

MinLand: Mineral resources in sustainable land-use planning

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Deliverable 7.4 "Main conclusions on the first Network workshop"

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Introduction

One of the most important tools for accomplishing the objective of equal stand of mining projects in land use planning assignments, as any other type of land uses, **is the development of a strong network with broad stakeholder participation**, including participants not only from local and regional authorities but also from civil society, e.g. environmental NGOs and extensive land-users.

Therefore, the first step for the creation of a strong network, which can add knowledge for future mineral land-use practice and can support the adequate linking between mineral- and land-use policies, was evaluated to be the participation of stakeholders from the following Expert Groups:

- Stakeholder Expert Group 1 (EG1): "Public policy administrators"
- Stakeholder Expert Group 2 (EG2): "Industry"-
- Stakeholder Expert Group 3 (EG3): "Research Institutes and Organisations"
- Stakeholder Expert Group 4 (EG4): "Public and Social Bodies"
- Stakeholder Expert Group 5 (EG5): "National Geological Surveys"

The identification and mapping process started since the beginning of the project, using the MINLAND Consortium's relevant contacts, the existing associations, networks, clusters, governments, regions, industry, academia, RTOs, NGOs, end-users, and social bodies. The Network of Experts, the strategy behind its creation and the analysis of the participants were included in Deliverable D7.1.

In the present report, the preparations, the topics selected for discussion as well as the first conclusions that arise from the dialogue in the round tables that took place are presented. It must be noted that, only non-personal data will be included to all Network-related reports, respecting GDPR, since the table with the personal data can be accessed only by NTUA and SGU.



1. Preparations for the Network Meeting

1.1 Design of the Network of experts meeting- Topics selected for Discussion among the Network of Experts

The findings of the first, "pilot" local workshop is Ireland were very interesting, especially the fact that for the same subject there could be a significant diversity of opinions and approaches, even for stakeholders that share a common background. Therefore, it was decided to use the same approach also for the Network of experts, selecting for discussion subjects of great interest for the development of Raw Material sector such as the policy integration. During the designing of the meeting, the main idea was to inform the participants about the objectives of MinLand project, provide them with some very interesting data from a legislative/permitting, policy and land use-planning perspective through some of the case studies that MinLand is analyzing and then engage them into round table discussions under specific topics. The Topic that was selected to be discussed in the 1st Network meeting, as well as the questions that would help the initiation of the dialogue between the participants, can be seen below:

Topic 1 – Policy Integration

Reflect upon questions below and to what extent solutions and suggestions are transferable between different MS. If not why?

- a) Integration of minerals interest in land use planning, the weight of the protection of minerals in national practice?
 - a. Part of land use planning?
 - b. Level of safeguarding adequate or not?
 - c. Prospecting is often in metal producing countries seen as a land-use that can co-exist with other land uses and a key to opening up new mines. What are the possibilities and obstacles in achieving this?
- b) What are the key land use conflicts? How can they be addressed?
- c) Support for Planning and Permitting Authorities, what do they need:
 - a. Is the land use planning flexible enough to meet demands of prospecting and mining.
 - b. Guidelines for Planning Authorities?
 - c. Expertise in the Planning Authorities?
 - d. More support from central government?
 - e. Other



1.2 Invitation to the Experts

The Network of Experts was activated towards the end of September and the first weeks of October, when the MinLand partners approached the network candidates asking them to participate in the network as well as the Network meeting that was going to be organized at the end of November in Brussels. In <u>Figure 1</u>, the process that was followed for the engagement of the experts and the activation of the network can be seen.

"Consortie contact" sends to related stakeholders consensus letter + request for the additional data

All data will be sent to NTUA & SGU.

NTUA will compile the complete list for the Network/ safekeep the consensus letters. NTUA will update the Network and the stakeholders consensus status

Figure 1. Schematic representation of the process for stakeholder engagement

It must be noted that the Network of experts is foreseen to be a "living organism" therefore, the size and the type of its members is expected to vary in the course of time. The members of the network received an invitation informing them about the activities of the network as well as the organization of the 1st Netwok meeting in Brussels and inviting them to participate. The invitation sent by MinLand partners to the potential members of the Network of Experts is found in the section below.

MinLand: Mineral resources in sustainable land-use planning Invitation to Network WS Brussels November 26, 2018

Dear Sir/Madam,

We are contacting you on behalf of the MinLand project and it is our great honour and pleasure to invite you to participate and contribute with your expertise to the MinLand Network.

In Europe the need for raw materials by far surpass the production. In order to meet need of needs of raw materials within the EU has e.g., through the H2020 umbrella launched a number of actions directed at improving conditions for the extractive industry. In this context it was recognised that one of the large challenges in extractive minerals industry is access to land and its use. Therefore, the H2020 MinLand project aims at investigating good practice in land-use planning policies, practices and linking to mineral prospecting and extraction. Specific land-use challenges might arise from/at e.g.,

- highly densely populated areas
- nature conservation and protected areas
- other industrial and other activities- tourism, agriculture, cultural heritage
- infrastructure
- affected parties

MinLand project aspires to assist and effect the land use process so that mining projects will be evaluated on par with other potential land uses. MinLand will also attempt to provide examples of Good Practice that can assist to improve the authorization and permitting procedures.

One of the actions that can assist promoting and achieving this goal, is the creation and active involvement of a network of experts and stakeholders, associated with land use planning and/or affiliated with mineral planning or industry. Therefore, MinLand will create a "Network of Experts". We are inviting you to be a part of this Network by sharing with MinLand your views about certain aspects related to land-use planning. Furthermore, as a member of the Network, we will invite you to participate in expertise exchange events together with other specialists as you, that we will organise firstly in 2018 and a second event in 2019. The Network of Experts will also be used for consultations of the MinLand network regarding good practice and challenges in mineral prospecting and extraction in Europe.

The first event in Brussels will take place on November 26 in Brussels. Expenses up to 200 EU can be covered. If you accept our invitation, please answer by e-mail indicating your personal data (name, e-mail, telephone number, position in the company/institution). By registering you agree to our procedures for storing personal data and consent for participation (for more information see accompanying attachment).

Register by email to: Chrysa Panagiotopoulou chrysapanag@metal.ntua.gr or Maria Taxiarchou, NTUA taxiarh@metal.ntua.gr

Questions regarding project: Ronald Arvidsson, Coordinator – ronald.arvidsson@sgu.se



2. Network of Experts Meeting

2.1 Program for the Network of Experts Meeting



Agenda - MinLand Network of Experts, November 26, Brussels

Date: 26/11/2018 **Duration**: 9.00- 18.00

Place: Courtyard by Marriot Brussels EU Rue Joseph II 32, 1000 Brussels.

Programme

09.00 Welcome coffee

09.30 Presentation MinLand project and Policy and Mineral Land use – European perspective – Ronald Arvidsson

09.55 The concept of the workshop learning from each other – peer learning – Andreas Endl 10.10 Case histories – linking mineral and land-use policies Good Practice and challenges: Ireland, Spain, Norway, Finland presented by the case owners.

10.40 Coffee Break

11.00 Case histories continued
Austria, Portugal, Sweden presented by the case owners

12.30 Lunch

13.30 WS – Peer Learning Linking mineral and land-use policies 14.30 Challenges of protected areas – ways to mitigation and ecosystem services Boliden and ecosystem challenges Anders Forsgren

15.00 Coffee

15.20 Ecosystem services – Michael Schulz

15.50 WS – Peer Learning

17.00 Conclusion of the day and round the table discussion

18.00 End of meeting

2.2 Presentation summaries

Presentation of MinLand Project

The first presentation was delivered by Ronald Arvidsson (Geological Survey of Sweden), providing an outline of the MinLand project, the main objectives and outcomes such as linking mineral policies with land-use policies by 1) creating a knowledge repository, 2) facilitating minerals and land-use policy making, 3) strengthening transparent land-use practices, and 4) foster networking.



Figure 2. Presentation of Minland project to the Network of Experts

Presentation of Peer Review Process

The second presentation was given by Andreas Endl (Vienna University for Economics and Business) who outlined the principle of peer learning as part of the MinLand project. The objective of the presentation was to clarify why participants would be asked to interact with each other in the afternoon session and how it would inform the Good Practice Guide.

Presentation of the Irish case study

The first case-study presentation was delivered by Gerry Stanley (Geological Survey of Ireland). This Irish case study involves the life-cycle of lead and zinc mines from exploration to closure and remediation. Ireland was one of the largest producers of lead and zinc in the world. It is also the home of Europe largest lead and zinc mine, the Boliden Tara Mine, located



in Navan, County Meath. Lead and zinc production was concentrated in three mines, Lisheen in County Tipperary, Galmoy in County Kilkenny and Tara in County Meath. The Lisheen and Galmoy mines have now closed, while Tara mine has been active for over forty years. There is currently an application to re-open the Galmoy mine. Key success factors and problems in Policy Integration, Permitting and Licensing Integration, Public Participation and Transparency are analysed.

During the presentation Mr. Gerry Stanley mentioned that for Ireland there is a fast track route for industry towards getting started but not for mining and that it is necessary to have expertise at all levels of Government. Furthermore, it was highlighted that prospecting in Ireland does not need a land use planning permit but an EIA is needed for a mining permit. According to Mr. Stanley's presentation, the weakest link towards mining is the lack of understanding of the local public.



Figure 3. Presentation of the Irish case by Mr. Gerry Stanley

Presentation of the Spanish case study

The Spanish case study, which was presented by Virginia Rodriguez, is referring to the Navarra region, one of EU regions with highest consumption of aggregates and concerns a deep analysis of the resources and territory to produce a land use planning tool. For the realization of the Spanish Mining-Environmental Planning Map the requirements were:

- An environmental inventory: study of the physical and socioeconomic environment.
- An analysis of the mining activity: collection of data from active and abandoned quarries in field templates.



A geological-mining survey.

Once all this starting information was available, the so-called territorial diagnosis was addressed. The ultimate purpose of the territorial diagnosis was to determine the capacity of the territory to support the exploitation of aggregates (carrying capacity for aggregates mining).

One of the main objectives of the territorial diagnosis was the identification of the most valuable or vulnerable environmental elements, in order to guarantee their preservation or to minimize the foreseeable impact. Within the study area, the following elements were analysed, in risk terms, due to their high conservation value or to their high vulnerability in the face of a future mining exploitation: Points of Geological Interest, Groundwater, Channels and banks of the rivers, wet areas, Flooding areas, Best soils, Vegetation and fauna, Cultural heritage, Urban areas and road and agricultural infrastructures.

The final results were a territorial zoning proposal, a mining and environmental planning map, and the definition of exploitation and restoration criteria and models. Key to success have been the collaboration of the authorities and institutions involved and the great availability of information (especially cartographic and accessory information) in the study area.

Therefore, in the Spanish case, the Region of Navarra integrated minerals into the land use planning in a mining and environmental planning map and aggregates are included into potentially exploitable areas. These maps show areas of potential exploitation with quality indicators. Prospecting is free but mining land use must change in areas of "concession".

Presentation of the Norwegian case study

The case study deals with land use management of mineral resources in Nordland County in Northern Norway, an historical mining region and the second most important county in Norway in terms of extractive industry. The presentation was performed by Mr Henrik Schiellerup (Geological Survey of Norway).

Nordland county includes 8 national parks and reindeer herding activity while it is a region with classified mineral resources that are adapted to county/national land use management tools to better forecast and mediate potential land use conflicts, safeguarding mineral resources. As it was mentioned during the presentation, mineral resources registration for deposits is valued as of local, regional or national importance. Competing land uses are e.g., sensitive nature, reindeer husbandry, hydropower areas.

Presentation of the Finnish case study

The Finnish case, that was presented by Mrs Nike Luodes concerns the Kevitsa mine (Ni,Cu), which constitutes is a good case for transparency and community acceptance in an area where reindeer herding is performed and for commitment to conform to strict environmental



permitting requirements. The Finnish case is also showing how minerals are included into land use planning at regional level. According to Mrs Luodes presentation, minerals entered into land use planning up upon the application of permitting. Furthermore, the land use is being adapted to Sami heritage areas.

Presentation of the Austrian case study

Mrs Katharina Gugerell (University of Leoben) presented the **Austrian Mineral Resources Plan** – a safeguarding tool for mineral resources and its implementation on different levels of governance: The AMRP's goal is to document raw-material deposits and outline minable deposits with low conflict potential with other policy-relevant land-uses. 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.). According to Mrs Gugerell the aspects that worked well were:

- Willingness and ability of the provincial government
- Flexibility to fit within particular conditions
- Raising awareness of safeguarding
- Partial uptake of the data by the Austrian Mineral resource Plan

The aspects that did not work well were:

- Lack of communication and participation in the policy design phase
- Provincial level not sufficiently involved in the design phase.
- Technically a correct plan however would it be necessary to complement with improved communication?

Presentation of the Portuguese case study

The Portuguese case study that was presented by Mrs Maria Figueira builds upon 30 years of land use planning and mining and concerns both metallic and other minerals as well as critical raw materials. The specific points that were mentioned in the presentation are:

- Areas of known geological resources can be exploited and are included in the category rural soil.
- Responsible mining
- Disclosure CSR
- Meeting WS
- Encouragement of transparency initiatives and local supportClose monitoring by the authorities
- Royalties policy
- Principles of coexistence two or more uses can coexist
- Principle of parity of all natural resources



- Stating the coexistence/compatibility with other land uses in rural soil
- Option for the local community to decide upon the lanad use if negative the authorities will inform of potential uses and effects to promote mining.
- Success factors openness and transparency
- Creation of jobs and economic development



Figure 4. Presentation of the Portuguese case

A very interesting measure that is currently implemented in Portugal and has assisted in achieving social acceptance is the fact that part of royalties are allocated to local projects. As a consequence some municipalities become more open to mining activities and it becomes easier to obtain access to land. The major challenges that the Raw material Sector has to face are the bad examples from past activities as well as the difficulties in communicating with a part of local decision makers.

Mrs Figueira, included also in her presentation some possible responses to the challenges, such as:

- Dialogues/meetings with local authorities
- Highlight the importance of mining heritage
- Highlighting the importance of the mineral resources with the mineral resources in daily activities in modern societies
- Fostering SLO

Presentation of the Swedish case study

The Swedish case was presented by Mrs Ronald Arvidsson, in which it was highlighted the importance of involving stakeholder in advance and of seeking solutions when addressing possible conflicting land uses in advance. This is supported by a rich open available geological information (Geological Survey of Sweden) and land-use dataset that can be used for both the industry as well as all authorities. In this way it is possible to fast up the permitting process.

The system of land use is well integrated with the application process and there is a flexible approach to policy support. Most data at governmental, regional or municipal level (e.g., military areas are not included) is available to both the companies as well as other authorities and public. For support functions are also advice on use of data and functionality of the system. The Swedish Geological Survey is e.g., tasked with supporting industry, authorities and public with geological information that is a base for prospecting but also decisions upon permitting and land use aspects

2.3 Round Tables

For the Round table discussions, the audience (38 persons), comprising both MinLand partners and Experts, was divided into 5 round tables. Special care was given to ensure that each round table would have representatives of as many different expert groups as possible. The round tables were provided the same set of questions (presented in Section 1.1) to work on, and each round table had to select a rapporteur that would communicate the conclusions of each round table during the plenary group open discussion process. In the section below, some of the main issues that were discussed in each round table are summarized.

Round Table 1

In this round table it was highlighted the lack of common language between the different authorities, stakeholders and public not only in European level but also within the same country.

Regarding the participation and civil engagement, it was suggested that maybe a good idea would be to approach people through formats and media that are more informal.

Another issue that was also discussed is that it appears that mining and metallurgy do not have appeal as professions to the general public and a good idea would be to try to make the Raw Material-related profession more attractive to the people outside the sector.

The convertation then revolved around Natura 2000 issues, which might make mining impossible. The question that arose from these discussions was whether it would be possible to have underground extraction in a Natura 2000 region.



Round Table 2

The discussions in the Round Table 2 begun with the request for a definition of safeguarding: what does safeguarding stands for? It is important to find a definition for this term, that will be commonly agreed and will guarantee that land use plans will not "sterilize" land areas by reserving them for the sake of mining or any other land use.

A second very important issue that was discussed concerned the lack of land use planning legislation in national and EU level that would promote the Raw Material sector. It was agreed by all the participants that for the designation of a land use, all possible uses should be examined, on equal footing, including the extraction of raw materials. According to the round table participants, it might be useful for the promotion of Raw Material Sector to have an EC recommendation to EC include minerals in land use planning.

The third important issue that was discussed was the necessity of an open dialogue with all interested parties. The dialogue is important to take place also between different sectors (including the general public): it is important for the transparency of these processes to include views from different sectors, interests and perspectives. During the discussions it was also discussed that (according to the participants) guidelines are necessary that will assist the decision-making providing the element of visiosn for the future.

Last, but not least in the list of topics that were dscussed in the round table, it was highlighted that knowledge an extremely important aspect for land use planning in order to assist in reaching a decision.

Round Table 3

The discussions in the third round table revolved around the integration of minerals in land use planning. It was noted that generally minerals are not part of land use planning, at least in the jurisdictions that were present at the table (Germany, Sweden, Norway, Finland, Ireland). In Germany, exists the concept of areas of concentration, but generally Germany is complicated due to the governance system. Regarding the level of safeguarding it was agreed that in general it is not adequate and the participants in the specific round table did not find the idea of designating areas very appealing. Prospecting as a land use co-existing with other land uses is generally accepted in the jurisdictions present at the table and it was commented that it should be accepted in all jurisdictions.

Regarding the key land use conflicts, water usage, Nature areas and Reindeer herding were mentioned.

As far as the issue of support for Planning and Permitting Authorities is concerned, it was agreed that land use planning generally does not include mineral planning. It was also mentioned that there should be guidelines for planning authorities to assist them in making decisions on mining proposals, while in some countries like Finland, Sweden Norway and Ireland this type of guidelines already exists. The expertise is planning authorities was



generally found insufficient but the reality it that there are not many mining proposals so difficult to justify having specialists. The solutions in such cases could be to address to a central authority; assistance from Ministry; or consultants. Nevertheless, it was commented that more support from the central government is needed such as statements of strategy/ policy should identify minerals as being of national/ European importance; as well as assistance to Authorities with mining expertise.

Round Table 4

During the discussions of Round Table 4, it was mentioned that it is important to include minerals in the national strategy and to highlight their national importance and their criticality. Furthermore, it was found to be of great significance the **top- down national governance**, nevertheless in some cases event though the governance suggestions are not implemented as locals have different priorities. Therefore, it was concluded that probably there is also the need for **bottom up intelligence and communication** in order to succeed in the acceptance of minerals into land use. Furthermore, in order to overcome the problems of acceptability by locals it is important to value also the downstream industry.

Also in this round table, the importance of knowledge as a solution to resolving the opposition to mining projects was mentioned. It was highlighted that ensuring true and reliable knowledge at every level could greatly affect social acceptance: if authorities and stakeholders know better, they could accept better.

It was suggested that a way to overcome opposition problem at local community level could be to use Royalties like in Portugal in order to support activities on local level. The question that arose was whether this measure should depend on individual incentives or it should be included in the legislation.

The importance of communication as a way to reduce conflicts of land uses was also mentioned.

Regarding safeguarding, it was discussed that strong safeguarding will affect all interests so it would be better to produce a softer tool for safeguarding.

Round Table 5.

In the beginning, there was a general discussion over the difficulties to compare different national legislations in both land use planning and mineral permitting processes. There are huge difference between the Netherlands and the Nordic countries (Sweden, Finland and Norway) and even for the in the Nordic countries where a lot of similarities can be found, there are still differences.

In land use planning, mineral interests should be accounted for and it was commented that the Norwegian and Portuguese examples could be a way forward. Usually the Exploration phase does not present any difficulties, however the Mining phase creates a lot of opposition.



Safeguarding minerals is considered as inadequate and the connected key land issues are the Water Framework Directive, Natura 2000 as well as Sami areas (in the Nordic countries).

Regarding the aspects that can assist social acceptance, it was commented that it is preferable to have early involvement with relevant stakeholders and authorities and that efficient communication, information as well as education of interested parties is crucial.

The idea of introducing guidelines for planning authorities was found interesting and it was suggested that the guidelines should be easy to understand and use.

National collaboration intergovernmental collaboration was suggested as a way for the development of the Raw Materials Sector within EU. It was commented as positive to have more support from central government but it was found dependent on the Political will so it was suggested that there has to be a common agreement among different political parties.

2.4 Plenary meeting open discussion

During the general discussion different opinions were exchanged about whether planning should be performed at EU level or at national level or at local level. There was a recommendation by some of the participants for a voluntary – framework and legislation for mineral resources.

Regarding safeguarding it was concluded that it can be performed in two ways: the Norwegian and the Portuguese. The only recommendation was to insist on the simplicity of the processes and to proceed in changes only if a process does not work.

3. Workshop Conclusions

3.1 Conclusions

After the round table discussions and the open discussion during the plenary meeting, the following conclusions can be drawn:

- Safeguarding is part of mineral land use and the deposits should be made possible to
 evaluate for the present and the future. A Holistic approach should be implemented
 in the sense that "a system that delivers projects that can result in mining is per see a
 safeguarding system". It was agreed that safeguarding is a need but only in the sense
 that areas are not sterilized with cities and buildings. Safeguarding should refer to
 "naming an area suitable <u>also</u> for mining activities, <u>along with</u> other, compatible, land
 uses".
- It was commonly agreed by all participants that there is a legislative gap. One suggestion was that it might be useful is to have EU recommendation as a backbone for assisting the status of Raw Materials in land use planning, incentivizing in this way



- member states but with respect to the concept of subsidiarity. According to all discussions there is a need to top-down national governance but also for bottom up intelligence and communication. If guidelines for land use planning and raw materials are created, then they should be simple and easy to use.
- It was also concluded that one of the key aspects for social acceptance is the efficient communication with affected parties and with local/ regional/national authorities as well as communication and education of the general public, with respect to minerals. This communication should start as soon as possible and should lead to the engagement of interested parties in an open dialogue that will ensure transparency.