EUROPEAN COMMISSION
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Chemicals, metals, mechanical, electrical and construction industries; Raw materials
Metals, Minerals, Raw Materials

Annex 1

Brussels,
ENTR/G3

WORKING DOCUMENT

Subject: **Proposal for the development of indicators in the area of framework conditions in order to foster the sustainable supply of raw materials in the EU, including land use planning, authorisation, permitting and related environmental issues**

1. INTRODUCTION

The extraction of raw materials provides the first industrial step of the raw materials chain for the manufacturing industry. The raw materials it produces are essential for the quality of our everyday life. Despite the fact that mining has been a professional activity for thousands of years in Europe, society at large has barely noticed the technological strides it has made. The sector often suffers from a bad public image, although it has made great efforts to develop significantly safer and more environmentally sound mining technologies. However, with rising sustainability challenges and competition over land-use, the EU's share of global extractive activities has been declining over the last decades. This has led to the EU becoming increasingly dependent on imports for raw materials, while the extractive sector has been badly affected by a loss of skills.

On 2 February 2011 the European Commission adopted the Communication on commodity markets and raw materials which sets out targeted measures to secure and improve access to raw materials for the EU[1]. Based on the first Communication on the Raw Materials Initiative published in November 2008[2], this new strategy document further pursues and reinforces the 3 pillar-based approach to improving access to Raw Materials for Europe. These pillars are:

(1) Fair and sustainable supply of raw materials from international markets;

(2) Fostering sustainable supply within the EU;

(3) Boosting resource efficiency and promoting recycling;

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1 Communication on commodity markets and raw materials - COM(2011) 25 final.

2 Communication on the Raw Materials Initiative "Meeting our critical needs for growth and jobs in Europe" - COM(2008) 699 final.

The exercise on indicators in the area of framework conditions relates exclusively to the second pillar of the raw materials initiative.

In the European Union it is basically the competence of Member States to provide the administrative framework conditions in relation to the exploration and extraction of raw materials, including land use planning and permitting procedures. In order to exchange best practices in Member States and to encourage improvements of the current framework where appropriate, the Working Group on the exchange of pest practices in land use planning, permitting and geological knowledge sharing (hereafter WG) was set up in 2009[3]. It delivered its report in June 2010, which identified the following key elements as the basis for the improvement of framework conditions in order to foster the sustainable supply of raw materials in the EU:

- A National Minerals Policy;
- A National Land Use Planning Policy for minerals;
- A clear and understandable authorization process for the exploration and extraction of minerals;
- Codes of practice in order to achieve technical, social and environmental excellence;
- Harmonised EU-level geological data sets;
- Better networking between National Geological Surveys using a standardized terminology.

On the basis of this work, the following three elements were stressed as particularly important in the Commission Communication on commodities markets and raw materials of February 2011[4] in order to promote investment in extractive industries:

- The definition of a **National Minerals Policy**
- The setting up of a **Land Use Planning Policy**
- Establishing a **clear and understandable authorization process** for exploration and extraction.

2. THE OBJECTIVE OF THE EXERCISE

In the context of the second pillar of the Raw Materials Initiative, the Commission proposed "*to assess together with Member States the feasibility of establishing a mechanism to monitor actions by Member States in the above area (NB i.e. the above three areas), including the development of indicators*".

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[3] The report of the RMSG ad-hoc Working Group on the exchange of pest practices in land use planning, permitting and geological knowledge sharing is on-line available: http://ec.europa.eu/enterprise/policies/raw-materials/files/best-practices/sust-full-report_en.pdf.

[4] COM(2011)25 final

Such indicators should not only cover the above-mentioned areas, but should also give some indication on how the framework conditions have an effect on the performance of the extractive sector and their developments of well managed mining projects. The indicators should provide us with an insight into which kind of policies contribute to a speedy, clear and reliable permitting process while at the same time ensuring technical, social and environmental excellence.

Although this exercise is voluntary, an as complete as possible response would be highly appreciated.

2.1. Scope of raw materials covered

These indicators cover the mineralic materials described in COM(2011)25 final and COM(2008) 699 final in a more targeted way. Although the Communications covers the score of this exercise refer sorely to mineralic materials, for example *ores and its metallic minerals* (such as base metals and high-tech metals), *industrial minerals* (such as feldspar, kaolin, magnesite, perlite and salt) and *construction materials*, (such as aggregates, sand, gravel, gypsum and natural stone). Materials not covered in here will be addressed at a later stage elsewhere.

The term `critical raw materials´ shall be used as defined by the Commission, which has a transparent, innovative and pragmatic methodological approach to defining "criticality"[5]. Currently 14 raw materials are listed as critical: antimony, beryllium, cobalt, fluorspar, gallium, germanium, graphite, indium, magnesium, niobium, platinum group metals, rare earths, tantalum and tungsten[6].

2.2. Definition of an indicator

In the context of this exercise indicators are defined as an instrument used in order to understand the current situation in the three key areas mentioned above, how the EU Member States are performing and how to help Member State authorities identify areas where they could improve their own framework conditions. In order to provide the most useful information this exercise aims to make use of all appropriate tools, such as statistical data, as well as descriptive, explanatory replies. There are two types of indicators:

- **Static indicators** that interface with existing processes.
- **Dynamic indicators** that specify whether something is improving or not or presenting measurable qualitative data which can be presented as a number, e.g. percentage of implementation.

The former is manly of qualitative nature and my by answered by open replies.

The latter can be of quantitative or qualitative nature and may be answered by yes- or-no tick boxes.

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[5] "Critical raw materials for the EU". Report of the RMSG ad-hoc working group on defining critical raw materials June 2010.

[6] This list is due to be revised every three years, starting in 2013.

The indicators have been identified through a stakeholder consultation process. Stakeholders from Member State authorities and extractive industry were consulted during the preparation of the report on best practices. This served as a useful basis for the WG to draw conclusions and to formulate recommendations. Based on these findings the Commission proposed a preliminary set of 20 indicators which were discussed with Member States and industry representatives in the RMSG meeting of 16 November 2011. Such indictors shall enable the Commission and Member States to assess the current situation and identify areas where improvement will be appropriate on a voluntary basis.

3. NATIONAL MINERALS POLICY INDICATORS

In full respect of the subsidiarity principle and the diversity of political and geological circumstances within Member States', key policy elements that should be found in a National Minerals Policy have been identified. **These key elements serve as indicators**. It is noted that since the adoption of the Raw Materials Strategy, many Member States have either been considering or have already initiated or completed steps to improve or adopt a Minerals Policy in various degrees (directional indicator). Therefore, the proposed **indicators point** to the **existence of a Minerals Policy and to the quality and level of detail** of such a policy while giving facts and figures where possible. As such it will look into indicator details regarding:

- **Legal framework;**
- **Information framework;**
- **Land use planning;**
- **Authorisation and permitting;**

Legal framework indicators

(1) **Mineral Acts**[7]: is there a national Mineral Act which covers all the relevant types of minerals that are known or likely to occur in the country?
yes ❑ publication/ last up-date: [dd/mm/yy]; no ❑
if yes, please tick the materials covered:
metals / ores ❑; industrial minerals ❑; construction materials ❑
Further comments: ❑ _____

(2) **Fiscal framework**:

(a) Does your fiscal framework provide incentives for exploration? yes ❑; no ❑

(b) Does your fiscal framework provide incentives for acquisition? yes ❑; no ❑

(3) **Ensuring access to mineral reserves**[8] and to **mineral resources**[9]**:** do you have an adequate long term land use planning legal framework in order to safeguard them for future generations yes ❑; no ❑;
if no see question 4,
if yes, at which level
local ❑; regional ❑; national ❑; international ❑

[7] A 'Mineral Act' (or Mining Act, Mineral Code or Mining Code) is the part of the Minerals policy of a Member State which setting the rules of the policy framework.

[8] A 'mineral resource' is a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade/quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade/quality, continuity and other geological characteristics of a mineral resource are known, **estimated** or interpreted from specific geological evidence and knowledge including sampling, *PERC Reporting Code, 2012.*

[9] A 'mineral reserve' is the **economically mineable** part of a measured and/or indicated mineral resource, defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors, *PERC Reporting Code, 2012*.

Information framework indicators

(4) **Availability of reliable and relevant statistics on raw materials supply and demand** as a decision base for authorities and industry.

Do you have data available on the following:

(a) Economic importance of the extraction sector yes ❑; no ❑
if yes,
metals ❑; industrial minerals ❑; construction materials ❑;
at which level: local ❑; regional ❑; national ❑; international ❑
are these data publicly available yes ❑; no ❑
if yes, where _____
and on which level: local ❑; regional ❑; national ❑; international ❑

please indicate the employment rate per relevant level (*multiple responses possible)*:_____
share of mining in total national GDP for the relevant level
(*multiple responses possible)*: _____
_____

(b) imports and exports yes ❑; no ❑
if yes,
ores ❑; metals ❑; industrial minerals ❑; construction materials ❑
provided by whom _____
at which level: local ❑; regional ❑; national ❑; international ❑

are these data publicly available yes ❑; no ❑
if yes, where _____

and on which level: local ❑; regional ❑; national ❑; international ❑

(c) primary raw materials production statistics yes ❑; no ❑
if yes,
ores ❑; metals ❑; industrial minerals ❑; construction materials ❑
provided by whom _____
at which level: local ❑; regional ❑; national ❑; international ❑

are these data publicly available yes ❑; no ❑
if yes, where _____
and on which level: local ❑; regional ❑; national ❑; international ❑

(d) Does a structure/tool exist for making long term estimates on minimum demand[10]? yes ❑; no ❑
if yes: with regards to
construction materials ❑ specify: _____
meeting demands:
local ❑ by _____ [%] of which _____ [%] are recycled material;
regional ❑ by _____ [%] of which _____ [%] are recycled material;
national ❑ by _____ [%] of which _____ [%] are recycled material
global ❑ by _____ [%] of which _____ [%] are recycled material

metals ❑; specify: _____
meeting demands:
local ❑ by _____ [%] of which _____ [%] are recycled material;
regional ❑ by _____ [%]of which _____ [%] are recycled material;
national ❑ by _____ [%] of which _____ [%] are recycled material
global ❑ by _____ [%] of which _____ [%] are recycled material

industrial minerals ❑ specify: _____
meeting demands:
local ❑ by _____ [%] of which _____ [%] are recycled material;
regional ❑ by _____ [%]of which _____ [%] are recycled material;
national ❑ by _____ [%] of which _____ [%] are recycled material
global ❑ by _____ [%] of which _____ [%] are recycled material

(5) **Detailed geoscientific knowledge basis** on resources and reserves publicly available.

(a) Are standardised statistical and classification codes used? yes ❑; no ❑
if yes, which
PERC ❑; UNFC ❑; JORC ❑;
others ❑ please specify _____

(b) Are the following maps available?
Geological maps, digital: yes ❑; no ❑
if yes: scale:_____; coverage land area _____[%]
Geochemical / mineralogical, digital: yes ❑; no ❑
if yes: scale:_____; coverage land area _____ [%]
Geophysical / Aerogeophysics, digital: yes ❑; no ❑
if yes: scale:_____; coverage land area _____ [%]
2-D minerals map, digital: yes ❑; no ❑
if yes: scale:_____; coverage land area _____ [%]
3-D minerals map, digital: yes ❑; no ❑
if yes: scale:_____; coverage land area _____ [%]
retrievable computer based minerals information systems yes ❑; no ❑;
if yes, for which raw materials:
ores ❑; metals ❑; industrial minerals ❑; construction materials ❑

[10] extent of self-reliance.

provided by whom _____

Land use planning indicators

Do you have the following available?

(6) Digital geological knowledge base on resources and reserves in an appropriate scale following the INSPIRE Directive rules yes ❑; no ❑
if yes: scale:_____; implemented to _____ [%]

(7) Are suitable maps obligatory for the land use planning?
yes ❑; partly ❑ no ❑
if yes or partly:
which type of map: _____;
scale:_____; implemented to _____ [%]
if yes, do they cover information on (*multiple responses possible)*:
ores / metals ❑; industrial minerals ❑; construction materials ❑;
quality ❑; thickness ❑; overburden ❑; ground water situation ❑;
others ❑ specify _____

(8) Does land use planning respond to national needs? yes ❑; no ❑
if yes, with regards to:
demographic change: yes ❑; no ❑
local ❑; regional ❑; national ❑
population density: yes ❑; no ❑
local ❑; regional ❑; national ❑
Has your land use planning system benefitted from the results as e.g. provided by EU co-funded projects[11] yes ❑; no ❑
if yes: please provide an example: _____
_____;
how is the up-take of scientific knowledge ensured? *describe the method briefly*:
_____
_____

(9) Does a structure/tool exist for identifying the different needs and level of uses, such as indicating industrial and agricultural zones in order to take care of the needs of future generations which will then help to identify barriers. yes ❑; no ❑
if yes: with regards to (*multiple responses possible*)
construction materials ❑ local ❑; regional ❑; national ❑; European ❑
non-construction materials ❑: local ❑ specify:_____;
regional ❑ specify:_____; national ❑ specify:_____
meeting demands:
local ❑; regional ❑; national ❑; European ❑; global ❑
please describe briefly the method _____
_____

[11] For example projects like EuroGeoSource, OneGeologyEurope and Promine.

Authorisation and permitting indicators

The duration of an authorization process is mainly affected by two elements:
Firstly, by the quality and completeness of the application itself;
Secondly, by the clarity, understanding and certainty of what is needed for the administrative process in order to obtain authorization for getting access to raw materials either for a) minerals exploration or for b) minerals extraction.

(10) To avoid any time delay, is a check list of minimum requirements for the application compiled and provided:
a) for minerals exploration permitting process? yes ❑; no ❑
if yes: is it provided on:
request ❑; online ❑; other ❑; specify _____
b) for minerals extraction permitting process? yes ❑; no ❑
if yes: is it provided on:
request ❑; online ❑; other ❑; specify _____

(11) Does the process foresee any arrangements between the applicant and all the authorities involved which clarify the detailed information required and avoid redundant stages (e.g. a “kick off meeting")?
a) for minerals exploration permitting process. yes ❑; no ❑
if yes: is it provided on:
request ❑; online ❑; others ❑ specify _____
number of different authorities involved in the process: _____
Is it structured as[12]:
sequential assessment ❑; parallel assessment ❑; one-stop-shop ❑
Number of public consultations: _____
b) for minerals extraction permitting process. yes ❑; no ❑
if yes: is it provided on:
request ❑; online ❑; others ❑ specify _____
number of different authorities involved in the process: _____
Is it structure as:
sequential assessment ❑; parallel assessment ❑; one-stop-shop ❑
Number of public consultations: _____

(12) Average time frame for granting the authorization starting from the submission of the complete application.
a) for minerals exploration permitting process.
Years _____ Months _____
b) for minerals extraction permitting process.
Years _____ Months _____

Do you follow a parallel or a subsequent (serial) authorisation procedure?
parallel ❑; subsequent ❑; other ❑ please describe: _____
_____

[12] The WG remarked that the good practice of a one-stop-shop can be sometimes difficult to implement in some countries due to the number and variety of authorizations required because of their legal and administrative systems in place.

(13) Number of complete permits finally delivered over a certain and agreed period of time compared to the number of applications.
a) for minerals exploration permitting process per area.
mean _____ [number / annum]; percentage _____ [%]
b) for minerals extraction permitting process per area.
mean _____ [number / annum]; percentage _____ [%]

(14) Does your Mining Act take into account developments in the area of environmental legislation or other developments at national or at European level?
yes ❑; no ❑
if yes: when was the last update of the Mining Act? [13] _____[mm/yy]

(15) Start-up costs for extractive companies on average for a) public domains and b) private domains or respectively for c) underground mining and d) open pits and quarries
a) _____; b) _____; c) _____; d) _____; [€/annum]
a) _____; b) _____; c) _____; d) _____; [€/exploration phase]
a) _____; b) _____; c) _____; d) _____; [€/extraction phase]

(16) Do you have a tool or mechanism to disseminate EU guidance documents such as the guidance document on NEEI and Natura 2000[14] to the relevant national/regional/local authorities yes ❑; no ❑
if yes: please describe briefly: _____
_____
_____

(17) Percentage of authorization/permitting decisions subsequently challenged at Court
_____ [%]
average time delay due to court case _____ [months]
percentage of cancelled projects due to court decisions _____ [%]
Number of challenged authorization/permitting decisions finally accepted by the court compared to total number of issued decisions _____[e.g. 10/90 per annum]

(18) Reasons for appealing against the decisions *(multiple responses possible)*
general environmental concerns ❑; NIMBY principle ❑;
occurrence of protected species not mentioned in the EIA ❑;
health and safety concerns ❑ specify: _____;
others ❑ specify: _____

[13] NB the WG calls for striking a balance between the need for a stable Mining Code offering adequate legal certainty and the need of regular revisions of Mining Codes according to developments in the area of environmental legislation or to other developments at national or at European level.

[14] The EP Resolution of 13 September on Raw Materials reaffirms "that the Natura 2000 guidelines provide a sound basis under which non-energy extraction activities must take place, taking into account the principle of subsidiarity".

(19) Number of extraction sites inside Natura 2000 areas
a) before the declaration of the areas: _____
b) after the declaration of the areas; _____
Number of new permits / enlargement permits inside Natura 2000: _____
Number of rejected applications: _____

(20) Percentage of court cases related to Natura 2000.
in 2009 _____ [%]; in 2010 _____ [%]; in 2011 _____ [%];
no information available ❑