POSITION STATEMENT

Assessment of the methodology on the list of critical raw materials

The CRM Alliance[i] has a vested interest in the ongoing work by the European Commission on the assessment of the methodology on review of the critical raw materials lists and has the pleasure to submit its comments below. The CRM Alliance supports the specific comments submitted by its individual members but desires to address some overriding principles.

The listing of CRMs underlines their essential role for the European economy. In context, CRMs are immediately important to Europe's economy and essential to drive future innovations in maintaining Europe's technological leadership in a highly competitive world economy. Many different suppliers as well as traders and industries, rely on the unique properties of CRMs to manufacture lifesaving and reliable products.

Considering the above, priorities for the European Commission should be:

- ☞ Minimizing supply chain risks
- ☞ Applying CRM list in EU policies
- ☞ Leaving the issue of substitution to the markets
- ☞ Improving the mining investment climate
- ☞ Improving other external factors to enhance mining
- ☞ Establish a critical raw materials institute

Minimizing supply chain risks

Efforts need to be directed toward minimizing supply chain risks rather than continuing to develop methodologies and performing studies toward the identification of a CRM. To ensure the continued supply of these critical materials, a specific critical raw materials policy is needed which underlines the importance and dependence of the European economy on them. This policy needs to be directed away from substitution and towards:

- exploration and extraction of CRMs in Europe,
- fair trade policies,
- minimizing any adverse regulatory burden
- seeking investments and fiscal policies that enhance the supply

Applying CRM list in EU policies

The CRM list, as first produced in 2010, has had as benefit to draw the attention of policymakers, stakeholders and others to the importance of certain substances to the European economy. Although this

highlighting of relevance is positive, it is not worth the effort if this list is not taken into account in current policymaking and legislation.

Efforts need to be made to formalize the position of CRMs in policymaking. CRMs are particularly relevant in the following policy areas: industrial development, in particular high tech industries; international trade; R&D; Environment and Health Legislation.

Leaving the issue of substitution to the markets

As CRMs are without exception a costly element in the production process, users have always been and will always be investigating substitutes. EU efforts should not focus on the substitution issue and should certainly not include it in the very definition of a critical raw material. The criticality evaluation is not aiming at substitution per se; substitution is only a means to avoid prejudicial disruptions to materials supply. When a European-based production of critical raw materials subsists, the policy put in place should in priority aim at preserving this production; substitution efforts should enter into play only after taking the necessary steps to ensure an EU-based supply of the critical raw material. Moreover, substitution can pose a large number of additional issues, as recognised in this study, e.g. when the potential substitute is also a CRM, or when it is classified as a dangerous material.

Moreover, the review talks about substitutability lowering the economic importance of a metal. However, the possibility should be considered that the substitute is also a CRM, in which case there is a false mitigation. Each of any number of CRMs might be substitutes for each other, so then they lower its 'economic importance', but ultimately, if it can only be substituted by other CRMs, the economic importance is surely not alleviated, especially if the supply of the 'substitute' were to come under pressure.

Improving the mining investment climate

Current work by the European Commission insufficiently addresses investment related aspects:

- Lack of European exploration companies – there are very few European sourced/based exploration companies exploring in Europe. While this is in part a case of geologists/ management assessment of land use/prospectively/mining law it certainly holds back discovery.
- Lack of European investors in mineral exploration – There are very few investors who are favourable to either mining or mining in Europe. European investors expect exploration companies to show cash flow projections and P&L which are irrelevant in our industry. European investors are relatively risk adverse, and those that do like risk go for biotech/IT, etc. The funding therefore has to come from outside of Europe and is therefore much more mobile, always seeking the best returns. There is no loyalty to European discovery
- The European stock markets give poor protection for mining shareholders – the Canadian and Australian markets are much better due to legislation on how companies report technical data (Canada is NI43-101). The high quality reporting means that investors feel safer investing in a Canadian company than a Swedish/German/English one where financial reporting is monitored, but not technical reporting.
- The system of R&D funding in other first world areas is much better than Europe. In Australia, exploration or processing R&D receives a 45% rebate – the company spends the money with the best researchers of their own choice, and receives the rebate for the money spent. In Europe, the

complex and expensive process of Horizon2020 funding, which in most cases fails, requires a team to be built from parties who have agendas different to the exploration/mining company

- Education – there are not many universities that are teaching exploration geology (in preference to that for water, ground stability, environment) as so there are fewer geologists out there looking for new discoveries.

Improving other external factors to enhance mining

- Europe is very under explored by modern methods that are widely applied elsewhere.
- Europe lacks well integrated data sets that cover prospective mineral belts – when available they are limited by country/province boundaries and don't provide a clear view on prospectivity. The Nordic countries have worked hard to integrate data across geographic borders, so geological regions can be viewed as one. This is extremely helpful.
  There is relatively little regional scale magnetic/gravity/radiometric data that geologists rely upon to make early decisions and prioritize the areas to explore.
- Every country is different, however Europe is on the whole unattractive to junior exploration companies. This is due to a combination of high population density, competing land use, Natura 2000, EU-level water and land management requirement, high energy pricing, high labour costs, large variations in Mining Acts, often poor Mining Acts, significant up-front expense on claims (Finland is some 50 times more expensive than Australia for example), the requirement for a high level of very early stage stakeholder engagement.
- Europe has a reputation (well founded) for environmental resistance to mining – the "Not in My Back Yard" view that creates an immediate path of conflict. If a Government is silent or not supportive of the mining industry, the role of the mining company is difficult, regardless of published mineral strategies.

Establish a critical raw materials institute

The establishment of the CMI in the US has been extremely effective in making real progress but there is no European equivalent. Skills are consolidated, not distributed across all the US. The Australian model has been to develop "Key Centres for Competence". A Competency Centre for Critical Materials in a EU Member State, where skills are aggregated, would go a long way to understanding and securing critical metal supply. At present, to know how much of a metal is produced in Europe, a first point of reference would be the United States Geological Survey.

Brussels, 24 September 2015

[i] The CRM Alliance is the representative body of primary producers, traders and associations. It consists of 19 members representing 15 Critical Raw Materials and more than 350 companies globally: Beryllium Science & Technology Association; Etimine (borates); The Cobalt Development Institute; World Coal Association (coking coal); Eurofluor (fluorspar); Tertiary Minerals (fluorspar); German Engineering Federation (gallium arsenide); EcoPhos (graphite rock); Indium Corporation; International Magnesium Association; Minor Metals Trade Association; Imerys Graphite and Carbon (natural graphite); Beta Technology (niobium); International Precious Metals Institute (PGMs); Great Western Minerals Group (REEs); Tasman Metals (REEs); EuroAlliages (silicon metal); and Commerce Resources Corporation (REEs and former CRM tantalum).