Sustainable Aggregates Resources Management and Planning issues in SEE: From SARMa to SNAP-SEE project

K. Hatzilazaridou
F. Chalkiopoulou
D. Shields

6th International Conference on Sustainable Development in the Minerals Industry, 30 June-3 July 2013, Milos island, Greece

12.7.2013

Jointly for our common future
Findings on issues related to the sustainable aggregate resources management and planning in SEE

Key challenges for the sustainable management and planning of aggregates

Jointly for our common future
Objectives of SARMa

• To develop common approach to Sustainable Aggregates Resource Management (SARM) and

• To ensure Sustainable Supply Mix (SSM) policy in SEE

**SARM** means moving towards efficient and low socio-environmental impact Quarrying considering also waste management

**SSM** policy means that aggregates’ demand should be fulfilled with a mix of primary and secondary aggregates that together maximize net benefits of aggregate supply across generations
Findings & related issues

At the conclusion of the SARMa project:

The partners recognised the gap between their enhanced understanding of SARM & SSM concepts and the existing aggregates planning process in their countries and across much of the SEE.

**Planning for aggregates supply** is a governmental activity, the purpose of which is to determine the policies, legal framework, actions, and information that will be needed to ensure the availability of adequate amounts of primary and secondary aggregates to economy in the near, medium and long term.

Jointly for our common future
It was also identified that the SEE region faces a lack of data which are required to support the aggregates planning......

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

Jointly for our common future
Findings & related issues

Type of data that are generally missing:

- Demand forecasts
- Data on secondary aggregates

*Secondary aggregates* originate as waste of [other quarrying and] mining operations, or from industrial processes, C&DW including road planning), but excluding chalk and clay/shale worked primarily for aggregate purposes.

Jointly for our common future.
Findings & related issues

Reduced capability to achieve **resource efficiency**

Inadequate capacity and competence for addressing primary and secondary aggregates planning

‘**Resource efficiency**’ is defined in general as a practice in which the primary consideration of material use begins with the concept of “Reduce-Reuse-Recycle-Repair” in descending order of priority

Jointly for our common future
Secondary aggregates were not considered when planning for aggregates supply in most SEE countries.

SSM strategies and policies are in general missing in SEE.

Databases on secondary aggregates either missing or include limited information.

Jointly for our common future.
Findings & related issues

Different levels of development, regarding the recycling of C&DW
Achievement of C&DW recycling targets and implementation of relevant legislation is a slow process

Recycling rate of C&DW is very low in most SEE countries

Missing data on % of recycled used as aggregates

Jointly for our common future
Findings & related issues

- **Complex legislative framework** regulating Quarrying in some SEE countries
- **National mineral planning policy** is not equally developed in different SEE countries
- too many, potentially conflicting, laws...
- Land use planning does not always take into account aggregate resources

Jointly for our common future
Findings & related issues

Limited stakeholders’ involvement in planning

- Identification of stakeholders
- The level and nature of stakeholder participation in the development of management plans needs to be enhanced
- Coordination is needed between different stakeholders

Jointly for our common future
Key challenges for the sustainable aggregates management & planning

The sustainable aggregates management and planning in SEE involve challenges such as:

- Exploitation of all potential aggregate resources
- Promotion of recycling activities
- Elimination of deficiencies in the relative legislative framework
- Achievement of social license to operate

Jointly for our common future
More challenges include lack of:

Coordinated planning for aggregates that addresses cross-sectoral interactions;

Integrated (or any) planning for primary and secondary aggregates that addresses resource efficiency;

Data to support sustainable aggregates planning;

Stakeholder engagement and consultation process to ensure that planning addresses the concerns and needs of all target groups.
How can SEE countries achieve SARM & SNAP?

- Adopt SARM and SSM practices in order to achieve resource efficiency
- Integrate planning for primary and secondary aggregates
- Develop tools to support national/regional aggregates planning

Jointly for our common future
More actions….

Raise knowledge and awareness on the potential contribution of aggregates from recycling to achieve SSM

Increase knowledge and capacity levels among stakeholders with respect to sustainable aggregates management and planning
Thank you for your attention!

Jointly for our common future