

# Background Information for UNFC Guidance Europe

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## RESOURCE MANAGEMENT WEEK 2023

ASSURING SUSTAINABILITY IN  
RESOURCE MANAGEMENT



**UNECE**

# Classification Systems

## for Mineral Resources in Europe



- **No** unified classification system for mineral resources in **Europe**
- **EU Member States** have adopted **different** mineral resources classification and reporting systems.
- The most common ones are:
  - **CRIRSCO** International Reporting Template (JORC, PERC, CIM...)
  - **National** Classification and Reporting Systems (including ex-Soviet based)
  - **UNFC**: United Nations Framework Classification for Resources Applications

# CRIRSCO International Reporting Template

## In Europe

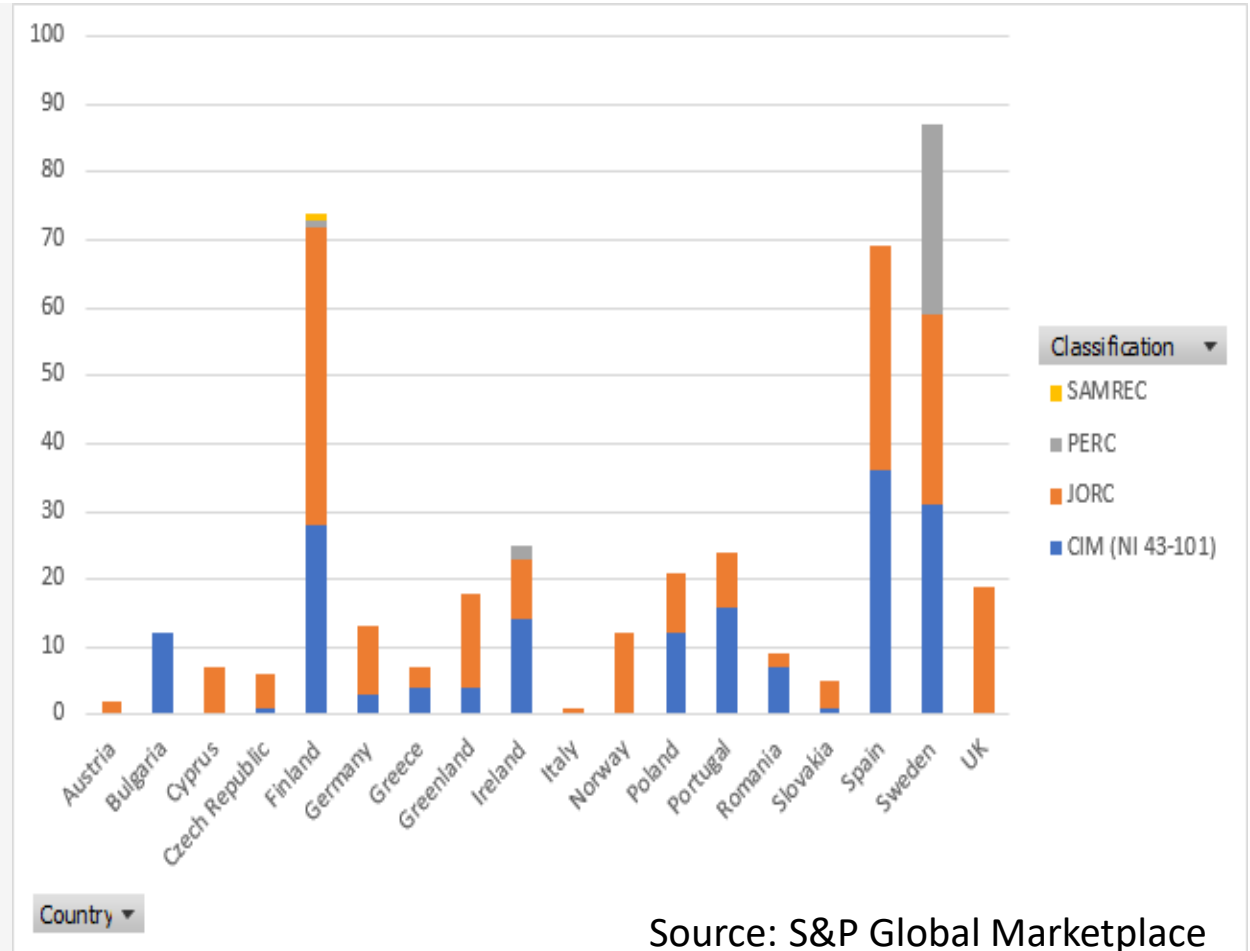


- The **CRIRSCO-Codes** used on **European** deposits:

- JORC
- SAMREC
- PERC
- CIM (NI 43-101)

- The dataset of global mining sector, from 2004 to 2022, indicates the following registered EU deposits with CRIRSCO Codes

➤ <b>JORC</b>	51%	
➤ <b>CIM (NI 43-101)</b>	41%	
➤ <b>PERC</b>	8%	➡ Only from Sweden, Ireland, Finland



Source: S&P Global Marketplace

# National Reporting Systems / Raw Materials Data Collection

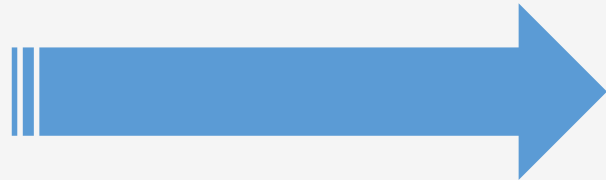
In Europe



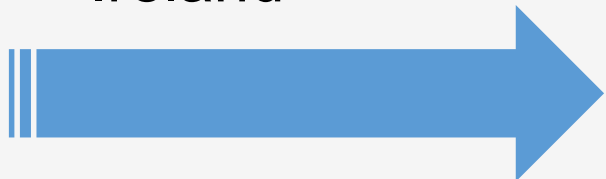
- There is currently **no aggregated commodity** figures from **EU states** with the same classification system.
- EU Countries can be divided into **3 groups for raw material data collection**:
  1. Countries with **central collation** of information based on **international reporting systems**
  2. Countries with **central collation** of information based on **national reporting system** (national, ex-Soviet based, UNFC)
  3. Countries with **incoherent data collection** based on **national system or without system specification**.

# Countries with Central Collation of Data

## Based on International Reporting Systems



- Finland
- Sweden
- Norway
- Portugal
- Ireland

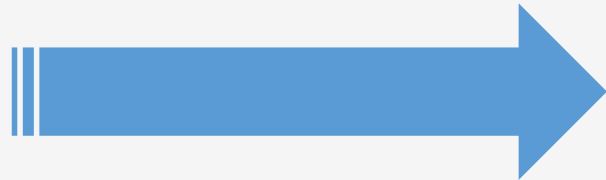


### Data collection is statutory

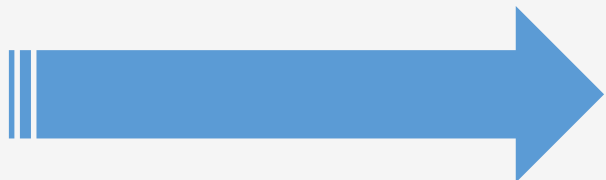
- Mining Industry is **legally obligated** to report information to national bodies
- Annual-based or constantly updated
- **Centralized collection** of raw material data:
  - Information on resources and reserves
  - Production data
- No mandate use of a system for reporting, may use any CRIRSCO-based code for Public Reporting

# Countries with Central Collation of Data

Based on own National Reporting System



- Austria
- Cyprus
- Malta



## Data collection is statutory

- Extractive industries are **obliged** to report to national authority
  - Reporting **mineral resources and reserves**
  - Annual-based or constantly updated
- 
- National reporting system have no compliancy to internationally recognized standards

# Countries with Central Collation of Data

Based on National Reporting Systems (ex-Soviet based)



- Poland
- Bulgaria
- Croatia
- Hungary
- Latvia
- Slovenia
- Czech Republic
- Slovakia

➤ National reporting is **Mandatory** for entities reporting mineral resources and reserves:

➤ **Data collection:**

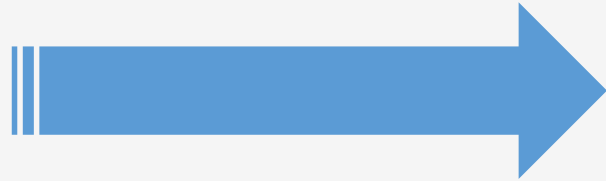
- Collected **annually**
- **Centralized** national repository
- Spatial reference (GIS-based, INSPIRE-compliant, or None)

Number of Mining Sites	Poland (2020)	Czech Republic (2020)	Slovenia (2021)
Energy	326	116	2
Metals	9	--	--
Industrial Minerals & Rocks	240	84	16
Construction Materials	4337	317	196
sum	4921	517	214

Number of Deposits	Poland (2020)	Czech Republic (2020)
Energy	732	257
Metals	51	--
Industrial Minerals and Rocks	1323	405
Construction Materials	12540	811
sum	14646	1473

# Countries with Central Collation of Data

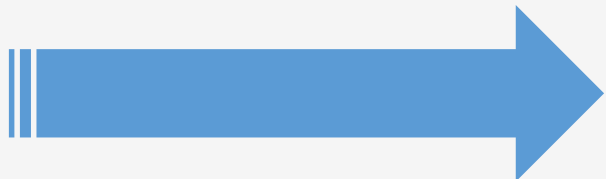
Based on National Reporting Systems (UNFC-based)



- Lithuania
- Romania

## Data collection is statutory

- For **extractive industries**
- Reporting mineral resources and reserves to **national authority**
- Annual-based or constantly updated
- **Centralized** collection in national repository
- **INSPIRE-compliant** data



- Estonia's reporting system is similar to UNFC and aligned with international systems

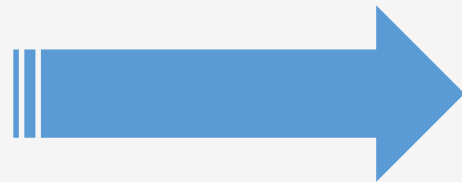


# Countries with Incoherent Collation of Data

Based on National Reporting System or Without



- UK
- Spain
- Germany
- Netherlands
- Luxembourg
- Italy
- France
- Greece
- Denmark
- Belgium



- No systematic, centralized data collection and reporting
- Most have no mandatory reporting system used

Proposed map of conversion for categories of solid mineral raw materials reserves for comparison with mineral resources and reserves (JORC Code, Ni 43-101: CRIRSCO) and UNFC system

Law (2015) and Proposed New Book of Regulations for Solid Mineral Raw Materials	Results of Geological Exploration	Mineral Resources			Mineral Reserves	
		Inferred	Indicated	Measured	Probable	Proved
Official Book of Regulations for Solid Mineral Raw Materials (1979)	Mineral Reserves					
	Potential	Potential	Established ( <i>in situ</i> – Geological: <i>Out-of-Balance and Balance</i> )		Exploitation ( <i>inclusive of dilutions and losses during mining</i> )	
	D <sub>2</sub> , D <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	B, A	C <sub>1</sub>	B, A
UNFC			Mineral Resources		Mineral Reserves	
	334	223	222	221	112	111

Source: R. Vukas, “Case Study – Integrated energy and water resources management in Serbia using UNFC systems”, UNDP project “Integrated Energy and Water Resources Management in Support of Sustainable Development in South-East Europe and Central Asia”, 2018-2021.

# Previous UNFC Activities

## In Europe



- Many UNFC Case Studies have been done across EU to different Raw Materials:
  - ERGM UNFC case studies on primary raw materials:
    - UNFC Case Studies from Finland, Sweden, Norway, Austria ...
    - A GUIDANCE FOR THE APPLICATION OF THE UNFC-2009 FOR MINERAL RESOURCES IN FINLAND, NORWAY AND SWEDEN – 2017
  - ERGM UNFC case studies on secondary raw materials:
    - Case studies on residuals from extractive industries
    - Case studies on the consumers residuals (EOL)

Source: <https://unece.org/>



# Ongoing UNFC Activities

## In Europe



UNEP

- **Network of Practitioners (NoPE)**
- Co-Chaired between **UNEP & GSEU**
- Established to facilitate appropriate application of **UNFC to primary and secondary raw materials projects**
- NoPE is a source for UNFC users with members as contact points for stakeholders seeking assistance



### Focus Areas

- Translation of UNFC into EU languages
- UNFC training – exchange of practice
- UNFC Guidance for Europe



### Membership Network

- National Contact Points

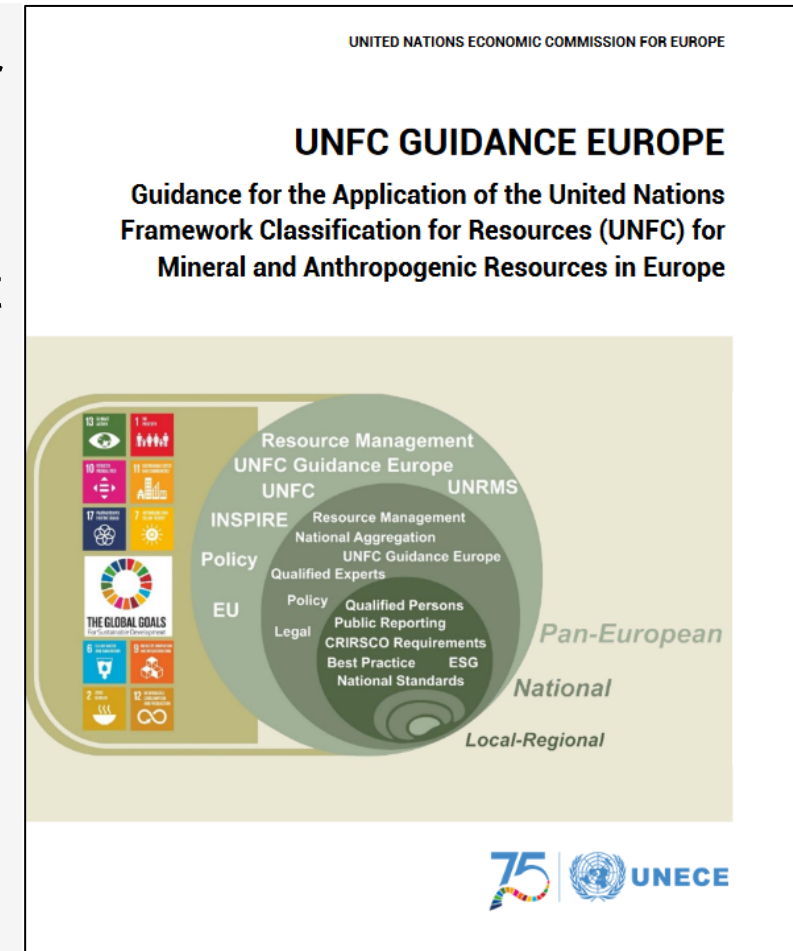


# UNFC Guidance Europe

## Introduction



- E-357 project (2020-2024) Supporting UNECE member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS)
- Promotion activities (RMW, EGRM/RMW, conferences ...)
- Trainings
- Review Team
- Coordination Team
- NoPE



# Thank you!

Slavko Solar  
Economic Affairs Officer

**UNECE**

Date 25 | April | 2023, Geneva



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