



***Recommendations
on the Regional, National and Transna-
tional Level for
Decision-makers on
Sustainable Supply Mix (SSM)***

DELIVERABLE SUMMARY	
PROJECT INFORMATION	
Project acronym:	SARMa
Project title:	Sustainable Aggregates Resource Management
Contract number:	
Starting date:	1. 5. 2009
Ending date:	31. 12. 2011
Project website address:	www.sarmaproject.eu
Lead partner organisation:	Geological Survey of Slovenia
Address:	Dimičeva ulica 14, SI-1000 Ljubljana
Project manager:	Slavko V. Šolar
E-mail:	Slavko-Vekoslav.Solar@geo-zs.si
DELIVERABLE INFORMATION	
Title of the deliverable:	Activity 5.1 Recommendations
WP/activity related to the deliverable:	WP5 / Activity 5.2
Type (internal or restricted or public):	Public
Location (if relevant):	-
WP leader:	Günter Tiess, MUL
Activity leader:	Fotini Chalkiopolou, IGME
Participating partner(s):	All partners
Author:	Günter Tiess, Fotini Chalkiopolou
E-mail:	guenter.tiess@unileoben.ac.at

DISCLAIMER

The present report was prepared in the framework of the project SARMa – Sustainable Aggregates Resource Management, which is co-financed by the EU within the South East Europe Transnational Cooperation Programme.

The information reported is accurate according to the best knowledge of the authors and is the sole responsibility of the authors of this report. The publication reflects the views only of the authors; and therefore the rest of project partnership and the South East Europe Programme Managing Authority cannot be held responsible for any use which may be made of the information contained therein.

1.1 EU Issues

One essential task of WP4 of the SARMa project was to analyze the relevant EU framework related to aggregates. Therefore, before turning to the recommendations at the national level some of the respective EU recommendations with regard to aggregates will be provided (Hamor, 2011).

Recommendation: The Community aggregates policy and national mineral plans

A coherent Community aggregates policy is proposed to be developed that will take balanced consideration of economic, environmental, and social aspects to ensure the sustainable practices of aggregates Industry. A new specific reference on national mineral plans in the Strategic Impact Assessment Directive is proposed for the reinforcement of the weight and valuation of the primary aggregate commodity and its occurrences of resources and reserves.

Recommendation: Legal terminology for aggregates

An up-to-date legal terminology is needed for aggregates. “Primary” and “secondary” are the two terms proposed to be used for all categories – types of aggregates. The transposition of these terms into Member State legislation should be sped up.

Recommendation: Eco-legislation for aggregates

Product-specific eco-label and eco-award legislation should be extended to both primary and secondary aggregates production schemes.

Recommendation: Increase awareness on the potential of extractive waste for production of aggregates

Rising of awareness is recommended among mining companies and authorities in order to exploit the options provided by the Mining Waste Directive (MWD) for the management of extractive waste. Technical guidelines are proposed to be developed that may include provisions on how this management corresponds to aggregate reserves.

Recommendation: The Natura 2000 framework

The Natura 2000 framework needs further homogenous implementation in the different Member States in order to avoid the distortion of market conditions, and the transboundary exportation of environmental impacts. Access to primary aggregate resources should be made feasible by closely monitoring the due implementation of Natura 2000 by the competent Community bodies.

1.2 National Aggregates Policies

There is practically no national aggregates policy framework established in SEE countries.

Recommendation: Establish National aggregates policy framework in SEE countries

SEE emerging countries are advised to develop their national mineral/aggregates (planning) policy, and harmonize it with regional spatial development and local land use plans (aggregates planning policy). Preferably, this framework should be regulated by a single piece of legislation, which will enable prudent planning leading to easier access to aggregate resources.

Issue: Minerals planning policies

Nearly no country in SEE has adopted a national aggregates planning policy. The general tendency is to develop land use plans, which refer to aggregates only partly or not at all. Moreover:

- ✚ *National aggregates exploitation plans* are required.
- ✚ *The separation of natural and recycled aggregates legislation* should be discontinued. Aggregates (land use) supply and management concepts shall be based on SSM (i.e. mix of primary and secondary resources).
- ✚ *The involvement of the social elements should be increased*: Involve operators and communities effectively in the planning process of the concerned site, at the earliest possible stage.
- ✚ *Improvement of transport logistics* based on the traffic concepts / plans of the concerned municipalities is required and should be included in the planning process.

Recommendation: Implement mineral planning policies in SEE countries

All countries should adopt long-term planning (taking into account alternative aggregates, and optimization of trading/transport routes). The aggregates planning policy should determine the authorities that are in charge of developing a plan for future aggregates resources extraction and supply: depending on the rate of decentralisation of each country, the planning role is in charge from national agencies to municipalities. All Countries should adopt a common process for planning, managing, monitoring and evaluating the aggregate life cycle (existing EU laws have not been adopted completely). Consider a sectorial aggregates planning competence in SEE-countries.

Issue: Without proper data no SSM planning policy framework can be established.

Almost all countries have a national or regional inventory on aggregates reserves and resources, but it is a segment of the national/regional minerals inventory (or cadaster). In many countries, the resources inventories are not complete or regularly updated or even in digital format. The inventories are developed and maintained by the national or regional geological surveys or authorities. The resources inventory is accurate in countries where land use planning takes aggregates into account. The inventory of aggregate reserves and operating quarries is operated by the same entity that is in charge of the permitting of aggregate quarries or the supervisory ministry. This entity is either the mining or the geological authority and their supervisory ministries for the industry or environment. There is a growing need for transparent and consistent information across regions and trans-nationally. Stakeholders require high-quality information regarding the location of mineral resources and the characteristics of the physical and cultural environment in which they occur.

Recommendation: Inventories

On-line, easily accessible (or even publicly available) service providing aggregates information for both primary and secondary aggregates supply (and demand) sources is needed in all countries. Based on necessary professional competence, existing databases and regulatory tasks, the geological surveys and mining authorities may be ideal candidates to run such a system. Nevertheless, due to other traditions in certain countries, regional planning authorities and state environmental bodies may also be suitable to manage this task.

National ministries should recognize the importance of possessing more reliable and complete statistics on aggregates.

Secondary aggregates are in general not considered in the land use planning for minerals in SEE countries. Waste management plans (or policies) usually include a quantitative outlook for secondary aggregates generation, especially for construction and demolition waste. However, land use plans do not take the generation of secondary aggregates into account. The legislation for the authorization of recycling activity is either non-existent or incomplete in all countries. There has been no research for developing tools to address sustainability impacts related to non-environmental issues, such as the local social and economic impacts of aggregates extraction or the

possible integration of a primary aggregates site with a nearby recycling/ secondary aggregates site.

Recommendation: Incorporation of secondary aggregates in minerals planning

Secondary aggregates should be considered and incorporated into national, regional and local minerals plans, land use plans, environmental programs, waste management plans, and development plans by enforcing laws for the protection of primary aggregates resources, and by moving towards a recycling society.

The situation regarding databases for secondary aggregates is disappointing: most countries do not possess such an information base. In some countries limited information can be extracted from mining waste inventories. There are efforts to comply with the new waste framework directive (2008/98 EC), and countries are about to establish regulated and more detailed data collection systems for construction and demolition waste. Some information on secondary aggregates can be extracted from the national waste database managed by environmental agencies or the relevant ministry, or statistical offices. This aspect is important with regard to the Innovation Partnership as it applies to aggregates, as well as the public access to environmental information, including mineral resources (i.e. the EU INSPIRE directive requirements).

1.3 Regulatory framework

There is a lack of homogenous legislation and practices (planning, licensing, monitoring, and sanctions) in most countries in which multiple levels of public administration are implicated in the field of aggregates.

Recommendation: Improve aggregates regulatory framework

Improve the legal structures/regulations for aggregates, consider aggregates equivalent to other mineral resources. Implement the regulatory framework of a sectorial planning competence relevant for aggregates.

All countries should adopt legal basics ensuring common processes for long-term planning, management, monitoring and evaluation of the aggregates life cycle. Adopting integrated legislation for regulating both primary and secondary aggregates management might be challenging. Sustainability assessment screening should be obligatory.

Issue: exploration and exploitation permit

The major licensing steps to access primary aggregates resources are rather uniform in SEE countries: In general, they involve an exploration permit and an exploitation permit. In centralized countries, geological and mining authorities play the main role. In countries that develop and use aggregates exploitation plans, the planning authorities take the prime lead. Judicious planning and de-regulation may make access to aggregate resources easier.

Recommendation: Clearly defined duties and responsibilities

Clear definition of duties and responsibilities as well as the reinforcement and maintenance of geological and mining authorities' roles are recommended, while at the same time acknowledging the planning authorities' outstanding responsibility. The consensus building via consultative involvement and enhanced dialogue with NGOs and local stakeholders should be encouraged.

Issue: co-authority

In SEE partner countries the co-authority participation (i.e. environmental, land use planning authorities or others) show similarities, but the number of co-authorities involved differs significantly. In smaller and/or more centralized countries, 2-3 ministries or professional authorities participate (e.g. Bosnia-Herzegovina, Croatia, Slovenia, Romania, and Serbia). Fewer co-authorities participate in permitting where complex aggregates and land use planning is practiced (Austria and Italy). On the other hand, in Greece and Hungary, numerous authorities are involved in the process and their consent is obligatory. The so-called “parallel assessment” model is rare.

Recommendation: Major, regulatory body must be ensured

For the SEE countries where the number of involved co-authorities is close to exceeds a dozen, a revision of this extended range of co-authorities is recommended, and/or the scope of their aggregates-related mandate should be reconsidered. The minimum element of good governance is the designation of a distinguished, major, regulatory body, which is authorized to co-ordinate the co-operation among involved authorities. This approach is similar to a “one-stop-shop” model, which is the most client-friendly solution and also conforms with e-government requirements.

Issue: Coordination between permitting procedures/authorities and land use planning management.

With respect to EIA and NATURA 2000 the vast majority of SEE countries transposed the related EU Community legislation, and inserted the relevant passages in the early licensing stages. Surprisingly, only Italy and Styria in Austria apply the option of Strategic Environmental Impact Assessment (SEA) as a preceding collateral exercise to minerals planning. The introduction of GIS technology, including web-based applications, has greatly improved the ability to display, manipulate, analyse, export and sustainably manage aggregates resources information. Good quality information about aggregate resources is necessary to ensure rational land use planning.

Recommendation: Strategic Environmental Impact Assessment

It might be useful and may help avoiding failures during the actual Environmental Impact Assessment (EIA) phase, if countries also adopt and practice the Strategic Environmental Impact Assessment (SEA), prior to the development of national or regional aggregates extraction plans.

Nature conservation issues are usually dealt with and incorporated into the environmental licensing action. Member States as well as most non-EU member SEE countries apply the related Community Natura 2000 framework. The practical transposition of this legislation usually leads to designation of absolutely “forbidden” areas for aggregates extraction in most countries.

Recommendation: Nature conservation issues

It is advised that competent authorities study the related guideline document published by the European Commission in 2010 in order to learn how the extraction of aggregates and the biodiversity goals can be managed in harmony. Romania and Slovenia are two examples of SEE countries that allow aggregates mining on Natura 2000 areas upon stringent surveillance.

Public participation is usually ensured during the environmental licensing phase, through public hearings and/or the expression of written views. However, the representation of stakeholders, i.e., the affected public, who have the right to intervene, is rather problematic, leading in many countries to appeals in the legal courts. In some countries public hearings are also prescribed by the Mining Act, and/or during the discussions of land use plans.

Recommendation: Public participation

A more enhanced and sophisticated involvement of local society could be encouraged in some SEE countries, not necessarily by the state but by the aggregates companies on a voluntary basis. The New Waste Framework Directive that focuses on waste recycling and secondary aggregates (namely aggregates from other than Quarrying sources) introduces the opportunity for a new campaign in community engagement and information sharing. The participation of the SEE primary aggregates sector in the EITI (Extractive Industries Transparency Initiative) should be also promoted.

Issue: investment security for the aggregates industry

The permit processing time from the first application to the extraction license ranges, in general, from half a year to two years in SEE countries. In most of them no specific rules apply for the processing time of aggregates. Deadlines are usually breached, either simply due to delays or because of legal suspension of the process due to interested parties' intervention. The licensed period of exploration activities may last 2-8 years (incl. approved prolongation). The duration of extraction in some countries is unlimited, and in cases where the duration is regulated, it may extend to 20-35 years.

Recommendation: Effective licensing processes

This is important for the security of investment and for sustainable aggregates management and planning. Reconsideration of the existing licensing conditions (processing and license period) for quarrying of "primary" aggregates is recommended, since they inhibit long-term planning and sustainable utilization of aggregate resources. A more efficient processing of permits could be achieved by the precise and restricted definition of the intervening stakeholders (i.e., affected parties who have the right to question the process).

Recommendation: Introduction of e-government

The introduction of e-government (incl. e-application forms, automatic deadline monitoring, digital documentation) may also improve the situation. It is worth considering that shorter permit durations may discourage speculative players in the aggregates sector. Time-linked progressive financial regulatory tools (e.g. land use fees) may direct unwanted land occupation in the appropriate way. Clear regulations on processing deadlines, as well as the stringent monitoring and sanctioning of breaches of the above by either the authorities or clients side is a must, in any case.

Issue: Financial burden on primary aggregate

The financial burden on primary aggregate is multiple (competitiveness issue). Royalty varies between 1.5 - 7 % of the calculated market price, based on a nominal value published or on basis of extracted tons of commodity. In some countries land rental fees have to be paid. Corporate taxation also varies between 10 % and 40 %, as well as the social care charges. Licensing fees are usually on the order of hundreds of euros, but 1-2 k€ fees are known as well. Financial sanctions for illegal mining or environmental offences are on the order of tens of thousands of euros.

Recommendation: Financial issues

Most financial instruments are within the domain of national sovereignty. It is up to the government to establish these economic drivers along with the national policy. Although the majority of SEE countries do not distribute mining royalty income to local communities, it may be a reasonable policy if local communities could benefit from mining royalty income. The progressive land use fee during the exploration phase is considered a good practice, because it guards against speculative land occupation.

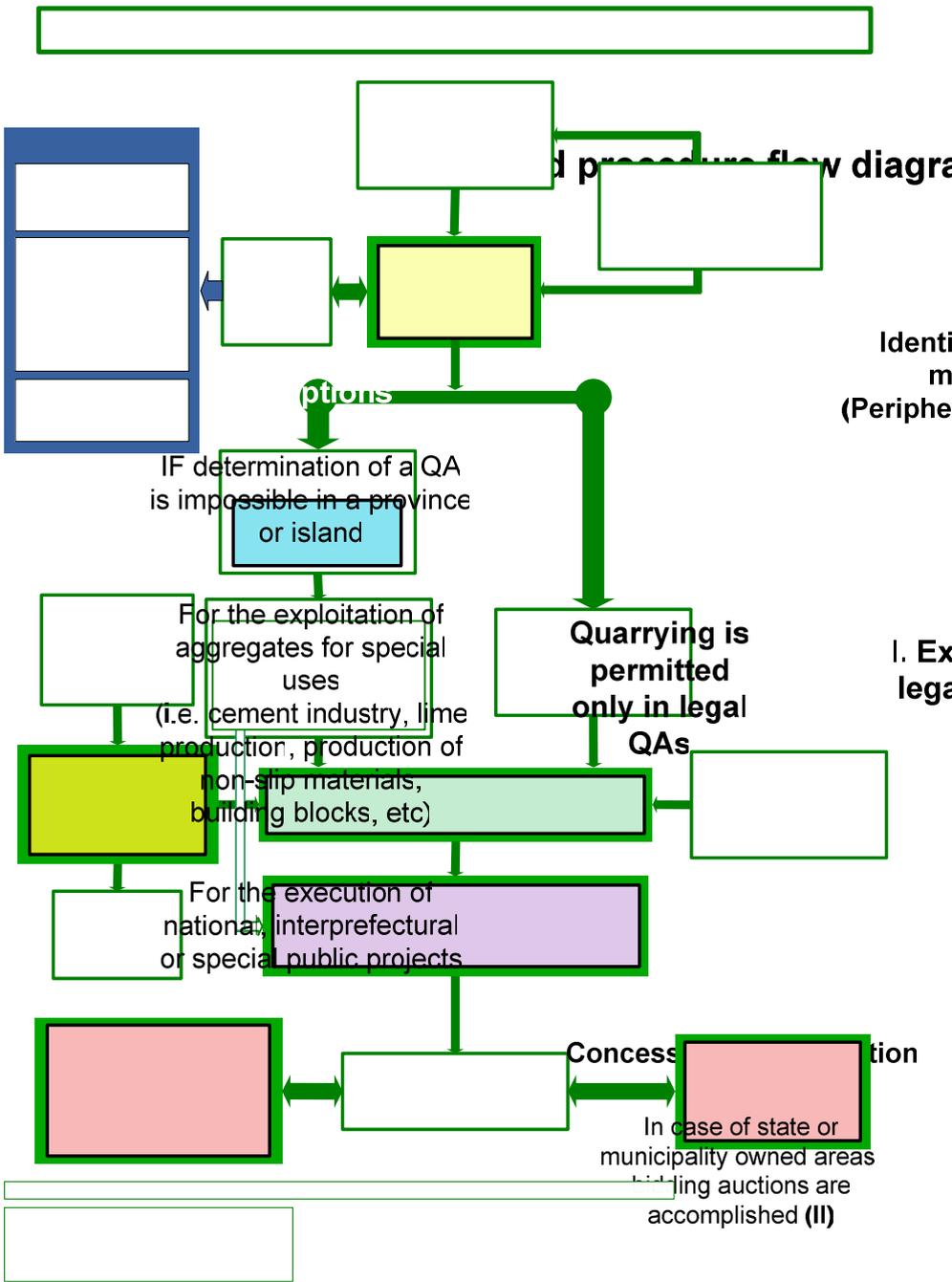


Figure 1: Permitting procedure in Greece, designed by F. Chalkiopolou

Disclosure of Environmental Impact Assessment Study (EIAS)

Leasing contracts

In case of state quarries leasing contract is equal to the