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Editorial

A new EU project entitled "Supporting EU's Freight Transport Logistics Action Plan on Green Corridors Issues" (abbreviated name "SuperGreen"), with NTUA-LMT assuming the role of Coordinator, has started on Jan. 15, 2010. The 3-year project is a Coordinated Action supported by the European Commission (DG-TREN) in the context of the 7th Framework Programme. The purpose of SuperGreen is to promote the development of European freight logistics in an environmentally friendly manner. Environmental factors play an increasing role in all transport modes, and holistic approaches are needed to identify 'win-win' solutions. SuperGreen will evaluate a series of 'green corridors' covering some representative regions and main transport routes throughout Europe. This newsletter provides a summary of activities during the first year of the project. More details on the project including public deliverables can be found on our web site www.supergreenproject.eu. To be regularly informed about the project, please send us an email at supergreen@martrans.org

Prof. Harilaos N. Psaraftis - Project Coordinator

Laboratory for Maritime Transport - National Technical University of Athens

Benchmarking Green Corridors

Starting from an initial list of some 60 corridors, a pre-selection of 15 European corridors was first made, based partly on the current TEN-T and was also relevant in terms of the market and logistics needs of the project's industrial partners. The pre-selection of corridors has been made according to the criteria such as transport volumes, average length of transport chains (share of long distance transport), existing transport infrastructure, types of transported goods, multimodality, effects on environment, human habitat and land use planning, geographical preconditions (cases covering different preconditions), used transport and information technology, supply chain management strategies and procedures of main transport clients and other relevant criteria defined more exactly in the beginning of this task. The analysis of the corridors is based on existing data, and previous research and development projects. Adequate care has been given so that the selected corridors achieve an adequate geographical and modal balance.

In collaboration with the stakeholders' workshop held in Helsinki, Finland, in June 2010, a selection of 9 corridors was made and will be used for benchmarking and further analysis in the project. These corridors are shown in the 'metro-format' map. Selection of these corridors does not mean an endorsement by the project or the Commission, but these corridors will be the objects of further analysis in the project.

After the selection of corridors was carried out, the next task was the definition of benchmarking indicators and methodology. The following groups of Key Performance Indicators (KPI) were defined:

1. **Efficiency** - Absolute unit costs (€/tonne), Relative unit costs (€/tkm)
2. **Service quality** - Transport time, Reliability, Frequency of service, ICT applications, Cargo security, Cargo safety
3. **Environmental sustainability** - CO₂-eq, SO_x, NO_x, PM_{2.5}, PM₁₀
4. **Infrastructure sufficiency** - Congestion, Bottlenecks
5. **Social issues** - Land use – urban areas, Land use – sensitive areas, Traffic safety, Noise

A further filtering and selection of the final KPIs is on-going together with the benchmarking of green corridors. A first regional workshop was arranged in Nola, Italy, in October 2010 to evaluate the initial set of KPIs together with different stakeholders. At the moment, testing of KPIs is on-going.

In addition, changes in operational and regulatory environment have been surveyed and grouped. The analysis and the assessment of these effects to the defined KPIs is also being studied.

In the first half of 2011 all above mentioned tasks will be summarized and grouped in order to define the areas for improvement in greening the transport corridors.

Ilkka Salanne, Sanni Rönkkö - WP leader
Sito Ltd





Sustainable Green Technologies and Innovations

The main objective of this activity is the identification of Green Technologies to be applied in the 9 selected SuperGreen corridors, with the purpose of making corridors greener and solving the identified bottlenecks. An extensive collection has been carried out, and many innovative technologies have been identified with respect to waterborne transport (inland waterway and maritime), railway, road and multimodal transport.

The first result of this activity consists of almost 140 technologies identified in the following categories:

- engines and propulsion systems;
- fuels and energy sources;
- cargo handling and transfer technologies;
- heating and cooling technologies;
- innovative loading units and their treatment;
- vehicles;
- navigation technologies;
- best practices of technologies integration.

As some of the identified technologies have been considered applicable to two or more different transport modes, the collection identified almost 200 different applications. An analysis and selection of the most relevant technologies for the project was carried out in order to identify technologies that are most promising accordingly with SuperGreen scope and objectives. 50 technologies have been selected as the ones having the largest potential for the project.

Francesca Vio - WP Leader
D'Appolonia S.p.A.

Smart Exploitation of ICT-flows

The objective of this activity is to define and exploit the role of Information and Communications Technology (ICT) flows towards the goal of greener transport. Along with the identification of "greening technologies", it will allow to identify 'win-win' solutions and best practices based on implementation of methodologies that achieve a cost-effective utilisation of transport resources on the one hand, and a green supply chain management on the other.

The preliminary results achieved led to the classification of info flows, mode of usage, their integration among various systems and related problems is developed on maritime systems and of course, information flows on inland & road waterways are also analysed. Furthermore, main results, tools and methods of EU projects such as Freightwise, E-freight, and other related projects have been taken into account. In particular, such classification describes how data from all these systems, tools and info flows can map to environmental and non-environmental attributes of the supply chain that one would like to improve and establish the baseline/state of the art (EU and national projects). The following questions are relevant: *What are the technologies? What info is needed to make decisions that will improve these attributes? How can this info be better utilized, keeping in mind "supply chain management" principles? What info is needed but is not collected? Etc.*

Finally, an investigation concerning bottlenecks and other deficiencies that prevent or make difficult the use of information flows has been performed, including the study of systems and best practices applied outside Europe which may provide increased performances with respect to current European practices.

Panayotis G. Zacharioudakis - WP Leader
Laboratory for Maritime Transport - National Technical University of Athens

Policy Implications

The main goal of this activity is to examine the interaction between the relevant regulatory policy framework on the one hand, and of the work produced within the project on the other, in order to identify possible suggestions to be provided to the European Commission concerning the formulation and harmonisation of policies on Green Corridors.

The main activities performed during this first period of the project consisted in the identification of the current regulatory context, including the selection of the most relevant policy initiatives at European level, and the detailed analysis of the related documentation in order to identify their strength and weakness points, eventual inconsistencies and the potential for improvements. In particular, key policy initiatives that have been taken into account include (among others):

- The Freight Transport Logistics Action Plan;
- The Communication on a freight-oriented rail network;
- The Communication on a European Ports Policy;
- The European maritime transport space without barriers;
- The Communication on the promotion of Inland Waterway Transport;
- Motorways of the Sea.

Humberto Moyano - WP Leader
Gijón Port Authority

First SuperGreen Workshop — Helsinki, Finland, June 28, 2010



The Helsinki workshop was the first among a number of workshops associated with the project.

The audience of the workshop consisted of logistics service providers, shippers, carriers in all surface modes, intermodal transport companies, policy makers, researchers and analysts, environmental organizations, and other stakeholders interested in green logistics. Some 90 participants attended the first workshop of the SuperGreen project.

The main objective of the workshop was to report and solicit feedback on the selection of corridors and KPIs. To that effect, a series of group sessions and a panel discussion was held among

representatives of key stakeholders, among the audience, and among the members of the project's Advisory Committee.

Based on this input, among other things, the Project's Management Committee, at its meeting on the following day, concluded at a selection of the 9 corridors to be used for benchmarking and further analysis in the project.

All relevant presentations are available on the Project Website.

First Regional SuperGreen Workshop — Nola, October 19, 2010

The first regional SuperGreen project workshop took place at Interporto Campano in Nola, Italy on October 19, 2010. The workshop was the first in a series of regional workshops associated with the project benchmarking task and it attracted around 100 participants.

The workshop entailed an overview of the project progress, including the selection of pilot corridors and the initial set of KPIs that will be used for benchmarking the selected corridors and a consultation session with the stakeholders present. Despite its complexity, the concept of green corridors was welcomed and the potential of the SuperGreen project was recognized by stakeholders.

As one of the most important events at the workshop, the consultation session with stakeholders was carried out in two groups – in Italian and English-speaking groups. The discussion was focused on the benchmarking methodology and selection of the Key Performance Indicators.

All relevant presentations are available on the Project Website.



Next Public SuperGreen Events

- Second Regional Workshop, February, 01, 2011, Antwerp, Belgium
- Third Regional Workshop, March, 10, 2011, Malmoe, Sweden
- Fourth Regional Workshop, March, 24, 2011, Sines, Portugal
- Second Plenary Workshop, September, 12, 2011, Genoa, Italy

Second Regional SuperGreen Workshop — Antwerp, February 01, 2011

The Antwerp workshop will be the second regional workshop of the project and will focus on policy. To that effect, changes in the operational and regulatory environment will be surveyed and grouped. The target is to analyse and group the complex amount of information so that it will be useful to forthcoming phases of the project. The method will be a survey based on research works and other existing information. The information will be collected under a few main groups: technology development, international regulations, trends in logistics, changes in business environment, public policies, infrastructure development, etc. The target is to find the general and specific changes in the corridor's operational and regulatory environment which may hinder improvements of green logistics corridors. Assessment of the effects will be made using the key performance indicators (KPIs) that will be used for benchmarking the corridors selected for analysis. Some preliminary results of the benchmarking exercise will be reported in Antwerp, with a focus on the 'Brenner' corridor.



Programme and registration details of the Workshop are available on the Project Website www.supergreenproject.eu

www.supergreenproject.eu

SuperGreen Advisory Committee



Members of the project's AC meet with project partners in October

From left to right:
 George Panagakos and Harilaos Psaraftis (National Technical University of Athens)
 Indrek Iives (Procter & Gamble)
 Manfred Reuter (Hamburg Port Authority)
 Humberto Moyano (Gijon Port Authority)
 Atle Minsaas (Marintek)
 Ilija Lorenzo Volpi and Jacques Dirand (Community of European Railway and Infrastructure Companies)
 Herman de Meester (European Community Shipowners' Associations)
 Nicolette van der Jagt (European Shippers' Council)
 Jerker Sjogren (Swedish Ministry of Transport)
 Fuensanta Martinez Sans (European Automobile Manufacturers Association)

A unique feature of the SuperGreen project is its Advisory Committee (AC), which will provide a link with industry and other stakeholders on a level on top of what is already provided by the project's many industrial partners.

The purpose of the AC, which is an external committee, is to provide independent advice and feedback on key issues related to the progress of the project, and to validate its main results. The AC will link with the PMC and will ensure additional stakeholder input into the project. It will be invited to participate in selected meetings and workshops.

Already there have been two meetings of the AC, one in Helsinki in June and one in Brussels in October 2010.

SuperGreen Project Partners:



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