

# Case 14: The Austrian Mineral Resources Plan (Österreichischer Rohstoffplan, AMRP)

A safeguarding tool for mineral resources and its implementation on different levels of governance



This good practice case responds to the challenge of strategic aspects of protecting mineral resources ('safeguarding') as well as integration of minerals and land use planning policy.

Minland Good Practice Stream Topics:

D) integration of minerals and land use policy

H) protecting mineral resources and safeguarding

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## Part 1: Case Overview

### 1.1 Executive summary

The Austrian Minerals Resources Plan (AMRP) is a good practice example of implementing and integrating mineral safeguarding approaches in land use planning policy. The AMRP is a policy instrument to **safeguard mineral resources** for land owner raw materials (aggregates, construction materials) on the national level and acts as a policy instrument that facilitates integrated minerals and land use planning policy implementation on the provincial level. Its main objective is to document raw-material deposits and outline minable deposits with low conflict potential with other policy-relevant land-uses such as nature conservation (e.g. national parks, Natura2000), urban/settlement development, watershed, etc. While policy-making for mineral resources and mining are institutionally embedded on national level, spatial planning (including land-use planning) policy-making and implementation is institutionally embedded on the provincial and even municipal level (zoning plans, spatial development plans/visions). Thus, the actual horizontal (across policy sectors) and vertical (across different levels of governance) integration of minerals and land-use (spatial) planning occurs in different institutional arrangements and practises.

Therefore, the Austrian case looks into how the AMRP is linked to, and integrated on, the level



of policy governance and decision-making processes as well as on the legislative domain. In this regard, we provide some recommendations to illustrate the diversity of implementation pathways of safeguarding approaches by investigating barriers and enablers of institutional frameworks, land-use planning options and vertical policy integration on the example of two Austrian Federal States (provinces). The case of safeguarding mineral deposits and integrative mineral and land use policy is of value for both national level mineral and land use planning policy makers, mining authorities, as well as public administrators on the regional or federal state level.

## 1.2 Overview of Key Good Practice Aspects and recommendations

### Good Practice Aspect 1: An integrated national plan for mineral safeguarding and minimisation of land use conflicts:

- Designing the AMRP (i.e. mapping raw-material deposits with low conflict potential) requires political mandate and sufficient amount of resources (SUCCESS FACTOR/STRATEGIC CHOICE).
- **Suggestion for Transferability:** Data availability from different policy streams and close collaboration with responsible authorities and administrative levels related to relevant sectors of such policy streams.
- Providing an information baseline for minable deposits with low conflict potential (SUCCESS FACTOR/STRATEGIC CHOICE).
- **Suggestion for Transferability:** Political mandate and resources given to responsible authority for gathering of data to develop a planning tool.
- Lack of data and information exchange between different sectors (horizontal) and levels of government (vertical). (CHALLENGE ENCOUNTERED)
- **Suggestion for Transferability:** Provision of resources and organisational structure to manage flow and exchange of data amongst and between different levels of government.
- Lack of monitoring or progress measuring of implementation (CHALLENGE ENCOUNTERED).
- **Suggestion for Transferability:** Apply qualitative and quantitative instruments for policy monitoring.
- Non-disclosure of the Austrian Raw Materials Plan (CHALLENGE ENCOUNTERED).
- **Suggestion for Transferability:** Proper data management plan and consideration that allows for disclosure to public administration.

- Technical planning approach and lack of political sensitivity in policy design (CHALLENGE ENCOUNTERED).
- **Suggestion for Transferability:** Active engagement and multi-level governance in the form of a cross-scale/ cross-policy working group to avoid “technical solutions to complex problems”.
- **Heterogeneous legal frameworks and decision-making processes** on regional level considered (9 provinces) (CONTEXTUAL FACTOR)
- **Suggestions for Transferability:** Integrative policy making as a baseline.

### Good Practice Aspect 2: Flexible approach (soft policy tool) for implementation of a national level mineral safeguarding policy:

- **Willingness and commitment to implement AMRP by provincial government actions** requires active engagement/communication and governance approaches for guiding implementation on regional level (SUCCESS FACTOR).
- **Suggestions for Transferability:** Active engagement/ communication and governance approaches for guiding implementation and improve coordination and linkages between different policy streams.
- **Legislative competence distributed along different levels** (CONTEXTUAL FACTOR).
- **Suggestions for Transferability:** In similar contexts a more integrated approach for communication and coordination is necessary to achieve safeguarding.
- Voluntary and ‘soft-policy instrument’ indicate no obligation for lower levels to implement plans (CHALLENGE ENCOUNTERED).
- **Suggestion for Transferability:** Depending on regulatory/legal framework different approaches could be more effective e.g. regional programmes (regulatory policy instrument).

### Good Practice Aspect 3: Implementation of the AMRP: Option 1 – Ordinance

- Regulatory policy tool for implementing mineral safeguarding (SUCCESS FACTOR).
- **Suggestions for Transferability:** Choice of appropriate policy instruments (voluntary instruments demand high technical and managerial capacities) but also provides flexibility, coercive instruments however may provide legal protection and predictability.
- **Alternative and masked safeguarding mechanisms are favourable option for mineral safeguarding in a regulatory tool** in case there are **less favourable conditions (political commitment or interest)** in mining, since these are indirect methods for safeguarding of mineral deposit (STRATEGIC CHOICE).



- **Suggestions for Transferability:** Indirect methods can support safeguarding in less favourable conditions (political commitment or interest).
- Implementation of priority zones (SUCCESS FACTOR)
- **Suggestions for Transferability:** Priority zones can provide strong protection against other land-uses that would hinder or limit future extraction of the deposit.
- Transparency of zoning areas (STRATEGIC CHOICE).
- **Suggestions for Transferability:** transparency of zoning areas can increase accountability and legitimacy of decisions but also provides an additional burden for the administration in terms of time and resources.

## Good Practice Aspect 4: Implementation of the AMRP: Option 2 – Sectoral Action Plan

- **Soft policy instrument as implementation pathway:** the Sectoral Action Plan is a non-regulatory/voluntary plan for the region that is required in case of less or contradicting political interest (CHALLENGE ENCOUNTERED).
- **Suggestions for Transferability:** A soft-policy tool can be perceived as a compromise for dealing with a controversial topic.
- Supply and demand outlook and planning tool that outlines the need, demand and requirement for mineral extraction (SUCCESS FACTOR).
- **Suggestions for Transferability:** Required integrated and extensive collaboration with other policy streams in realising inter-linkages.
- Comprehensible illustration of important regional, provincial interests for nature conservation (SUCCESS FACTOR)
- **Suggestions for Transferability:** Clear identification and weighing of land-use interests to support regional and provincial interests.
- The use of the plan to support on-demand decision-making enabling expert opinions and supporting administrative procedures (SUCCESS FACTOR).
- **Suggestions for Transferability:** The access to data and an 'expert' tool to support demand for minerals as a public interest.

## 1.2 Mineral resource groups



Aggregates



## Part 2: Case description

### 2.1 Case description

The Minland case of the **Austrian Mineral Resource Plan** (“Österreichischen Rohstoffplan” AMRP) **describes 1) what are key characteristics of a national plan for safeguarding minerals deposits** for land owner raw materials (aggregates, construction materials) and, 2) how such a **national level policy is implemented on effective levels of spatial and land use planning policy on provincial** (and down streamed regional and local) levels of public administration. The goal of the AMRP is to assess and determine, based on standardised methods, on a national level, raw-material deposits and to assess their conflict potentials with other land-use options (i.e. settlement development, watersheds, conservation, forestry, etc.). Hence, so called Rohstoffeignungszonen (mineral potential areas) were intersected with other competing/conflicting zones or designated areas (especially building land, groundwater tables, conservation/nature protection, Natura 2000, areas protected based on water-shed protection/water legislation) to determine possible Rohstoffsicherungsflächen (literally: Raw Materials Safeguarding areas) . Furthermore, the case looks into how the AMRP is used and facilitated on a voluntary basis **in the context of land use planning on the level of policy governance and decision-making processes as well as the legislative domain**. While in Austria the safeguarding for mineral deposits (free-to-mine, state owned) is organised by the national level (competence portfolio of the federal state), the implementation and connection to spatial planning/ land use planning takes effect only at the provincial level (provinces).

Thus, the **AMRP provides good practice information for practitioners interested in public policy tools for minerals safeguarding as well as how to better integrate minerals policy in land use planning policy**. The case study describes interactions of mineral and land-use planning policy and processes, focussing on the pre-exploration/land-use planning phase, and its declination on the regional level. We exemplify this, by looking into how the AMRP is applied in two Austrian provinces (Tyrol and Styria), indicating two ways of how a national planning policy can be implemented on the regional level and in regional land use planning processes. These two provinces illustrate the diversity of implementation pathways by looking into legal frameworks, land-use planning options and vertical policy integration.



## 2.2 Responsible institutions

- **The Austrian Ministry of Sustainability and Tourism** (Department of Mineral Policy) responsible for designing the AMRP
- **Provincial government authorities** of Styria and Tyrol and selected **regional and local public authorities** responsible for implementing the AMRP (FOR AGGREGATES)

## 2.3 Case stakeholders

Whereas **National government public administrators** are responsible for mineral policy (based on the constitution) ), **provincial government public administrators** are responsible for land use planning. Furthermore, **regional and local public authorities** (spatial planning visions, development plans/programs, etc. on sectoral or integrated level) are also legally endowed for spatial planning activities: zoning plans (land-use plans) are embedded on local/municipal level by constitutional law.

## 2.4 Context

The Austrian Mineral Resources Plan has the **legal status of an ‘Expert Report’ and is considered a documentation/inventory of (minable) deposits but NOT a planning strategy** or a master plan for land use planning in the narrower sense (see report Court of Auditors) . Hence, a legal basis for “technical planning activities” on national level regarding minerals is/was not fully established (e.g. by means of mandatory technical plans), and, thus, there is **no mandatory implementation on provincial and downstream levels**. However, several provinces used data from the AMRP and implemented the AMRP in some less or more stringent way in their provincial, regional and subsequently local land use planning systems. Austrian public administration and policy are divided into four main levels, which makes a stringent implementation of the AMRP through all levels of land use planning challenging: national, provincial (federal states), regional and municipal. The Austrian federal system and principle of subsidiarity embeds many different legal frameworks, policies, planning instruments and implementation responsibilities on provincial and municipal level. Thus, the integration of mineral and land use policy is taking place on different levels of governance as well as with a variety of different public institutions involved.



## Part 3: Case Evaluation

### 3.1 Impact achieved by the AMRP

The results from the case study suggest a fragmented implementation and unclear impact (regarding the number of protected deposits) of the AMRP, due to its soft / non-coercive character. It can be stated that the Rohstoffplan contributed to the Minland Good Practice Stream topic of protecting mineral resources / safeguarding and policy integration and mainstreaming safeguarding and preventing sterilisation as policy goals in LUP and raising awareness in LUP on provincial level :

- **To introduce and create awareness for the concept/national policy goal of mineral safeguarding on lower levels of governance** (i.e. provincial, regional and local).
- **Partial uptake of the data provided by the AMRP mineral safeguarding/preventing sterilisation concept in provincial and regional land use planning policy instruments** (i.e. stringent uptake: Designation of mineral resource priority zones of different nature and level of strictness; less stringent: Regional development programs are delineating mineral extraction priority zones).
- **Application of „masked“ protection /zoning of deposits to avoid speculation** (indirect safeguarding through agricultural priority, forestry or grassland zones).
- **Outlook on future demand of raw materials:** Sectoral Plan for Minerals and Mineral Extraction and safeguarding provide an outlook on the future demand on raw materials .



## 3.2 Good Practice Aspects: Elements and their transferability

GOOD PRACTICE ASPECT 1:	
An integrated national plan for mineral safeguarding and minimisation of land use conflicts	
Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Mapping raw-material deposits and outline minable deposits with low conflict potential:</b> Using comprehensive data sets on minerals resources to apply a methodology of supply and demand projections to outline and describe deposits with potential low land-use conflicts.</p> <p></p> <p><b>SUCCESS FACTOR / STRATEGIC CHOICE</b></p>	<p><b>Developing a methodology that has certain quality criteria, is able to include and process different several data items</b> (deposits of minerals, different land use forms etc.), including data from other policy streams, to support the coordination and improve linkages between mineral policy and land-use planning policy (and other policy streams, such as environment, nature protection, water management, forestry/agriculture);</p> <p>Using data and including policy goals/outlined polygons into policy making – is only initial step – <b>including persons/actors/stakeholder from those policy streams</b> is important for coordination and integration and improve implementation.</p> <p>Data availability from different policy streams (nature, infrastructure, agriculture/forestry, etc.) is the starting point in the administrative process for spatial planning in order to delineate land uses or zoning. However, <b>public administrators needs to work closely with actual decision-makers by providing processes for feeding this information into the actual decision-making process.</b> Thus, having administration closely working with the political level in the same process is necessary to enable informed decisions for delineation of land uses.</p>
<p><b>Providing information baseline for minable deposits with low conflict potential:</b> The collection, provision and management of data to provide a data baseline for identifying minable deposits with low conflict potential.</p> <p></p> <p><b>SUCCESS FACTOR / STRATEGIC CHOICE</b></p>	<p><b>Political mandate</b> given to the ministry to gather this data and develop the planning tool</p> <p>Providing <b>sufficient amount of resources and time</b></p> <ul style="list-style-type: none"> <li>- One ministerial department: 2-3 staff members &amp; 5 years) for data compilation and setup of the AMRP;</li> <li>- Resource provision to the Geological Survey to perform the mapping, hence the mapping/evaluation of mineral deposits is not only the outcome of business based exploration activity but is performed by the Geological Survey prior to any exploration activity. Thus, the data remains in the hands of the state (and partly provinces, who are also doing geological mapping, e.g. Styria and Tyrol).</li> </ul>



### GOOD PRACTICE ASPECT 1:

An integrated national plan for mineral safeguarding and minimisation of land use conflicts

Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Lack of data and information exchange:</b> Data and information exchange are in general very limited. In particular, vertical and horizontal information exchange is not existent: i.e. there are neither formal nor informal working groups in place where public administrators from different provincial governments and the ministry (due to share responsibilities) could share experience and information fostering policy implementation.</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>Provide resources and organisational structure for national level as well as provincial, regional and local level of admiration to more effectively manage the data exchange and flow (i.e. AMRP data for informing land use planning at lower levels; information on altered land use forms informing the AMRP in terms of having up-to-date and valid data).</p> <p>LUP needs accessible, suitable GIS/data interfaces, defined polygons to integrate them into LUP process and valuation/ comparison with other land use options as well as needs (e.g. infrastructure/processing sites, etc.)</p> <p>LUP should have knowledge on protected deposits and evaluation of attainment of “safeguarding” policy goals (informing AMRP policy process as feedback loop).</p>
<p><b>Monitoring &amp; measuring progress:</b> no policy monitoring is taking place in order 1) check the impact of the AMRP, or 2) to check the progress of the implementation on the provincial and regional level.</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>Apply qualitative and quantitative policy monitoring and evaluation tools to keep progress of the implementation of policy tools.</p>
<p><b>Non-disclosure of the AMRP:</b> Non-disclosure of the policy document resulted in various difficulties (e.g. for once the public interest was not disclosed, hence legal actions and steps for provincial spatial planning resulting from disclosure were missing)</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>Similar as with public data of conversions or re-zoning of green or rural land to urban land, information of raw materials deposits need to be available to public administration responsible for spatial planning. As to how this data transfer and disclosure takes place, there is a need to establish clear procedures ensuring availability and consideration of e.g. potential political conflicts of interest.</p>



## GOOD PRACTICE ASPECT 1:

## An integrated national plan for mineral safeguarding and minimisation of land use conflicts

Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Technical planning approach and lack of political sensitivity in policy design:</b> A lack of political sensitivity and too little consideration of the “political perspective” and political dimension resulted in limited policy implementation performance. The strong technical focus resulted in a technically correct plan. More specifically, major implementation deficiencies are resulting from fragmented governance mechanisms, poor stakeholder participation apart from the “usual suspects” in the policy design of the <i>AMRP</i> and underrated risk of political willingness and poor consideration and integration of their needs in the policy. This has been further triggered by little considerations on policy design regarding implementation or provision of incentives for policy implementation bodies.</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>Technical planning approaches (i.e. mapping of deposits and delineation of mineral safeguarding zones) do not suffice for dispersed responsibility and complexity of the planning and policy problem: Mineral and resource planning can be considered as complex issue or ‘wicked’ problem, which can hardly be “managed” with technical planning approaches (such as blueprint planning). <b>Active engagement and multi-level/network governance approaches:</b> including also representatives from lower organisational units, industry, other stakeholder groups, NGOs and civil society should be actively involved in the design and drafting and evaluation process of mineral safeguarding policies. Diagonal implementation and dispersed responsibility across scales <b>demands a level of involvement that goes beyond the ‘right to submit comments’</b> to draft and consultation procedures. Instead, it requires that implementing authorities are included in the evaluation process during design and implementation to ensure accountability (what happened) and build in feedback loops whether implementation processes work.</p> <p><b>For example, a Cross-scale/cross-policy working group</b> might be beneficial that is meeting and working on a regular basis to establish a “learning space” for peer learning and policy feedback and to discuss alignments, interests etc. One of the possible topics for this working group to discuss could be potential avenues for implementation of the <i>AMRP</i> (e.g. practical examples Tyrol, Styria, what forms of implementation: soft instrument vs regulatory instrument, possibility Spatial Planning Law: as an option for integrating / safeguarding Mineral Deposits).</p>
<p><b>Heterogeneous legal frameworks and decision-making processes</b> on regional level considered (9 provinces) in the regional implementation: Provincial government public administration responsible for land use planning as well as regional and municipal public authorities, also legally endowed for spatial planning activities, are characterised by heterogeneous legal frameworks and decision-making processes.</p> <p><b>CONTEXTUAL FACTOR</b></p>	<p><b>Integrative policy making as a baseline:</b> 9 different provincial decision-making systems and legislative frameworks make integrative policy-making even more important, if there is the expectation that national policies need to be implemented; federal system with dispersed responsibilities might suggest an early integration during the policy design phase.</p>




GOOD PRACTICE ASPECT 2: Flexible approach (soft policy tool) for implementation of a national level mineral safeguarding policy	
Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Willingness and commitment to implement AMRP - provincial government actions:</b> Though the policy document AMRP is a technical report, without any legally binding effect, the provincial government and the linked departments in public administration showed willingness (to different degree) to engage with the AMRP.</p> <p></p> <p><b>SUCCESS FACTOR</b></p>	<p><b>Active engagement/communication and governance</b> approaches for guiding implementation on regional level and for coordination between the different policy streams to improve the linkages.</p>
<p><b>In case spatial and mineral policy legislative competence is distributed along different levels, a more integrated approach for communication and coordination is necessary to achieve safeguarding of mineral resources:</b> i.e. turning the implementation process into a strong “communication” approach between the different levels is further relying on the willingness of other public policy bodies to move in the intended direction and implement policies in coherent way. However, decentralised policy-making offers the opportunity for tailor-made, area-based policies, which provide a better fit for local circumstances, demands and interests. It appears, that in the Austrian case, and due to the division of competences between national (minerals/mining) and provinces (spatial planning), the governance system for coordination might not be fully operational.</p> <p><b>CONTEXTUAL FACTOR</b></p>	<p><b>In order to account for distribution of legislative and implementation competence across different levels: Active and co-creative engagement and multi-level/network governance approaches</b> for policy design and later implementation. Such an approach requires the inclusion of representatives from lower organisational levels as well as other non-governmental stakeholders in in the design and drafting and evaluation process of mineral safeguarding policies.</p> <p>Incentive structures for minerals safeguarding for governance levels holding legislative competence for spatial planning: Soft tools such as co-creative policy design and multi-level network governance will only be active if minerals safeguarding is a priority for either the administrative or the political level of the respective responsible province, region or municipality. However, any incentives (e.g. mineral royalties) provided to province, region or municipality potentially facilitate both the consideration of safeguarding in the administrative as well as the political competent bodies or committee deciding on the actual land use choice.</p>

<b>GOOD PRACTICE ASPECT 2:</b> <b>Flexible approach (soft policy tool) for implementation of</b> <b>a national level mineral safeguarding policy</b>	
<b>Key elements</b> <b>(of Good Practice Aspects)</b>	<b>Suggestions for Transferability</b> <b>(of Key Elements)</b>
<p><b>Soft Instruments – no obligation for implementation on lower levels of public policy governance</b></p> <p>Soft instruments, like regional plans implementing the AMRP, still provide a lot of freedom for the decision makers as well as provide guidance and facilitation of a common understanding of terminology for decision-makers on lower levels of implementation. However – specific, stringent and strategic securing of land for mineral resources on regional and provincial scale is not facilitated.</p> <p>Austrian case (interview, national level) stresses, that implementation is fragmented, because there was too much focus on technicalities and technical implementation and too little attention was paid to the political discourse, agenda setting and ‘political momentum’; administration and LUP departments do not have the authority for the political agenda setting.</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>According to a different legislative background, different approaches and policy instruments can be applied on the regional level: for example, (1) using the format of the policy tool <b>“Regional Programme”</b> (regulatory policy instrument implementation on regional and local level); (2) or a <b>“Sectoral Action Plan”</b> which is used as a guideline (voluntary policy instrument implementation on regional and local level).</p> <p>Administrative/bureaucratic debate must be complemented with political discourse: the active (!) involvement of political actors/stakeholder (political realm) and the administration/civil servants (administrative realm) in policy making is crucial; considering suitable incentives to trigger implementation or make implementation more attractive.</p>

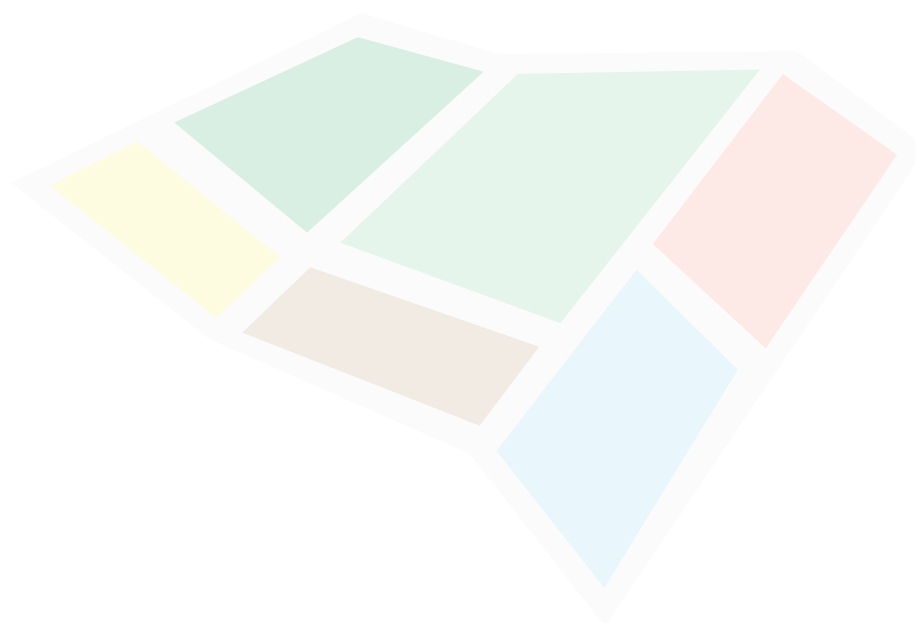
## GOOD PRACTICE ASPECT:

## Implementation of the AMRP: Option 1 - Ordinance "Regional Programme" Styria

Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Regulatory Policy tool for implementing mineral safeguarding:</b> regulatory tools are much more efficient in implementing minerals deposit safeguarding compared to soft (voluntary) policy tools.</p>  <p><b>SUCCESS FACTOR</b></p>	<p>Soft policy instruments demand high technical and managerial capacities and willingness of the involved actors (mineral policy and LUP) for ensuring a coherent and accountable monitoring of the overall land use process; good communication with the industry, local stakeholder and community and other policy departments to keep the overview and management. They provide more flexibility – but also higher risk for shortcomings in the implementation process, while more coercive instruments provide a legal protection that can be enforced and is obligatory for all down streamed planning decisions.</p>
<p><b>Alternative and masked safeguarding mechanisms:</b> Due to less favourable conditions (political commitment or interest) in mining indirect methods for safeguarding of mineral deposit are applied based on the data originating from the AMRP (e.g. access to mineral deposits can be safeguarded via the definition of priority zoning for "agriculture" - agriculture on the surface does not impact the accessibility of the mineral resource).</p> <p><b>STRATEGIC CHOICE</b></p>	<p>In case there are less favourable conditions (political commitment or interest) in mining <b>indirect methods for safeguarding of mineral deposit are applied based on the data originating from the AMRP.</b></p>
<p><b>Implementation of Priority zones:</b> Establishment of exclusive zones (depending on particular landscape types) and Priority Zones on the regional planning scale (linking regional development and spatial planning on regional level, 2 policy streams). Priority zones are outlined areas that have a strong coercive character: They provide strong protection against other land-uses that would hinder or limit future extraction of the deposit.</p> <p><b>SUCCESS FACTOR</b></p> 	<p>Implementing priority zones of a coercive character can provide strong protection of deposits against other land uses that could hinder or limit future extraction of the deposit, thereby ensuring safeguarding.</p>


**GOOD PRACTICE ASPECT:****Implementation of the AMRP: Option 1 - Ordinance "Regional Programme" Styria**

Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Transparency of zoning areas:</b> Clear zoning and translation of areas in spatial units that are published and accessible for the public: Transparent land-use options and zoning: accessibility of the data and zoned areas. The reasoning for the planning and decision making process on the valuation of land, land-use options and the decision taken is to ensure an accountable and transparent process, including the valuation criteria (e.g. weighing of different policy goals).</p> <p><b>STRATEGIC CHOICE</b></p>	<p>Transparency in the process: reasoning of the planning and decision making process on the valuation of land, land-use options and the decision taken, to ensure an accountable and transparent process, including the valuation criteria (e.g. weighing of different policy goals) → this however, increases pressure on administration and resources, which are not always available. For example, facilitating transparency of zoning areas is an additional burden for the administration in terms of time and resources. More specifically, process transparency requires consideration of more documentation in the budgets for public administration. Hence, for transferability, one should consider the benefits of transparency and auditability of the process with increased demand of resources and capacity (and ensure that those responsible for the process have access to appropriate resources to complete the process without being overburdened).</p>



GOOD PRACTICE ASPECT:	
Implementation of the AMRP: Option 2 - Sectoral Action Plan: <i>Gesteinsabbaukonzept Tyrol</i>	
Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Supply &amp; demand outlook and planning tool:</b> Intermediary sectoral plan, that outlines the need, demand and requirements for mineral extraction (aggregates: demand based evaluation for aggregates; Metals/ etc.: supply based evaluation) and its inter-linkages to other policy streams (i.e. tourism, conservation, agriculture).</p> <p></p> <p><b>SUCCESS FACTOR)</b></p>	<p>Requires intensive research on regional demand forecast of raw materials from all sectors.</p> <p>Inter-linkage to other policy streams requires and integrated and extensive collaboration approach with other policy areas that can be demanding in terms of resources and time.</p>
<p><b>Less commitment for implementation: Soft policy instrument</b> as implementation pathway in case of less or contradicting political interest: A non-regulatory or soft policy tool can be perceived as a compromise for dealing with a controversial topic or a topic with less political traction, that nevertheless provides guidance for planning and decision-making.</p> <p><b>CHALLENGE ENCOUNTERED</b></p>	<p>In case there is no obligation for implementation <b>active and co-creative engagement as well as multi-level governance approaches</b> for policy design and later implementation are required: Such an approach requires the inclusion of representatives from lower organisational (regional and municipal) in the design and drafting process of mineral safeguarding policies.</p> <p>Soft tools should be clear in wording and describe well the expectations, goals etc. to function properly as guidance document, avoid ambiguity, and increase flexibility for implementation.</p>
<p><b>Comprehensible illustration of important regional, provincial interests for nature conservation:</b> The Sectoral Plan (Gesteinsabbaukonzept Tyrol), which integrated parts of the ARMP, describes and discusses land use areas and interests. This indicates that there is weighing of different land-use options in the decision making process.</p> <p></p> <p><b>SUCCESS FACTOR</b></p>	<p>Access to information of different land use areas (from the ARMP) allowed for informed weighing of land use of regional and provincial interest in the formulation of the Sectoral Plan (Gesteinsabbaukonzept Tyrol).</p>



GOOD PRACTICE ASPECT:	
Implementation of the AMRP: Option 2 - Sectoral Action Plan: <i>Gesteinsabbaukonzept Tyrol</i>	
Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p><b>Support for on-demand decision-making:</b> The <i>Gesteinsabbaukonzept Tyrol</i>, which serves as a voluntary instrument, is used for expert opinions and administrative procedures, when the demand for minerals is of public interest.</p> <p></p> <p><b>SUCCESS FACTOR</b></p>	<p>Access and knowledge of a sectoral plan for safeguarding; requires information channels and coordination between actors responsible for land use planning and adjacent actors.</p>

