

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 landuse, 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 EU¹. Based on the first Communication on the Raw Materials Initiative published in November 2008², 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;

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

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 2009³. 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 <u>work</u>, the following <u>three elements</u> were stressed as particularly important in the Commission Communication on commodities markets and raw materials of February 2011⁴ 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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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". 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.

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

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

 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 reserves⁸ and to mineral resources⁹: do you have an adequate long term land use planning legal framework in order to safeguar them for future generations yes □; no □ if no see question 4, if yes, at which level 	(1) Mineral Acts ': is there a national Mineral Act which covers all the					all the	relev	ant types				
yes □ publication/ last up-date:		of	miner	als th	nat are	known	or likely	y to	occur	in	the	country?
 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 reserves⁸ and to mineral resources⁹: do you have an adequate long term land use planning legal framework in order to safeguate them for future generations yes □; no □ if no see question 4, if yes, at which level 		· · · · · · · · · · · · · · · · · · ·									no 🗖	
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Further comments: (2) Fiscal framework: (a) Does your fiscal framework provide incentives for exploration yes \(\sigma\); no (b) Does your fiscal framework provide incentives for acquisition yes \(\sigma\); 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 safeguar them for future generations yes \(\sigma\); no \(\sigma\) if no see question 4, if yes, at which level		0 0	· 1					П٠	con	structio	on ma	terials 🗍
 (a) Does your fiscal framework provide incentives for exploration yes □; no □; no □ (b) Does your fiscal framework provide incentives for acquisition yes □; no □ (3) Ensuring access to mineral reserves⁸ and to mineral resources⁹: do you have an adequate long term land use planning legal framework in order to safeguar them for future generations yes □; no □ if no see question 4, if yes, at which level 				,		· · · · · · · · · · · · · · · · · · ·			construction materials			.tc11a15
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yes \square ; no [3] (3) Ensuring access to mineral reserves and to mineral resources do you have an adequate long term land use planning legal framework in order to safeguar them for future generations yes \square ; no \square if no see question 4, if yes, at which level		(a)	Does	your	fiscal	framewor	rk provid	le in	centives		_	
an adequate long term land use planning legal framework in order to safeguar them for future generations yes \square ; no \square if no see question 4, if yes, at which level		(b)	Does	your	fiscal	framewo	rk provid	de in	ncentives			•
	(3)	an ather	adequat m for fu o see qu	te long iture go uestion	term lar eneration 4,	nd use plan				n orde	er to s	afeguard
$local \square$; regional \square ; national \square ; international \square						□;	natio	onal 🗆	l ;	i	nterna	itional 🗖

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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.

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.

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.

<u>Information framework indicators</u>

(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 \square ; <i>if yes</i> ,	no 🗅						
	metals \square ; industrial minerals \square ; construat which level: local \square ; regional \square ; national \square ; are these data publicly available <i>if yes</i> , where	international ☐ yes ☐; no ☐						
	and on which level: local □; regional □; national □;	international \Box						
	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 if yes,	yes □; no □						
	ores □; metals □; industrial minerals □; construct provided by whom	ion materials 🗖						
	at which level: local \square ; regional \square ; national \square ;	international \Box						
	are these data publicly available if yes, where	yes □; no □						
	and on which level: local \square ; regional \square ; national \square ;	international						
(c)	primary raw materials production statistics if yes,	yes □; no □						
	ores \square ; metals \square ; industrial minerals \square ; construction provided by whom	materials \Box						
	at which level: local □; regional □; national □;	international 🗖						
	are these data publicly available $yes \square$; if yes, where $\underline{}$	no 🗖						
	and on which level: local \square ; regional \square ; national \square ;	international						

	()	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 \Box 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:
		local \square by [%] of which [%] are recycled material; regional \square by [%]of which [%] are recycled material;
		national \square by [%] of which [%] are recycled material
		global by [%] of which [%] are recycled material
		industrial minerals □ specify:
		meeting demands:
		local \square by [%] of which [%] are recycled material regional \square by [%]of which [%] are recycled material
		national \Box by[%] of which[%] are recycled material
		global D by[%] of which[%] are recycled material
(5)		tailed geoscientific knowledge basis on resources and reserves publicly ailable.
	(a)	Are standardised statistical and classification codes used? yes □; no □
		if yes, which PERC \square ; UNFC \square ; JORC \square
	(1.)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	others □ please specify
	(b)	Are the following maps available? Geological maps, digital: if yes: scale:; coverage land area [%] Geochemical / mineralogical, digital: if yes: scale:; coverage land area Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area [%]
	(b)	Are the following maps available? Geological maps, digital: if yes: scale:; coverage land area [%] Geochemical / mineralogical, digital: if yes: scale:; coverage land area Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area [%] 2-D minerals map, digital: yes □; no □
	(b)	Are the following maps available? Geological maps, digital: if yes: scale:; coverage land area [%] Geochemical / mineralogical, digital: if yes: scale:; coverage land area Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area [%]
	(b)	Are the following maps available? Geological maps, digital: if yes: scale:; coverage land area[%] Geochemical / mineralogical, digital: if yes: scale:; coverage land area[%] Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area[%] 2-D minerals map, digital: if yes: scale:; coverage land area[%] 3-D minerals map, digital: if yes: scale:; coverage land area[%] if yes: scale:; coverage land area[%]
	(b)	Are the following maps available? Geological maps, digital: if yes: scale:; coverage land area [%] Geochemical / mineralogical, digital: if yes: scale:; coverage land area Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area [%] Geophysical / Aerogeophysics, digital: if yes: scale:; coverage land area 2-D minerals map, digital: if yes: scale:; coverage land area [%] 2-D minerals map, digital: yes □; no □ if yes: scale:; coverage land area [%]

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? $yes \ \square; \qquad partly \ \square \qquad no \ \square$
	if yes or partly: which type of map:;
	scale:; implemented to[%]
	if yes, do they cover information on (multiple responses possible):
	ores / metals \square ; industrial minerals \square ; construction materials \square ;
	quality \square ; thickness \square ; overburden \square ; ground water situation \square ; others \square specify
	outers — speerry
(8)	Does land use planning respond to national needs? yes \square ; no \square
	if yes, with regards to:
	demographic change: yes \square ; no \square local \square ; regional \square ; national \square
	population density: yes \square ; no \square
	local \square ; regional \square ; national \square
	Has your land use planning system benefitted from the results as e.g. provided by
	EU co-funded projects ¹¹ yes \square ; no \square
	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 \(; \) regional \(; \) specify: regional \(\) specify: meeting demands: local \(; \) regional \(

 11 $\,$ For example projects like EuroGeoSource, OneGeologyEurope and Promine. 9

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.

application co.	mpiled and prov		minimum requi	rements	for the
a) for minerals	exploration pe	rmitting process?	у	es □;	no 🗖
if yes: is it pro	vided on:		·		
request □;	online \square ;	other \square ; specify $_$			
b) for minerals	s extraction peri	mitting process?	y	es □;	no 🗖
if yes: is it pro	vided on:		-		
		other \square ; specify $_$			
authorities inv		y arrangements be larify the detailed off meeting")?			
		rmitting process.	v	es □;	no 🗆
if yes: is it pro	• •	rimeting process.	,	c s _ ,	no –
		others \square specify			
		s involved in the pr			
Is it structured		s my or year m ene pr			
		parallel asse	ssment \square :	ne-ston-	shop 🗆
Number of pul	olic consultation	ns:	, o	ne stop	ыор —
b) for minerals	s extraction peri	mitting process.	v	es □;	no 🗖
if yes: is it pro	-		J	,	
		others □ specify_			
-		s involved in the pr			
Is it structure a		5 111 (51) 54 111 1110 P 1			
		parallel asse	ssment \square :	ne-ston-	shop 🗆
		ns:			snop —
(12) Average time the complete a a) for minerals Years	frame for granti pplication. s exploration per s extraction peri	ing the authorizatio rmitting process. Month mitting process.		ne submi	

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); [\notin annum]
a); b); c); d); [€exploration phase]
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 □ <i>if yes</i> : please describe briefly:
(17)Percentage of authorization/permitting decisions subsequently challenged at Court[%]
average time delay due to court case [70]
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 \square ; NIMBY principle \square ; occurrence of protected species not mentioned in the EIA \square ; health and safety concerns \square specify:; others \square specify:;

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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.

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 ext	raction sites i	inside Natura 2	000 areas		
a) before the d	eclaration of	the areas:			
b) after the dec	claration of th	ne areas;			
Number of nev	w permits / en	ılargement peri	mits inside N	atura 2000:	
	-	tions:			
(20) Percentage of	court cases re	elated to Natura	a 2000.		
in 2009	[%];	in 2010	[%];	in 2011	[%];
no information	available 🗆				