saudi Arabia has witnessed rapid development in its economy, industry and population. Environmental concerns are growing. To support PME in its national, regional and international duties including the implementation of the Environmental Law, GAF and partners now commence work on using space technology and satellite remote sensing and provide timely and nationwide information on the status and evolution of the environment. The Environmental Law of the Kingdom authorises the use of satellite remote sensing to conduct the analysis, comparison and verification of environmental pollution sources and deterioration. Remote sensing shall be used as surveillance tool to detect polluters and to substantiate liability claims.

Services include the development and provision of a number of thematic products and services, the implementation of a geo-portal as well as technical consultancy towards a dedicated GIS and remote sensing centre as important component of a future Environmental Information Management System (EIMS).

Nationwide land use/cover mapping and monitoring will provide important baseline information and detect important environmental changes in the last 2 decades. The air quality monitoring and forecasting service to be developed by DLR and will not only allow national and urban pollution to be monitored and forecasted but also the detection and warning of imported air pollution resulting from trans-boundary transports into Saudi-Arabia. Telespazio will demonstrate near real time oil spill monitoring and damage assessment in a pilot area in the Arabian gulf. Detection of pollution and polluters off the coasts of KSA is a prime topic of interest.

Project activities for the first phase have started and extend into fall 2009. The GAF team consists of the partners GAF as lead, DLR, Germany and Telespazio, Italy. GAF cooperates with SGS in Saudi Arabia in the performance of this project, which aims at developing a long term European - KSA cooperation in the field of nation wide- satellite based environmental monitoring.