SUBJECT

New CEN/TC on ‘Sustainable production of raw materials from mining related activities’

BACKGROUND

On 2023-12-08, SIS submitted a proposal to CCMC for the creation of a new Technical Committee in the field of sustainable production of raw materials from mining related activities (Annex 1).

The proposed Technical Committee will be responsible for standardization of sustainability aspects of production of raw materials from mining related activities covering the whole value chain from exploration, extraction, treatment, smelting, refining, other processing, as well as recycling and mine closure and reclamation, to minimize the negative impacts from mining through its life cycle. Energy raw materials, i.e., coal, oil and gas, and aspects covered by CEN/TC 472 ‘Rare earth’ are excluded from the scope of the proposed TC.

Access to raw materials is essential for the Union economy and the functioning of the internal market. In addition, the European mining industry plays a crucial role for reaching the objectives of the Paris Agreement, and the necessary climate transformation set for Europe. In March 2023, and as a part of the Green Deal, the European Commission (EC) proposed a comprehensive set of actions to ensure the EU’s access to a secure, diversified, affordable and sustainable supply of critical raw materials, the Critical Raw Materials Act.

One main objective of the new proposed CEN/TC is to set up an infrastructure to take care of the expected standardization request from the EC following the entry into force of the Critical Raw Material Regulation or any other relevant standardization requests in the area. The proposed CEN/TC should mirror the work in ISO/TC 82/SC 7 and assess which ISO/TC 82/SC 7 standards could be relevant for adoption as European standards. The proposed CEN/TC should also mirror the work in the ISO/PC 348 Sustainable Raw Materials and assess if relevant to adopt as a European standard.

CEN/TC 472 ‘Rare Earth’ intends to mirror the work of ISO/TC 298 ‘Rare Earth’ while also addressing the Critical Raw Materials Act to regulate strategic topics along the supply chain. CEN/TC 472 also covers aspects such as sustainability, traceability and recycling. Given that Critical Raw Materials (CRM) to a very large extent is extracted as by-products of other mining activities, it is necessary to also consider sustainable aspects of mining in general regardless of the type of mineral being extracted, in order to cover the full life cycle of CRM, hence this proposal for a new CEN/TC. If the proposed CEN/TC is approved, it is crucial that the two Technical Committees work closely together in order not to duplicate work or develop standards with overlapping scopes.

A proposal for the initial work programme of the new CEN/TC is presented in Annex 1.
CEN/BT is asked to approve the creation of a new TC as follows:

- Vote according to Internal Regulations Part 2, clause 6.2.3 (non-mandated work, weighted);
  
  **Note:** Possible votes are ‘Agrees’, ‘Disagrees with comments’ and ‘Abstains’. Any vote indicating ‘Deferred decision’ will be counted as ‘Disagrees with comments’.
- At least 5 Members express commitment to participate.

**PROPOSAL(S)**

BT,
- having considered the proposal for a new field of technical activity submitted by SIS as included in Annex 1;
- decides to create a new CEN/TC xxx with the following preliminary title and scope:
  
  **Title:** Sustainable production of raw materials from mining related activities

  **Scope:** Standardization for sustainability aspects of production of raw materials from mining related activities covering the whole value chain from exploration, extraction, treatment, smelting, refining, other processing, as well as recycling and mine closure and reclamation, to minimize the negative impacts from mining through its life cycle.

  Sustainability includes environmental, social, economic and governance aspects of the raw material production and may also include carbon- and environmental footprint, circularity, material efficiency and traceability.

  Excluded:
  - Energy raw materials, i.e. coal, oil and gas
  - Aspects covered by CEN/TC 472 ‘Rare earth’

- allocates the secretariat of CEN/TC xxx to SIS;
- asks the new CEN/TC xxx to submit its final title and scope for BT approval after its first meeting.

2024-01-05 – AC – NUP
**PROPOSAL for a NEW FIELD OF TECHNICAL ACTIVITY**

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<th>Date of circulation</th>
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<td>2023-12-08</td>
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| Type of technical body proposed (TC) | Technical Committee |

**IMPORTANT NOTE:** Incomplete proposals risk rejection or referral to originator.

☑ The proposer has considered the guidance given in Annexes 1 and 2 during the preparation.

**Proposal** (to be completed by the proposer)

### Title of the proposed new subject
(The title shall indicate clearly and unambiguously, yet concisely, the new field of technical activity which the proposal is intended to cover.)

Sustainable production of raw materials from mining related activities

### Scope statement of the proposed new subject
(The scope shall precisely define the limits of the new field of technical activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)

Standardization for sustainability aspects of production of raw materials from mining related activities covering the whole value chain from exploration, extraction, treatment, smelting, refining, other processing, as well as recycling and mine closure and reclamation, to minimize the negative impacts from mining through its life cycle.

Sustainability includes environmental, social, economic and governance aspects of the raw material production and may also include carbon- and environmental footprint, circularity, material efficiency and traceability.

Excluded:
- Energy raw materials, i.e. coal, oil and gas
- Aspects covered by CEN/TC 472 Rare earth

### Purpose and justification for the proposal.

The mining industry is a central actor in the transformation to a sustainable society and on a global level there are ongoing standardisation work addressing topics related to sustainable mining, amongst others within ISO/TC 82/SC 7 Sustainable mining and mine closure. (This new title is under discussion – current title is Mine closure and reclamation management.)

ISO/TC 82/SC 7 are currently discussing its title and scope to include “sustainability” in a broader meaning. However, European stakeholders also see a need to establish a European platform for exchange on standardization on sustainable mining.

In September 2023 ISO/TMB approved the establishment of a new International Workshop Agreement (IWA) on Sustainable Critical Mineral supply chains. The new ISO/PC 348 on Sustainable Raw Materials has also been approved and is planned to start its work July 2024, as soon as the ISO/IWA has completed its work.

Access to raw materials is essential for the Union economy and the functioning of the internal market. In addition, the European mining industry plays a crucial role for reaching the objectives of the Paris Agreement, and the necessary climate transformation set for Europe. In March 2023, and as a part of the Green Deal, the EU Commission proposed a comprehensive set of actions to ensure the EU’s access to a secure, diversified, affordable and sustainable supply of critical raw materials, the Critical Raw Materials Act (the CRMA).

According to the European Commission (from p. 1, 11 and 50 in the Preamble to the CRMA proposal), "[a]ccess to raw materials is essential for the Union economy and the functioning of the internal market. There is a set of non-energy, non-agricultural raw materials that, due to their high economic importance and their exposure to high supply risk, often caused by a high concentration of supply from a few third countries, are considered critical. Given the key role of many such critical raw materials in realising the green and digital transitions, and in light of their use for defence and space applications, demand will increase exponentially in the coming decades. At the same time, the risk of supply disruptions is increasing against the background of rising geopolitical tensions and resource competition. Furthermore, if not managed properly, increased demand for critical raw materials could lead to negative environmental and social impacts. Considering these trends, it is necessary to take measures to ensure access to a secure and sustainable supply of critical raw materials to safeguard the Union's economic resilience and open strategic autonomy.” (p. 1)
In order to ensure the sustainability of increased raw material production, new raw materials projects should be implemented sustainably. To that end, the Strategic Projects receiving support under this Regulation should be assessed taking into account international instruments covering all aspects of sustainability highlighted in the EU principles for sustainable raw materials, including ensuring environmental protection, socially responsible practices, including respect for human rights such as the rights of women, and transparent business practices. Projects should also ensure engagement in good faith as well as comprehensive and meaningful consultations with local communities, including with indigenous peoples. To provide project promoters with a clear and efficient way of complying with this criterion, compliance with relevant Union legislation, international standards, guidelines and principles or participation in a certification scheme recognised under this Regulation should be considered sufficient.” (p. 11)

The production of critical raw materials at different stages of the value chain causes environmental impacts, whether on climate, water, fauna or flora. In order to limit such damage and incentivise the production of more sustainable critical raw materials, the Commission should be empowered to develop a system for the calculation of the environmental footprint of critical raw materials, including a verification process, to ensure that critical raw materials placed on the Union market publicly display information on such footprint. The system should be based on taking into account scientifically sound assessment methods and relevant international standards in the area of life cycle assessment. [...]” (p. 50)

A set of European standards that reflect the requirements on sustainable minerals and metals production from mining would function as an appropriate tool to supplement the CRMA. In its communication on the Critical Raw Materials Act the European Commission refers to standards as means to ensure a strong and sustainable level playing field. Source: https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_5523

In the preliminary draft of the Annual Union Work Programme for European Standardisation 2024, the need for European standards regarding Recycling critical raw materials from permanent magnets as well as European Standards supporting exploration, extraction, refining and recycling of critical raw materials are highlighted. It should be noted that the production of critical and strategic raw materials under the CRMA is often carried out in combination with or as an integrated part of the production of other raw materials, that are often extracted as by-products of other mining activities. The standards developed should therefore be applicable to all such raw materials. Recycling is an increasingly important source of raw materials and recycling is often combined with production from primary materials. Therefore, it would be appropriate for the new CEN TC to develop standards relating to the sustainable production of raw materials from mining related activities covering the whole value chain from exploration, extraction, treatment, smelting, refining other processing and recycling (including recovery). Moreover, the new CEN/TC will serve as a platform for discussions and standardization work regarding the need to develop European standards as well as a logical location to develop harmonized standard following a standardization request from the EU Commission, related to sustainability issues within the scope of the CRMA. The new CEN/TC should also mirror the standards of ISO/TC 82/SC 7 as well as standards developed in ISO/PC 348 Sustainable Raw Materials and decide on their potential adoption as European standards, either of published standards or by joint development under Vienna Agreement. It should also mirror the work on the ISO/IWA on Sustainable critical mineral supply chains.

Is the proposed new subject actively, or probably, in support of European legislation or established public policy?

☑ Yes  ☐ No

If Yes, indicate if the proposal is

- in relation to EC mandate(s): Expected after Entry into force of CRMA............(which one(s))
- in relation to EC Directive(s)/Regulation(s): CRM Act............(which one(s))
- in relation to other legislation or established public policy: ..........(give details)
Proposed initial programme of work
The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall therefore show the relationship between the subject proposed.

Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, terminology, characteristics, other requirements, data to be supplied, test methods, performance requirements, etc.). Supplementary justification may be combined with particular items in the programme of work (e.g. output from a research project).

The proposed programme of work shall also suggest priorities, target dates and the most appropriate type of deliverable (e.g. EN, TS) for each item.

One main objective of the new CEN/TC is to set up an infrastructure to take care of the expected standardization request from the European Commission following the entry into force of the Critical Raw Material Regulation or any other relevant standardization requests in the area. Meanwhile, the CEN/TC should mirror the work in ISO/TC 82/SC 7 and assess which ISO/TC 82/SC 7 standards that could be relevant for adoption as European standards. The CEN/TC should also mirror the work in the ISO/PC 348 Sustainable Raw Materials and assess if relevant to adopt as a European standard.

Example of possible programme of work may include development of European standards and standardisation deliverables:
- supporting exploration, extraction, refining and recycling of critical raw materials, such as standards for sustainable mining and carbon footprint
- recycling critical raw material from permanent magnets

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing CEN, CENELEC, ISO and IEC deliverables.

The proposer should explain how the work differs from apparently similar work or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization, or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

One of the main tasks for the new CEN/TC would be to mirror the standards of ISO/TC 82/SC 7 and ISO/PC 348 Sustainable Raw Materials and to decide on their potential adoption as European standards. The proposal of this new CEN/TC has been developed in parallel with the voting of the German proposal of CEN/TC 472 "Rare Earth". That CEN/TC intends to mirror the work of ISO/TC 298 "Rare Earth" while also addressing the European Commission’s proposed Critical Raw Materials Act to regulate strategic topics along the supply chain. The scope of the German proposal includes “...aspects such as sustainability, traceability and recycling are covered”.

Given that Critical Raw Materials to a very large extent is extracted as by-products of other mining activities, it is necessary to also consider sustainable aspects of mining in general regardless of the type of mineral being extracted, in order to cover the full life cycle of CRM, hence this proposal for a new CEN/TC. If this CEN/TCs is approved, it is crucial that the two committees work closely together in order not to duplicate work or developing standards with overlapping scopes.

Other committees in related areas:
- ISO/TC 333 Lithium
- ISO/TC 345 Specialty metals and minerals
- ISO/TC 298 Rare Earth
- CEN/TC 472 Rare Earth
- ISO/TC 82/SC 7 Mine closure and reclamation management
- ISO/PC 348 Sustainable raw materials
A listing of relevant existing documents at the international, regional and national levels.

Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source, and should be accompanied by an indication of their significance.

ISO/CD TR 24419-2, Mine closure and reclamation – Managing mining legacies – Part 2: Case studies and bibliography

ISO/AWI 120305, Mine closure and reclamation – Vocabulary

ISO/FDIS 24419-1, Mine closure and reclamation – Managing mining legacies – Part 1: Requirements and recommendations

ISO 21795-1:2021, Mine closure and reclamation and planning – Part 1: Requirements

ISO 21795-2:2021, Mine closure and reclamation and planning – Part 2: Guidance

ISO/PWI 8241, Mine closure and reclamation – Mine water

ISO/PWI 8238, Mine closure and reclamation – Social aspects

ISO/WD 7819, Lithium – Vocabulary

ISO/AWI 19287, Lithium sustainability across the value chain: concentration, extraction, separation, conversion, recycling and reuse

ICMM, International Council on Mining and Metals, Global Standard for Responsible Mining


The Copper Mark Criteria for Responsible Production https://coppermark.org/standards/

IRMA, Initiative for Responsible Mining Assurance, https://responsiblemining.net/about/team/

Known patented items

☐ Yes  ☒ No If "Yes", see CEN-CENELEC Guide 8 and provide full information in an annex

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) in particular those who are immediately affected from the proposal (see Annexes 1 and 2) and how they will each benefit from or be impacted by the proposed deliverable(s)

1. Consumers: European standards will ensure that the products containing raw material from mining meet sustainability requirements.

2. Businesses (incl. SME): European standards will help to reduce costs associated with compliance and marketing of products containing raw materials while also meeting regulatory requirements.

3. Governments: European standards will provide a tool to comply with regulatory requirements and will ensure that the extraction and processing of raw materials is done in an environmentally neutral way.

5. Academic and research bodies: European Standards will provide them with a framework for conducting research, allowing them to collaborate more effectively with other institutions. The CEN/TC will also provide a platform for sharing and exchanging research results, which would help to accelerate the development of new technologies.

6. Non-governmental organisations (NGOs): European standards will ensure that the extraction and processing of raw materials is done in an ethical and environmentally friendly manner and that their use is sustainable.
Liaisons:
A listing of relevant external European or international organizations or internal parties (other CEN, CENELEC, ETSI, ISO and/or IEC committees) to which a liaison should be established (in the case of ISO and IEC committees via the Vienna or Dresden Agreements).

ECOS – European Environmental Citizen’s Organisation for Standardisation
UNECE - United Nations Economic Commission for Europe
CEN/TC 472 Rare earth
ISO/TC 82/SC 7 Mine closure and reclamation management
ISO/TC 298 Rare earth
ISO/TC 333 Lithium
ISO/TC 345 Specialty metals and minerals
ISO/PC 348 Sustainable raw materials

Joint/parallel work:
Possible joint/parallel work with:
- CEN (please specify committee ID)
- CENELEC (please specify committee ID)
- ISO (please specify committee ID)
- ISO/TC 82/SC 7
- IEC (please specify committee ID)
- Other (please specify)

Name of the Proposer
(include contact details)
Lisa Almkvist, Head of Standardization, Swedish Institute for Standards, lisa.almkvist@sis.se
An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

Karin Lindmark
Head of Technical Policy and standardization services
SIS representative to CEN/BT
Signature of the proposer

Annex(es) are included with this proposal (give details)

☐
Informative Annex 1 "Principal categories of market needs"

- Consumer protection and welfare
- Environment
- Innovation
- Support to:
  - public policy
  - European legislation/regulation
- Market access/barriers to trade, i.e. enhancing the free movement of:
  - services
  - goods
  - people
- Interoperability
- Health/Safety
- Terminology

Informative Annex 2 "Principal categories of stakeholders"

- Industry and commerce,
  where particularly appropriate, to be identified separately as
  - Large enterprises (those employing 250 staff or more)
  - Small and medium sized enterprises (SME), (those employing 250 staff or fewer)
- Government
- Consumers
  including those organizations representing interests of specific societal groups, e.g. people with
disabilities or those needing other particular consideration)
- Labour
- Academic and research bodies
- Non-governmental organisations (NGO),
  including organizations representing broad or specific environmental interests
- Standards application business (e.g. testing laboratories, certification bodies)

Sometimes it is valuable also identify the immediate affected stakeholders from industry and commerce in terms of their position in a product value chain, as follows:
- Supplier
- Manufacturer
- Intermediary (e.g. warehousing, transport, sales)
- Service provider
- User of the product or service
- Maintenance / disposal

NOTE: 'Immediately affected stakeholders' are considered to be those who, within the context of the proposal, would be in a position to implement the provisions of the intended standard(s) into their products, services or management practices.