



***Recommendations
on the Transnational Level
for Decision-makers on
Sustainable Aggregates Resource
Management
(SARM)***

DELIVERABLE SUMMARY	
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DISCLAIMER

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The information reported is accurate according to the best knowledge of the authors and is the sole responsibility of the authors of this report.

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1.1 Cross-border SARM Policy

Issue: Cross-border aggregates markets and SARM policy

The distinction between regional production and consumption of aggregates, the supply of internal (regional) and external (trans-regional) markets is crucial. Cross-border flows are related to external markets at the transnational level. As mentioned in Chapter 3, drivers for cross-border flows are several, including geological, environmental, and social reasons.

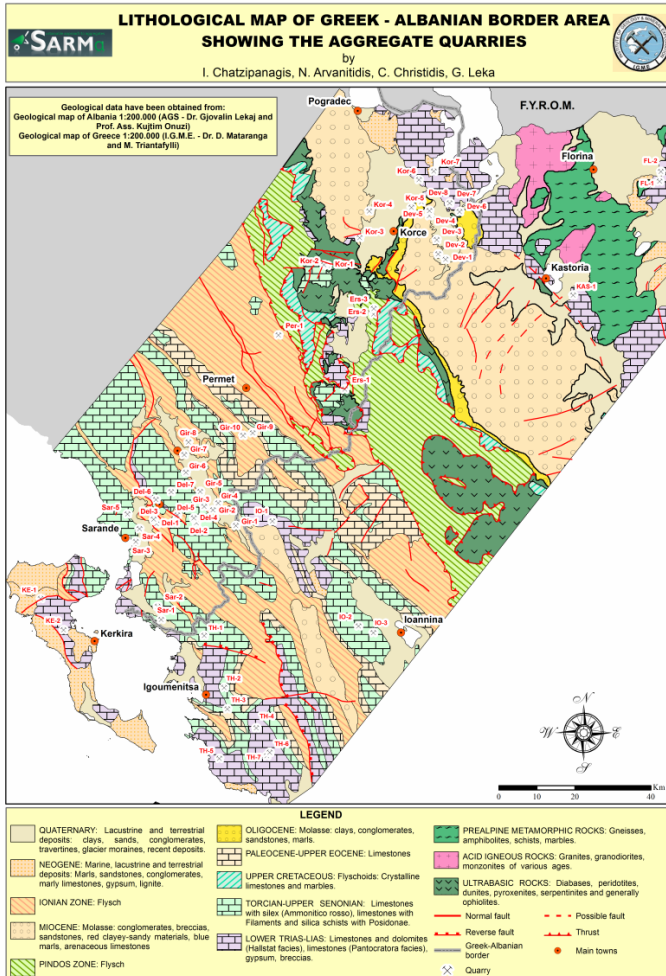


Figure 1: Aggregate quarries in cross-border areas between Albania and Greece

Recommendation No 1:

Analysis of cross-border aggregates market structures is important. Demand and supply (sources) should be known, as well as the mid- and long-term demand scenarios and the possible supply options. Both the demand and supply of aggregates may be influenced by the cross-border SARM policy (which in turn must be based on such market analysis).

Recommendation No 2:

It is recommended that SEE countries implement a cross-border SARM policy framework in order to meet the increasing demand for aggregates, particularly in larger cities located at border areas. In the frame-work of international tenders regarding road and railway (cross-border) construction, the needs for aggregates and transport logistics should be clearly defined.

Recommendation No 3:

Most financial instruments are within the domain of national sovereignty. It is up to the government to establish these economic drivers along with national policy; however, significant differences in the financial instruments may lead to distorted competition in cross-border regions. Harmonizing financial instruments might be recommendable.

No statistical data are collected on the cross-border flow of aggregates, in general only estimations are available.

Recommendation No 4:

Important task of cross-border SARM policy: Improve data and knowledge exchange between stakeholders taking into account the trans-national policy level.

Transnational European transport network

Pan-European Corridors play a crucial role. A very important road connection between central and south-eastern Europe is the Pan-European Corridor X and its branch Xa: Salzburg-Villach-Ljubljana-Zagreb-Beograd-Niš-Skopje-Veles-Thessaloniki. For instance, the main thoroughfare passing at right angles through the cross-border region of Varazdin and Medimurje (Croatia) is the Budapest-Zagreb- Rijeka/Split highway system. Also the construction of the Zagreb-Maribor and Nagykanizsa-Maribor highway sections would be of crucial importance for economic development in the area. Major international railway lines converge in the Northern part of that border region.

Recommendation No 5:

Implement the SARM policy framework in the transnational European transport network: consider the relationship between “aggregates and construction” at the transnational level, include it in the ERDF objectives and strategies.

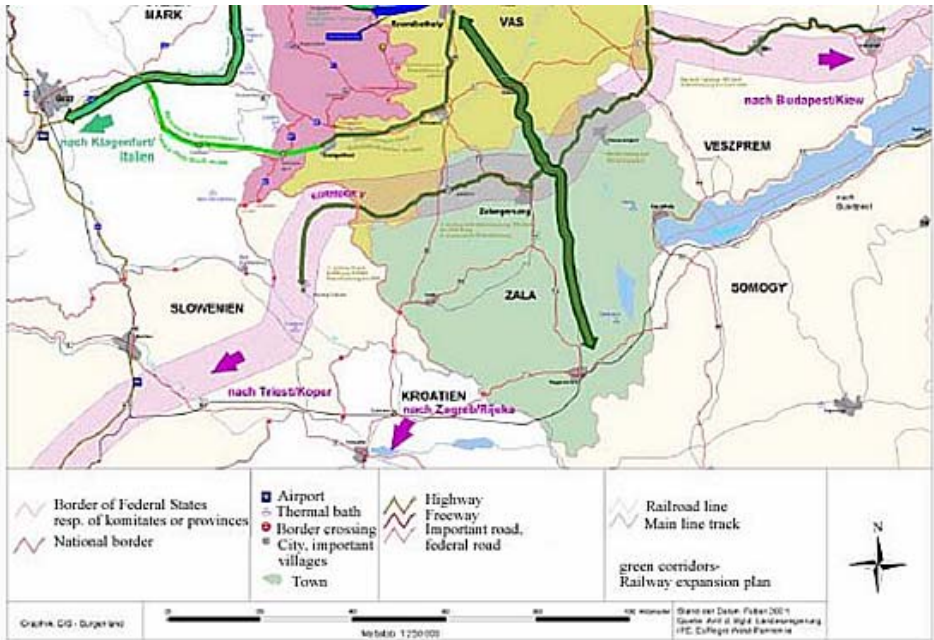


Figure 2: Railway extension plan - network cooperation in cross-border areas AT-HU-SI-HR (source: Operational Program Phasing Out Burgenland 2007–2013 – EFRE)

1.2 Common SARM and SSM Approach

Figure 3 points out issues and gaps that affect supply security and aggregates' resource efficiency in the SEE territory. **Harmonization** of policies for aggregates' planning and management at the local, national and transnational level – **based on a common approach** in SEE – will contribute towards **supply security and resource efficiency**:

Figure 4 illustrates

Basic elements of a multi-purpose, multi-scale interoperable Aggregate Intelligence System (AIS) for SEE, which is necessary to achieve SARM and SSM

Figure 5 illustrates

How to increase the potential for harmonization of policies and legislation for aggregates resources management and aggregates supply at national and transnational level.

Incorporation of SARM and SSM into land use planning and management amongst SEE countries

Incorporate SARM concepts in all sectorial plans (e.g. mineral plan, waste management plan, etc.), covering the life cycle of aggregates or even better, merge all relevant aspects into a single land use plan. Such SARM approach requires that specific aspects be analyzed in each part of the plan, from the knowledge base to the development of different scenarios. Each of the phases of plan development needs to take advantage of the sustainability evaluation assessment (SEA) and requires the involvement of stakeholders at the earliest possible stage. Communities and operators should be involved much more throughout the planning process for each site.

- In SEE countries geological mapping and mapping of primary resources exist at different scales that are not equally informative;
- Inventories of the primary aggregates' production cycle are missing or incomplete;
- Inventories of secondary resources are mostly missing;
- Databases for primary resources, if they exist, are not homogenously constructed or regularly updated;
- Accessibility of data by the interested parties is not always easy;
- Existing data are not always ready or managed.

Low recycling rates of C&DW and inadequate framework for exploitation of extractive another waste.

Limited Resource Efficiency in SEE countries, at local, national and transnational levels

SSM strategies and policies are, in general missing from the planning SEE countries for aggregates

Some principles of SARM policies exist in some SEE countries. They are mostly isolated elements that are not organized in integrated aggregates' policies.

Harmonization of policies for aggregates planning at local, national and transnational levels will contribute towards resource efficiency

Efficient data collection, management and processing is necessary for the development of harmonized SARM and SSM policies

Figure 3: Issues affecting aggregates' resources efficiency in the SEE territory (designed by F. Chalkiopolou)

DATA required for the production of aggregates by applying SARM & SSM

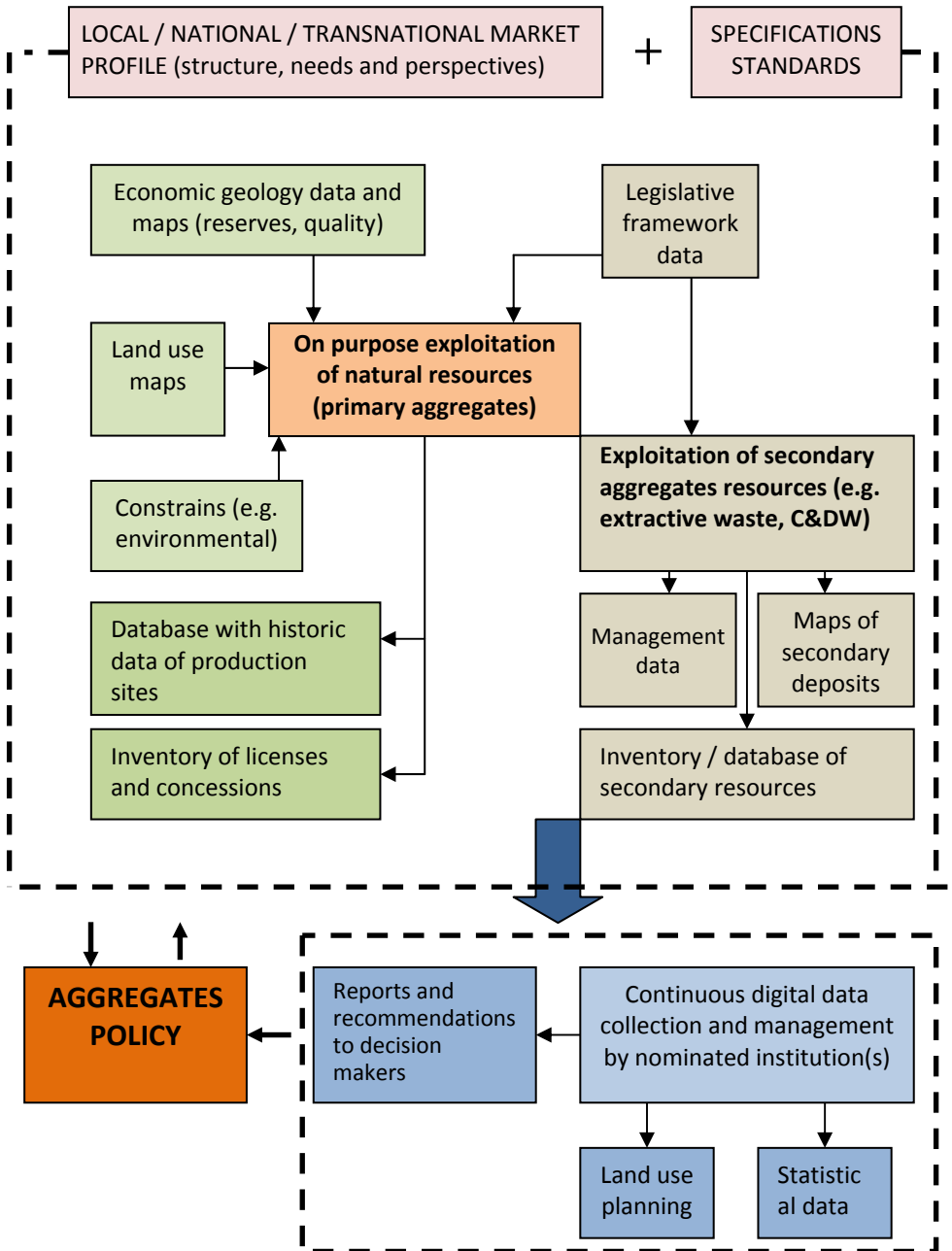


Figure 4: Data required for the production of aggregates by applying SARM & SSM, designed by F. Chalkiopoulou

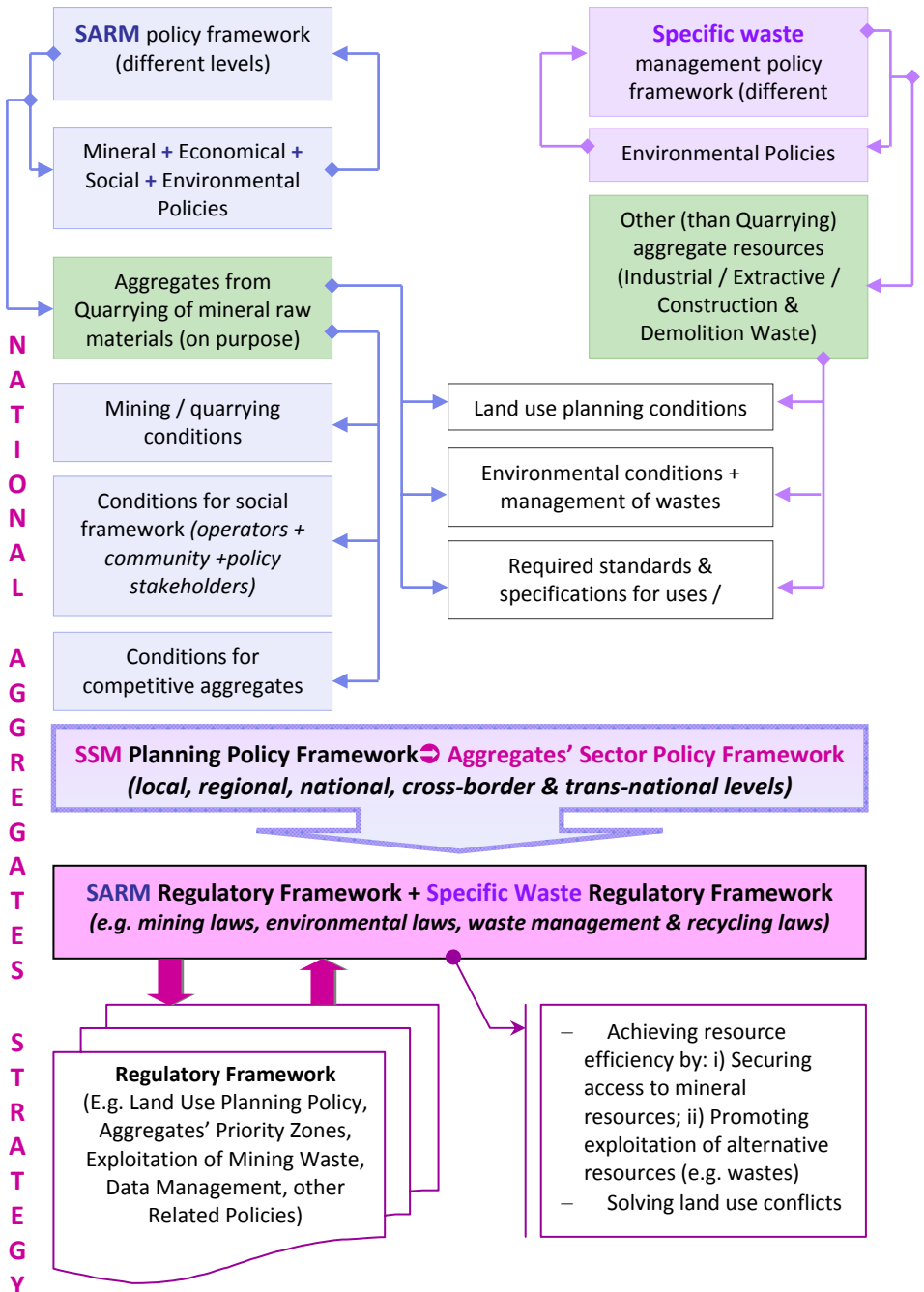


Figure 5: Major co-ordinates of a National Policy on Aggregates in order to achieve supply security and resources efficiency, designed by F. Chalkiopoulou