

D6.1 AEOLIX EVALUATION FRAMEWORK

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The main objective of this document is to present the evaluation framework of the AEOLIX project. The evaluation framework for impact assessment takes into account the identification of the operational benefits through the use of evaluation tools by the local and regional Living Labs, and the development of a set of key performance indicators (KPIs) assessing the AEOLIX penetration to local industry. The KPIs have been selected collaboratively with the AEOLIX Living Labs, aiming to provide a framework tailored to the needs of each specific Living Lab.

The framework is based on the implementation of AEOLIX in eleven Living Labs in different European regions, which will test the AEOLIX solution. The assessment focuses on the derived business advantages through the logistics service operations and the market penetration to local industry.

The General Evaluation Framework is described in this deliverable. Impacts to be evaluated include:

- The derived operational benefits and the market penetration achieved from the implementation of AEOLIX in the Living Labs;
- competitive advantage gained through the implementation of AEOLIX;
- changes to the way that supply chain stakeholders co-operate and do business;
- socio-economic impacts; and
- changes in carbon footprint, utilising the Global Logistics Emissions Council (GLEC) framework.

The implementation of the AEOLIX solution through the Living Labs' scenarios requires structural modifications among the stakeholders, which will be revealed through the identification of "quick wins" among the Living Labs.

A comprehensive view of the evaluation criteria and the KPIs among the Living Labs is provided. The deliverable examines the KPIs that can be used for the evaluation of the Living Labs. It also describes the kind of measurements that will be used by the Living Labs, in order to collect the necessary data. The need for common data formats among the Living Labs and the performance targets of the AEOLIX services is highlighted.

Deliverable 6.1 presents an overview of the evaluation techniques to be employed throughout the AEOLIX project, which include:

- Investment costs compared to expected benefits;
- identification and comparison of the before/after situation of business models of each actor;
- cost benefit analysis of socio-economic impacts;
- the Global Logistics Emissions Council (GLEC) framework for the evaluation of carbon footprint;
- review of satisfaction of stakeholders' needs; and
- Multi-criteria Analysis (MCA).



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Multi-Criteria Analysis (MCA) will be used to assess the impact and the effectiveness of each Living Lab implementation. The main features of MCA (performance matrix, scoring and weighting) are highlighted while the several types of MCA are described. D6.1 proposes the Analytical Hierarchy Process (AHP) for the AEOLIX evaluation in order to assess the achievements of the Living Labs.

The definitions and descriptions of the research hypotheses and roles for each Living Lab and each scenario have been defined in detail. For each Living Lab, a brief description of the objectives and the scenarios to be tested is included. The necessary data required for the evaluation of the KPIs and the Living Lab operations is also described.

The assessment tools to be developed for data collection procedures and monitoring process during the implementation of the Living Labs are reported in detail. Specific data collection tools for each Living Lab are described. Following the definition of the KPIs and the data required for the evaluation of the Living Labs execution phase, each Living Lab has identified the necessary tools for its data collection process.

The final section proposes an implementation plan to be followed by each of the eleven Living Labs during the AEOLIX project. This section presents the implementation plan for the activities of work package 6 (Impacts Monitoring, Dynamic Assessment and Evaluation), starting from the submission of Deliverable 6.1 and continuing to the time plan for the following deliverables during the AEOLIX project.

Access the full deliverable here: <http://aeolix.eu/deliverables/>

