



# Newsletter

## 1<sup>ST</sup> ISSUE

Dear Reader,

This is the 1<sup>st</sup> newsletter of ImpactMin, a project co-financed by the European Commission for 36 months, which started in January 2010. The project seeks to investigate new methods and develop a toolset for monitoring the impact of mining operations upon the environment. An experienced, active multinational consortium has been contracted, consisting of 11 partners each from a different European country, in order to accomplish these tasks.

A multi-disciplinary consortium of scientists is working on breaking the boundaries and integrating proven Earth Observation (EO) technologies through the observation of a phenomenon from various angles. Applying these methods of EO, which can be used on a regional and local level, will assist in defining the complex characteristics of resource extraction and its effects upon the environment and society.

The researchers are intent on finding the best methods, using Earth Observations and in-situ data, that will aid future decision making based on coordinated, comprehensive and sustained Earth Observation and information, which is the main objective of the Global Earth Observation System of Systems (GEOSS).

## FIRST HALF YEAR BY WORK PACKAGES (WP)

### WP1 COORDINATION

In January 2010, the ImpactMin KICK-OFF MEETING with the participation of all partners and the representatives of Rosia Montana Gold Corporation (RMGC) had been organized. Partners introduced themselves and Work Package Leaders described the work to be done on WP level. Ms.

Florence Beroud gave a presentation about GEOSS to the partners and made an indication what is the EC perspective on ImpactMin project.

Present: Geosense, UNEXE, LTU, Photon, GFMO, IMIN, UBB, ULRMC, DMT, VITO, Geonardo  
Project Officer: Florence Beroud, *DG Research*  
Advisory Board: Prof. János Földessy, *University of Miskolc*

*January 2010, Budapest*



### GEPW ATTENDANCE *Athens, 29-30 April 2010*

The Coordinator participated 2<sup>nd</sup> time on the GEO European Project Workshop this year. The 2-day event was hosted by the Greek GEO office in Athens. Please find the poster of the ImpactMin project at:

[http://www.impactmin.eu/uploads/media/Impactmin\\_poster.pdf](http://www.impactmin.eu/uploads/media/Impactmin_poster.pdf)

### WP2 END-USER NEEDS ASSESSMENT

To reach the future ImpactMin project end-users and to serve them with updates on the project progress an official web site was developed and launched at the really beginning of the project. For more information please visit:

[www.impactmin.eu](http://www.impactmin.eu)

ImpactMin consortium was represented by Dr. Marc Goossens (Geosense) at the PDAC 2010 conference in Toronto spreading information about the start of the project. Please download the brochure from:

[http://www.impactmin.eu/uploads/media/Impactmin\\_Canada.pdf](http://www.impactmin.eu/uploads/media/Impactmin_Canada.pdf)

Barter Agreements and co-operation with external parties are foreseen during the course of the project. The negotiation is in mature state with RMGC and already joint research activities have been carried out in the first half year of ImpactMin project.



ImpactMin project is funded by the European Commission under the Framework Programme 7.

## WP3 SOCIO-ECONOMICS

Special note by Dr. Elizabeth Adey  
*University of Exeter*

**Workshop in Cornwall May 24 – 27 and  
visit to Roşia Montana June 20-25**



*Visit to the Claylands, St. Austell*

Camborne School of Mines (University of Exeter) hosted visitors in Cornwall involved in ImpactMin work package 3 (WP3). WP3 will investigate the social and economic impacts of mining, providing a more holistic perspective to complement the other work packages. Visitors from Hungary (Geonardo Environmental Technologies), Bosnia and Herzegovina (University of Mostar), Sweden (Lulea University of Technology) and Romania (Babes-Bolyai University and Roşia Montana Gold Corporation) visited some of Cornwall's post mining projects such as the Eden Project and the Geevor tin mine museum. We also looked at the current china clay mining industry around the St. Austell region of Cornwall.

The focus of WP3 is to explore what people think of the mining industry, including how it affects people's lives at different sites across Europe and Russia. This work will utilise a range of research methods, including the use of surveys across all sites, in addition to carrying out interviews and focus groups. A range of stakeholders involved in mining will participate in the research, thus enabling a broad perspective of views to be looked at from across the industry.

The workshop was successful in finalising research questions for the survey that will be administered across the 4 demo sites (Romania, Sweden, Russia and Bosnia Herezgovina) and additionally in Cornwall. The first of these visits, to Roşia Montana, took place from June 20-25, benefitting vastly from the immense support received from Roşia Montana Gold Corporation. Further site visits will be carried out between July and September.

To find out more about the project please contact Elizabeth Adey: [E.A.Adey@exeter.ac.uk](mailto:E.A.Adey@exeter.ac.uk)



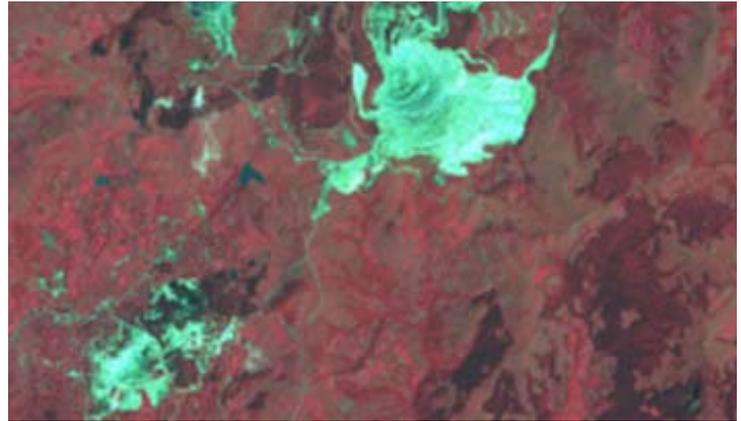
*Visit to Geevor tin mine museum*



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The success of the ImpactMin project is also conceived on indepth evaluation and due diligence research of existing remote sensing, environmental and case studies, geophysical and geospatial data that form the backbone to work packages (WP) 4 and 5. These to WP are instrumental for successful completion of spaceborne, airborne hyperspectral and gamma-ray surveys which will be used in site-assessments.

The work is ongoing with close cooperation by the relevant partners to seamlessly integrate existing geospatial data with the new satellite and air-based imagery that would offer new insights and evaluations of resource extraction activities on the environment. The industry is already noticing the great value of the novel EO approach in site characterization: "Unbiased, timed satellite images help build stakeholder trust because they clearly illustrate the activities taking place in our mine leases," said Ashley Nixon, Sustainable Development Integration Manager at Shell Canada.



*Satellite image of a demonstration site in false color composite*

Amongst the researchers, a similar cooperative sentiment prevails: "All of us are essentially searching for targets, hints of recognition that may mean minerals, pollutants, algae, tissue." Amer Smailbegovic (ImpactMin partner: Photon LLC), GRSG Newsletter, Issue 55.

EO, with its capabilities and coordinated development by the international cooperation of GEO, is truly entitled to a lead role in environment monitoring in the future.

The first results and publicly available documents related to WP 3, 4 and 5 will be released on the official project website ([www.impactmin.eu](http://www.impactmin.eu)) at the end of 2010. The project, however is continuing through 2012.

**GENERAL INFORMATION**



- Partners: Geonardo Ltd. – GEO  
 Geosense – GEOS  
 University of Exeter – UNEXE  
 Lulea University of Technology – LTU  
 Photon LLC – Photon  
 University of Mostar – GFMO  
 Institute of Mineralogy, Russian Academy of Science – IMIN  
 Babes-Bolyai University – UBB  
 Ukrainian Land and Resource Management Center – ULRMC  
 DMT GmbH & Co.KG – DMT  
 Flemish Institute for Technological Research – VITO
- Coordinator: Mr. Peter Gyuris, *Geonardo*, [coordinator@impactmin.eu](mailto:coordinator@impactmin.eu)
- Project Officer: Ms. Florence Beroud, *DG Research*

For more information please visit: [www.impactmin.eu](http://www.impactmin.eu)



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