







**Title of the Project:** Continuous improvement strategy for increasing the efficiency of wastewaters treatment facilities in the Black Sea coastal states

**Acronym:** CISWastewater

# **Project Description:**

**Overall objective** is to achieve stronger regional partnership and cooperation to realize significant improvements of the wastewater treatment facilities management in the Black Sea coastal states.

**Specific objectives**: 1. Cooperation between Black Sea (BS) partner regions to improve the management of the wastewater treatment facilities; 2.Increase the performance of wastewater treatment facilities through a new continuous improvement strategy (CIS) model development; 3.Acquisition of desired competences for the personnel involved in BS wastewater management; 4.Enable WWTF managers and BS regions decision makers to manage more effectively and respond to trends more quickly; 5.Coordination of the technical, administrative and financial activities of the joint Action.

# **Target Groups**

Regional operators, municipalities, wastewater plant managers, universities, R&D institutes and NGOs participating at the CIS training courses, local authorities.

### **Brief Description of the presentation**

# **Define Manual**

The Continuous Improvement principles outline an integrated strategy for processes' improvement, by searching and removing the causes of defects and variables; they also frame a continuous and qualitative improvement strategy, which involves the commitment of the entire working team. Following the DMAIC methodology, the DEFINE manual develops a series of key aspects which require the WWTP managers' attention, for being able to improve the treatment processes of the municipal and industrial wastewater, in order to reduce the Black Sea high The DEFINE manual is built to support the initiatives of the WWTP degree of pollution. managers for removing the defects of the treatment processes, by learning the continuous improvement strategies and their main implementing principles and instruments. It also displays an overview of the DEFINE phase and highlights the stages for CIS projects selection and the implementation steps, followed by the development of a risk management overview strategy. After being acquainted with the DEFINE phase's principles and stages, the WWTP manager will have the ability to identify an adequate strategy of improving the treatment processes, and also to prepare its future implementation, by adapting the learned key aspects to the WWTP's specificity.

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#### **Balanced Scorecard Manual**

The Balanced Scorecard Manual outlines the Wastewater treatment which complies with the latest legislation and technological advancements and is accomplished through a series of treatment processes and stages: preliminary treatment, secondary treatment, tertiary treatment, disinfection, de - chlorination, post-aeration, solids processing, release of the treatment effluent to the receiving stream of the Black Sea Region and reuse of the stabilized waste solids (biosolids) as a soil amendment/fertilizer on several neighboring agricultural fields.

Defines the Balanced Scorecard as a progressive and innovative way to communicate to town leaders, employees and the community how each WWTP in the Black Sea Region will achieve its mission and strategic objectives.

Identifies the steps towards the design and implementation of a Strategy Map and a Balanced Scorecard of a WWTP which will do the following: 1) Tell the story of the WWTP's strategy and is connected to that of the referral Region, 2) Show that every objective selected is a link in the cause-and-effect relationships that compose the Region's strategy, 3) Drive performance by using a variety of measures and targets to encourage proactive management, 4) Involve the participation of division heads, key staff, and employees throughout the Region, 5) Ensure financial viability and 6) Positively change the behavior in the Region by developing strategic initiatives.

Defines that the WWTP in the Black Region must: 1) Review their existing initiatives and subsequent budget requests to ensure they are aligned with the Region-wide strategy, 2) Assure that each initiative has at least one performance measure used to gauge progress toward achieving the initiative, 3) Update at the end of each fiscal year the status of these performance measures and communicate their results to the Board of the Region, 4) Determine whether they want to stay the course or develop new initiatives for achieving the REGION's strategic objectives and 5) Analyze the Accomplishments and Challenges of their Wastewater Treatment Services in the Region.

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**Note**: Mr. Theodoros Patsoules will present the above methodologies.