MINguide

Minerals Policy Guidance for Europe

The Policy Guide Framework and Features

Deliverable 1.2

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1. Background and objectives

MIN-GUIDE: a brief introduction

The Horizon 2020-funded MIN-GUIDE project 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 practice 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 good 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 practice through qualitative analysis of country-specific framework conditions, and the compilation of minerals statistics and reporting systems. These insights will form the basis for the project's key output, an online Minerals Policy Guide (referred to in this document as 'the Policy Guide').

The project is split across 8 work packages (WPs) (see Table 1 below). 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 practice 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

Common approach	WP1	Minerals policy guide development and conceptual basis
Core content	WP2	Stock-taking of EU and EU MS mineral policy and legislation
	WP3	Innovative exploration and extraction
	WP4	Innovative processing
	WP5	Innovative waste management and mine closure
	WP6	Raw materials knowledge and information base
Cross-cutting management and engagement	WP7	Stakeholder management, communication and dissemination
	WP8	Project management

What is expected of the Policy Guide?

The objectives for the Policy Guide as set-out in the proposed work-plan are: to provide guidance for EU and EU MS mineral policy by developing a knowledge repository which will:

1. Achieve greater transparency of EU and MS policy and legislation.

2. Outlining the EU MS minerals policy governance framework.

3. Facilitating policy learning between EU MS (not part of WP1)

4. Contributing to coherence in the minerals policy sector

5. Providing a favourable framework for the implementation of the EIP on Raw Materials

To achieve these objectives, the proposed work plan envisages the development of a comprehensive guide to minerals policy and legislation on EU and EU MS level that will provide: a web-based knowledge repository of individual policy and legislation, and minerals data reporting, together with benchmarking and good practice elaboration; targeted publications enabling country and challenge-specific information provision; comprehensive and fit-for-purpose knowledge repository for the different stakeholder groups; transparency of EU and EU MS policy by outlining their innovation potential and highlighting good practice examples along the whole chain of mining activities.

The process of Policy Guide development

This report sets out the first iteration of background research which informs the development of the MIN-GUIDE Policy Guide, to be used in both D1.3 (an offline report) and the milestones 2, 5, 8, 10 associated with WP 7 for the online guide. All of the suggestions in this report relate to both elements of MIN-GUIDE's Policy Guide development work. The research activities include:

1. A review of various existing policy guides to understand what has worked elsewhere.
2. A visioning exercise of user needs.
3. Interviews with target users on what they find useful for a Policy Guide.

Based on this, this report has proposed a first stage proposal of how to structure the MIN-GUIDE Policy Guide online interface to inform the future activities planned in development of the Policy Guide. These future activates will include:

1. Technical development based on this first stage proposal of how to structure the Policy Guide interface.
2. Ongoing refinement and development based on inputs from WP leaders and user stakeholders during MIN-GUIDE's Policy Laboratories.

This report therefore additionally maps out how this proposed structure relates to subsequent WPs, and how task 1.3 can work in collaboration with WP7 within the Policy Laboratories to engage stakeholders in the further refinement of the Policy Guide.

This deliverable

This MIN-GUIDE deliverable (D1.2) sits under WP1 and represents the first step in the process of developing the Policy Guide's structure and format. **This is an iterative process that will continue as the needs of users are further developed and technical and practical challenges are identified in collaboration with the other WPs**. **The proposed structure discussed in this deliverable should in no way be considered final.** This first version has needed to strike a balance between developing a highly descriptive early proposal for the guide as driven by user expectations, and initiating a more iterative process of exploring innovative ways that the various WPs can meet these user needs. This task has responded to this challenge by presenting in detail the user needs and explaining how this has been used to develop a *first stage proposal of how to structure the Policy Guide interface.*

The remainder of this report:

1. Provides the key findings from the research activities and investigations from task 1.3 intended to further inform and refine this specification. This includes:
    a. The results from a *review of various existing policy guides* and an evaluation of the key factors in their success for being useful and achieving impact.
    b. A synthesis of two *visioning exercises* conducted within the validation workshop on different user needs, as well as the results from an exercise on what elements participants saw as most important.
    c. The outcome of initial *interviews with target high priority users* on how they envisage actually using the guide.
2. Presents a *first stage proposal of how to structure the Policy Guide interface*.
3. Explores the implications of this proposed structure for each of the WPs.
4. Details a plan on future development of the Policy Guide in relation to stakeholder engagement in WP7, as well how this stakeholder engagement can enhance the guide's impact.

2. Findings from task 1.3 investigations

Review of existing policy guides

A review of a number of existing policy guides was undertaken ahead of the Validation Workshop on the 12th of May 2016. These existing policy guides were assessed against the characteristics of MIN-GUIDE, as set out in the proposed work plan. Each policy guide was reviewed in turn and the outcome of this assessment is shown in Figure 1 below.

				Other sector's guides & toolkits							
What characteristics does MIN-GUIDE need?	CSES 2014 (Best practice)	EU 2014 (Recommendations)	Clark 2002 (UN Book)	IDPC 2012 (Drugs)	WHO 2014 (Reproductive)	APA 2015 (Water)	ILO 2015 (Labour)	GOV.UK 2016 Open policy	OECD 2010 (Consumers)	ODI 2006 (Progressive policy)	Nesta 2015 (Innovation)
Web-based	✔	✔	✔	✔	✔	✔	✔	✔	✔?	✔?	✔
Interactive	✘	✘	✘	✘	✘	✘	✘	✔	✘	✘	✔?
Customizable	✘	✘	✘	✘	✘	✘	✘	✘?	✘	✘	✘
Updatable living document	✘	✘	✘	✔	✔	✘	✘	✔	✘	✘	✔?
Knowledge repository	✔?	✔	✘	✘	✔	✘	✘	✔	✘	✘	✘?
Targeted at different stakeholder groups	✔?	✔	✔	✘	✔?	✘?	✘	✘	✘	✘	✔
Enabling country-specific information	✘	✘	✘	✘	✔?	✘	✘	✘	✘	✘	✘
Enabling challenge-specific information	✔?	✔?	✘	✔	✔	✘	✘	✔	✘	✘	✘
Cover whole chain of mining activities	✔	✔	✔	-	-	-	-	-	-	-	-
Promote innovation	✔	✔	✔	✘?	✔	✔	✘?	✔	✘?	✔?	✔
What are the contents of MIN-GUIDE?											
Policy instruments	✔?	✔	✔	✔?	✔	✘	✔?	✘	✔?	✘	✘?
Permitting procedures	✔	✔	✔?	-	-	-	-	-	-	-	-
Minerals data reporting	✔	✘		-	-	-	-	-	-	-	-
Best practice benchmarking	✘	✔	✘	✘	✔?	✘	✘	✘	✘	✘	✘
Targeted publications	✘	✘	✘	✘	✔	✘	✘	✘?	✘	✔	✘

Figure 1 –Assessment of exisitng policy guides

The overall outcome of the assessment of existing policy guides found that although all of the policy guides reviewed were web-based, they were mostly either structured around or were entirely contained pdf documents. They were not therefore assessed to be interactive and there were limited examples of customizability. Furthermore, whilst there were some examples of updatable guides, there were less examples of actual recent updating, although the 'open policy' policy guide provided a clear exception to this. Examples of **knowledge repository** were typically embedded or integrated into the policy guide, rather than being a distinct accessible area. The guides generally had a rather targeted audience, typically based on the policy makers and decision makers in the

given field. There were however some limited examples of **multi-stakeholder** audience across the policy sector.

The function and strengths of three of the key existing policy guides reviewed were as follows:

- **Drugs policy** (International Drug Policy Consortium (IDPC) Drug Policy Guide): this guide was intended to be used by those reviewing their drugs policy in light of recent new thinking in this area of policy. It was a printable pdf document but claimed to be updated.

- **Birth policy** (Policy Guide for Implementing Essential Interventions for Reproductive, Maternal, Newborn and Child Health): this guide provided an example of a good international perspective and extensive referencing of relevant sources of data.

- **Labour relations policy** (International Labour Organization - Collective bargaining): this guide provided an example of how a policy guide could engage with a wide stakeholder group. Overall, the nature and intent of the guide was to promote a particular positon as encouraged by the International Labour Organization.

Overall, the review of existing policy guides found no strongly relevant example for MIN-GUIDE on which to base its design. Furthermore, it could not be said that the requirements for MIN-GUIDE could be met with a combination of elements found in this review.

Additional guides suggested within the Validation Workshop

The results of the review of existing policy guides were presented in the validation workshop held on the 12th of May 2016 in London. One of the outcomes of the session was the input of a large number of suggested further sources of information which participants thought might support the future development of the Policy Guide. Many of these suggestions were intended to highlight examples of on-line guides that demonstrated good practice in a particular element that we are seeking. These have been investigated to identify their potential strength and therefore relevance to the future development of the Policy Guide. The outcome is provided in Figure 2.

Guide for investigation	Relevant strength(s)
Betterevaluation.org	Use of a process diagram to access information
infomine.com	News article based website (updated regularly). Industry focus
World Bank's 'EI Sourcebook'	Good use of process diagram that is retained throughout the website.
The Inter-Gov Forum on Mining & SD have produced a Mining Policy Framework	Contains a wide set of news items. Good example of updated website.
OECD Guidelines for Multinational Enterprises	Good example of a searchable database
Planning Policies and Permitting Procedures to Ensure the Sustainable Supply of Aggregates in Europe: Commissioned by UEPG	Good example of a 'challenge/issues' based document

ESDN website www.sd-network.eu	Good example of a map as a front end of accessing datasets
Minventory (project), on the DG Grow website	Useful possible portal. Relevant to MINGUIDE
ERKC: setis.ec.europa.eu/energy research.	Good example of a map as a front end of accessing datasets
ESDN website. FAOLEX	Good searchable repository (of legislation)
Better Regulation Website (http://www.betterregulation.com)	Good example of updated legal texts.

Figure 2 –Further sources of information suggested in the validation workshop

Identification and prioritization of user needs

Two approaches where used to understand user needs:

1. A visioning exercise undertaken within the project's Validation Workshop invited participants to explore how the guide will likely be used by different types of users.

2. Initial and targeted interviews were conducted with specific prospective users and those developing and managing related tools/guides.

It should be noted that the first approach was carried out as an exercise with the range of experts and stakeholders who attended the validation workshop. As such, it is not a direct canvasing of user needs but a visioning of needs.

Prioritization of user needs

The stakeholders MIN-GUIDE intends to engage have been categorised into three tiers.

- The **first stakeholder tier** of the project are *policy-makers* closely-related to primary minerals production and *geological survey representatives*, i.e. EU and national-level politicians and public administrators directly responsible for minerals policy design and adoption, focal points (EU and national-level coordinators) for minerals and raw materials supply strategies, thematic resource strategy, raw materials initiative; and *representatives of the minerals industry*, in particular, from extraction, processing and recycling sectors, incl. industry associations and individual companies.

- The **secondary tier** consists of other, *related policymakers* and EU and national level stakeholders often playing a key role in policy implementation: *businesses and business associations, labour unions and employee associations* in the mentioned industries etc.

- The **third tier** consists of a diverse group of EU and national level stakeholders, incl. *policy-related knowledge services* (i.e. academia, consultancies, policy think tanks, policy advisory groups etc.), and *civil society organisations* (Figure 3).
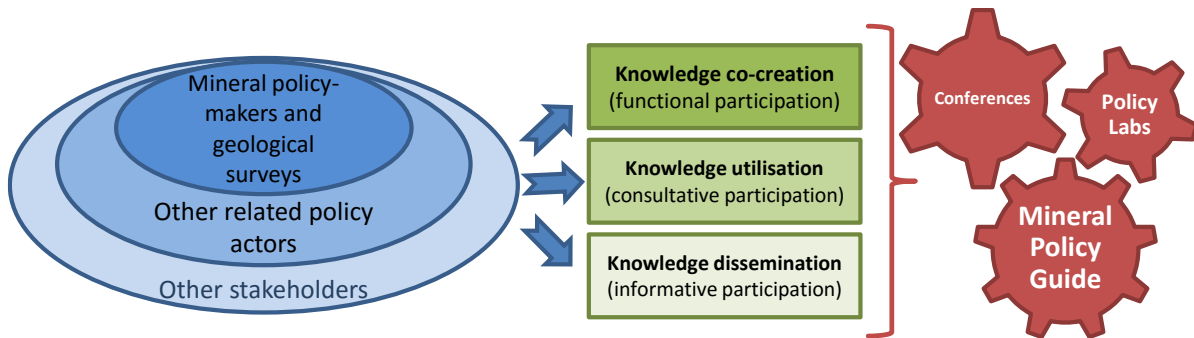
Figure 3: Aspects and degrees of participation and stakeholder tiers

The various user needs have been categorised by these tiers and then used as a prioritisation when developing the first stage proposal of how to structure the policy as shown in section 3.

Results from the user needs visioning exercise

The user needs visioning exercise was undertaken at the Validation Workshop; invited participants were asked to explore how the guide will likely be used by different types of users. It should be noted that this was carried out as an exercise with the range of experts and stakeholders who attended the workshop. As such, it is not a direct canvasing of user needs but a visioning of needs. The participants included many members of the project team, four members of the project's advisory board, and a DG GROW officer.

Closely related Policy-makers and Industry (Tier one users)

There was a general coherence and convergence between the different groups considering policy maker's perspectives. Those groups considering the European Policy maker's perspective or response referred to four areas of interest: (1) Information about all MS policies and profiles including permitting (2) Comparison or benchmarking of policies. (3) Guidance on best practice, innovation and what works. (4) Coverage of the minerals supply chain. There was no specific order of importance in these suggested areas.

The industry perspective (including consultants working for the sector) visioning tended to focus on the need to understand the impact of policy on their business. Key areas were: (1) Procedures and data requirements for obtaining concessions for exploitation of mineral resources including Environmental Impact Assessments (EIAs). (2) Environmental and nature protection legislations & archaeological restrictions. (3) The level of compensation for exploitation of mineral resources. (4) The timeline for each legislation & accumulated time to finalise permitting and need for public consultation. (5) The cost for compliance (i.e. business costs associated with complying with legislation, for example, from new equipment, practices, or monitoring). (6) Specifications; regulations; discharge limits etc. stemming from that specific policy.

The industry perspective taken in the groups did not seek country comparisons. However, the consultants (defined broadly, thus perhaps also in tier three) who work for them did put considerable emphasis on this, suggesting this type user is seeking a more strategic perspective.

Other EU and national policy-makers (Tier two users)

The views of this group (including less-directly relevant EU, and national policy maker perspectives) were similar to tier one policy-makers. They also put additional emphasis on: (1) The specific timing for permitting by MS. (2) Impact issues such as cost, competition, archaeology and employment. (3) Understanding of key relevant words in other languages (i.e. translation of key elements/documents). (4) A general desire for a wider scope for the guidance (e.g. exploring implications in other industry and policy areas).

Other stakeholders (Tier three users)

Users in this group were thought likely to need access to existing information, case studies, and data to showcase impact of policies. In addition, specific state level information in combination with interactive, search functions by topic, would be useful.

The role of NGOs/CSOs (non-governmental and civil society organisations) was stated to be to monitor events to ensure that policies are being implemented, and promote good practice innovations across the sector. Therefore, they are interested in countries with stringent environmental regulations and successful industrial innovations. In additional, they require information on how policy is actually being translated into practice. This includes overseas (i.e., outside the EU). Finally, they also value networking information on decision making processes and relevant stakeholders.

The issues identified from perspectives of researchers and academics include: (1) A focus on the quality of evidence including a reference to a learning tool for students. (2) Reference to policies on sustainable development. (3) A source of outlet or their own research. (4) A comparison between how various policies are applied in various countries.

Results of the initial and targeted interviews

During late June and early July 2016, four informal interviews were conducted with potential users (described in detail below) of the Policy Guide intended to supplement efforts for this deliverable by deepening our understanding of user needs, and obtaining feedback on the 'prototype' structure of the guide as it stood at the time. These interviews were relatively informal and held by telephone or teleconference software (e.g., GoToMeeting, Skype) using audio only. A semi-structured approach was taken so to maximise the chance that those approached (typically working in industry and government) would be willing to take part. Email invites were sent out to over seventy individuals. Five individuals (across four interviews – one interview was conducted with two colleagues) took part, two offered to help but could only take part at a date beyond this deliverable's submission, and one advised that they had already given information to the project in a previous interview (with WU). Individuals and their organisations are kept anonymous by agreement.

One interviewee was a senior civil servant working for their national government's ministry with responsibility for mining policy. They described their role in line with typical government responsibilities, highlighting both specific policies and legislation which they were in the process of developing now, and their more general ability to update policies as and when necessary. The second interview was with two researchers (who asked to speak during the same phone call). They described their roles on a range of research projects concerned with mining from a range of perspectives (technical, commercial, policy). A third interview was held with a senior scientist at a National Geological Survey who explained the Survey's main roles in informing government and other users. The final interview was conducted with a senior executive with an international mining services company. They explained their role in research and development in the organisation, and explained the company's main business models, in providing expertise and equipment to mining companies during the extraction process.

It should be noted, the interviews do not constitute a representative sample of users, and are not treated as if they do. There was a good mix across types of users (government, industry, academia), however there is a strong possibility more interviews would have gathered more and different insights. More interviews were not conducted due to low response rates from this round of stakeholders being contacted requesting an interview, and time constraints on this first iteration of background research on user needs..

Using a semi-structured approach, and interview guide, the interviewees were asked questions on:

1. The information sources for minerals policy they currently use.
2. Types of information on minerals policy they are typically in need of.
3. Their views on the early proposed structure of the Policy Guide.
4. Their views on the future format of information available in the Policy Guide.

In general, the interviewees were positive about the Policy Guide, and the project's objectives, though this is perhaps unsurprising given their positive response to the request to be interviewed. They gave useful insights which are summarised here along the lines of the five question areas.

1. **Information sources they already use:**

Overall, the interviewees all described relatively informal and ad hoc approaches to gathering information on minerals policy. Their efforts in gathering information were driven strongly by specific needs and a desire for 'updates', rather than general interest or 'deep' knowledge. The interviewees mentioned the following five specific sources they use for information on minerals policy:

    i. Colleagues: both in their organisation and at others across Europe. Individuals described simply emailing or calling colleagues to enquire on specific policy related questions they had. They were also able to exchange ideas with colleagues outside their organisation by taking part in expert panels and working groups.

    ii. Customers: the mining services company executive explained they often receive information on specific countries' policies via their customers (mining companies), as constraints/requirements on the services they are providing.

    iii. The Fraser Institute Annual Survey of Mining Companies (https://www.fraserinstitute.org/categories/mining): this report was mentioned as a useful and well-trusted resource.

    iv. National government, and EU websites: These were used to look-up specific elements of legislation. However, it was noted this can be difficult if there is a not a

facility for new information to be highlighted (i.e. for updates in legislation to be given prominence).

    v.   Mining trade associations: were mentioned as a source of information for companies that are part of the association.

2. **Type of information users are interested in:**

The interviewees identified a wide range of information they would seek on minerals policy. Those that appeared most valuable to the participants were specific details on policies relating to permits/licenses, and updates on legislation. These appeared most important as the interviewees that mentioned them were relatively keen to explain the value of these types of information, compared to the others. The following specific types of information were mentioned in the interviews:

    i.   *Details on licences* and restrictions they contain: one of the interviewees (a civil servant) was interested in understanding in detail how other countries design their mining licenses. This included information on Royalties (i.e., payments to various stakeholders required under a license). Statistics on organisations operating under licences (e.g., safety incidents, number of employees, etc). Levels and mechanisms for fines and penalties. Authorities – i.e., who oversees and implements licences, and how they operate.

    ii.   *Laws on mine closure*: again the civil servant was interested in comparing their country's mining laws for the closure of mines, with other countries'.

    iii.   *Country comparisons*: The mining researchers suggested not to provide direct country comparisons and identification of 'worst practise'. Instead, it was suggested to provide analyses identifying strengths, weaknesses, opportunities (i.e. SWOT), and threats on legislation so to provide critical analysis.

    iv.   *Policy analysis*: It was suggested it may be useful to highlight areas of 'regulatory competition' – i.e., competition between policy which is designed to protect land from disruption (e.g., heritage or protected nature areas), and policies to protect mineral deposits.

    v.   *News and updates***:** The mining services company suggested updates on policy are most important/valuable, as opposed to deep knowledge. A customisable mailing list was suggested.

    vi.   *Public acceptability issues:* Finally, the civil servant thought information on gaining local acceptance (i.e., local communities accepting mining developments) is an important topic, and should be included/covered in the guide.

4. **Their views on the early proposed structure**

All the interviewees responded well to the early proposed structure. The interviewees stated the following:

    i.   They agreed that country by county comparison was central to the value of such a Guide.

    ii.   Similarly, they agreed identifying good practise was useful. However, some were keen to stress that what is meant by 'good practise' be made very clear.

    iii.   Finally, the interviewees thought breaking down information by position in the value chain was important, and reflected, particularly in industry, the way expertise is divided.

5. Their views on the future format of information available in the Policy Guide

The interviewees were clear that information should be easily accessible and aesthetically attractive on the website, but should also be available in downloadable PDFs. Even when promoted, no interviewees seemed interested in having specific data or images in exportable (i.e., csv, png or jpeg) formats.

In summary, these findings confirmed that:

- Country by country information is vital
- Guidance on good practise is valuable, *but* good practise must be defined clearly
- Filtering information by position in the mining value chain reflects how industry works
- Users' interest in details of permitting and licenses is likely to be high.

There were no areas in which the findings opposed/disagreed with any of those identified in the visioning exercise undertaken in the Validation Workshop.

3. First stage proposal for Policy Guide structure

Analysis of the various results leads to our *first stage proposal of how to structure the Policy Guide.* **It should be noted that this structure is only a first iteration of development, and is very likely to change in the face of new and deeper insights on users' needs, the characteristics of the data collected in other work packages, and technical and budgetary constraints on analysis and website development.** The following list describes *sections or filtering options* that will allow users of the Guide to filter/break down the information provided from other WPs on (i) existing policy and legislation, (ii) examples of good practice, and (iii) recommendations and guidelines.

This sections are as follows (NB: we use 'datasets' as a catch all term for the relevant information gathered in the WPs2-6):

1. **Datasets by MS available to download**: Information should be searchable by country as a core function. Basic factual comparisons between two (or more) countries may be a useful functionality – i.e., tables comparing key characteristics of legislation.
2. **Datasets by stage in the value chain available to download**: Information relevant to specific stages in the production chain should be filterable.
3. **Good case descriptions resulting from benchmarking**: Descriptions of good practice examples should be a filtering option. Care should be taken not to point to 'worst practice' but some analysis could be included identifying gaps or threats.
4. **Information on what this means in terms of industry innovations or issues and challenges:** Implications for industry should be easily accessed as core section/filtering option. For example, question such as - what are the best approaches to policies to minimize the time taken to gain permitting in an integrated way? – could be addressed.

To make this clearer, we now describe two possible user experiences:

- *A national level civil servant wishes to find out about another country's legislation and compare it to their own, and the good practise in the field. They enter the online Guide, they can easily find their country and peruse all the information held on it. They then compare this high level info with the country they are interested in. Specifically, they are interested in extraction, so they can select an option to show greater detail here, and the comparison becomes specific to this area. Finally, they wish to look at good practise in extraction – the guide is able to give them good practise information on extraction, for a third country – identified by the good practice analysis.*
- *An employee of a large mining company which is closing several mines wishes to understand the implications of the country they have operations in adopting the standards of another country, which is considered a leader in innovative policy in this area. They enter the site and ask to look at the 'implications for industry' section, and focus specifically on mine closure. They can then select the two countries they know, and ask for a best practise country to be identified, and compare the legislation in the three countries.*

Although not specifically a category for the Policy Guide's structure, the interviews showed a strong preference for updates in policies to be made clear. Thus, some functionality which highlights new information or identifies dates of information would be beneficial to the Policy Guide.

At this stage it is envisaged the Guide will be in English throughout. This means some translation may be required where English versions of key documents are not available, and the project team does not read and write in the specific language. Translation services will be arranged on an ad hoc basis when required.

4. How will project outputs feed into the Guide structure?

Relationship and implications for other WPs

The deliverables from WPs 2-6 are outlined in the table below and are described in full in the Appendix Section 6.2.

WP	Deliverable	Month
2 Mineral Policy and Legislation	Existing policy and legislation	4
	Benchmarking and Best Practise and Policy Lab	10
	Fact sheets	30
3 Exploration and extraction	Existing policy and legislation	12
	Benchmarking and Best Practise	8
	Feasibility study	16
	Guidelines and Recommendations	16
4 Processing	Existing policy and legislation	11
	Benchmarking and Best Practise	15
	Guidelines and Recommendations	19
5 Waste management and mine closure	Existing policy and legislation	14
	Benchmarking and Best Practise	18
	Guidelines and Recommendations	22
6 Knowledge and Info base	Existing projects and stats	23
	Existing and Best Practise Standardisation	28

Figure 4 – Project deliverables by WP

Given our first proposal of how to structure the Policy Guide and the MIN-GUIDE time plan, the information/data for each of sections will arrive as follows:

1. **Country and country comparison**: Country by country information will be coming in consistently throughout the project in all of the deliverables. However, D2.3 (M30 and UOW led) will be a key output that contains much of the information for this element of the site. The information contained in the benchmarking and best practise deliverables (i.e., comparison) will be available a little later than the initial summaries of existing policies and legislation.
2. **Position in the production chain**: This information will come as the deliverables come from WPs 3-6 starting in M8, right through to M22. This means some information for the site will not be available for some time, for WP5 particularly (M18).
3. **Innovation/what's good**: Information on innovation will come from each of the best practise and benchmarking deliverables.
4. **What does this mean operationally** (i.e. permitting lead-times etc): It is anticipated that the information to meet this user need will be delivered via the 'Guidelines and Recommendations' deliverables within each WP, as this is the deliverable which is most likely to include this type of analysis (i.e. consideration of industry compliance).

As information and data is collected by each of the WPs, and plans are made with the website development team for how to structure and present information on the webiste, these categories should be carefully considered.

Technical considerations

A key issue for the development of the online interface of the Policy Guide, is combining the findings of user needs exercises such as those carried out in this deliverable, and characteristics of the data collected in other WPs, with technical considerations and constraints. For example, developing the 'tagging' system that will be used to tag information provided by the various input WPs and then filter that information to users, is a key consideration. The team developing the website itself need detailed information on the structure of tags and an actual list of tags, to help them develop early iterations of the website. This effort is underway, however it is difficult to develop a final comprehensive tag list until the work of the WPs input is done. The current plan to deal with this issue, is to develop a prototype tag structure with each WP before extensive data collection is conducted, which can be amended as the guide evolves through the project. More generally, conversations between the team developing the website are ongoing as and when new material is being identified and collected by WPs, however in some cases functionalities that users may desire may not be technically possible.

Budgetary constraints

A further potential constraint is that of time and finance restrictions on the levels of detailed analysis that can be conducted to fulfil the structure and some of the functionalities outlined above. This is most relevant for the fourth section – implications for industry – where significant research, which has not been budgeted for, is required to fulfil this potential user need. It is also relevant for other sections, in the case of deep comparative analysis (i.e. a deep comparison of every country's policies is unlikely to be possible). As MIN-GUIDE is a *Coordination and Support Action* (a Horizon 2020 funding scheme which is supposed to support policy actions through compiling and managing existing information, for example, to support key stakeholder groups instead of creating new knowledge through research and development), it is unlikely extensive further analysis can be completed in this manner.

The process of the guide delivery

Task 1.4 (led by WU but with significant contributions from other partners) will involve analysing and summarising the information provided in the various deliverables so that it can be used in the Policy Guide. WP leaders will provide the reports, WP leaders under the supervision and guidance by WU will synthesise these into country fact sheets, and UOW will compile these for the Policy Guide (i.e., D1.3 in M32). Therefore, any information placed in the Policy Guide before that based on the final

deliverables from each WP2-6 will be superseded by that in the final deliverables. The process is summarised in Figure 5.
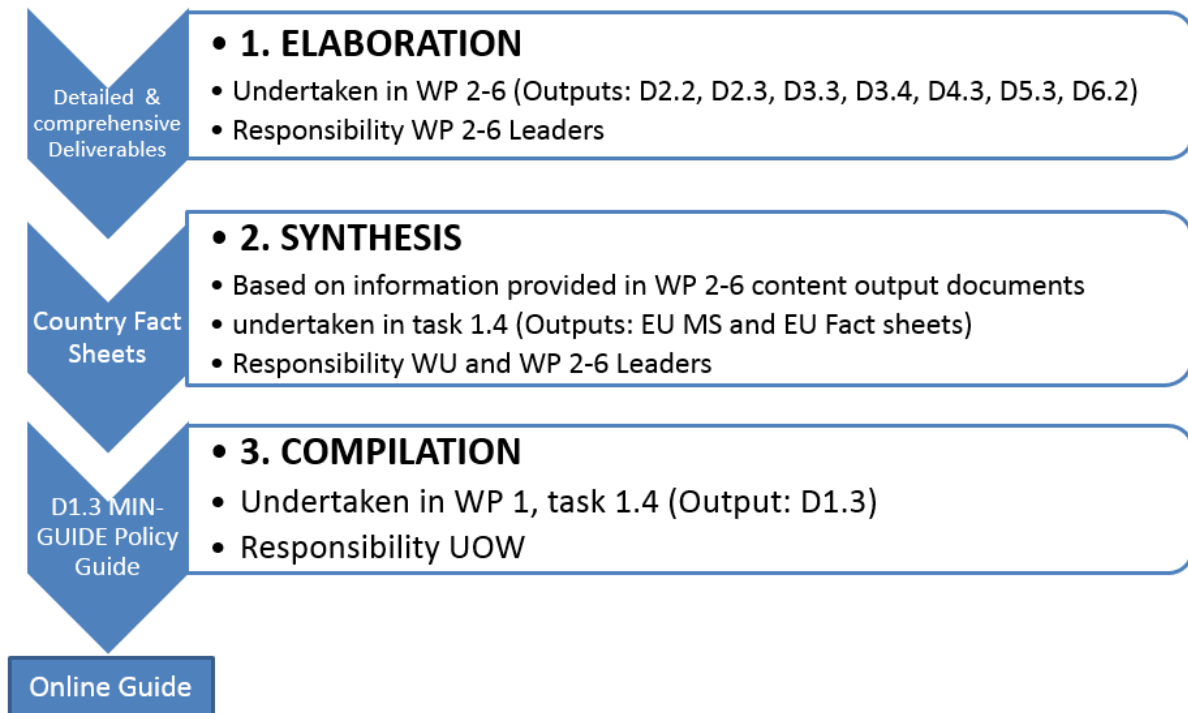

Figure 5 - The process of the guide delivery

Policy Labs and Conferences

The Policy Guide development is an ongoing process throughout MIN-GUIDE, which will be developed in conjunction with stakeholder input and the integration of project outputs into the Policy Guide. Another important element of this development, is input from stakeholders at the Policy Labs and MIN-GUIDE conferences. Though these events will not have the sole purpose of gathering stakeholder input, they will provide stakeholders a space to hear about the project and provide feedback. During the MIN-GUIDE annual conferences (M11, M23 & M31) there will be space for considering overarching industry issues and challenges, and at the five Policy Laboratories there will time to consider WP specific issues and challenges, as shown in Figure 3. During each of the Policy Labs there will also be a session on the Policy Guide itself, including a presentation of the current online version and an interactive session with the Policy Lab participants in which they feedback to the project team on their needs for the online guide. This will then be evaluated by the project team for refining the Guide.

Milestone name	Work package(s)	Estimated date	Input sought
Policy Laboratory 1 on innovative minerals policy governance	WP2	M8	Identification of <u>minerals policy governance</u> specific challenges and issues
MIN-GUIDE Opening Conference	WP1, 2	M11	Identification of <u>overarching</u> challenges and issues
Version 2.0 of the Minerals Policy Guide online knowledge repository	WP1, 2, 7	M12	-
Policy Laboratory 2 on innovative exploration, extraction, exploitation policy	WP3	M13	Identification of <u>exploration, extraction, exploitation</u> policy specific challenges and issues
Policy Laboratory 3 on innovative processing policy	WP4	M16	Identification of innovative <u>processing</u> policy specific challenges and issues
Version 3.0 of the Minerals Policy Guide online knowledge repository	WP1, 3, 7	M18	-
Policy Laboratory 4 on innovative waste management policy	WP5	M19	Identification of on innovative <u>waste management</u> policy specific challenges and issues
Version 4.0 of the Minerals Policy Guide online knowledge repository	WP1, 4, 7	M21	-
MIN-GUIDE Mid-term Conference	WP1-5	M23	Identification of overarching challenges and issues
Policy Laboratory 5 on mining data in Europe	WP6	M26	-

Figure 3 - Proposed forum for inputs for future Policy Guide development and refinement

5. Conclusion

This document has described:

1. **A review of existing policy guides**: The review found no strongly relevant example for MIN-GUIDE on which to base its design. Furthermore, it could not be said that the requirements for MIN-GUIDE could be met with a combination of elements found in this review.

2. **A user needs visioning exercise**: This emphasised and described the potential needs of the three tiers of users; (i) directly relevant policy makers and industry, (ii) other policy makers, and (iii) NGOs, academia, and others

4. **Interviews with target users**: Which found that: (i) country by country information is vital, (ii) guidance on good practise is valuable, but good practise must be defined clearly, (iii) filtering information by position in the mining value chain reflects how industry works, and (iv) users' interest in details of permitting and licenses is likely to be high.

5. **A first stage proposal of how to structure the Policy Guide interface**: Which contains 4 core sections/filtering options – country, good practice, position in mining value chain, implications for industry.

6. **How WPs 2-6 and their deliverables will feed into the Guide**: Which emphasised the key tasks and deliverables, and described which deliverables are expected to deliver information for the 4 section/filtering options.

6. ANNEX A: Outcomes from visioning of user needs

The contents from the flip charts used for the visioning exercise were written-up and are provided below (NB: they are in note form).

Policy maker's needs

European Policy-makers
Repository of current & past policies; understanding of chronological dev't of policies and relationship of multiple policy initiatives; ability to sort by Member State, place in value chain, specific mineral etc.
Knowledge of best practices. Practical help for EU members
Better overview of MS. To name & .../ shame - highlight best practices. Use to brief politicians. European semester - country profiles? Could minerals be part of this? How do we take into account of future added value of raw materials feeding into the processes. Comparison: permitting, policies, information framework, land use planning, ...
Innovation overview
National policy makers
Help to harmonise policies
Impacts of the policy on competitiveness of the sector. Time of permitting. Comparison of EU practices and their impact on competitiveness
Rules, status, level of detail, comparison
Other/General policymakers
language ..., format. How is it in other countries? How do they do it in Sweden? - translate, ability to understand keywords in other languages (key definitions list/ meanings / explanation. When was it updated? Is this still relevant? Is this policy undergoing revision? - Add "work in progress" warning so people know it will be evolving soon + version control.
User input: which problems do you have? Tick boxes (filter) - which policy options are there to tackle these problems? Examples of best practice. Website output
(diff to read)... system in mining sector: ... network, institutions. Policy initiatives in other centres for address system for this mechanism. ... challenges in country & means to solve/address them.
Time for permitting (delays, respect timelines); impact on costs; employment; archaeology, infrastructure, economy, industry

Mining industry
Procedure for obtaining concession for exploitation of mineral resources; what authority (institutional) is responsible for mining; what sort of documentation are needed in procedure for obtaining concession; kind and amount of compensation for exploitation of mineral resources
Procedure on EIA, nature legislations, archaelogy restrictions: a) timeline for each legislation & accumulated time to finalise permitting, b) cost for compliance, c) guidance document for the most ... legislat (EIA & nature legislations) to comply with i.e. Irish, Finnish, UK guidance documents
(Representative of the industry): (1) A road map of the policy implentation. (a) Gov't depts involved; (b) time and cost requirements; (c) need for public consultation; (d) specific expertise. Chartered engineers required. (2) Specifications; regulations; discharge limits etc. stemming from that specific policy
Exploration company; investment fund: To know when it is best to invest in Europe - time to permitting
Consultant working within mining

What are the 'rules' in different countries and how do they compare? Status of policy + elements (details). Comparison between countries
Support companies; support NGOs; support investors (Global, EU, local)

NGO/CSOs
Role: Interested in countries with strict env regulation - industry innovation … environment; industry players doing good stuff…. **Need:** Communicate to policymakers/industry players, applying good practices; find out how to contribute/influence policy-making processes. What are the entrance points/mechanisms?
Monitoring policies - are they implemented
Monitoring policies
Info to ensure policy is translated into practice. Identify good practice by comparison. Hold companies to account for standards employed overseas (usually they say will adopt same standards in place of origin as overseas activities).
(NGOs), perspective: Global, EU, Local. Look up info for information on the process, stakeholders.

Academic/ Researchers
Access to evidence; understanding of sources - good referencing; assessment of quality - rigour, governability; outlet for own research; balanced range of perspectives
To review well documented summary data on MS & EU policies and outside EU policies on sustainable development of mineral resources
Research item; learning tool for students that might work on land use; permitting; mining; authority positions later on
Comparison between how various policies are applied in various countries

Deliverables from WPs 2-6

WP2 – Mineral Policy and Legislation

- D2.1 (M4): Report on policy and legislation in the minerals policy and related sectors on EU level and in all 28 EU MS.

- D2.2 (M10): Report on the results of the benchmarking, best practice case descriptions and results gathered at the "Policy Laboratory on innovative minerals policy governance" (M8? October 4-5).

- D2.3 (M30): Report summarising all 28 EU MS country fact sheets and on their respective minerals policy framework, the results of the benchmarking, best practice case descriptions and results gathered at the "Policy Laboratory 1 on innovative minerals policy governance".

WP3 – Innovative exploration and extraction:

- D3.1 (M12): Report on the current policy and legislation for exploration and mineral extraction activities in all 28 EU MS.

- D3.2 (M8): Report summarising the results of the benchmarking study, describes best practice cases and evaluation criteria for innovation score boarding.

- D3.3 (M16): Report on feasibility study of implementing 'innovative legislation and policies' in sub-surface and deep sea mining.

- D3.4 (M16): Report on innovative exploration and extraction: Guidelines and recommendations for future policy and legislation.

WP4 – Innovative processing:

- D4.1 (M11): Report comprising information on policy and legislation on EU level and in all 28 EU MS with specific focus on mineral and metallurgical processing.

- D4.2 (M15): Report summarising the results from the bench-marking, best-practice case description and evaluation criteria.

- D4.3 (M19): Report including guidelines and recommendations for future policy development for innovation in mineral and metallurgical processing.

WP5 – Innovative waste management and mine closure:

- D5.1 (M14): Report on policy and legislation framework for innovation in waste management and mine closure.

- D5.2 (M18): Report summarising the results of the bench-marking, best practice case descriptions and evaluation criteria for innovation scoreboard.

- D5.3 (M22): Report on innovative waste management and mine closure. Guidelines and recommendations for future policy and legislation development.

WP6 – Raw Materials Knowledge and Information Base:

- D6.1 (M23): Report compiling information on all the existing projects at EU level which provide mineral statistics on production, trade, exploration and resources.

- D6.2 (M28): Report summarising the existing EU standardization of mining data and best practices in standardization of mining data.