

MinLand: Mineral resources in sustainable land-use planning

A H2020 Project

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Topic: SC5-15d-2017 - Linking land use planning policies to national mineral policies

Deliverable 2.2: The MinLand Data Repository (Establishment of a structured and functional data repository which will feed subsequent WP's with data and criteria for achievements)

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The MinLand data collection plan

The establishment of the MinLand data repository is a task in WP2 of the MinLand project. The repository structure and requirements were outline in the MS1 document, and a practical model to accommodate the project needs was subsequently agreed upon. In addition to serving the needs for data storage for WP2, the repository will also hold the data for WP3 (case studies) and organize the data for the analytical work packages 4, 5 and 6. Relevant data for public on-line access (locations, case summaries, public land use policy documentation) will be hosted by the repository in the form of hyperlinks or texts and made available through the MinLand web portal. The data repository is supposed to hold all data collected through the project in order to observe and evaluate how mineral resources are prioritized in land use planning across Europe. In summary, the data repository includes the following raw data:

- 1. A set of background data on current land use legislations, policies and practises, to frame the project and the included case studies. Background data will be indexed according to their European, national or regional application (WP2)
- 2. A metadataset on the availability of the necessary spatial data needed to land use manage both known and undiscovered mineral resources, divided into INSPIRE themes, such as deposits, prospects and provinces. All data are indexed according to coverage (WP2)
- 3. A case library, containing all data derived from the case studies conducted in the project (WP3)

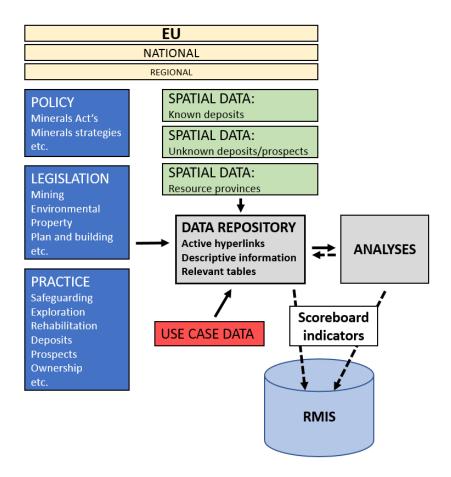
The plan for obtaining all relevant background data (point 1 and 2 above) was presented in the MS2 mile stone document "Collection plan for policy and practice, safeguarding, and the existence of spatial data". The collection plan outlined a three-step approach, including:

- 1. Mapping and completing existing surveys.
 - MinLex and MinGuide will be consulted for data on mineral policies and legislation.
 - MinLex and MinGuide cover EU28 only, and data for non-EU28 (i.e. Norway and Ukraine) must be
 collected and processed in MinLand. The relevant data will be added as independent sources directly
 to MinLand. Participants from the other countries will be asked to check if updating of relevant
 information is necessary, and if so, to update this information.
 - MINATURA2020 will be consulted for land use policies and the availability of spatial data in the 15 countries covered by the project. Relevant included data for the remaining EU+2 countries need to be collected. Participants from the EU countries will be asked to check if updating of relevant information is required, and if so, to update this information.
 - Spatial data on mineral resources; polygons vs. point data. European resource databases, such as
 Minerals4EU, FODD and other accessible databases will be consulted for the existence of spatial data
 on mineral resources. Availability was to some extent covered by MINATURA2020.
 - Data from MINLAND partner and third-party countries not covered by MINATURA2020 must add their information (i.e. Finland, France, Greece, Norway, Spain, Ukraine)
 - Additional land use information collected through the WP3 case studies will be integrated into the WP2 dataset.





- 2. Use of consortium partners' and third parties' expertise on national systems and policies.
 - A questionnaire will be completed and distributed among project partners and participants. The
 questionnaire is meant to fill gaps in existing data coverage as well as securing new data of relevance
 to land use planning and mineral resources. Remaining gaps in data availability and coverage will be
 mapped and filled through pt. 3
- 3. Reach out to national experts and complement/validate already compiled information.
 - Outstanding questions in the questionnaire will be redistributed to the wider network of stakeholders and other national experts identified by partners and third-party contacts. It is the responsibility of each partner/third party representing the individual countries to reach out to relevant national experts, in order to complete and validate the framework survey.



The MinLand data repository set in context. The MinLand data repository will host policy, legislative, practice and case study data, and provide information to work packages 4, 5, and 6, where data are processed and analysed. Results of the analyses, as well as certain data from the raw data repository, will be fed into the RMIS. This, in particular, applies to results and data which are considered to have impact on the Raw Material Scoreboard indicators, most notably activities in mining and exploration, transparency for public acceptance, and the policy framework.



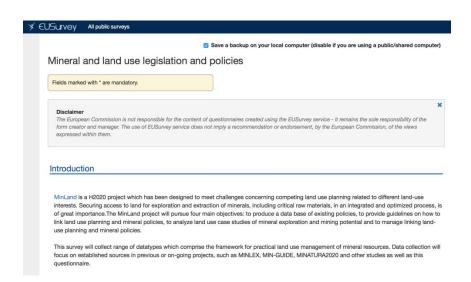


Data from the MinLex, MinGuide and MINATURA2020 projects were subsequently collected via project partners with roles in the three projects. These data are available from the MinLand repository for analyses in the later MinLand work packages (4-6). Gaps in areal coverage and need for updates were amended through specific questions in the WP2 questionnaire (see below).

The questionnaire and data output

The main part of the data gathering exercise is taking place through the questionnaire directed to all project partners and third-party participants. The questionnaire consists of more than 150 questions covering mineral resources policy and legislation (including permitting procedures), land use planning policy and legislation, safeguarding and protection of mineral resources, integration of mineral resources in land use planning, and spatial data and repositories. Where relevant, questions are asked for both national and regional/local scales or have been designed to probe on what scales policies and practices are implemented. Questions are designed to call for objective and factual answers, even where the questionnaire asks for descriptions of certain practices. Finally, it is recorded who completed the questionnaire, and the exercise will result in one comprehensive fact base from each of the 22 partner and third-party countries.

The questionnaire was designed by the WP2-team through the first months of the project. Extensive commenting was taken into account to ensure that all analytical work packages would have sufficient data for the various assessments and the formulation of good practice. For distribution and acquirement of data, the survey application *EU-Survey* was used. Where applicable, questions were cross-linked and to ease the work-load on the respondents.



The MinLand WP2 questionnaire on EU-Survey (https://ec.europa.eu/eusurvey/runner/MinlandWP2Survey)

Technically, EU-Survey allows for the resulting answers to be exported into a number of formats. The MinLand repository will include the data in Excel format for easy access by all work packages but will also





retain the individually answered questionnaires in pdf format for reference for the duration of the project. The questionnaire results constitute a 166-column spread sheet, in a format which is flexible in terms of search operations, groupings and export to other applications. Case study data are easily organized into a similar structure and both data sets will be easily available for further analyses.

The data repository

A number of different repository solutions from regular databases to various data sharing services for the MinLand data were considered and evaluated. The prime considerations were:

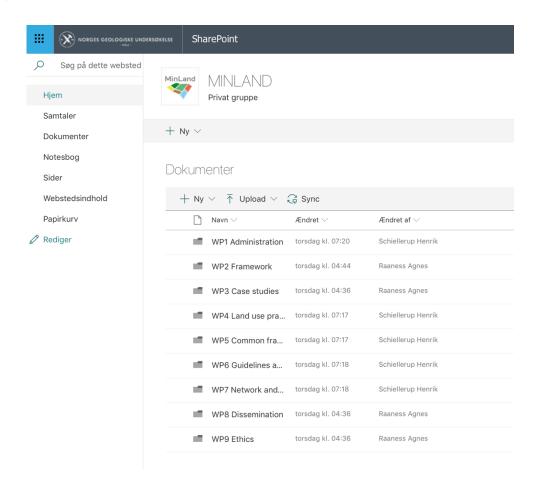
- Strict observation of the European General Data Protection Regulation.
- Privacy and access control; full access to raw data should be limited to MinLand project partners working with data analyses and aggregation.
- Structure should be able to hold both WP2 and WP3 raw data as well as the resulting analytical data in similar or comparable formats.
- Selected raw data (essentially descriptive texts and live links) as well as analytical data should be easy to link or export to the MinLand webpage, and, where relevant, the RMIS.
- Ease of access and data extraction for the MinLand analytical work packages
- The repository should be flexible, easy to manage, expandable and erasable.

The solution, which is considered to best accommodate the listed requirements, is a limited access sharepoint. The Geological Survey of Norway is therefore currently hosting the MinLand data through an institutional Microsoft sharepoint. Access is restricted to individuals with specific need for data, and access is granted only by the Geological Survey of Norway. The solution is simple, flexible, requires a minimum of maintenance, and data are easy to extract for analyses, distribution or publication.

The MinLand data repository is a live sharepoint which will develop and expand in the course of the MinLand project. In addition to holding raw data and analyses it may function as a working library for the project. Which data to publicise are yet to be decided.







The MinLand sharepoint and data repository hosted by the Geological Survey of Norway. Language of menus will change depending on the computer settings of whoever is logged in.

