Guillaume Bertrand\(^1\),
Meta Dobnikar\(^2\),
Zoltán Horváth\(^3\)

\(^1\) BRGM; \(^2\) GeoZS; \(^3\) SZTFH/SARA

UNFC in European Geological Surveys


www.geologicaleservice.eu
Overview of the GSEU – Geological Service for Europe project

- Coordinated by EuroGeoSurveys
- 5 years (Sept. 2022 to Aug. 2027)
- 48 partners (European NGOs)

Main objectives of GSEU

- Establish a Geological Service for Europe, permanent collaborative network of European GSOs.
- Provide European institutions, enterprises, and citizens with high-quality geoscientific expertise and data, aggregated at the EU-level.

Develop harmonized databases and information services
Overview of the GSEU – Geological Service for Europe project

Raw Materials WP:

• Lead by BRGM (GS of France);
• Contribution from 32 GSOs;

Objectives:

• Re-evaluate the European potential in primary onshore and offshore and mining wastes;
• Develop the use of the UNFC classification system for mineral resources;
• Develop a European International Center of Excellence on Sustainable Resources Management;

Organized in 4 tasks:

• EU primary and secondary onshore CRM resources
• EU offshore CRM resources;
• EU International Center of Excellence on Sustainable Resource Management;
• UNFC for resource management;
Overview of the GSEU – Geological Service for Europe project

Task « EU ICE SRM » :

• Lead by GeoZS (GS of Slovenia);
• Contribution from 21 GSOs;

Main objectives and impacts:

• Develop a European ICE SRM, promoting the deployment of UNFC and UNRMS that will be embedded within the GSEU;
• Improve sourcing of primary and secondary CRM in Europe, by promoting and building capacity in UNFC/UNRMS and integrating information on the availability of natural resources;
• Build a strong EU-level expertise on CRM intelligence in support to provision of information compliant to UNFC;
Overview of the GSEU – Geological Service for Europe project

Task « UNFC for resource management »:

• Lead by SARA (GS of Hungary);
• Contribution from 20 GSOs;

Main objectives and impacts:

• Develop a joint UNFC methodology for all GSEU data providers, application of UNFC for primary and secondary RM and serving UNFC data to the EGDI;
• Support increased sourcing of primary/secondary CRM in Europe, based on proper methodology for using UNFC and appropriate FAIR data in UNFC system;

UNFC in European GSOs – a baseline assessment

The challenge of CRM in Europe

Dependencies of European industries on third countries is a threat in a context of growing demand and geopolitical unstabilities;

Increasing awareness in Europe led to important steps with high ambitions, such as the CRM Act.

The CRM Act, a game changer that strongly relies on UNFC:

- UNFC for the strategic project application to the Commision (art. 5);
- UNFC for reporting of national exploration programmes (art. 19);
- UNFC for risk monitoring of new projects (art. 21);
- UNFC for reporting on extractive waste facilities (art. 27).

What is the state of UNFC in European GSOs:

- Survey questionnaire addressed to GSEU partners (European GSOs) in winter 2022-2023 → point of view of GSOs;
- 34 responding organizations;
UNFC in European GSOs – a baseline assessment

Experience of GSOs in using UNFC (years of practice)

• Only part of E Europe and Portugal were using UNFC 10 years ago;
• … plus UK, Scandinavia and part of W Balkan 5 years ago;
• Most European GSOs are using UNFC today → positive momentum in the use of UNFC across Europe.

Most European countries have experience with UNFC and are, at some level, prepared for UNFC data provision.
UNFC in European GSOs – a baseline assessment

UNFC categories related data handled by partners:

- All countries manage G data;
- Half of the countries manage E and G data;
- One fourth (7) of the countries manage E, F and G data;
- Several GSOs mention that other authorities may have more data;

Guidance documents (incl. good practices, case studies, etc.):

- 9 countries have guidance documents and more produced UNFC studies → good base of expertise for data harmonization at European scale;
- Still, many countries are missing guidance documents → GSEU is working at preparing guidance documents to fill this gap;
UNFC in European GSOs – a baseline assessment

National/regional legislative background for classification of primary raw materials

- 20 out of 28 countries (71%) have national/regional legislative background for classification of PRM;
- A majority of countries is legally bound to classify PRM;

Applied reporting standards or classification systems

- National systems are used in most cases;
- Two countries use UNFC as legal classification tool (ROU, UKR);
UNFC in European GSOs – a baseline assessment

Bridging between national data and international codes or systems:
• Only 18% of countries use such bridging;

Development of UNFC guidelines
• 68% of countries have not yet developed UNFC guidelines;
• Only 18% have;

Frequency of classification update
• Most countries (approx. 80%) update PRM classification yearly;
**Preliminary SWOT analysis – PRM and UNFC related legislation**

**STRENGTHS**
- Most countries have organizations/authorities in charge of raw materials;
- More than 2/3 of countries have national/regional background for classification of raw materials;
- Implementation of central European database and data collection will foster UNFC application;
- Legally binding data collection (e.g. CRM Act) will be a strong driver for UNFC development;

**WEAKNESSES**
- Duties and responsibilities are often scattered among several authorities;
- Application of UNFC is heterogeneous across countries;
- Poor/limited communication between authorities and GSOs may hinder the development of UNFC;

**OPPORTUNITIES**

**THREATS**

[Diagram showing SWOT analysis with specific points listed under each category]
Preliminary SWOT analysis – UNFC activities and expertise

**STRENGTHS**

- Increase of UNFC activities in most GSOs since approx. 10 years;
- National and international activities contributed to the deployment of UNFC in Europe;
- Projects and initiatives (GSEU, NoPE, ICE SRM, etc.) will increase UNFC expertise;
- Cooperation will facilitate proper development and use of UNFC (templates, guidances, etc.)

**WEAKNESSES**

- Many countries are lacking proper UNFC experience;
- This may hinder proper EU-level data collection and long-term UNFC data maintenance;
- Lack of proper development of expertise may hinder the development of UNFC and, in turn, the implementation of the CRM Act;

**OPPORTUNITIES**

**THREATS**
Conclusion

Completed or on-going UNFC-related GSEU actions to address these threats and weaknesses:

- Study on methodology and guidance for EU-level data harmonization with UNFC;
- Preliminary organisational scheme, business plan and working plan of the EU ICE SRM;
- Development of the EU ICE SRM IT platform;
- UNFC data provision template (collab. With UNECE and Futuram);
- Various UNFC promotion and support actions (communication, expert groups, etc.);
- UNFC « train the trainers sessions » (spring 2024) in Ljubljana;
Conclusion

Main learnings and take away messages

- Raw materials are of strategic importance in almost all European countries;
- The CRM Act is a key driver for rapid implementation of UNFC in Europe;
- GSOs have an important role to contribute to resource management through better integration of UNFC;
- All European countries have organizations that collect raw materials data; there is a need to improve their expertise in UNFC and to develop communication between these organizations;
- The pan-European situation is still heterogeneous, due to various national situations and the use of diverse reporting codes;
- Guidance and training to develop UNFC expertise are key to ensure its proper implementation;
- The GSEU project, led by EuroGeoSurveys, contributes to capacity building, via the development of the EU ICE SRM;
Thank you for your attention!

THE VIEWS EXPRESSED ARE THOSE OF THE AUTHOR AND DO NOT NECESSARILY REFLECT THE VIEWS OF THE UNITED NATIONS