

**ORAMA & JRC RMIS Joint Workshop:
Data Optimisation for Primary & Secondary Raw Materials
Thursday 13th June 2019, Joint Research Centre, Ispra, Italy
Preceded by Dinner hosted by ORAMA on the evening of the 12th June.**

The EU is highly dependent on mineral raw materials, which are essential for European industries, jobs and growth. Part of the strategy for assessing issues on security of supply of raw materials is to improve the quality and harmonisation of primary and secondary raw materials data. This is essential not just for investigating supply vulnerability at the European level, but also for facilitating information sharing at different levels within the EU. A key requirement of this data is to understand the resource potential of Europe, by evaluating known geological stocks of primary raw materials using statistics for mineral resources and reserves as well as assessing stocks of secondary raw materials in the urban mine.

The ORAMA project (Optimizing quality of information in RAw MAterial data collection across Europe) focuses on optimising data collection for primary and secondary raw materials in the Member States of the EU.

ORAMA addresses specific challenges with regards to primary and secondary raw materials (contained in waste batteries, waste electrical & electronic equipment, end of life vehicles and mining wastes) related to data availability, geographical coverage, accessibility, standardisation, harmonisation, interoperability, quality, and thematic coverage in Member States.

The project is now nearing its close and wishes to share its results and present to key stakeholders the methodologies it has developed around raw material enhancing data across Europe, using such tools as the United Nations Framework Classification system (UNFC).

The ORAMA project has close ties with the Joint Research Centre's Raw Materials Information System (RMIS). The RMIS was launched in 2015 to facilitate key information and knowledge needs of the European Commission and of the Member States on non-food, non-energy raw materials. It is Europe's principal tool for those wishing to access data on raw materials.

This workshop will focus on sharing the outcomes of the ORAMA project. During the morning session the emphasis will be on the raw material data network in the EU looking at data collection, presentation and use. In the afternoon, there will be parallel workshops dedicated to introducing the detailed results and guidance for primary and secondary raw materials data. The programme will be split by a lunch time poster and banner session where the results of the ORAMA research will be displayed alongside those of other stakeholders present at the event.

Wednesday 12th June – 19.00 – 22.00**Dinner - La Scuderia, VILLA BORGHI, Piazza Borghi, 1, 21020 Varano Borghi (VA)**

Hosted by the ORAMA project this will be an informal opportunity to meet with other delegates and the ORAMA and JRC teams.

Thursday 13th June – 09.00 – 17.30**Data Optimisation for Primary & Secondary Raw Materials****09.00 Welcome and introduction by session Chair, Pasi Eilu, Geological Survey of Finland****09.10: The ORAMA Project: overview, objectives, outcomes and relation to RMIS, Perttu Mikkola, Geological Survey of Finland****09.25: Statistics on primary raw materials supply chains & products, Constantin-Alin Popescu, DG ESTAT G3****09.50: Improving environmental and material accounting towards robust supply chain and stock-flow materials databases, Arnold Tukker, EIT RM, PANORAMA Project****10.15: The role of European Geological Surveys in data collection of raw materials, Slavko Solar, EGS****10.40: COFFEE****10.55: Developments in the RMIS' commodity-specific material flow analyses (MFA), Cristina Torres De Matos, Joint Research Council****11.20: Towards harmonized MFAs, Daniel Mueller, MINFUTURE project****11.45: GEO-ERA contribution to the front-end of strategic value chains, Antje Wittenberg, BGR Germany, Theme Coordinator GeoERA Raw Materials****12.10: Discussion****12.30 LUNCH with poster & banners session**

Delegates are invited to display posters and banners from their own research.

14.00 Parallel Sessions: See overleaf.

14.00 Parallel Sessions:

i) Primary Raw Materials – Data harmonisation in ORAMA

ii) Secondary Raw Materials – Data Harmonisation in ORAMA

i) Primary Raw Materials – Data harmonisation in ORAMA

This session will focus on national primary mineral resource data, and how the harmonisation of such data can be achieved, by using tools such as UNFC.

14:00: Introduction: issues with resource & reserve data and introduction to UNFC, Tom Bide, British Geological Survey

14:30: How harmonisation using UNFC can be achieved from countries with no national reporting system, Gus Gun, British Geological Survey

15:10: How harmonisation using UNFC can be achieved from countries with Russian style reporting codes, Zoltán Horváth, MBFSZ.

15:50: COFFEE

16:15: A case study from Norway on use of UNFC, Henrik Schiellerup, NGU.

16:35: The role of data models in achieving harmonisation for resource and reserve data, Frands Schjøth, GEUS.

16:55 Group Discussion

17:30 CLOSE

ii) Secondary Raw Materials – Data Harmonisation in ORAMA

This session will focus on data optimisation for secondary raw materials from WEEE/PV panels, batteries, ELV and mining waste

14:00: Introduction, Jaco Huisman, Joint Research Centre

14:10: Sector specific training and discussion:

- **Product Group 1: (W) EEE**, Michelle Wagner, United Nations University
PV Panels Kristine Sperlich, TU Berlin;

15:10: COFFEE

15:25: Sector specific training and discussion contd.:

- **Product Group 2: Batteries**, Johanna Emmerich, TU Berlin;
- **Product Group 3: Vehicles**, Amund N. Løvik, EMPA; Johan Tivander, Chalmers University;
- **Product Group 4: Mining Waste**, Špela Bavec, GeoZS

17:10 Conclusions, Jaco Huisman –Joint Research Centre

17.30 - CLOSE