MICA Mineral Intelligence Capacity Analysis

# WP2: STATUS AND PROSPECTS

Stakeholder Needs

Lorenz Erdmann,
MICA Plenary Meeting
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Fraunhofer ISI

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- Overview on status
- Assessment of D2.1 Stakeholder Report
- Status of the needs appraisal
- The road(s) ahead

# WP 2 AIMS

**WP2 Needs: Stakeholder identification, appraisal and mapping of stakeholder requirements**

- to provide a comprehensive inventory of relevant stakeholders, and
- to explore current stakes (interests/questions) in raw material intelligence.

# WP2 TASKS AND STATUS

| | What has been done? | Status | |
|---|---|---|---|
| Inception | MICA tacit knowledge about stakeholders<br>MICA supposed stakeholder questions | ✓ | M1 |
| Stakeholder Mapping | Systematic identification of stakeholder groups<br>Elicitation of how knowledge needs are met at the moment | ✓ | D2.1 |
| Interviews | civil society organisations<br>industry associations | ongoing | D2.2 |
| Surveys | EFG<br>EGS<br>industry associations | ✓ | |
| Stakeholder Workshop | stakeholders in mining, urban mining, raw material use and prospection / exploration | ~~today~~ xxx | |

Yesterday

# THE STAKEHOLDER REPORT

MICA Mineral Intelligence Capacity Analysis

## Deliverable D2.1

## Stakeholder Report: identification & analysis

| | |
|---|---|
| **Project:** | Mineral Intelligence Capacity Analysis |
| **Acronym:** | MICA |
| **Grant Agreement:** | 689468 |
| **Funding Scheme:** | Horizon 2020 |
| **Webpage:** | www.mica-project.eu |
| **Work Package:** | Work Package 2 |
| **Work Package Leader:** | Fraunhofer ISI |
| **Deliverable Title:** | Stakeholder Report: identification & analysis |
| **Deliverable Number:** | D2.1 |
| **Deliverable Leader:** | Fraunhofer ISI |
| **Involved beneficiaries:** | Fraunhofer ISI, GEUS, NERC, UL-CML, MinPol, BRGM, EGS, EFG, NTNU |
| **Involved Third Parties:** | LNEG, MFGI, PGI, SGU |
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| **Version:** | Final |
| **Status:** | Upload |
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# 1. IDENTIFICATION APPROACHES

## Relations mapping

- R&I calls
- Public consultations
- Expert conferences

## Expert view

- 4 country studies

## Bottom-up mapping

- Private sector organisations
- Civil society organisations

## Widening

- World Café
- Foresight and Brainstorming

Source: MICA

# 2. DEFINITION APPROACH

| Code | Stakeholder group | Parent level | Parent stakeholder domain |
|---|---|---|---|
| **21,21** | **construction material industry** | 21 | manufacturing industry |

**Definition**

The construction material industry sector covers *manufacture of clay building materials* (NACE 23.3), *manufacture of other porcelain and ceramic products* (NACE 23.4), *manufacture of cement, lime and plaster* (NACE 23.5), *manufacture of articles of concrete, cement and plaster* (NACE 23.6), *cutting, shaping and finishing of stone* (NACE 23.7), *manufacture of structural metal products* (NACE 25.1), *building completion and finishing* (NACE 43.3) and *other specialised construction activities* (NACE 43.9).

**Units**

- industry associations: European Aggregates Association (UEPG), The European Cement Association (CEMBUREAU), Construction Products Europe, Assimagra [PT], British Aggregates Association [GB]
- enterprises: LafargeHolcim, Knauf, Euroaszfalt Ltd.

**In focus**

*LafargeHolcim* operates in the building materials industry. It is present in 90 countries and claims to have innovative cement, concrete and aggregates solutions.

| ID R&I calls | ID consultations | ID industry | ID civil society | ID conferences | ID country studies | ID World Café | ID foresight & brainstorming |
|---|---|---|---|---|---|---|---|
| X | X | X | | X | | X | |

Source: MICA

# STAKEHOLDERS IN A MICA PERSPECTIVE

MICA Mineral Intelligence Capacity Analysis

## Definitive stakeholders

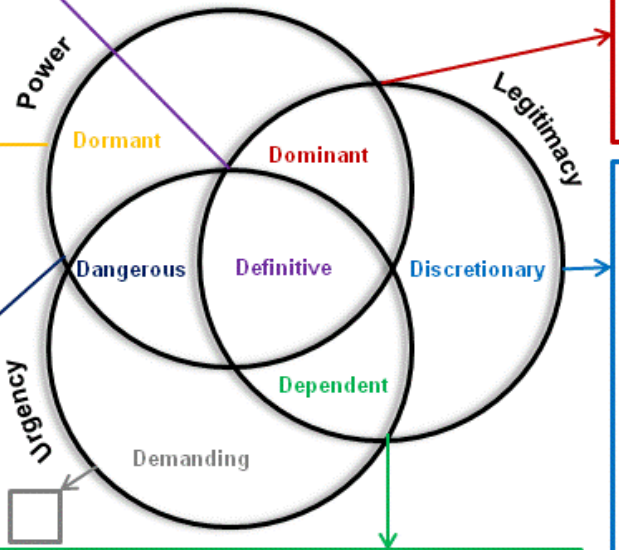
geological surveys (11,11)
public research institutes (other) (11,12)
universities (11,13)
research & technology org. (11,15)
intelligence institutes (11,2)
innovation initiatives (12,14)
project mgt. agencies (12,31)
professional org. (12,45)
mining & extraction industry (21,1)
materials production industry (21,21 – 21,23)
recycling and material recovery industry (21,32)
ministries of economic affairs (31,11)
ministries of education & research (31,17)

## Dominant stakeholders

competence clusters (12,11)
technology platforms (12,12)
professional education & training org. (12,42)
equipment industry (21,24 – 21,26)
demolition, waste collection and mgt. industry (21,31)
site remediation, monitoring and maintenance industry (21,31)
infrastructure industry (21,41)
sustainable industry (21,5)
cross-sector industry assoc. (22,1)
standardisation bodies (22,2)
governments (EU, national) (31,1)

## Dormant stakeholders

intelligence platform p&o (12,22)
research commercialisation org. (12,32)
raw material commerce (23,1)
financial commerce (23,2)
raw material thieves (52,1)
illegal landfill operators (52,2)




## Dangerous stakeholders

misusers of products and systems (51,3)
terrorists (52,3)

## Discretionary stakeholders

academies of science (11,14)
applied research institutes (11,3)
R&D labs and departments (11,4)
innovation communities (12,13)
research infrastructure p&o (12,21)
research-society intermediaries (12,33)
media org. (12,34)
media & communication support (12,35)
basic education org. (12,41)
professional networks (12,43)
job search intermediaries (12,44)
physical operations support (24,2)
infrastructure support (24,4)
ministries of social affairs (31,15)
ministries of defense / of the interior (31,16)
supranational institutions (31,22)
political parties (32,2)
external organisations mgt. (32,3)
judiciary (33)
civil society funding institutions (42)
informal personal communities (43,2)
individuals (44)
artisanal and small scale miners (51,1)
scavengers (51,2)

## Dependent stakeholders

responsible STI initiatives (12,15)
bio-based industry (21,27)
repair & maintenance industry (21,28)
other manufacturing industry (21,29)
waste treatment and disposal industry (21,33)
service industry (21,42)
exploration & development support (24,1)
information support (24,3)
consultancies and planning offices (24,5)
ministries of the environment (31,12)
ministries of trade & finance (31,13)
ministries of spatial planning (31,14)
statistical offices (31,18)
regions and local administrative units (31,21)
parliaments (32,1)
CSOs, citizen initiatives and cooperatives (41)
prosumer communities (43,1)

Source: MICA

# ASSESSMENT OF THE STAKEHOLDER LANDSCAPE

**Contribution of the stakeholder mapping**

- systematic identification
- stakeholders identified beyond the usual suspects
- comprehensive mapping

  civil society organisations

  industry associations
- stakeholder groups relate to one another around certain themes, thereby elicitation of needs
- argumentation who is treated how to improve legitimacy of choices for the empirical appraisal

# NEEDS APPRAISAL

## Surveys



industry associations

## Interviews

- **conducted**: industry and civil society
- **pending**: city representatives, investment, environmental agencies

## Stakeholder-Workshop

**Aims:**

- identify bling spots
- elicit prior needs in depth

# COVERAGE

**Surveys:**

- almost 100 responses: 60 professional geologists, 26 geological surveys, 10 industry associations
- response rates: 5,5 % professional geologists, 63,4 % geological surveys, 10,9 % industry associations

**Interviews:**

- 6 with industry associations
- 3 with civil society organisations

n=26, multiple answers possible *Source: MICA EGS Survey 2016*

# STAKEKOLDER WS (STAGE 1)

## public sector stakeholders (D1)

| | | | |
|---|---|---|---|
| **Host** | Jan-Olof | Arnbom | SGU |
| **Participants** | Mark | Simoni | NGU |
| | Steven | Fortier | USGS |
| | Claudia | Delfini | EGS |
| | Teresa | Brown | BGS-NERC |
| | Bjarni | Pjetursson | EGDI / GEUS |
| | Renate | Schoofs | Flemish Government |

## mining stakeholders (D2)

| | | | |
|---|---|---|---|
| **Host** | Eberhard | Falck | MinPol |
| **Participants** | David | Ovadia | Blenheim Natural Resources |
| | Nancy | Savall | EGS |
| | Vanja | Basevic | INTRAW / EFG |
| | Sari | Katalin | MFGI |
| | Roberto | Tomasi | Gopa |
| | Corinna | Hebestreit | Euromines |
| | Erika | Machachek | GEUS |

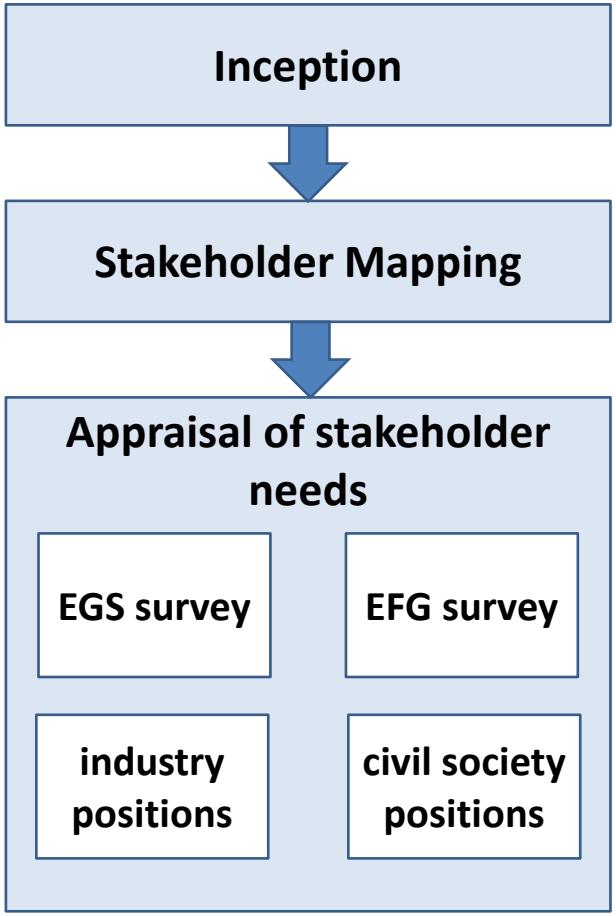
## material production and manufacturing stakeholders (D4)

| | | | |
|---|---|---|---|
| **Host** | Björn | Moller | ISI |
| **Participants** | Henk | Pool | CEFIC |
| | Norbert | Babcsan | Aluinvent |
| | Dirk | Lauinger | NTNU |
| | Vincent | Aubert | Toyota Motors Europe |
| | Andy | Clifton | Rolls-Royce |
| | Patrick | Wall | VERAM (technology platforms) |

## urban mining stakeholders (D3)

| | | | |
|---|---|---|---|
| **Host** | Lorenz | Erdmann | ISI |
| **Participants** | Christian | Hagelüken | Umicore |
| | Veronika | Cerna | EIP Smart Cities and Communities |
| | Barbara | Radwanek-Bak | PGI (WEEE recycling) |
| | Michael | Ritthoff | Wuppertal Institut (Cirular Economy) |
| | Lidia | Quental | LNEG (tailings) |
| | Pascal | Leroy | WEEE Forum |

# OVERALL SUMMARY




1. The identification and analysis of stakeholders has layed the foundations for the empirical appraisal of stakeholder needs (systematic, comprehensive and legitimacy).
2. The surveys confirm the significance of the raw material information needs identified at the Inception Meeting and unveil new topics.
3. The interviews are particulary suitable to explore concrete information needs in more detail.
4. The stakeholder workshop validated the appraisal, made suggestions for further interviews and gave birth no novel questions?

# OVERALL CONCLUSION

The approach allowed for inclusion of a number of actors in empirical research; however some groups have not been tapped successfully.

Awareness of being a stakeholder: definitive, dominant and some dormant present; CSOs, cities and affected industry not.

The empircal research is designed to avoid dupilcation of work done by other projects such as MINGUIDE, Minlex, VERAM

Though being, comprehensive, the needs appraisal is far from being complete.

We got questions, topics, fragments – the sense-making for MICA

# THE ROAD(S) AHEAD

- Stakeholder Workshop documentation (Oct. 2016)
- Pending interviews to close gaps (Oct. 2016)
- Agree on data analysis scheme – WP6 (Oct. 2016)
- Further data analysis and mapping (Nov. 2016)
- Rough Draft D2.2 Stakeholder Needs (end of Nov. 2016)
- Validation in Telco (beginning of Dec. 2016)
- D2.2 Stakeholder Needs final (end of Jan. 2017)

MICA Mineral Intelligence Capacity Analysis

# THANKS FOR YOUR ATTENTION

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Fraunhofer ISI

# EGS QUESTIONNAIRE

1. How important are the following strategic issues for our geological survey?
2. How useful are the following raw material information platforms for your geological survey?
3. Needs for improvement of raw material information: for which topics?
4. Who are your key clients? What are emerging questions?
5. How important are the following future developments for your geological survey by 2020?

Technical requirements

Position at the geological survey

# EGS SURVEY CONCLUSION

- most questions and topics matter to the majority of responding geological surveys
- offshore mineral potential, investment, above ground infrastructure, subsurface infrastructure, value chain bottlenecks and conflict minerals matter to roughly half of the geological surveys only
- stakeholder identification is mainly an access problem, multi-stakeholder engagement needs to be supported
- agreement on strategic issues and future developments: budget pressure, time pressure, competencies as strategic issues; SDGs matter; bipartite picture for bioeconomy and EU under threat
- Minerals4EU considered useful by all, RMIS unkown to 10 GS
- choosing between different data set properties (most recent, most accurate, free of cost, etc.) a major requirement

# EFG SURVEY INSIGHTS

**Preliminary conclusions:**

- The survey enhances our knowledge and understanding of raw material information needs of professional geologists as potential users of the envisaged online platform
- For identification and assessment of mineral deposits the survey confirmed that improvement of the access to the information as well as support responding to information is needed on :
  - Mineral endoiment
  - Onsore resource potential
  - Geographical ....
- For the exploitation of mineral deposits improve the access to information on land use and existing and planned mining ventures are needed. At the contrary the financing options for mining ventures are no relevant for the exploitation of mineral deposits.

# INDUSTRY APPROACH

**Side topics**

- Which countries classify which products as hazardous?
- Activities/initiatives (Raw Materials Policy) would be very important to have in the MICA platform
- REACH
- A decision is taken to maybe restrict a material… how does this affect the industry using that material? (foresight studies, scenarios)
- Studies should  consider the local context of products and  the use of critical and rare materials in these products

# CIVIL SOCIETY - CONCLUSION

- civil society organisations relevant to raw material information mapped for the first time comprehensively
- the IRMA standard (Draft 2.0) provides a broad framework reflecting civil society interests (CSOs, communities) in mining
- there is no comparable broad framework reflecting civil society interests in urban mining
- clearly different perspectives on raw material information
- more than 20 CSOs have been invited to the Stakeholder Workshop, none is here
- The „Crashkurs Rohstoffpolitik“ regularly takes place, addressing politically actives, trade unions and environmental and development NGOs

# EFG SURVEY INSIGHTS

- Exploration industry and mining industry are the main clients of respondents' professionals, with a total of 80% are the key clients. The emerging questions raised by the clients are related to:
  - environmental restrictions,
  - permitting procedure,
  - the EU position regarding the security of mineral resources and land use policies
  - economic: world market and future commodities.

# OUTLOOK AFTERNOON

## Sources

- Stakeholder Report
- Interviews
- Surveys

## 8 Knowledge domains

| |
|---|
| D1 mineral deposits |
| D2 mine development & mining |
| D3 anthropogenic stocks & recycling |
| D4 material production & manufacturing |
| D5 raw material supply & demand / criticality |
| D6 Political and legal framework |
| D7 Environment & health |
| D8 Social accountability & reporting |

## Supporting material

a) Synopsis of topics and subtopics identified
b) novel questions that came up in the appraisal