Minerals policy governance in Europe: good practice examples in EU Member States

Deliverable 2.2, Version 1
Authors:
Andreas Endl, Eric Thomas Mulholland, Gerald Berger (Vienna University of Economics and Business)
With contributions by:
Michael Tost (Montanuniversität Leoben), Martha Bicket (Policy Studies Institute, University of Westminster)

Project coordination and editing provided by
Gerald Berger & Andreas Endl
Institute for Managing Sustainability, Vienna University of Economics and Business
Welthandelsplatz 1, A-1020 Vienna, Austria
Phone: +43-1-31336-0
Email: info@min-guide.eu
www.min-guide.eu/

Manuscript completed in December, 2016.

ACKNOWLEDGEMENT & DISCLAIMER
This publication is part of a project that has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 689527.

This publication reflects only the author’s view. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the information contained in this publication.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.
MIN-GUIDE Project Partners

Institute for Managing Sustainability, Vienna University of Economics and Business (Coordinator)
Vienna, Austria

Policy Studies Institute, University of Westminster
London, United Kingdom

Montanuniversität Leoben
Leoben, Austria

Luleå University of Technology, Department of Civil, Environmental and Natural Resources Engineering
Luleå, Sweden

National Technical University of Athens
Athens, Greece

Instituto Geológico y Minero de España
Madrid, Spain

University of Aveiro
Aveiro, Portugal

GOPA Com.
Brussels, Belgium

University of Zagreb – Faculty of Mining, Geology and Petroleum Engineering
Zagreb, Croatia

Ministry of the Employment and the Economy
Helsinki, Finland
# Table of Contents

**LIST OF ACRONYMS** .......................................................................................................................... 5  
**INTRODUCTION** ................................................................................................................................. 1  
**EUROPEAN CHALLENGES FOR MINERALS POLICY AND GOOD GOVERNANCE** .......................... 2  
  **RATIONALE FOR GOOD GOVERNANCE APPROACH IN MINERALS POLICY** .................................. 4  
  **SELECTION OF GOOD PRACTICE CASES** .......................................................................................... 6  
**1. STRATEGIC POLICY FRAMEWORKS** .............................................................................................. 7  
  **1.1. CASE 1 - SWEDEN: SWEDEN'S MINERALS STRATEGY** ................................................................. 9  
  **1.2. CASE 2 – PORTUGAL: POLICY AND REGULATORY FRAMEWORK ON MINERAL RESOURCES** .......... 12  
  **1.3. CASE 3 - FINLAND: SUSTAINABLE EXTRACTIVE INDUSTRY ACTION PLAN** .................................. 16  
**2. STAKEHOLDER INVOLVEMENT** ..................................................................................................... 19  
  **2.1. CASE 1 - AUSTRIA: RAW MATERIAL ALLIANCE** .......................................................................... 21  
  **2.2. CASE 2 - FINLAND: NETWORK FOR SUSTAINABLE MINING** ......................................................... 25  
  **2.3. CASE 3 - GREECE: NATIONAL COMMITTEE FOR MINERAL RESOURCES** ................................. 28  
**3. PERMITTING PROCEDURES** ........................................................................................................... 30  
  **3.1. CASE 1 - IRELAND: LICENSING SYSTEM FOR EXPLORATION** .................................................... 31  
  **3.2. CASE 2 - DENMARK: PARALLEL PROCESSING OF PERMIT APPLICATIONS FOR EXTRACTION** .......... 35  
  **3.3. CASE 3 – BELGIUM/FLANDERS: ONE-STOP-SHOP FOR PERMITTING PROCEDURES** .................. 38
# List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIP</td>
<td>European Innovation Partnership</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>MIN-GUIDE</td>
<td>Minerals Policy Guidance for Europe (EU-funded Horizon 2020 project)</td>
</tr>
<tr>
<td>MS</td>
<td>Member State</td>
</tr>
<tr>
<td>NIMBY</td>
<td>Not In My Back Yard</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>R&amp;D&amp;I</td>
<td>Research, Development and Innovation</td>
</tr>
<tr>
<td>SIP</td>
<td>Strategic Implementation Plan</td>
</tr>
<tr>
<td>SITRA</td>
<td>Suomen itsenäisyyden juhlarahasto (Finnish Innovation Fund)</td>
</tr>
<tr>
<td>SLO</td>
<td>Social Licence to Operate</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>WP</td>
<td>Work Package</td>
</tr>
</tbody>
</table>
Introduction

MIN-GUIDE: a brief introduction

The Horizon 2020-funded MIN-GUIDE project (www.min-guide.eu) aims to support the secure and sustainable supply of minerals in Europe through the development of a major new online repository, outlining guidance and the latest in good practices for minerals policy decision makers. The project’s key objectives are (1) to provide guidance for EU and EU Member States’ minerals policy, (2) to facilitate minerals policy decision-making through knowledge co-production for transferability of best practice minerals policy, and (3) to foster community and network building for the co-management of an innovation-catalysing minerals policy framework. MIN-GUIDE will profile relevant policy and legislation in Europe, identifying innovation-friendly good practices through quantitative indicators, qualitative analysis of country-specific framework conditions, and the compilation of minerals statistics and reporting systems. These insights will form the basis of the project’s key output: an online Minerals Policy Guide (referred to in this document as ‘the Policy Guide’).

The project is divided across 8 work packages (WPs) (see Table 1). The content-rich work packages are WPs 2-6: WP2 will produce a comprehensive, and well-structured, knowledge repository of EU level and EU Member States’ mineral policies and governance frameworks; WPs 3-5 will identify, benchmark, and elaborate good practices on policy innovation capacity according to the different activities along the whole mining value chain (permitting, exploration, extraction, cross-border exploitation, processing, waste management, recycling, remediation and mine closure); and WP6 will review the mineral data base and recommend standardisation and systematic reporting requirements for EU Member States.

Table 1: The MIN-GUIDE work packages

<table>
<thead>
<tr>
<th>Common approach</th>
<th>WP1</th>
<th>Minerals policy guide development and conceptual basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core content</td>
<td>WP2</td>
<td>Stock-taking of EU and EU MS mineral policy</td>
</tr>
<tr>
<td></td>
<td>WP3</td>
<td>Innovative exploration and extraction</td>
</tr>
<tr>
<td></td>
<td>WP4</td>
<td>Innovative processing</td>
</tr>
<tr>
<td></td>
<td>WP5</td>
<td>Innovative waste management and mine closure</td>
</tr>
<tr>
<td></td>
<td>WP6</td>
<td>Raw materials knowledge and information base</td>
</tr>
<tr>
<td>Cross-cutting management and engagement</td>
<td>WP7</td>
<td>Stakeholder management, communication and dissemination</td>
</tr>
<tr>
<td></td>
<td>WP8</td>
<td>Project management</td>
</tr>
</tbody>
</table>
Purpose and structure

The purpose of this report is to highlight some practical examples of good practices in minerals policy governance among the EU Member States. Thus, it informs public policy decision-makers and stakeholders working in the mining sector about how to (re)design minerals policy governance instruments and mechanisms in order to achieve larger degrees of policy coherence, integration, legitimacy and transparency overall. To this end, the good practice cases outline key aspects, which provide in-depth comprehension and understanding on how the policy works, as well as identify crucial factors that led to the preferred outcomes of the policy.

However, there are certain constraints to the extent that policy learning and transfer is possible in the context of synthesised good practice information in this report. In particular, insufficient attention paid to the differences between the economic, social, political and ideological frameworks in the transferring and the borrowing country, is a crucial aspect that cannot be covered by this report. The MIN-GUIDE project addresses these limitations by running a series of Policy Laboratory Workshops that enable a hands-on learning process for participants focusing on 1) an interactive process that puts the learners’ role, both good practice presenter and participant, in the centre, and 2) pre-defines the process, but leaves freedom to learners in defining goals and content.

The information gathered in this report is based on several sources and validated by stakeholders:

1. Desk-research on existing minerals policy governance instruments and mechanisms synthesised in the report D2.1 Stock-taking on EU and EU MS mineral policy; and
2. Interviews with EU Member State minerals policy makers
3. Inputs and discussions that have taken place during two major MIN-GUIDE events: the 1st Policy Laboratory Workshop “Good Governance in Minerals Policy in Europe” (Vienna, October 4-5 2016), as well as the 1st MIN-GUIDE Annual Conference “Minerals Policy and Governance in Europe” (Brussels, Dec 2 2016).

The first section of this report outlines major challenges for minerals policy in Europe, the rationale behind the MIN-GUIDE good governance approach, and how this approach is related to the broader framing of the overarching objective of the MIN-GUIDE project, “enabling an innovation friendly minerals policy framework in Europe”.

The second part is dedicated to the description of 9 good practice cases on minerals policy governance in EU Member States, which are divided into three major parts: 1. Strategic national minerals policy frameworks, 2. Permitting and licensing procedures for exploration and extraction, 3. Instruments for stakeholder involvement

European challenges for minerals policy and Good Governance

A prerequisite for fostering the sustainable and secure minerals supply in Europe is, among other aspects, a policy framework promoting innovative approaches that address challenges in the mining value chain. Challenges in primary mineral production, such as local community conflicts and public
acceptance of mining site operations or rapidly changing legislative frameworks, are manifold and prevalent in many EU Member States.

Establishing effective, coherent and innovation friendly minerals policy frameworks guide policymakers and stakeholders on sectoral, cross-sectoral, strategic, institutional aspects in a given policy field, such as minerals policy in the EU and its Member States. However, EU Member States are confronted with a number of challenges and are, thus, often lengthy and inefficient. Information and data on raw materials, where it exists, is scattered across different institutions and stored in various formats. This lack of harmonisation and standardisation has a negative effect on permitting procedures and policies.

In the context of the MIN-GUIDE, a number of challenges for minerals policy governance, addressed by the MIN-GUIDE approach for Good Governance, are highlighted below:

- Designing the right policy instruments or policy mixes to meet the objectives envisaged in the first place.
- Cross-sectoral integration and coherence of policies that are the responsibility of different ministries and policy units within one ministry.

---

• Collaboration and exchange between different tiers of government (i.e. EU, national, regional and local) in designing and delivering minerals policies.
• Implementation of comprehensive monitoring and policy evaluation tools (e.g. minerals policy scoreboard).
• Involving the right mix of stakeholders (e.g. industry, research, CSOs) that are crucial in the design and delivery of policies, as well as designing the right processes for effective dialogue and exchange.

Rationale for Good Governance approach in minerals policy

The concept of Governance refers to the process of governing, the managing, steering and guiding of public affairs by governing procedures and institutions (e.g. public authorities or other stakeholders), especially in relation to public policy decision-making. It includes processes that go beyond, for example, formal planning and permitting procedures, but are in place to achieve general coordination of policy decision-making or involvement of stakeholders.

“Good Governance”, as a concept for guiding public policy decision-making, is an important prerequisite for achieving general outcomes, such as legitimacy, policy coherence and integration. In that sense, the integration of ‘Good Governance’ in general policy decision-making provides enabling conditions for the design of policy instruments that target innovation in the mining sector.

In this regard, the MIN-GUIDE Approach for Good Governance is comprised of a set of building blocks that have been derived from both general EU governance frameworks,\(^5\) as well as mining sector specific ones\(^6\). The MIN-GUIDE approach for Good Governance and its related policy instruments and processes are outlined in figure 1 below.

![MIN-GUIDE Approach for Good Governance](image)

**Figure 1: MIN-GUIDE Approach for Good Governance: major building blocks and related policy instruments and mechanisms**

\(^5\) EU better regulation communication, 2015; EU Treaty and the forthcoming EC Communication on 2030 Agenda for SD; EU White paper for Good Governance, 2011

\(^6\) European Innovation Partnership SIP, 2013; Raw Materials Initiative, 2008
The MIN-GUIDE project team has more closely looked into good practice cases for 1) Strategic Policy Frameworks, 2) Stakeholder Involvement, and 3) Permitting Procedures. In its initial stock-taking and mapping for minerals policy governance instruments and mechanisms (see figure 1) the MIN-GUIDE project did not focus on permitting procedures for exploration and extraction. Instead, these activities have been carried out by the “Study on Legal framework for mineral extraction and permitting procedures for exploration and exploitation in the EU” (MIN-LEX). Thus, the MIN-GUIDE team was able to build upon and further elaborate on its good practice cases based on prior and preliminary results of the MIN-LEX study. In general, the reasoning for focusing on these three policy governance areas is outlined below:

1) **EIP SIP focus**: Clear statement in the EIP Strategic Implementation Plan action area “II.A. Improving Europe’s raw materials framework conditions” (i.e. Action area n° II.1: Minerals Policy Framework: incorporates both actions items on “national minerals policies against recommendations of Raw Materials Initiative for improvement” and “transparent and streamlined permitting procedures”; Action area n° II.3: “Public Awareness, Acceptance and Trust” is relevant for stakeholder involvement);

2) **Current level of importance in EU Member States**: i.e. several EU Member States such as Italy, Romania or Czech Republic are in the stage of developing National Mineral Strategies; the same is true for authorisation processes (permitting and licensing) for minerals exploration and extraction.

3) **MIN-GUIDE Scope**: For the purpose of a more in-depth elaboration of a limited number of cases given the project’s scope and resources available.

In doing so, the MIN-GUIDE team has selected and elaborated on three good practice cases for each of these policy governance areas (see figure 2): 1. Strategic Policy Frameworks, 2. Stakeholder Involvement, 3. Permitting Procedures.

**Figure 2: Selection of MIN-GUIDE policy governance streams**
Selection of good practice cases

For these three policy governance streams the MIN-GUIDE team selected 3 good practice cases, respectively: During the first stage of identifying good practice cases, the project team made use of the extensive stock-taking information on EU Member state minerals policy governance mechanisms and instruments gathered in Deliverable 2.1. Based on this comprehensive mapping of approaches in EU Member States, the team conducted a series of interviews with national minerals policy makers responsible for the design and implementation of governance instruments to obtain in-depth understanding of potential good practice cases. The final selection of good practice cases in this report is the result of the MIN-GUIDE stock-taking report as well as already identified good practice cases from other sources (7) such as the report “Evaluation and exchange of good practice for the sustainable supply of raw materials within the EU”. The final selection of good practice cases for each of the MIN-GUIDE policy governance streams is described below (Figure 3: Good practice cases for MIN-GUIDE policy governance streams.

- **1. Strategic Policy framework**
  - Case 1: Sweden’s Minerals Strategy (SE)
  - Case 2: Strategic policy and regulatory framework on mineral resources (PT)
  - Case 3: Sustainable Extractive Industry Action Plan (FI)

- **2. Stakeholder involvement**
  - Case 1: Austrian Raw Material Alliance (AT)
  - Case 2: Finnish Network for Sustainable Mining (FI)
  - Case 3: National Committee for Mineral Resources (GR)

- **3. Permitting Procedures**
  - Case 1: Licensing system for exploration (IE)
  - Case 2: Parallel processing of permit applications for extraction (DK)
  - Case 3: One-stop-shop for permitting procedures (BE-Flanders)

Figure 3: Good practice cases for MIN-GUIDE policy governance streams

---

In a second step, the project team elaborated in-depth good practice case descriptions outlined in this report based on 1) existing information, 2) interviews with responsible policy makers and experts, and 3) the results gathered at the 1st MIN-GUIDE Policy Laboratory and the MIN-GUIDE Annual Conference. To this end, the good practice cases outline key aspects, which provide in-depth comprehension and understanding on how the policy works, as well as identify crucial factors that led to the preferred outcomes of the policy. More detailed in-depth descriptions and respective key aspects of these good practices cases can be found in the following chapters of this report.

1. Strategic Policy Frameworks

Complex and crosscutting requirements and procedures characterise mining sector public policy and governance, since underlying provisions and other considerations evolved from disparate legislative frameworks governing different policy areas (i.e. mining activity, quarrying, land use, safety and environmental legislation and provisions governing poisonous and otherwise dangerous substances etc). Strategic Policy Frameworks describe integrated and coherent approaches to address the above-mentioned shortcomings of previous, more ad hoc policy responses regarding the challenges of primary mineral supply.

In this context, we perceive National Action Plans, Strategies or integrated regulatory frameworks (i.e. a set of legislation being coherent and harmonised towards concrete objectives and targets) as Strategic Policy Frameworks. More specifically, Strategic Policy Frameworks share a streamlined policy instrument mix (e.g. individual actions in a National Action Plan) and the coordination of multiple goals so that different instruments support, rather than hinder one another in the pursuit of those goals. These Strategic Policy Frameworks also set up responsibilities and governance arrangements for minerals policy in a country, which facilitates effective steering requirements for the implementation of minerals policy.

Strategic Policy Framework can provide other benefits such as greater stability in the regulatory system or planning based on longer-term objectives which are of considerable importance to the industry: Given the long lead times over the period from initial geological exploration towards actual production, long-term predictability is an important factor for investment in mining and metallurgy.

The Raw Material Initiative recommended the design of National Mineral Strategies, but it was not obligatory to adopt such strategies at the national level. In total, 10 EU Member States have designed a National Mineral Strategies to better accommodate the EU minerals policy framework.

---

8 European Commission, 2014. Evaluation and exchange of good practice for the sustainable supply of raw materials within the EU.
10 Austria, Finland, France, Germany, Greece, the Netherlands, Portugal, Sweden, and the United Kingdom have developed their own mineral strategies in the field of non-energy and non-agricultural raw materials.

In the following paragraph, the MIN-GUIDE project presents three good practice cases for Strategic Policy Frameworks including a reference to their selection:

- **Case 1: Sweden’s Mineral Strategy**: The National Mineral Strategy is a good practice example for Strategic Policy Frameworks due to its communication approach, which enables a participatory and stakeholder centred approach: A certain number of communication mechanisms and tools for involving other ministries and stakeholders during the design stage created an arena and culture for participatory decision-making, which facilitated trust and cooperation among actors.

- **Case 2: Portuguese Policy and Regulatory Framework on Mineral Resources**: The Portuguese case is a good practice example for integrating land use planning policy and mining policy at the national, regional and local level: In this regard, three revised and updated legislative instruments form a tripartite approach towards a new strategic legislative framework. This strategic legislative framework follows the overarching objective of taking into consideration mineral resources next to other natural resource uses (i.e. mining land uses next to other land-use types, such as forestry or agriculture).

- **Case 3: Finland’s National Action Plan**: The Action Plan’s collaborative approach for implementation, involving a multitude of stakeholders in implementing measures, combined with high level political commitment, is a good practice example for achieving policy outcomes ‘on the ground’.

<table>
<thead>
<tr>
<th>Instrument type:</th>
<th>National Mineral Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>(2013) on-going</td>
</tr>
<tr>
<td>Objective:</td>
<td>The overall objective of Sweden's Minerals Strategy is to increase the competitiveness of the mining and minerals industry. In this context, Sweden's mineral assets are to be exploited in a sustainable way in the long-term, with consideration for ecological, social and cultural factors, so that natural and cultural environments are preserved.</td>
</tr>
<tr>
<td>Main responsible organization:</td>
<td>Ministry of Enterprise and Innovation</td>
</tr>
</tbody>
</table>


General description:

The formulation of the Swedish Minerals Strategy was initiated in 2011 by the former Ministry of Enterprise, Energy and Communications (renamed into the Ministry of Enterprise and Innovation) together with the Geological Survey of Sweden. The Strategy was a response to the European Commission Raw Materials Initiative, as well as increased metal demand, which provided Sweden’s economy with an opportunity for regional and national growth in the mining sector.

Sweden’s Minerals Strategy establishes five key objectives that are supplemented by eleven action points. A total of nineteen complementary measures have been proposed to help realize the key aims of the strategy and these cut across a diverse range of relevant policy areas. The Strategy
addresses a few main themes: (i) improving the legal framework in terms of its correct and consistent enforcement, such as through the development of guidelines to help stakeholders interpret the legislation; (ii) improving the governance of mining activities, for which seven measures have been developed to support enhanced interaction and coordination between government, industry and other stakeholders; (iii) strengthening the information framework and the knowledge base in relation to raw materials, particularly in relation to issues around resource efficiency, such as assessments of mining and recycling potential, development of shot rock production data, and the assessment of critical raw materials; (iv) improving land use planning processes, as well as the permits and authorization process.

Stakeholders were invited to a series of open events and provided written feedback on key issues the Strategy should address. Over one hundred organizations contributed to the formulation phase and a vast array of measures was proposed. This led to further stakeholder discussions assessing the initial inputs and refining the draft Strategy.

The Strategy is supported by a budget that sufficiently funds a number of selected measures, and is overseen by a stakeholder group chaired by the Minister for Enterprise that is tasked to perform monitoring activities and provide advisory inputs. The Ministry of Enterprise and Innovation had a role in coordinating and overseeing the Strategy. A range of stakeholders have been appointed to implement the individual measures, including the Geological Survey of Sweden, the Swedish Environmental Protection Agency, the Board of Housing, Building and Planning, the County Administrative Board, the Agency for Economic and Regional Growth, the Agency for Growth Policy Analysis, the Programme for Vehicle Strategic Research and Innovation, and Swedish Research Council. Moreover, a wide range of interest groups will engage in the development and implementation of the measures.

One of the overall impacts of the introduction of the Strategy is that it has better positioned a range of governmental bodies, including the Geological Survey of Sweden, industry and other stakeholders in their joint oversight and coordination of issues and initiatives of strategic importance to mining sector.

**Key aspect 1: Good communication approach between all involved stakeholders during design and implementation**

The Swedish Minerals Strategy has a major focus on improving the governance of mining activities: Seven out of nineteen measures have been developed to support enhanced interaction and coordination between government, industry and other stakeholders. More specifically, the strategy makes it clear that cooperation between central government, municipalities, regions, the business sector and interest groups creates the conditions needed to improve local and regional attractiveness and national growth. Thus, open and inclusive communication, with a clear distribution of responsibility among stakeholders, is an important key aspect of the strategy, stimulating implementation of the proposed actions.

Three success factors summarise the communication approach during the design and implementation stage of the strategy:

1. **Understanding and recognising the societal need for minerals and the importance of the mining sector for socio-economic development.**
2. **Government Commitment and activities for sincere communication approach.**
3. **"Two-way" communication model: information is not just communicated from the top
down, but also from the bottom up.

These success factors show themselves through a number of concrete activities: mechanisms and processes for stakeholder involvement, as well as for creating a social license to operate. Some concrete examples are listed below:

- The Strategy applied a number of tools, in order to guarantee input from, and communication between, all involved stakeholders during the design stage of the strategy: In doing so, the Minister for Enterprise, Energy and Communications officially invited all interested stakeholders to take part in the development of the strategy. Stakeholders were able to do so in two ways: through written consultation processes (40 written contributions), as well as four thematic dialogue meetings (400 participants in total). The workshop-like meetings, which took place in different regions of Sweden, enabled participants to openly discuss on objectives and actions included in the strategy. The outcomes of written consultations, as well as the discussions during the dialogue meetings, feed into the development of the National Mineral Strategy's objectives and actions.

- Strategy actions were headed by different governmental authorities (e.g. Geological Survey, Environment Protection Agency) that were responsible for implementation. These authorities strongly rely on a two-way communication approach on how actions are implemented. One concrete example is the development of a “manual for consultation” between the reindeer and mining industries during permitting processes (headed by the Norrbotten County Administrative Board). As a baseline for developing such a manual, the involved stakeholders quickly realised that there was a need for designing measures and principles for a functional communication between indigenous people, reindeer industry and the mining industry. The approach to communication between these two stakeholder groups is crucial in resolving land use conflicts.

- One of the actions headed by the Geological Survey of Sweden, in collaboration with institutions working within the school education system, is to increase the knowledge about the role of geology in society and highlight the industry as a workplace: (1) teaching material for school teachers and guidance for where to put it in the curriculum; (2) PC game “Minecraft” with the modification “BetterGeo”.

- One of the Strategy's action for “Dialogue and Cooperation” is the setup of a National Minerals Forum to promote dialogue, knowledge and coordination among stakeholders: The Forum is a yearly conference open for everyone to attend and learn about the Strategy's progress on the implementation, as well as updates and possibilities for involvement.

Key aspect 2: Integration and linkage to other strategies

Another key aspect is the integration and linkage of the Minerals Strategy to other policy sectors. Particularly, coordinating actions of the Minerals Strategy with other national policy strategies’ actions (e.g. New industrialisation strategy) is a prerequisite for streamlining and harmonising different policy sector’s efforts.

Some supportive actions for a more integrated approach are:

- **The inclusion of several ministries in the design stage of the strategy:** Ministry of the Environment, Ministry of Culture, Ministry of Education and Research, Ministry of Employment, Ministry for Infrastructure. Essentially, several government departments
(across ministries) have been involved during the strategy design and, thus, are aware of the importance for minerals and the mining sector, and, in particular, the Strategy’s objectives and actions.

- **Approval of all affected ministries**: Before any decisions on national policy strategies (e.g. Minerals Strategy) can be made, all affected Ministries have to give their approval. Different ministries have their special interests to consider, or are responsible for different public authorities. Therefore, finding a common ground for objectives and agreeing on implementation of certain actions can be a time-consuming and challenging task before approval.

- **Adaptive, flexible and coordinated implementation**: For example, in order to facilitate actions in the “New industrialisation strategy – Smart Industry”, the National Minerals Strategy foresaw an action for mapping high-tech minerals and metals (secondary and primary resources).

### 1.2. Case 2 – Portugal: Policy and Regulatory Framework on Mineral Resources

<table>
<thead>
<tr>
<th>Policy and Regulatory Framework on Mineral Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Map of Europe highlighting Portugal" /></td>
</tr>
</tbody>
</table>

**Instrument type:**

Legislative framework

**Established:**

(2015) on-going

**Objective:**

The General Directorate for Energy and Geology (DGE, Portuguese Mining Authority) fosters a land use planning policy that clearly includes mineral resources in harmonization with other uses of rural soil (recognizing their parity and co-existence with other natural resources), avoiding conflicts in the
use of soil, and preventing uses that might compromise/sterilise the current and future access to deposits and known mineral occurrences.

To this end, DGEG implemented and revised a legislative tripartite approach to harmonise mining policy with land use policy to ensure access to raw materials. This approach covers the following legislative instruments:

- In 2012, the DGEG took the initiative of proposing the revision of the mining law, and the Portuguese Government accepted and launched the new Mining Act in 2015, which is the framework diploma for the geological resources activity. The regulation diplomas are being finalised and will be published in 2017.
- Two new land use diplomas were also launched in 2015: "Legal Framework of Land Use Management Tools", and the "Criteria for the soil classification".

**Main responsible organization:**

General Directorate for Energy and Geology

**Further information**

www.dgeg.pt

**General description:**

During 2015, the General Directorate for Energy and Geology established and updated a series of three legislative instruments that form a tripartite approach towards a new strategic legislative framework for mining and land use policy in Portugal. These three legislative instruments are the “Mining Act” (Law No 54/2015), the “Legal Framework of Land Use Management Tools” (DL 80/2015), and the “Criteria for the soil classification” (DR 15/2015).

**Key aspect 1: Social openness and responsibility**

Social openness and responsibility takes into account both the increase of corporate social responsibility, as well as the general public’ awareness and trust in the mining sector, in order to improve quality of life and local programmes.

Some concrete actions supporting these two objectives are:

- **Involvement of municipalities in licensing/permitting procedures:** DGEG supports the consultation processes for local authorities and communities during the licensing procedures of a mine project (exploration and exploitation). The municipalities in which a project is going to be developed are directly consulted by DGEG during the license/permitting procedures, whereby their opinions are analysed and taken into account.

- **Involvement of other stakeholders:** Prerequisites, defined by the new Mining Act are 'systems' or protocols for sharing information to be understandable by different stakeholders. In order to keep other stakeholders informed about recent mining activities
(i.e. licensing procedures for exploration and exploitation), DGEG publishes the main conditions of the application on the Government Journal (www.dre.pt) and in two national and local newspapers. During a 30-day working period after the last newspaper publication, anyone interested can issue statements on these projects that are taken into account in the final evaluation procedure.

In order to increase general knowledge and awareness on geological resources, DGEG organizes workshops and conferences to demonstrate the importance of geological resources to the broader public, and, in particular, to local communities.

- **Redirecting royalty revenue to regional development:** Due to the allocation of a part of the royalties value (up to 25% of the total amount of the royalties due to the Government may be deducted and applied to local programs by the mining companies) towards regional investment, communities become more open, and less opposed, to mining activities. Since 2012, DGEG established, in all contracts signed between the Government and mining companies, that part of the public finances coming from mining project royalties is directed towards projects and programs (Social; Environmental; Technical innovation and technology programs, etc.) for the benefit of local communities in the regions in which mining occurs. This applies to the exploitation phase for which the value of exploitation royalties may be subject to a deduction up to 25% of the amount receivable is defined within the contract and within the following limits: Depending on the project, a pre-defined amount of deducted royalties need to be spent on i) local/regional social responsibility programmes, ii) local, regional or national environmental programmes and geological and mining heritage projects, iii) projects proposed by local authorities (municipalities, districts) covered by the area of the mining concession, iv) R&D internal mining projects focused on mineral optimization of metal recovery.

**Key aspect 2: Concept of sustainable mining (principle of parity and co-existence)**

With regard to the Portuguese legislative framework, the concept of sustainable mining includes the principle of parity and co-existence of mineral resources next to other natural resource uses (i.e. mining land uses next to other land-use types, such as forestry or agriculture).

A number of activities support the implementation of this principle in strategic legislative instruments:

- **Harmonisation of mining and land use policies during the policy design stage:** The goal in the harmonisation and policy integration process is to (1) foster a land use planning policy that clearly includes mineral resources in harmonization with other uses of rural soil (recognize their parity and co-existence with other natural resources), and (2) avoiding conflicts in the use of soil, and preventing uses that might compromise/sterilise the current and future access to deposits and known mineral occurrences.

- **DGEG involvement in land use planning policy design and implementation at all levels:** DGEG participates on the land use planning management system at 3 levels: national, regional and municipal, and has been responsible for overseeing the implementation of the policy and ensuring the implementation of land use plans at the municipal level, ensuring that the plans properly cover mining and quarrying activities, as well as other potential
geological areas based on information available from the Portuguese geological survey.

At the national level: Definition of the main principles and policies concerning access and use of mineral resources and the development of mining and quarrying activities. DGGG participates in the design of the National Policy for Land Use Planning, which is a territorial development instrument of strategic nature that establishes land use options with relevance to the organisation of the national territory. At the national level, we consider the easements and restrictions of public utility (all areas with issued permits and also the designed reserved areas and Captive areas).

In this regard, two recently established legislative instruments enforce the importance of geological resources and outline the compatibility with agriculture and forest land uses: (1) DR 15/2015 – “Criteria for the soil classification”, (2) DL 80/2015 – “Legal Framework of Land Use Management Tools”. In particular, DR 15/2015 "Criteria for the soil classification" clearly states that all land use activities classified for rural soil may be compatible with each other as long as they happen in a previously scheduled land use plan (i.e. regional and the municipal level).

Sectorial plans constitute an opportunity to stress the importance of geological resources and streamline these into regional and the municipal land use plans within the land use policy framework (i.e. DL 80/2015 and DR 15/2015). These plans integrate mapping and knowledge levels for geological resources into the regional and the municipal land use plans. The Portuguese Partnership on Mineral Resources was launched in 2015, aiming to reinforce the ability of national and local actors to foster the sustainability and efficiency of the use of geological resources, for spatial planning of the territory and economic development of the country.

At the regional level: Implementation of the principles and policies take into account the geological knowledge and the potential of each region. DGGG is involved in the Assessment Commission for spatial planning decision-making processes on Regional Land Use Plans (PROTs).

At the local level: DGGG is involved in the design of the Municipal Director Plan (PDM, local level spatial planning instrument) to (1) safeguard existing geological resources within the municipality, and (2) ensure that the areas where the known geological resources exist are included in all rural soil. In the PDM, classification and qualification of land uses are defined and mapped based on PDM regulation (outlining the variety of land use types eligible for the area), land use maps, and maps informing about land use constraints.

Participation of DGGG in spatial planning decision-making processes: The actual decision-making process is led by a regional body (CCDR) that coordinates the Assessment Commission, which is composed of several authorities (i.a. DGGG). The basis for the assessment is the respective Municipal Director Plan (PDM), which is the main instrument of spatial planning at the local level (Mapping, classification and qualification of land uses). The PDM defines areas allocated to geological resources (Spaces of Geological Resources) for exploration and exploitation, indicating areas where the mining activity is the main land use, and others where the development of other activities do not compromise the access to mineral resources. A PDM regulation document is published, providing information about the authorized/conditioned/forbidden activities within the municipality areas.

DGGG started a process to develop a common terminology for the land use municipal plans,
ensuring that a consistent terminology is used to characterise land uses related to raw materials.

1.3. Case 3 - Finland: Sustainable Extractive Industry Action Plan

Making Finland Leader in Sustainable Extractive Industry Action Plan

Instrument type:

Policy implementation plan

Established:

(2013) on-going

Objective:

There was a need in Finland for a more broadly based approach and a strengthened framework for implementing agreed actions in the Minerals Strategy. The National Action Plan meets both these needs, while at the same time promoting coherence and consistency across the various initiatives being undertaken as a result of the Action Plan, which seeks to improve policy and the legislative framework.

Main responsible organization:

Ministry of Employment and the Economy

Further information
The Action Plan has 35 measures, with details of actions to be completed by 2019 and descriptions of longer-term objectives up to 2030. The coverage of the Action Plan includes: the mining industry, aggregates industry, natural stone industry, metal refining, technology and service providers related to extractive industries, public administration, the development of the business environment, development of research and training, and recycling and life cycle aspects. By building on the original national Mineral Resources Strategy in the Action Plan, Finland has achieved a high political profile for the sector through its engagement with a broader public, strengthening its commitment to developing a sustainable industry. It has also developed mechanisms to ensure that the public authorities and industry push through the changes necessary for achieving a globally competitive industry with a high degree of social and political support. In doing so, the Action Plan addresses the broader conditions necessary for competitiveness and sustainability, as well as the specific steps needed for achieving progress.

In order to prioritize actions and monitor progress with the Action Plan, an ‘Extractive Industries Working Group’ has been established under the Ministry of Employment and the Economy, which has representatives from several ministries and other parties. A major task of the Working Group is to ensure a continuation of the dialogue between the various stakeholders, but it is also responsible for collecting data on the implementation of the Action Plan, reporting to ministries on progress, and communicating results, and any requirements for up-dating, to the general public. A major theme of the Action Plan is a systematic approach to promoting sustainability. The Action Plan is a part of the Strategic Programme for the Cleantech Business that is being implemented by the Ministry of Employment and the Economy.

Some of the key themes of the Strategy were strengthening minerals policy, securing the supply of raw materials, reducing the environmental impact of the minerals sector, increasing its productivity, and strengthening R&D capabilities and expertise. However, the situation in Finland changed a few years later: there was a heightened awareness about mining in the media, in politics, and in society, in which attitudes became critical towards it, leading to strong disagreements. As a response, the Prime Minister chaired a high level round table, which was convened in 2012 and included 50 participants from various stakeholder groups. Issues that were brought up during this round table were followed up by ten expert groups (160 participants). Over one hundred propositions were made for action to make the extractive industry more sustainable and competitive. The propositions were broadly accepted, forming the basis for the ‘Action Plan for Development of Sustainable Extractive Industries. One of the benefits of the design process leading up to the Action Plan is that the raw materials industry has a much clearer profile in national policy. Communication has not only improved between the industry and the general public, but also within the sector and between government departments.

Key aspect 1: Network activities between, and among, stakeholders
Networking activities for the involvement of stakeholders during the design and implementation stage cover the following mechanisms and characteristics:

- **Setup of multi-stakeholder working groups during the design stage:** In the initial design of the Action Plan, the ministry decided to set up a total of 10 working groups to identify and further elaborate actions during several meetings. Participation in these working groups was open to anyone with no limitations regarding the organisational background or number of participants allowed to attend. Working group attendance was characterised by a large number and diverse set of experts with different institutional backgrounds.

  More specifically, the Action Plan has led to a better appreciation for the interaction of the various parts of the value chain, as well as the contribution made not only by the mining exploration and extraction companies, but also the aggregate sector (previously not active part of the strategy) and firms involved in processing, providers of technology and those offering related services. This allowed a more coherent and comprehensive view of the industry sector to be developed, as well as the strategic interests and opportunities for the country to be more clearly identified. However, the responsible organisation admitted that more advanced modes of communication would be a means to involve more stakeholders with restrictions in terms of resources (financial and time-wise).

- **Transparent, knowledge-based and facilitated communication:** From the beginning of the working group consultation, participants were informed about the (1) goals of the consultation, (2) the overall process & facilitation, and (3) the further development after the adoption of the document.

  Due to the large number and the crosscutting nature of these working groups, professional and neutral facilitators were present during the whole process. A professional and neutral steering of the consultation facilitated the further development of raised ideas, inclusion of diverse stakeholder views, and a synthesis of the results, which avoided duplication. Furthermore, it supported a communication approach that was based on facts and practical and relevant experiences, in order to address the miscommunication and trust issues. The working groups’ outcomes resulted in a number of suggested actions, which were politically sensitive and, thus, addressed with special care by facilitators and not just put aside (i.e. conflicts of land use and with indigenous people). However, some formulations of actions required compromises and diplomacy, but that was done without losing the original idea of the proposed action from the working group. This transparent and open way of dealing with more contested issues fostered a more trusting and respectful engagement among stakeholders for implementation in later stages.

### Key aspect 2: A collaborative approach for implementation - involving stakeholders in implementing action plan measures

Prior trust in the overall approach, as outlined in key aspect 1, coupled with stakeholder commitment during an early design stage, was a driver for further implementation. The below mentioned activities further outline the features of a collaborative approach for implementation:

- **Stakeholder involvement and high level political commitment for implementation:** The commitment of all involved stakeholders and "will" (to collaborate with stakeholders and see
their role in a collaborative implementation approach) was one of the major drivers for implementing individual actions.

The initial High Level Meeting, where several ministers, as well as high level stakeholder representatives, attended, provided the impetus and showed agreement in the next steps. This consequently provided a mandate for the specialists to work on the design of actions and provided an outlook and security for a later stage financial implementation framework. The participation of ministers from several ministries has been widely perceived as a high level of political commitment and, furthermore, that the Action Plan is considered an important government policy.

- **Multi-stakeholder collaborative implementation for individual actions:** From the initial design stage, there was a clear communication that the implementation of actions is considered a joint effort and not only left to the public sector. In that sense, a mix of multi-stakeholder consortia, together with public sector actors (e.g. local or regional authorities or individual ministries), are responsible for the implementation of individual actions. In addition, a multi-stakeholder approach provides the opportunity for networking and, thus, offers a better understanding of all involved stakeholders’ interests, but also knowledge on the matter at hand.

Another important aspect for collaborative implementation is the continuous communication and reporting on the progress of individual actions towards all involved actors. A separate position as a coordinator for the Action Plan has been created to foster and follow up on the continuous progress of actions and communication towards involved actors, as well as high-level representatives. Reporting on progress facilitates the long-term interest and commitment of actors that are responsible for implementation, and, in particular, high-level support (i.e. politicians or company CEOs).

2. Stakeholder involvement

Multi-dimensional challenges of primary minerals supply (e.g. social licence to operate, mining impacts on ecosystems, long-term business investment decisions) impact or involve a large and diverse set of stakeholders. Successfully tackling these challenges requires

1) increasing the awareness of the general public on the benefits and potential costs of the raw materials supply, and, on the other hand, to

2) obtain acceptance by, and trust of, stakeholders (i.e. social licence to operate) for mining sector activities throughout the production cycle.

Following the second approach, the rationale and benefits for involving stakeholders at all levels - local, regional, national, European (e.g. local communities, interest groups such as reindeer herding or employee associations, mining companies, public authorities etc.) - in mining sector management or governance is manifold: (i) responsibility sharing: different stakeholders are equipped with

---

12 EIP SIP Part II Action area n° II.3: Public Awareness, Acceptance and Trust

MIN-GUIDE – D2.2 Minerals policy governance in Europe 19
different responsibilities and resources that contribute to the overall improvement of mining sector management, (ii) increased legitimacy for steering (public and private): taking into account wide and balanced range of views and that all relevant parties have had the opportunity to express their opinions, (iii) greater commitment, follow up implementation, and acceptance for state-designed intervention in design and implementation of policy instruments, or (iv) collecting and generating stakeholder knowledge, in order to translate management approaches into a local context.

Governance instruments and mechanisms for participatory approaches or multi-stakeholder involvement support overall mining sector management by addressing the above-mentioned benefits. In the following paragraphs, the MIN-GUIDE project presents three good practice cases for Stakeholder Involvement. Their selection mirrors a mix of participatory stakeholder engagement in public policy making (Greece: advisory role, as well as Austria: policy advice and implementation support), as well as overall support for mining sector management and governance (Finland: stakeholder network facilitating social licence to operate).

- **Case 1: Austrian Raw Material Alliance (AT):** The Austrian Raw Material Alliance applied a good practice approach regarding their management of the whole process of involving stakeholders, as well as to the precise and common definition of objectives in the context of a holistic approach for raw material supply.

- **Case 2: Finnish Network for Sustainable Mining (FI):** The network serves as a forum for discussion and co-operation between the mining industry and its stakeholders that 1) effectively adopted international experiences for SLO and adapted them to the local context, and 2) achieved the long-term continuation of the network through a series of activities.

- **Case 3: National Committee for Mineral Resources (GR):** The National Committee for Mineral Resources involved expert input from a diverse group of stakeholders (in particular academia) to enable knowledge-based decision-making, as well as increased confidence for minerals policy in Greece.
### 2.1. Case 1 - Austria: Raw Material Alliance

<table>
<thead>
<tr>
<th><strong>Raw Material Alliance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Map of Austria with a spotlight on the country" /></td>
</tr>
</tbody>
</table>

**Instrument type:**
Stakeholder involvement in the policy-making processes

**Established:**
2012, on-going

**Objective:**
The objective of the Raw Material Alliance is to keep stakeholders informed on both topical discussions along the whole raw material value chain (e.g. recovery of critical raw materials or acceptance of mining activity), as well as on specific policy instruments (e.g. Austrian Minerals Strategy).

**Main responsible organization:**
Federal Ministry of Science, Research and Economy

**Further information**

**General description:**
The Federal Ministry of Science, Research and Economy founded the Austrian Raw Material Alliance in 2012. The Alliance acts as a discussion platform for stakeholders interested in improvements in raw material supply. The overarching objective of this platform is to increase stakeholder involvement for policy-making on the reduction of import dependency and increasing the supply...
security of raw materials important for the Austrian economy.

The Raw Material Alliance provides an open discussion forum that goes beyond the legal compliance of involving stakeholders on raw material topics, and, in particular, the design of policy instruments. The Raw Material Alliance, organized/chaired by the Federal Ministry of Science, Research and Economy, convenes ‘on-demand’, in order to engage with stakeholders on various topical discussions along the whole raw material value chain (e.g. acceptance of mining activity), as well as on specific policy instruments (e.g. Austrian Minerals Strategy). During the first meetings of the Raw Material Alliance, a focus was put on the identification of strategies to increase recovery of critical raw materials from waste. The current topic is directed towards increasing raw material awareness, and, consequently, facilitating a social license to operate for mining activities in Austria.

Depending on the topic under discussion, the Raw Material Alliance involves different stakeholder groups, such as individual companies, industry associations, environmental NGOs, employee’s associations, as well as universities. Invited stakeholders are asked to provide feedback, first ideas and inputs on topical discussions and related policy instruments (e.g. transposition of recommendations for specific policy instruments). In this regard, the Austrian Raw Material Alliance is organising stakeholder input for individual policy instruments along the three pillars of the Austrian Minerals Strategy: Pillar 1: Securing minerals supply from domestic resources (e.g. realisation of the Austrian Mineral Resources Plan); Pillar 2: Securing minerals supply from Non-EU countries (e.g. raw materials partnerships); Pillar 3: Promoting resource efficiency (e.g. substitution, recycling, development of new methods with reduced inputs from minerals). In this regard, the Austrian Raw Material Alliance mirrors the approach of the European Innovation Partnership on Raw Materials.

An important outcome of recent discussions was that discussions needed to focus on the primary and secondary material topics, in order to keep stakeholders actively participating. Since the Raw Material Alliance is similar to an open discussion forum, its effectiveness, in terms of bringing about impacts, clearly showed in the case of providing R&D funds and setting up new R&D programmes for raw material topics.

Key aspect 1: Appropriate management of the whole process of involving stakeholders

The first key aspect of the Raw Material Alliance relates to its management structure and stakeholder composition.

- Governance structure and process management: The Raw Material Alliance, as a broad stakeholder dialogue for more inclusive policy-making, is designed in a two-level hierarchical management structure: (1) The Steering Group at management and decision-making level is under the leadership of the Federal Minister of Science, Research and Economy. They elaborate and negotiate on common objectives and are responsible for a follow up of suggested actions, and the (2) The Technical Working Group, which is organized as an expert working group, elaborates on the recommendations for action within the given framework of objectives.

- As an initial step in the management approach to the stakeholder platform, the invitation of the “relevant” stakeholders is crucial. Relevant stakeholders are considered as having a direct
interest in the given topic, they share common objectives for the issue to be discussed, but in some cases with different approaches, as they have various views (e.g. views from industry or science or public management on "securing minerals supply"). The identification of relevant stakeholders is an ongoing and dynamic process, in which the commodity sector has to be reviewed regularly. In that sense, the stakeholder dialogue should be characterised by a broad setting and should reflect the diverse range of opinions prevalent in the sector. So far, organisations participating in the Raw Material Alliance are the public sector, with representatives of different ministries, for example the Federal Ministry for Innovation and Technology, the Federal Ministry for Environment and the Federal Ministry of Economy, as well as stakeholder representatives from science and science funding, representatives from various interest groups, such as the Federation of Austrian Industry and the Austrian Chamber of Commerce.

- **Topic-related stakeholder composition:** Whereas the generic structure and working procedures are independent of the topic under elaboration in the Alliance, the selection and composition of stakeholders involved might vary according to the topic. This is due to the different topic's requirements from stakeholder expertise and ability to induce actions: i.e. for the topic of recovering critical raw materials funding, agencies and academic institutions where crucial to setting up R&D funds and respective R&D programmes; whereas for the topic of raw material awareness, civil society representation, as well as representatives from regional public authorities are crucial.

- The composition refers to both the individual representatives, as well as the type of organisations involved. Higher-level politicians (e.g. members of ministerial cabinets), as well as CEO level representatives from industry and associations are crucial in obtaining the necessary commitment from the respective institution or stakeholder group, and, henceforth, resources for implementation of actions in the future. The combination of topical experts in a Technical Working Group and higher-level decision-makers in the Steering Group provide both a knowledge based rationale and recommendations for action, as well as respective resources to follow up the implementation thereof.

A number of challenges, but also opportunities, characterise the multi-stakeholder setting as designed in the Raw Material Alliance:

- The diversity of interests, originating from the multi-stakeholder approach of the Raw Material Alliance, posed its largest challenge, as well as its most promising key-feature at the same time (which will be discussed in key aspect 2 below). However, closely associated with a multi-stakeholder approach are an array of resources, capabilities and expertise that come from the organisations involved. Having these assets at hand facilitates an outcome-oriented implementation approach (i.e. the distribution of different tasks to stakeholders and respective organisations according to their resources and competences). This supports the idea of not only designing actions, but also facilitated by higher level commitment foster the actual implementation in the respective organisations sphere of influence (i.e. academia and funding agencies pooling resources for setting up a research programme).

- The public management (actions and a strategic policy framework for action provided by the public sector; i.e. Mineral Raw Materials Act and related acts and regulations) provides an appropriate legal and fiscal framework for actions facilitated by the Raw Material Alliance. In
Austria, a legal framework is mainly given by the Mineral Raw Materials Act and related acts and regulations (e.g. waste legislation). However, to guarantee the implementation of actions proposed within the Raw Material Alliance, the appropriate fiscal framework is still not in place.

**Key aspect 2: Common objectives and a holistic approach for action**

With the multifaceted interests reflected by a diverse set of stakeholders involved in the platform, a precise and common definition of objectives was both a challenge, as well as a pre-condition for its success within each topical area discussion.

For the achievement of **common objectives**, a precise and common definition is important. This step in the stakeholder dialogue not only has a number of benefits for the overall process and but also for the follow up implementation of actions:

- **A common understanding of problem setting**: During the first stage of the stakeholder dialogue, analysing the current situation through expert discussions in the Technical Working Group lead to a better understanding of problem setting, an identification of risks, an exploration of different approaches for action, and the subsequent determination of actions. As already mentioned before, different actions have to be distributed to different stakeholders. One of the most important points in achieving common objectives was the recognition of the problem setting and the resolution of questions concerning the security of raw material supply. In this regard, supporting background information on systematisation and mapping of critical raw materials (e.g. European Commission criticality assessment) and contextualisation in the Austrian setting was a crucial knowledge basis.

- **A facilitated and dialogic discussion**: The final definition of objectives was achieved by a facilitated and interactive discussion. The different stakeholders’ interests in the topic, and its respective actions, did not reveal themselves until the first round of discussion started in the steering group meetings. However, this process lead to an open and well-informed discussion very early on in the process, making clear what the Raw Material Alliance could feasibly achieve, and in which areas stakeholders where interested in following up on specific objectives through concrete action.

**A holistic approach** for secure and sustainable raw material supply relates to an all-encompassing view on the commodity sector, including both primary and secondary raw materials. The primary production of raw materials is indispensable for maintaining raw materials supply. This is particularly important in the context of the European Commission’s Action Plan for the Circular Economy, which recognises primary production as an integrated part in a circular system.

In the context of a holistic approach, the communication to stakeholders on the equal importance of primary and secondary raw materials is facilitating the commitment of stakeholders, who are normally opposed to, or less interested in, either of the two. The different approaches of stakeholders to the overall topic of secure and sustainable raw material supply necessitate the definition and clarification of terminology from the very beginning. Furthermore, the different approaches of stakeholders to one topic (R&D for scarce raw materials), and various driving forces for implementation, are other challenges. In this context, secondary raw material providers,
compared to primary production stakeholders, have different opinions and approaches on which topics R&D programmes are supposed to focus. The solution for these challenges is the concentration, or reduction, on achievable objectives (e.g. striking a compromise on the equal distribution of objectives targeting supply issues from both secondary and primary sources).

2.2. Case 2 - Finland: Network for Sustainable Mining

<table>
<thead>
<tr>
<th>Network for Sustainable Mining</th>
</tr>
</thead>
</table>

**Instrument type:**

Stakeholder involvement for mining sector governance

**Established:**

May 2014-July 2015 (Sitra), August 2015- on-going

**Objective:**

Develop an open, balanced and continuous dialogue and cooperation between the mining industry and its stakeholders, as well as to promote the development of more responsible, sustainable and predictable mining practices in Finland. Another objective is to strengthen the mining sector’s voluntary self-regulation mechanisms through the reporting of mining sustainability standards.

**Main responsible organization:**

Finnish Innovation Fund (Sitra) (January 2014-July 2015), Network for Sustainable Mining (August 2015) on-going

**Further information**

General description:

The network serves as a forum for discussion and co-operation between the mining industry and its stakeholders. It develops and customizes various tools for application in the Finnish operating environment, in order to enable more responsible and sustainable mining practices.

The major driver for the network setup was the environmental accident in the Talvivaara nickel mine in 2012, which sparked widespread political and societal attention and led to the creation of a new model of cooperation that would improve transparency and legitimacy of the mining operations in Finland.

The Network for Sustainable Mining provides a neutral forum for the mining industry to interact with its stakeholders. With its focus on self-regulation, the network does not emphasise the role of authorities, but instead focuses on fostering voluntary cooperation between industry and society by providing a platform for sharing information and experiences. It also advances the building and introduction of more responsible practices, whereby concrete tools are created through cooperation. More specifically, the network’s working groups have been actively developing a new type of responsibility reporting and a practical set of tools for stakeholder cooperation.

So far, the network has published separate sustainability standards for mining and ore exploration, a toolbox for local actions, and a corporate social responsibility report, covering the activities of 19 mining and ore exploration companies in Finland. During its first year and a half of activities, the network operated under the direction of the Finnish Innovation Fund (Sitra), which operated directly under the Finnish Parliament and took the lead in building the network.

Key aspect 1: Making use of international experiences and adapting them to the local context:

During its initial phase, the network set up several working groups. In this regard, the network’s efforts encompass a series of tasks considered essential for the development of this standard, which had the following tasks:

(1) **Mapping the mining sector and its stakeholders:** conducting a survey on the Finns’ attitudes toward the mining industry, charting mining related research projects and best practices for cooperation, and surveying the members’ motivation factors.

(2) **Adapting the stakeholder management approach:** exploring alternatives to the network’s organization and management structure, and enhancing cooperation with both Canada and Sweden (based on the mapping of the mining sector challenges and its most relevant stakeholders).

(3) **Setting up rules and regulations for its future operations:** During its initial stage, the Network operated under the direction of the Finnish Innovation Fund (Sitra), which operated directly under the Finnish Parliament, and which took the lead in building the network. A fourth working group devised the rules and regulations of the network, launched four working groups and set up the board, which has equal representation from the mining industry, environmental NGOs, other livelihoods (reindeer herding and farming) and other stakeholders (local communities and metal workers). These four working groups are responsible for different action areas associated with (i) developing social responsibility reporting, developing separate sustainability standards for (ii) mining
and (iii) ore exploration, (iv) developing a toolbox for local cooperation actions in ore prospecting and mining activities, (v) devising an action plan with goals and guidance for the management and future development of its activities.

Out of the five working groups, two have been created to exclusively develop the sustainability standards for (ii) mining and (iii) ore exploration. These two working groups represent the mining sector and its key stakeholders, including environmental NGOs, the farmers’ union and the reindeer herders’ association.

(4) Identifying existing good practices: To this end, a working group commissioned a study on available mining standards in the world; Another working group commissioned an expert from the Geological Survey of Finland to draft a standard for exploration. The study identified the Canadian "Towards Sustainable Mining" (TSM) standard as a good practice example due to the following aspects: (i) an easy to understand rating system: similar approach as a credit rating complying with national legislation represents lowest level (C), next steps B, A, AA and AAA; (ii) fostering continuous improvement (companies report on an annual basis on their development and achievements in implementing the standard); (iii) independent and regular evaluation (external audit every three years to verify that reported achievements and level of implementation are correct). During the next stage, the network set up another working group to develop a separate standard for exploration.

In order to best match the Finnish perspectives for sustainable mining, the network defined eight protocols for mining and four protocols for exploration, on which basis the mining and exploration companies are being evaluated.

(5) Contextualising identified good practices: translating the Canadian TSM standard, a best practice example applied in the Canadian mining sector, into Finnish and comparing it to Finnish legislation. Based on the study’s results from out of a dozen alternatives, the working group picked the Canadian TSM model, which was later modified and adjusted to comply with the national legislation. In order to best match the Finnish stakeholder perspectives of a sustainable mining sector (i.e. the mission of the network), the network defined a set of 8 ‘protocols’; on which basis mining companies are being evaluated (4 Protocols for exploration companies, respectively).

In order to promote the application of the new standards in the industry sector, the network organized training courses and produced framework texts for each mining protocol (i.e. executive summaries). All the documents (two sustainability standards, toolbox for local actions, corporate social responsibility reports on 19 mining companies) are due to be translated into English in 2017, and are meant for external use and for potential application in other national contexts.

Key aspect 2: Sufficient funding for continuation

The initial phase for setting up the network has been managed and financed by the Finnish Innovation Fund (Sitra). Since 2016, the Finnish Mining Association has covered a greater part of its running costs, and after 2017 the network should be fully self-funded. In general, this approach, combined with (1) a rather balanced and broad involvement of different stakeholder representatives, as well as (2) its initial success in applying the standard in industry, made it easier to identify and allocate new funding sources for the continuation of the Network’s activities. At the current stage, most of the future funding after 2018 will come from the Finnish Mining Association.
Essentially, the networks continuation will depend on the stakeholder’s interest in continuing the work on the sustainability standard, which in turn is based on the sector’s interest in applying the standard (i.e. companies implementing it and recipients using its reporting tools as a measure for understanding a company’s approach towards a social licence to operate). In this regard, the independent network will continue developing and piloting tools and preparing for the implementation and widespread use of its mining and exploration sustainability standards.

There are a number of challenges which might compromise its continuation in the future: (i) the Sami parliament decided to opt out once the Finnish TSM was finalized, (ii) the tourism industry has a conflict of interest with mining activities in two ski resorts, and, therefore, never joined the network, (iii) maintaining the motivation of stakeholders once all the preparatory work has been finalized, and (iv) ensuring the application of the new sustainability standards for mining and exploration in Finland.

Some success factors highlighting the continued interest of the sector are (i) clear motivation of involved stakeholders to come together and further improve sustainability after Talvivaara, (ii) over 90% of the Finnish mining sector participated in the training courses, (iii) additional funding has been allocated from the Ministry for Industry and Employment for the training courses (additional funding will be requested from the Ministry for Foreign Affairs to support the increasing interest of other countries for applying the standard in their national contexts), (iv) external funding has been available for training courses and translations, and for designing a new sustainability standard for exploration, and (v) wide stakeholder participation to conferences organised by the network.

### 2.3. Case 3 - Greece: National Committee for Mineral Resources

**National Committee for Mineral Resources**

**Instrument type:**

Stakeholder involvement in policy-making processes
Established:
2012 (on-going)

Objective:
Provide feedback on policy issues, large mining investments and relevant programmes

Main responsible organization:
General Secretariat for Energy and Mineral Resources

Further information

General description:
The purpose of the National Committee for Mineral Resources is to provide an external expert point of view, in order to give general proposals for the better exploitation of mineral resources (i.e. new projects/policies/programmes), as well as give their opinions about new laws, or to revise existing ones. In particular, stakeholders present in the committee act as an advisory group for processing views and proposals for developing the National Mineral Strategy.

The National Committee is an institutionalised mechanism initiated by Ministerial Decision. The Committee has convened, according to the Ministerial decision, only once (since 2012), with high level representatives from different organisations. The minister decides on the further involvement of other stakeholders.

Key aspect 1: Stakeholder involvement offers confidence for minerals policy-making

The National Committee is designed to establish an institutionalized structure, in order to facilitate collaboration between public administration, academia, industry and employee associations, thereby providing support for knowledge-based minerals policy-making. It consists of high level public administrators and high level representatives from the non-governmental sector. The members of the Committee hold physical meetings on an “on-demand” basis.

The meetings of the National Committee have been chaired by the General Secretary for Energy and Mineral Resources, advised and co-chaired by General Directors and Directors of ministry departments relevant to mining policy in the General Directorate.

In order to provide the respective level of expertise for knowledge-based policy-making, the National Committee involves a broad spectrum of stakeholders from the mining sector: Heads of all university departments of mining engineering and geo-sciences, representatives from the Institute of Geological and Mineral Exploration, representatives from technical and geotechnical Chambers, representatives from the main labour union, representatives from the Greek Mining Enterprises
Association, representatives from the Hellenic Federation of Enterprises.

So far the National Committee has been active in supporting the implementation of the National Policy for the Exploration of Mineral Resources (i.e. the National Mineral Strategy) and the promotion of the dialogue for social licence to operate.

The way in which the Committee offers confidence to the broader public is from its makeup, as it can draw upon the diversity and expertise from its members, who come from various sectors that include academia.

Key aspect 2: Involvement of Academia in mineral policy

The role of Academia has been to provide necessary knowledge and expertise in the implementation of good practices and Best Available Techniques References documents regarding the prevention, reduction and rehabilitation of the extractive industry impacts on the environment and human health. Additionally, stakeholders from academia contribute to the public acceptance of licensed mining activities, which are performed according to the law restrictions and best practices. One of the major challenges was finding a common language and terminology during discussions among representatives from public administration and academia.

3. Permitting Procedures

The mining industry’s capital intensive investment, long start-up times or complex commodity market development requires stable legal framework conditions and efficient public administration. In this regard, permitting and authorisation procedures for exploration and mining licensing are of significant importance for the sector.

According to the EIP SIP, there are a number of challenges the permitting and authorisation systems of EU Member States are confronted with:

- **Long time frames**: start of authorisation to permit times are characterised by long or unknown time frames for the permit application.
- **Involving different authorities**: the permit procedure involves many authorities; In many permitting procedure segments, especially at the local / regional level, qualified personnel may be missing or be insufficiently trained.
- **Multiple and/or conflicting legal provisions**: the whole permitting chain sometimes does not have a clear course, since various and sometimes repetitive requirements are requested based on different pieces of legislation.
- **In-transparent or unavailable information**: available information and support to applicants or investors (i.e. nature and time frame of the process, as well as the level of permitting fees, royalties, etc.) is not sufficient at the time of permit application.

Therefore, making authorisation processes more effective may be achieved through integrating the different permits required in such a way that they are issued by one competent authority (a one -
stop-shop) and with only one environmental impact assessment or by parallel assessment\textsuperscript{13}. Furthermore, guidance documents or translations may facilitate an understanding and legal certainty of what needs to be provided, in order to obtain authorisation for minerals exploration or extraction.

In the following paragraphs, the MIN-GUIDE project presents three good practice cases for Permitting Procedures: Their final selection was based on the preliminary results on the identification of good practice regarding exploration and extraction permitting procedures in the MIN-LEX Second Interim Report.

- **Case 1: Licensing system for exploration (IE):** The Irish system for exploration licensing is a good practice case due to its administrative procedures organised as a one-stop shop, as well as publically available exploration data.

- **Case 2: Parallel processing of permit applications for extraction (DK):** The Danish permit application system for extraction is a good practice example, because of its approach towards Environmental Impact Assessments, as well as inclusive remediation plans and payment guarantees during the permitting process.

- **Case 3: One-stop-shop for permitting procedures (BE-Flanders):** The Flemish system for extraction licensing is characterised as a good practice case due to its integrated land use planning approach and administrative procedures organised as a one-stop shop.

### 3.1. Case 1 - Ireland: Licensing System for Exploration

**Licensing System for Exploration**

<table>
<thead>
<tr>
<th>Instrument type:</th>
<th>Procedures for prospecting licensing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Established:</td>
</tr>
</tbody>
</table>

\textsuperscript{13} European Commission, 2014. Evaluation and exchange of good practice for the sustainable supply of raw materials within the EU; EIP SIP part II Action area n° II.1: Minerals Policy Framework
### Objective:

Issuance of Prospecting Licences

### Main responsible organization:

The Exploration and Mining Division, Department of Communications, Climate Action and Environment is responsible for the regulation and permitting of exploration and extraction of scheduled minerals under Minerals Development Act 1940-1999 (this excludes petroleum, stone, sand, gravel and clay).

**Exploration of scheduled minerals:** Exploration and Mining Division

**Extraction of scheduled minerals:** Exploration and Mining Division, Local County Council and Environmental Protection Agency. Extraction of non-scheduled minerals, such as stone, sand, gravel and clay: Local County Council and Environmental Protection Agency.

### Further information

- [www.dccae.gov.ie](http://www.dccae.gov.ie)
- [www.mineralsireland.ie](http://www.mineralsireland.ie)

### General description:

In Ireland, the licensing body for mineral exploration and extraction is the Exploration and Mining Division, Department of Communications, Climate Action and Environment. The licence is the same for on-shore and off-shore exploration.

The extraction of scheduled minerals requires planning permission from the local county council, an IPC Licence from the Environmental Protection Agency and a mining lease / license from the Exploration and Mining Division. The extraction of other minerals, such as stone, sand, gravel and clay requires planning permission from the local county council and IPC Licence from the Environmental Protection Agency.

Exploration is carried out through a Prospecting Licence (PL), which gives the holder the right to explore for specified minerals over a certain area. Licences are issued for six years under the licence terms and conditions and may be renewed. Payment of fees and progressively increased work and expenditure commitments are also required. Work reports must be submitted every two years and are publicly released after six years, or upon surrender of the licence.

Licence holders should respect the wishes of landowners regarding access to land. Mineral exploration is exempted from planning permission under the Planning Acts and Regulations. The work programmes are screened for their potential for significant effects on the environment at the application, review and renewal stage. EMD requires companies to adhere to best environmental
practice and to comply with environmental guidelines published by EMD.

The reasons why Ireland is successful at exploration is due to many factors:

- There is a long history of exploration and mining in Ireland. Exploration is conducted in a way that it does not cause any significant environmental impact;
- The system affords third parties the right to make representations to the Minister;
- The Minister operates a ‘one-stop-shop’ in the application of the regulations relating to exploration activities, i.e. obtaining permission to carry out certain activities (e.g. drilling) or to carry out activities within restricted areas (e.g. near gas pipelines); The Minister carries out his duties in a speedy and efficient manner (key aspect 1);
- All the information collected as a result of exploration activities is made publically available either after six years or upon surrender of the licence – whichever is sooner, meaning that the data collected from exploration activities is available for the benefit of all, and not just to the minerals industry. The available data also assists exploration companies to assess a PL area, and thereby eliminates expensive duplication of exploration effort (key aspect 2).

**Key aspect 1: One-stop-shop for exploration**

The One-stop-shop for exploration in Ireland has a couple of features that support a faster application process, as well as facilitates public acceptance and prior notice to the exploration:

- The Application for Prospecting Licences for ground and/or minerals not currently licensed may be made at any time. Onshore and offshore licences are issued on a first come first served basis, except for areas in competition (four competitions each year of PL areas recently surrendered).
- Prospecting Licence Areas are described as either ‘standard’ or ‘incentive’. An ‘incentive’ area is an area in which exploration has not been carried out for four years, or areas currently licensed for certain minerals, but available for exploration for other minerals that have not been licensed in the previous four years. Otherwise it is a ‘standard’ licence. There is also a category of ground, which is described as ‘open ground’, meaning ground that has never been licensed.
- All exploration activities need to be screened for environmental impact. Consequently, this increases the administrative burden of both the applicant and the respective public authority. More specifically, the screening may incur extra cost and / or resources for companies, because they may have to provide additional information or conduct an expert screening of the area for the screening assessment report. However, exploration companies appreciate the rationale and added-value, such as increased public acceptance if everything is communicated transparently, behind strict environmental screening. Advance notice and prior approval is required for drilling and trenching before the activity can commence. Also, on the side of public authorities, the assessment of such screenings may take a substantial amount of time (2-12 weeks) depending on the proposed exploration activity and proximity of environmentally sensitive areas.
• Information about prospecting licence applications are available on a public website, and, thus, helps to deflect inquiries, which means less time that authorities must spend dealing with inquiries, and the more time they have to get through the applications, reviews and renewals. In this regard, the main challenge was to setup a suitable online data base system and have personnel available to administer the information.

There are a series of steps which characterize the system of an one-stop-shop for exploration in Ireland:

(1) Where a PL application fulfilled the necessary conditions, the applicant will receive a letter of offer, which states the standard terms and conditions of the Prospecting Licence and any additional special terms and conditions.

(2) Before a PL can be granted, the Minister will advertise his intention to grant a licence in newspapers circulating in the local area and on the DCCAE website, allowing anyone with concerns about exploration 21 days to submit a representation or observation, either positive or negative, for consideration. This advertisement is also displayed at a local Garda station, the local County Council office, and the Geological Survey of Ireland. The requirement for a public notification of Minister’s intent to grant a PL is in defined by legislation (Minerals Development Act, 1979, Section 18).

(3) The Minister will then take into account any submission received within the stipulated time-frame before making a decision on whether to grant a licence or not. Each submission to the Minister will be addressed and an individual response to each submission is sent.

(4) Assuming there are no substantive objections, the Prospecting Licence will be granted. It normally takes about four months for a PL to be granted.

Key aspect 2: Time-dependent availability of exploration data

Since 2000, EMD has released all of its non-confidential exploration data free of charge and in digital format, in order to stimulate exploration in Ireland. It is standard procedure that all the information collected as a result of exploration activities is made publically available either after six years or upon surrender of the licence – whichever is sooner. This means that the data collected from exploration activities is available for the benefit of all, and not just to the minerals industry, which assists exploration companies in assessing PL area(s), eliminating expensive duplication of exploration effort. This information is available in the form of company exploration reports and drill-hole logs, which can be accessed through OPALS map viewer.

The system has a number of benefits for exploration companies and the support for exploration activities in general:

• Exploration companies can see, in real-time, which areas are held and what data is available. Thus, they can assess the ground quickly and decide on whether to fill out an application or not;

• Avoid the replication of work (i.e. maximising expenditure on the ground for actual exploration activities, which means not spending money trying to get data);
• The feedback from industry, with respect to public release of data, is favourable, as it allows them to assess ground quickly and avoid duplication of work;

• One of the major challenges was the initial setting up the OPALS database, due to the costs and the time investment (translating information in digital format and synthesising it is time consuming; i.e. Historical Company Exploration Data Release included all the information from 1940s to 1990s, which had to be scanned into the OPALS system, as it only existed in hardcopy; Airborne Geophysics Data Release, which happens after 4 years.).

3.2. Case 2 - Denmark: Parallel processing of permit applications for extraction

<table>
<thead>
<tr>
<th>Parallel processing of permit applications for extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument type:</td>
</tr>
<tr>
<td>Procedures for land-based extraction permits</td>
</tr>
<tr>
<td>Established:</td>
</tr>
<tr>
<td>2014 (on-going)</td>
</tr>
<tr>
<td>Objective:</td>
</tr>
<tr>
<td>Issuance of permits for extraction in relation to land- based raw materials</td>
</tr>
<tr>
<td>Main responsible organization:</td>
</tr>
<tr>
<td>Regional Councils (land-based extraction and exploration)</td>
</tr>
<tr>
<td>Further information:</td>
</tr>
</tbody>
</table>
Raw materials in Denmark are defined as aggregates, clay, limestone, chalk, peat etc.

**General description:**

For land-based permits, the authorities are the Danish Regions, which are independent political organisations governed by the Regional Councils. The Agency for Water and Nature Management is responsible for the permitting procedure of marine-based aggregates. There are fundamental differences between the permitting procedures of land-based and marine-based excavation.

**Land-based exploration and excavation**

The resources are owned by the respective landowners. The Regional Council is responsible for exploration, planning and issuing permits.

The Regional Councils are obliged to explore and map land-based aggregates. Land-based exploration is financed and conducted by the regional councils, but can be carried out on private initiative based on a contract between the explorer and the landowner. Private businesses can, however, contact the regional authority and suggest areas for exploration.

**Land-based planning procedure**

The Regional Councils develop and issue a plan for extraction and supply based on the council’s exploration results. The plan covers the expected demand for raw materials within their particular region for the following 12 years. The plan is evaluated every 4 years and can be revised. The Regional Council bases the planning on findings from their own exploration. New extraction areas and areas with raw material potential are partly selected on the basis of an overall assessment of the quality and volume of the raw materials and planned developments in a region. They are also partly selected on the basis of considerations relating to other land-use matters, such as nature and environmental protection areas, groundwater extraction areas, archaeological preserved areas, infrastructure and urban development areas. A public hearing process, lasting at least 8 weeks, is mandatory in each update of the plan, where everyone can comment or express reservations towards the proposed areas.

Results of exploration for raw materials, including drilling results, geophysics and sample analyzes, must be reported to the Geological Survey (GEUS) and the Agency of Water and Nature Management.

**Key aspect 1: Environmental Impact Assessment based on preliminary screening of environmental implications**

All applications are subject to an EIA screening to assess whether an EIA is necessary. A number of important features are listed below:

- **Mandatory EIA:** An EIA is mandatory if the project area 1) is over 25 hectares 2) the applied permit is for more than 10 years and the project area is not located within a planned area. Companies often apply for less than 25 hectares in the hope of avoiding the associated costs and bureaucracy of a mandatory EIA.
• Prior screening for EIA conduct by regional authorities: However, if the above mentioned criteria do not apply, the public authorities conduct a prior screening of all the environmental aspects for the applied project, in order to assess whether an EIA is needed. If the applied excavation is within an area that is planned for in the 12 year plans for extraction, the regional authorities have already conducted a prior assessment of environmental implications (a Strategic Impact Assessment). In every case, stakeholders such as citizens, relevant NGO’s, affected businesses or local authorities, can challenge and complain about the screening decision.

• Challenges of public acceptance on short-term permits: The time-limited 10 year permits can create some confusion and discontent, and, thus, problems of public acceptance if a permit is prolonged, changed and/or expanded after the first 10 year period. In some cases, stakeholders are not aware that the extraction permits can be renewed or that extraction activities can be allowed to continue after the end of a 10 year period.

Key aspect 2: Remediation plans and payment guarantees for remediation are a standard procedure for permitting

The inclusion of a remediation plan is standard procedure when issuing a permit. This entails 1) the inclusion of preliminary remediation plans taking into account closure costs, and 2) the inclusion of a financial guarantee, letter of credit, closure fund, etc., for the coverage of closure costs. Remediation plans and financial guarantees are a requirement in the Act of Raw Materials.

The objective of this approach is to secure groundwater resources and promote the rehabilitation of a land use type that has societal value, such as farm land, recreational areas, biodiversity, nature preservation, etc. The decision towards which type of land use the rehabilitation activities shall be directed is based on 1) the landowner’s intention on how to use the land after excavation and 2) the local authority’s land use plans.

During the application procedure, the respective regional authority sets terms for the remediation in the permit. The intended process is to approve the remediation plan when granting the permit.

Important benefits of this approach entail:

• Less expected administrative burden and post-extraction problems: The additional administrative burden created through this process is expected to be much smaller compared to costly and burdensome ex-post enforcement of remediation measures, or in case the companies go out of business.

• Facilitates social licence to operate: Remediation plans are a good way to assuage stakeholders in the beginning of the permitting application process, because they see the added value of post excavation rehabilitation land-use, such as recreational spaces.

• Flexible and adaptable approach: Remediation plans and terms of remediation can be revised at all times upon inquiry of the holder of the permit and/or landowner.

• Objective financial evaluation of expected costs: The amount of the financial guarantee is calculated based on the costs associated with the amount of soil that needs to be moved.
Since land-based raw materials are limited to aggregates, clay etc., there are no waste products from extraction to consider when setting the financial guarantee.

Important challenges faced by this approach are the financial coverage of remediation activities. In case of bankruptcy, where the remediation costs exceed the financial guarantee, the region will cover the remaining remediation costs.

3.3. Case 3 – Belgium/Flanders: One-stop-shop for Permitting Procedures

<table>
<thead>
<tr>
<th>Instrument type:</th>
<th>Procedures for extraction licensing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>-</td>
</tr>
<tr>
<td>Objective:</td>
<td>Issuance of permits for extraction in relation to land-based minerals.</td>
</tr>
<tr>
<td>Main responsible organization:</td>
<td>Flemish Ministry of Environment, Nature and Energy; Department of Environment, Nature and Energy (LNE) for implementing the One-stop-shop system for Permitting Procedures</td>
</tr>
<tr>
<td>Further information</td>
<td>-</td>
</tr>
</tbody>
</table>
General description:

The Environment, Nature and Energy Department (LNE), under the jurisdiction of the Flemish Ministry of Environment, Nature and Energy, is the environmental administration of the Flemish government (a one-stop shop in the region) in charge of preparing, following up, evaluating the Flemish environmental policy, and awarding all permits for exploration and extraction.

In Flanders, extraction permitting procedures are subject to the Flemish Spatial Structure Plans, which recognise 19 regions as extraction areas. Spatial Structure Plans indicate areas for dedicated land use types, and, in addition, in areas for extraction that are not yet excavated. The only temporary land use that is allowed is land use that does not make future extraction difficult.

Each region contains a group of areas in which extraction could be possible and that are geographically linked based on the geological nature of the extracted mineral. Within these regions, specific areas are designated for extraction on the Spatial Structure Plans. These Spatial Structure Plans cover the entirety of Flanders and designate a function to all areas, such as agriculture, habitation, industry, nature conservation, extraction etc.

The current permitting process for environmental permits for companies functions as follows:

1. Companies must determine to which category of pollutants they belong to, as set out by the Flemish Regulations for Environmental Permits (VLAREM), which has established a classification of “nuisances”. The category, in which the most nuisances occur, is the category that the petitioning company is given. Mines and quarries extracting non-energy minerals belong to Category 1.
2. The categories of pollutants are classified on three levels, ranging from potentially strong polluting plants (category 1), to potentially polluting plants (category 2), and, finally, to plants with less nuisance, less polluting, and less risk (category 3).
3. The procedure for a permit application consists of five phases for category 1 and 2. The phases include: (i) examination of the admissibility and completeness, (ii) public consultation, (iii) provision of advice, (iv) the decision, and (v) the publication. The permit application must include an approved EIA.

In order to reach decisions on applications, the authorities work in a coordinated manner, in which issues are discussed in advance and in working groups that consist of all governmental departments concerned.

Key aspect 1: Integrating "planned areas" for mining in land use plans

The following activities define information requirements (only applicable to surface mineral

14 The Flemish Regulations for Environmental Permits – abbreviated as VLAREM – use an official classification list of nuisance activities in order to determine a company’s category. A company must go through this list and enumerate all of its activities that are considered to be nuisances. The classification of a company as a whole corresponds with the category of the company activity that causes the most nuisance. A company is subject to the permit or reporting obligation if it carries out at least one activity that is on the classification list.
resources, but not to underground or metal resources) necessary for the integration of geological information into land use plans:

- **Identify future demand on mineral resource:** In the context of the Flemish Parliament Act on Surface Mineral Resources, the main objective was to develop a long-term sustainable planning of extraction. In this regard, the Environment, Nature and Energy Department (LNE), Natural Resources Service developed a “General Surface Mineral Resources Plan” (AOD) every five years, which covers information on mineral resource demand in Flanders, including secondary raw materials, import and export from MDO. The AOD has a development perspective for 25 years, where specific actions are planned for a time period of five years and are approved by the Flemish Government.

- **Establishing mineral resource specific information for land use:** Based on future demand outlined in the "General Surface Mineral Resources Plan", LNE publishes “Mineral Resources Notes” for each individual mineral resource (i.e. The Mineral Resources Notes are Vision notes from the Minister responsible for Natural Resources). These Mineral Resource Notes also contain proposals for search zones that are a spatial translation of geological knowledge, demand and its spatial context.

- **Setting up a database for geological resources:** The online data base “Databank Ondergrond Vlaanderen” (DOV) compiles, among other aspects, all necessary geological information for all relevant minerals, such as Geological maps, bore hole data, geological models and viewer, and mineral resource explorer (development in progress). Additional data is available in the form of additional drilling on the sites in question. The geological information compiled through the above-mentioned steps is one of several factors taken into account along with agriculture, nature, constructions, proximity to waterways, economic situation, etc., in the selection process for new extraction areas.

- **A two-way process of integrating new proposals for extraction areas into land use plans:** Two options exist on how mining can be strategically integrated into land use planning approaches: a) a provision-driven process: based on the Mineral Resource Notes’ search zones, the minister of the environment proposes to start of the procedure to the Flemish Government for a Spatial Implementation Plan which changes the function of a specific area; b) Demand-driven process: Every person or company can send the minister a request in compliance with the "General Surface Mineral Resources Plan".

After the initiation of the process, “Ruimte Vlaanderen” (department under the Flemish Ministry of Environment) drafts a spatial implementation plan (RUP) with an approved Strategic Environmental Assessment and consults with the respective administrations. The provisional approval of the RUP by the Flemish Government goes through a public consultation procedure. The Flemish Government takes into account the results of the consultation into its final approval of the RUP. In this regard, one of the most common outcomes of this process is the expansion of existing areas for mining.

**Key aspect 2: Changing the current permitting system into a one-stop-shop**

In the current system, there exists no separate permitting system for extraction activities: There is
one permitting legislation systems in place that provides the framework for any permitting process, but is implemented by several authorities. For extraction permitting, the Provincial Executive (provincial authorities are a level between the municipal authorities and the Flemish authorities) and the Municipal Executive coordinate the environmental permit process and the building permit to change the topography of the natural landscape, respectively.

The major steps in changing the existing system into a simple and fast procedure for permit application, with minimal obligations for citizens and companies, are:

- **Political commitment**: The initial drivers for changing the current system were based on an initiative at the political level. The actual consultation process for changing the current system involved all relevant authorities that are responsible for the permitting processes.

- **Harmonising procedures**: Both the Environmental Permit and a Building Permit will be turned into the Physical Aspects Permit by February 2017. This will lead to the setup of a Provincial Physical Aspects Permit Committee, consisting of all governmental departments that are concerned, and replace the current Provincial Physical Aspects Permit Committee.

- **Resulting changes in existing legislation**: The change of the current permitting system led to the development of a new decree “omgevingsvergunningsdecreet” and some changes in existing legislation.

- **An independent application procedure**: The procedure for application for physical aspects permits to the Provincial Executive is: 1) Submission of permit application, including EIA, to the Provincial Executive; 2) Announcement of positive or negative admissibility decision (max. 30 days after application); the positive admissions is followed by three parallel processes: 3) conduct of public consultation, opinion from provincial physical aspects permit, 4) Approval / disapproval of EIA report by EIA Unit; 5) Approval / disapproval of permit application by the Provincial Executive and notification to the applicant (max. 120 days after positive admission with a potential extension of 60 days).

- **Some major challenges to be addressed in the future**: Digitalisation of the entire application process by the beginning of 2017; taking into account the practical experiences of public administrations in the application procedure, in order to find out what works and what needs to be changed in the application process.