

## **SYMIN** website goes live

Showcasing the possibilities offered by Earth Observation for verification of mining activities

www3.gaf.de/symin

GAF AG, together with the Institute for Environmental Security (IES), the Bonn International Center for Conversion (BICC) and the German Aerospace Center (DLR) are pleased to announce the launch of the SYMIN Project's new website. The website aims to showcase how Earth Observation (EO) can assist mining authorities with the regulation of informal mining activities through the detection of informal mining sites.

The SYMIN Project focuses specifically on five pilot areas in Afghanistan which are rich in coal, gold, gemstones as well as quarries. It is demonstrated that satellite-based remote sensing can be an efficient tool for area-wide mapping and monitoring of informal mining activities in remote, poorly accessible or security sensitive areas.

Based on very high resolution (VHR) optical images data, stereo data and radar-based coherence analysis, together with other geo-data such as mining cadastre information, our team is able to extract information such as the location and description of mining activities as well as the presence of infrastructure.

This information is then used to create up-to-date reconnaissance maps and dossiers with a description of current mining activities in order to facilitate the work of in-situ mines inspectors.

Dr. Stefan Saradeth - GAF Director of International Consulting - comments: "GAF offers globally a comprehensive service package to mining authorities - this includes capacity building and consulting, training and know-how transfer up to geoinformation- and software solutions. SYMIN combined with our new mobile GIS offers exciting new options for mining inspectors."

It is hoped that the SYMIN website will contribute to raise awareness on the possibilities offered by satellite-based remote sensing for the detection and monitoring of informal mining activities aimed at law enforcement agencies dealing with remote and sensitive areas throughout the world.

## Contact us

GAF AG | Tel. +49 (o) 89 12 15 28 0 | www3.gaf.de/symin | info@gaf.de





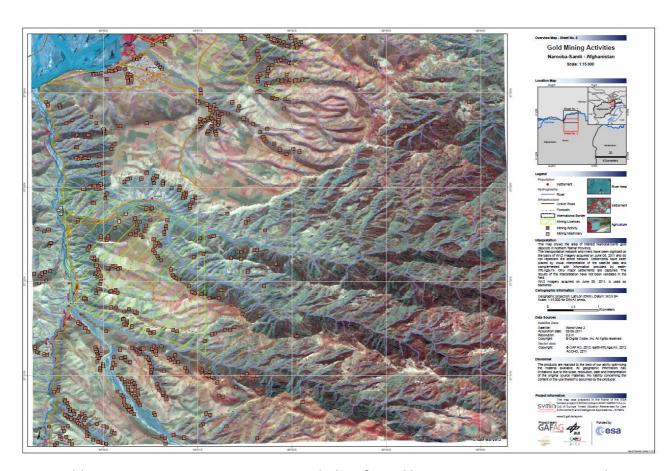




## Notes to editors

- The SYMIN Project is entitled "System for monitoring law enforcement of informal mining".
- The project covers a range of settings with artisanal and small scale mining (ASM) for metals, coal, gold, gemstones as well as quarries in several selected pilot areas. Cases are selected from GAF's international activities within the mineral resources domain.
- Artisanal and small-scale mining is largely a poverty driven activity and is typically practiced in the poorest and most remote rural areas of countries by a largely itinerant, poorly educated populace with little else available in the way of alternative employment. Today, an estimated 13 million people in about 30 countries across the world are small-scale/artisanal miners, with about 80 100 million people depending on such mining for their livelihoods. ASM can be environmentally damaging and often has serious health and safety consequences for workers and surrounding communities. Many of the potential economic benefits of the small-scale mining sector are also lost as a result of poor practice with regard to mining, processing and marketing. The compiling of an inventory is a first step towards regularizing the sector, i.e. the enforcement of health, safety and environmental standards and the collection of royalties. Governments can then also grant operators proper legal title and provide technical, marketing and training support.
- The project is funded under the European Space Agency (ESA) "Timely Situation Awareness for Law Enforcement and Intelligence Application" contract, which forms part of the Value Added Element (VAE) programme. The purpose of the VAE programme is to support industry in the use of earth observation data. The project started in autumn 2011 and is scheduled to run for 18 months.

## **Picture**



ASM Gold mining activities overview map, including formal license area (image not to scale)







