UNFC GUIDANCE EUROPE
Guidance for the Application of the United Nations Framework Classification for Resources (UNFC) for Mineral and Anthropogenic Resources in Europe

Deploying the United Nations Framework Classification for Resources in Europe and beyond to assure information for sustainable resource management

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Why is a UNFC-based inventory important?

A UNFC-based inventory is important for:

- **Public-sector decision-making** ranging from onsite, municipality, regional, country, European and the UN level on aspects of the resource life cycle

- Economic management for planning, organization, and leading activities of management of all corporate levels

- **Finance investment decision** making considering economic, environmental, and social aspects of raw material Projects

- In expertise, knowledge, and education
UNFC Guidance Europe

- Guidance for the Application of the United Nations Framework Classification for Resources (UNFC) for Mineral and Anthropogenic Resources in Europe

  - To facilitates the development of UNFC-based inventories across Europe and provide alignment with Infrastructure for Spatial Information in Europe (INSPIRE) for Mineral Resources.

  - To ensure clarity and comparability in national resource reporting, especially, how resource quantities are classified in accordance with UNFC and linked to various EU instruments, such as INSPIRE.

  - To assist evaluators to identify relevant controlling factors (CFs) and give the Qualified Expert assistance when making a balanced judgement in respect to categorization which may have a direct impact to the viability of a Project.
UNFC-based National & EU level raw materials inventories

- A tool to assess the availability of mineral projects in a standardized way under defined conditions
- Variable conditions in time are considered through reconciliation
- International usability through a robust numerical code-based system (unbiased by languages and translation)
- Supplemental specifications provide the guideline to apply the three axes of the rating matrix to mineral projects.
Whom is the UNFC Guidance Europe for?

Users, including regional and national authorities in Europe to facilitate decision-making and maintain databases for primary and secondary raw material projects.

Qualified experts and resource estimate preparers in Europe to classify primary and secondary raw material projects.
What is UNFC Guidance for Europe?

- UNFC allows raw materials projects to be **viewed** and **classified** in **national-level** in respect to changing social, environmental, economic, technological and geological factors/conditions.

Aggregated national metal endowments (primary and secondary resources) within different project maturity levels.

Identifying relevant **controlling factors** related to Non-Viable Projects turning into Potentially-Viable Projects.

Current status and maturity level of Viable and Potentially-Viable Projects.

Identifying relevant **controlling factors** related to Potentially-Viable Projects turning into Viable Projects.
National mineral resources accounting

- Practical approach with emphasis to **national inventories** where all commodities can be aggregated and reported in consistent and coherent manner.
- Government organisations compile the **mineral resource data and report aggregated CRM endowments under UNFC to the European Commission**.
- Member States may use a Bridging Document for conversion if **national reporting standard is in use**.
- The information is used in research, planning of mineral exploration, national resource accounting and, hence, also in decision making on national and EU level mineral policies.
Annex I: Classes and Sub-classes and INSPIRE Code List

To facilitate the development of UNFC-based inventories across Europe and provide alignment with Infrastructure for Spatial Information in Europe (INSPIRE) for Mineral Resources.

### UNFC Classes Defined by Categories and Sub-categories

<table>
<thead>
<tr>
<th>Class</th>
<th>Sub-class</th>
<th>Categories</th>
<th>INSPIRE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viable Projects</td>
<td>On Production</td>
<td>1</td>
<td>1.1, 1.2, (3)</td>
</tr>
<tr>
<td></td>
<td>Approved for Development</td>
<td>1</td>
<td>1.2, 1.3</td>
</tr>
<tr>
<td></td>
<td>Justified for Development</td>
<td>1</td>
<td>1.3, 1.2, 1.3</td>
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<tr>
<td>Potentially Viable Projects</td>
<td>Development Pending</td>
<td>2</td>
<td>2.1, 1.2, 1.3</td>
</tr>
<tr>
<td></td>
<td>Development On Hold</td>
<td>2</td>
<td>2.2, 1.2, 1.3</td>
</tr>
<tr>
<td>Non-Viable Projects</td>
<td>Development Unclarified</td>
<td>3.2</td>
<td>2.2, 1.2, 1.3</td>
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<tr>
<td></td>
<td>Development Not Viable</td>
<td>3.3</td>
<td>3.2, 1.2, 1.3</td>
</tr>
<tr>
<td>Remaining Products not developed from Identified Projects</td>
<td>Prospective Projects</td>
<td>3.3</td>
<td>4.1, 1.2, 1.3</td>
</tr>
<tr>
<td></td>
<td>Detailed Surface Exploration</td>
<td>3.3</td>
<td>3.2, 1.2, 1.3</td>
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<td></td>
<td>Regional Reconnaissance</td>
<td>3.3</td>
<td>3.3, 1.2, 1.3</td>
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<tr>
<td></td>
<td>Remaining Projects not developed from Prospective Projects</td>
<td>3.3</td>
<td>4.1, 1.2, 1.3</td>
</tr>
</tbody>
</table>

### Annex I: Classes and Sub-classes and INSPIRE Code List

#### A F Axis – Technical Feasibility
- **F1.1** Operating
- **F1.2** Under development
- **F1.3** Pending approval
- **F2.1** Feasibility
- **F2.2** Completion
- **F2.3** Approval
- **F3.1** Production
- **F3.2** Sold or used
- **F3.3** Future production

#### B E Axis – Environmental & Socio-Economic Viability
- **E1.1** Viable
- **E1.2** Potentially Viable
- **E1.3** Prospective
- **E2.1** Non-Viable
- **E2.2** Unclarified
- **E3.1** Existing
- **E3.2** New
- **E3.3** Remaining

#### INSPIRE Code List
- **L1** Total Products
- **L2** Produced
- **L3** Known Sources
- **L4** Remaining Products not developed from Prospective Projects

#### Annex I

- UNFC Classes and Sub-classes
- INSPIRE Code List
- Total Products
- Known Sources
- Remaining Products not developed from Identified Projects
Annex II: Supplemental Guidance for the National Resource Reporting

To ensure clarity and comparability in national resource reporting, especially, how resource quantities are classified in accordance with UNFC and linked to various EU instruments, such as INSPIRE.

Guidance for National Resource Reporting

- National Reporting
- The Use of Relevant Bridging Documents
- Reported Resource Quantities and Quality
- Product Type
- Historic Estimates
- Viable Projects Turn Non-Viable
- Terminology
- Documentation
Annex III: Sectoral Guidelines for Europe

To assist evaluators to identify relevant controlling factors (CFs) and give the Qualified Expert assistance when making a balanced judgement in respect to categorization which may have a direct impact to the viability of a Project.

E Axis – Environmental-Socio-Economic Viability

- Policy
- Legal Framework
- Exploration Rights
- Regulatory Approval
- Exploration Permits
- Extraction Permit
- Fiscal Framework/Contractual Conditions
- Social Considerations
- Economic Considerations

F-Axis – Technical Feasibility

- Technology Readiness Levels
- Mining Methods
- Mining Projects
Schematic mining-related project life cycles* in governmental and industry processes with some E-Axis controlling factors

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Thank you!

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UNECE
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