Union Européenne des Producteurs de Granulats
Europäischer Gesteinsverband
European Aggregates Association

POSITION PAPER

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Securing access to non-energy mineral resources, and specifically to Aggregates

Introduction

The industry welcomes the Raw Materials Initiative and urges the EU Institutions to develop a comprehensive European Raw Materials Strategy to ensure sustainable and long-term access to mineral deposits. This paper focuses specifically on the issues relating to Aggregates.

While there is general availability of indigenous aggregates at European and national levels, economically viable regional and local access is often severely constrained. Therefore, unless there is the acceptance Europe-wide of a strategy to provide viable local provision, the necessary future supply of aggregates at a local level will become even more critical, and this will quickly spread to the regional and subsequently to the national level. The strategy will also need to recognise that the time required to obtain a licence to produce aggregates can take 10 years or more from the first request.

The emphasis on local supply is also important because of the desire to limit carbon dioxide emissions in the Climate Change context, as the transportation of these heavy bulk materials is the biggest generator of CO_2 in an industry with otherwise miniscule specific CO_2 emissions (see estimates in Appendix 1).

While the industry has made significant progress in its environmental and health & safety performance, indeed now being a recognised leader in biodiversity, it has been facing increasing difficulty gaining access to vital local resources. This has affected not only the key mineral supplies needed by the EU economy, but also the industry's economic performance, which is in itself a pre-condition to deliver truly sustainable development. The industry also appreciates the need to preserve resources and actively encourages the use of recycled aggregates in this context. In some member states the amount of recycled aggregates is already near the saturation point of usable demolition materials.

The demand for Aggregates in Europe is 3 billion tonnes per year, produced mainly by SMEs on 28,000 sites across Europe. The EU average use of Aggregates is 7 tonnes per capita. The Aggregates Industry is the largest in the minerals sector by tonnages needed, numbers of locations and numbers employed. Taking an EU average price of €6/tonne, the aggregates sector represent a turnover of around €18 billion, though it has suffered heavily under the current financial crisis, reporting an average decline of about 20-25% in 2009 compared to 2008.

The Key Priorities of the Raw Materials Initiative in the context of the Aggregates Industry therefore are:

1. Giving higher priority to locally sourced non-energy minerals in land-use planning;
2. Encouraging competent authorities to manage permit applications more effectively;
3. Conserving natural resources by promoting the use of recycled aggregates;
4. Enhancing benefits for local communities from new extraction sites.

Priority 1: Giving higher priority to locally sourced non-energy minerals in land-use planning

Minerals extraction typically occupies less than 0.01 % of the EU Members' land areas, as compared to 40% for agriculture. The ever expanding urban zones and the growing number of Natura 2000 protected areas are increasingly limiting access to key local deposits through sterilisation (see comments in Appendix 2).

The Raw Materials Initiative's Ad Hoc Working Group "criticality" is focusing currently on 39 critical raw materials, including gypsum and limestone. Sand, gravel and crushed rock constitute in most cases the biggest ingredient of construction projects in terms of volume. It is not just strategic construction project such as hospitals, transport infrastructure and coastal protection that require secure access to raw materials: take away aggregates and our entire built environment would literally fall apart.

Each EU Member State, if it has not already done so, should secure locally sourced current and future raw material deposits by giving higher priority to its mineral resources in its industrial policy, in order that proven resources are not needlessly sterilised by residential, commercial or other industrial development. In fact responsible raw material supply should have the same priority as water, environment and waste management.

In the implementation of Natura 2000, access to raw materials on land and at sea (Marine Aggregates) unfortunately is usually not considered as an overriding public interest. Deposits in protected areas cannot therefore be secured for future uses, although extractive operations are only temporary, in many cases contribute to biodiversity and can be fully compensated by restoration. The Habitats Directive (92/43/EEC) in its current form does not take this into account, nor does the 7th draft of the Natura 2000 Guidance document for the Non-Energy Extractive Industries.

In addition, the European Aggregates Industry has to plan its activities according to production site lifetimes – generally 10 to 50 years - due to capital intensiveness of the investment. Public decision makers often focus on shorter timescales. This has led to a shortage of supply in several regions across Europe and will continue to do so unless a long term strategy is set in train.

Therefore we wish Aggregates as essential materials to be included in the list with associated specific criticality considerations to be addressed at national and local levels.

Priority 2: Encouraging competent authorities to manage permit applications more effectively

The time required to obtain minerals planning permits has significantly increased in recent years. The Leoben study on mineral planning has shown that the authorisation process can take several years, decades in some extreme cases. This is due to a combination of legal requirements, the complexity of the environmental assessment procedures and the large number of authorities involved, increasing litigation risks. It has occasionally resulted in situations where the proposed extraction period is the same duration as the authorization process, or sometimes less. Furthermore, the cost of the authorization process is such that it may no longer be affordable for some small and medium sized companies (see comments in Appendix 2)

Simplification is, therefore, needed, but without decreasing the level of protection given to local communities and all other stakeholders. The Leoben study recommended that attention should be given to the concept of “one-stop shopping”, which is being applied successfully in Canada and is based on the principle of parallel processing and intense cooperation between the authorities. The current exchange of best practice in land use planning is strongly supported by UEPG and should facilitate this simplification.

UEPG welcomes the Natura 2000 Guidance document for the Non-energy Extractive Industries in this context. We still feel, however, that the document lacks balance in a few key areas and that it does not fully embrace throughout the fact that “extraction activities in or near Natura 2000 areas can be reconciled with environmental protection”. The interpretation of the Natura 2000 Directives needs to be under constant review in so far as they interact with criticality of access to minerals. The effects of Climate Change and the natural movement of habitats and species will influence the geographical location of Natura 2000 sites and this also needs to be taken into account in the medium term.

Therefore we wish to see best planning and permitting practices applied to the Aggregates Industry by national and local authorities, fully reconciled with reasonable Natura 2000 Guidelines, to ensure timely access to resources and permit durations appropriate to the capital intensity of the Industry.

Priority 3: Conserving natural resources by promoting the use of recycled aggregates

The percentage of recycled aggregates in the overall market is continuously increasing, generally originating from inert construction and demolition waste, beneficially replacing virgin materials and conserving natural resources and stretching deposit lifetimes. This has the added important advantage of reducing waste going to landfill. However, there are technical quality and environmental limitations with recycled aggregates that are used in some higher-performance applications and so recycled materials will never be able to completely replace natural resources. In general, the percentage contribution of recycled materials in the total aggregates market will depend to some extent on population density – the higher the density, the higher the likely contribution.

UEPG continues to actively promote higher value applications of recycled aggregates, in cooperation with the International Recycling Federation (FIR) at the European Platform for Recycled Aggregates (EPRA).

Serious legislative and regulatory challenges for recycling remain however in REACH (in its application to Recovered Aggregates) and the end-of-waste criteria. These challenges are severely inhibiting the Industry in further developing use of recycled materials.

Therefore we wish to see the use of Recycled Aggregates being developed to the greatest practicable extent through simplification and removal of entirely unnecessary and inappropriate legislative and regulatory barriers.

Priority 4: Enhancing benefits of new extraction sites for local communities

The European Aggregates Industry provides measurable and long-term benefits for local communities. It contributes to direct local revenues through its investment in the land it uses. If the land being extracted belongs to the community, the latter receives royalties in addition to the tax revenues. The industry is also one of the few that operates almost exclusively in rural areas. The industry's presence and the jobs it creates often help to justify the development of public infrastructure. Most of the European Aggregates Industry consists of Small and Medium Enterprises (SMEs).

Because it offers opportunities for restoration and development projects, the European Aggregates Industry helps regions to regain their vitality by contributing to biodiversity and developing new amenities, including enhanced farm land, recreational facilities, ponds, wetlands, housing estates, forestry projects and drinking water reservoirs to name but a few.

While local communities need aggregates to build new homes, schools, hospitals and roads, unfortunately they increasingly tend to oppose any proposals from the industry to work new areas of land or to extend existing operations in order to meet those needs. The NIMBY (Not In My Back Yard) phenomenon contributes to increased costs and uncertainty for the industry.

Enhancing the benefits to local communities, as well as clearly communicating these benefits, is needed, if this trend of misinformed opposition is to be reversed and the industry is well aware of this challenge. The Aggregates Industry has moved forward significantly in recent years in opening its doors to the local community and stakeholders in "Open Days", as part of its sustainable development goals.

Therefore the positive role of the Aggregates Industry in providing local employment and community support should be clearly recognised in the initiative.

Recommendations

UEPG – the European Aggregates Association - is therefore calling for a European Raw Materials Strategy to meet the objectives outlined in this position paper.

This could be achieved by:

- Recognising the Aggregates Industry as a key sector (the largest in terms of volume of product, numbers of locations and numbers employed) with its own particular criticality and priority within the Raw Materials Initiative.

- Simplifying the regulatory framework and making it consistent and balanced in terms of sustainable development, on the basis of a comprehensive impact assessment. Implementing the "one-stop shopping" model could be a key objective;

- It must be understood that sand, gravel and crushed rock are often critical locally, on the grounds that aggregates are essential for strategic projects such as hospitals, transport infrastructure and coastal protection and access to vital local resources needs to be maintained, from environmental as well as viability perspectives;

- Developing an EU Minerals Policy in order to identify, protect and enhance mineral deposits in land-use planning, particularly at the local level. This policy should parallel the development of the Natura 2000 Guidelines, to ensure that "extraction activities in or near Natura 2000 areas can be reconciled with environmental protection";

- Promoting the use of Recycled Materials to the greatest extent practicable, while not compromising on technical quality, through minimising "red tape" and legislative and regulatory barriers for this activity.

- Highlighting the contribution of the European Aggregates Industry to overall EU sustainable development goals. This can be achieved through continued support for "Open-Days and other community events and by encouraging EU decision makers to visit aggregate quarries.

UEPG urges the EU Institutions to use the strong momentum created by the Raw Materials Initiative and to launch a comprehensive and coherent European Raw Materials Strategy, specifically taking into account the special needs of the Aggregates Sector.

Attachments:
Appendix 1: Environmental and Economic Arguments for Access to Local Resources of Aggregates.
Appendix 2: Some comments on the RMI Working Group documents.

Please direct any queries to Antony Fell, UEPG Secretary-General at secretariat@uepg.eu or via phone to +32 22 33 53 00.

Appendix 1: Environmental and Economic Arguments for Access to Local Resources of Aggregates:

CO_2 generated in the production of Aggregates:

- Industry data (most specifically the UK MPA) indicates that the CO_2 generated in the production of a tonne of aggregates varies from 4kg/tonne for sand & gravel to 9kg/tonne for hard rock.
- Taking a weighted average of around 6.5kg/tonne indicates a generation of some 20m tonnes of CO_2 per year for the total EU production of 3 billion tonnes of aggregates.
- These emissions result from the fuel used in heavy mobile plant in quarries, and in the usage of imported electricity for crushing, screening, washing, filtering and conveying machinery.

CO_2 generated in the transport of Aggregates:

- Best data available (such as the UK DEFRA guidelines) indicate that HGV trucks, fully laden as is normal, transporting on average 25-30 tonnes of aggregates per truck, based on typical fuel usage, produce around 1kg of CO_2 per kilometre travelled.
- UEPG data indicates that around 85% of all aggregates produced, that is 2.5 billion tonnes a year, are despatched by road (the rest by rail or barge/ship).
- Therefore transporting these aggregates even 1km will result in an extra CO_2 generation of 2.5m tonnes of CO_2.
- Taking an average transport distance of 30km, this will result in an extra CO_2 generation of 75m tonnes, over 3 times that generated in the production of the aggregates.

Cost of producing Aggregates:

- Data given in "Aggregates Business Europe", Nov/Dec 2007, indicates a range of aggregates selling prices across Europe varying from €3/tonne to €12/tonne, averaging then around €7/tonne. Current average prices have probably dropped to around €6/tonne.
- Hence the total economic value generated by the industry is about €18 billion a year.

Cost of transporting Aggregates:

- Industry published data would indicate a cost of around 10 cents per tonne per kilometre (higher in Western countries, lower in Central/Eastern countries) for transport in typical 25 tonne payload trucks.
- Therefore transporting 2.5 billion tonnes of aggregates a year an average of 30km costs an extra €7.5 billion, adding some 40% over the cost of production.
- By extrapolation, transporting aggregates more than 75km indicates a cost of transport greater than the material value, implying zero economic value.

Conclusion:
Both the environmental and economic costs of transporting aggregates make a very strong argument for access to local aggregate resources.

Appendix 2: Some comments on the RMI Working Group Documents:

Ad-hoc Working Group on Criticality:

Application of the "Fraunhofer" Formulae to Aggregates;

1. Economic Value

- This as calculated in Appendix 1 is some €18 billion for the European aggregates sector per year, in that the product is created from zero value in the ground.

2. Supply Risk

- These formulae have little relevance to the Aggregates sector, as aggregates are generally indigenous in each country, with little cross-border trade, and with minimal imports into Europe.
- There is a continuous trend to improve the recycling rate, still very low in some countries, but it is up to 20% of virgin materials in the more advanced/densely populated EU member states, which actually represents a recycling rate of up to 90% of all usable demolition materials. There are also technical constraints (of quality) in working at this or any higher levels.

Ad-hoc Working Group on Exchange of Best Practice:

Questionnaire on Best Practices:

1. UEPG strongly advocates that each country should have a minerals policy/strategy. The present situation varies, some countries do have a well-developed strategy, some none.
2. Minerals (and specifically aggregates) are unfortunately often not considered in land use planning in most countries, and that is a central plank of this position paper. Too often can the grant of planning permission for a single house or premises unnecessarily cause the sterilisation of access to aggregate resources. Generally speaking, aggregate resources are not mapped in detail unless the local aggregates association has specifically made inputs to the national or regional development plans, and even when this has been done, access requirements can sometimes be ignored by the planning authorities, a situation which needs be addressed and rectified as part of the Raw Materials Initiative.
3. The authorisation process is complex and very slow in most countries, taking typically 5-10 years to seek authorisation for a new quarry, sometimes longer, and permissions then granted may be for only a similar timescale, too short to justify the capital investment. These aspects too need to be addressed and rectified as part of the Initiative.
4. UEPG members have developed various good practice guidelines, which have been submitted to the draft Natura 2000 Guidelines working group.

Questionnaire on EU Minerals Knowledge Database
Questionnaire on Sub-Surface Information Components

- Neither of these has much relevance to Aggregates, in that these are almost always sourced from surface workings, and are therefore usually identifiable and well-known at a national or regional level. Specific local knowledge can be commercially sensitive in view of the difficulties in procuring land and authorization to work the deposits.