

NEXT – New Exploration Technologies

FINAL EVENT – 15 September 2021, 13.00-17.00 (CET)

Online

How innovative solutions and concepts will foster exploration success in Europe and beyond?

Innovative and more socially acceptable exploration technologies with lower costs and minimal environmental impact are called for to identify targets for detailed exploration. Successful implementation will lead to the discovery of new deposits and upgrading of the mineral potential in the EU while offering tools to reduce negative impacts on communities and impact on the environment.

The main objective of NEXT project was to develop innovative and sensitive exploration concepts and technologies, and to investigate factors affecting their acceptance by the society. The overall methodology in NEXT was structured around three pillars of technological advances:

- Mineral systems modeling,
- Exploration methods and approaches, and
- Data processing and data integration tools

The aim of the NEXT final event is to present and discuss innovative exploration concepts and technologies that can be optimized for diverse mineral systems and for a variety of geographical areas in the EU. Together these will extend the existing knowledge of European mineral resources, will help secure the domestic supply of both major commodities and critical raw materials, and will launch socio-environmental innovation approaches in the mining industry.

The event will bring together anybody interested in the results of the NEXT project, including the participants of EU projects related to mineral exploration; mining and mineral exploration companies, governmental authorities, universities, NGOs and other stakeholders in order to:

- Highlight the latest innovations, solutions and advancements in the exploration sector
- Highlight the economic, commercial, and technological benefits and factors affecting social acceptance of exploration
- Promote best practices in mineral exploration reducing environmental impact and improving relationships with local community actors
- Strengthen the cooperation between European projects dealing with exploration

AGENDA (all times Brussels time)

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| 13.00-13.05 | Opening and practicalities: Anna Spiteri, IRMCo |
| 13.05-13.10 | Opening address , Vesa Nykänen Scientific Coordinator, NEXT, Research Professor, GTK Geological Survey of Finland |
| 13.10-13.25 | Welcome speeches <ul style="list-style-type: none"> • EC representative (TBC) • Saku Vuori, Deputy Director of GTK Geological Survey of Finland |
| Session 1: NEXT – Main findings and lessons learned | |
| <p>During this session, we will present the NEXT core findings and learnings, highlighting how they contribute to the sustainable production of raw materials in Europe and how they can benefit the development of domestic metal industries in Europe. At the end of the session, there will be moderated discussion on the main observations and lessons learned for the future.</p> <p>Moderator: Anna Spiteri, IRMCo</p> | |
| 13.30-15.00 | 15-minute pitch talks NEXT WP leaders <ul style="list-style-type: none"> • WP2. Mineral Systems Modeling - Fernando Tornos, CSIC, Spain • WP3. Novel Exploration Technology, Ari Saartenoja, RADAI, Finland • WP4. Data Fusion - Andreas Knobloch, BEAK, Germany • WP5. Social License to Explore, Karin Beland Lindahl, LTU, Sweden • WP6. Clustering, Anne-Sylvie Andre-Mayer, UL, France Moderated discussion about main observations and lessons learned for the future |
| 15.00-15.05 | Conclusions – 5 main messages , Vesa Nykänen, GTK |
| 15.05-15.20 | Coffee break |
| Session 2: Exploring for Critical Raw Materials in Europe – New Innovations and Perspectives | |
| 15.20-15.25 | Opening and aim of the session, moderator Anna Spiteri, IRMCo |
| 15.25-16.15 | Key results of NEXT WPs (WP2, WP3, WP4) 10 minutes talks <ul style="list-style-type: none"> • Mineral systems science - Tobias Bauer, LTU • Drone based EM system for exploration and monitoring - Markku Pirttijärvi, RADAI • Developments in surface geochemical exploration technologies - Maarit Middleton, GTK • SOM tools in different platforms - Johanna Torppa, GTK • A practical toolkit addressed to mineral exploration companies - Dirk De Ketelaere, IRMCo |
| 16.15 -16.55 | Moderated discussion by mining industry collaborators and scientific advisory board <ul style="list-style-type: none"> • Nick Cook, Mawson, Karen Hanghøj, British Geological Survey, Timo Mäki, Northgold AB, Carlos Roberto Souza Filho, University of Campinas |
| 16.55-17.00 | Closing remark: Juha Kaija, NEXT Project Manager, Geological Survey of Finland - GTK |