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Measures and Actions for Coordinated Regional Logistics Policies

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Abstract: This publication stems from the work of the CORELOG project (Coordinated Regional Logistics), financed within the EU Initiative INTERREG IIIB CADSES NP (Central, Adriatic, Danubian and South-Eastern European Space) and coordinated by Regione Emilia-Romagna in cooperation with the Institute for Transport and Logistics (ITL). The project work is focussed on the development of coordinated regional policies in transport and logistics which can grant companies' competitiveness and the territorial sustainability of transport and logistics activities.

Keywords: regional logistics, benchmark, decision-making

1 Introduction

The “coordination” concept refers to different levels. First of all it concerns the shortening of the gaps between the business world's expectations and needs and the public authorities' actions in transport and logistics. The goal is to stimulate a cooperation in policy making between institutional bodies, responsible for policy making, financing and investment decisions and manufacturing companies, logistics providers, transport operators, transport & logistics nodes, whose decisions and supply chain strategies strongly affect the spatial pattern and the modal split of freight transport.

On a second level coordination means having in mind that different public policies in transport and logistics at different territorial levels (EU, State, Regional Authorities, Local Authorities) must always have common targets, which are companies' competitiveness and the reduction of transport and logistics territorial impacts. In this sense a cooperation among policy makers at different territorial and institutional levels is needed in the policy making process.

Finally the coordination concerns the cooperation among companies in logistics management. Companies usually manage logistics in individual terms, in the view of maximising the value of their own logistics activities. The project wants to show how cooperation among companies, in terms of vertical integration of the supply chain activities and horizontal cooperation among companies in specific clusters and industrial areas, can bring higher profits and environmental gains in terms of reduction of transport externalities. This is the trigger from which innovative public policies can target companies in a win-win perspective. Regarding this paper only the Phase IV is relevant: Proposal of regional policy guidelines promoting logistics cooperation and coordinating different types of policies impacting on transport and logistics in regions (spatial planning, industrial, transport, technologic and logistics policies).

This publication is related to phase IV and it presents the results of a survey carried out at EU level to rank the future needed public actions in transport and logistics. The paper presents proposals of regional policies in transport and logistics on the base of the understanding of companies supply chain management strategies and of the state of the art of public policies. It postpones to a future publication the presentation of the pilot project implementation results. The main objectives of the survey are:

- Get a clear definition of policies and action priorities in the logistic and freight transport fields, at a regional, national and international level.
- Get access to the opinion of an international panel of high level experts about the validity of both already implemented and not applied yet logistics measures.
- Enlarge the scope of the EU debate on the role of public authorities in logistics development, also by making specific proposals.
- Gain a better knowledge about the overall perception of the “state of the art” of the logistics coordination measures at the EU level.

2 The Methodology of the Transnational Survey for Coordinated Regional Logistics Policies

The strengthening of transport and logistics policies and the definition of relevant policy measures have become an increasingly difficult tasks due to the fast changes in the transport and logistics markets and to their international dimension. In order to be able to represent these changes into the definition of policy priorities the CORELOG survey structure was based on the following pillars:

- International dimension. The survey was carried out in six different countries (Austria, Greece, Hungary, Italy, Poland and Slovenia) in order to represent different logistics situations and merge them into a EU policy strategy document.

- Wide panel of high level experts. The questionnaire has been submitted to a wide panel of high level experts in transport and logistics (ninety-six experts), from all the six countries involved.
- Panel diversification. The ninety-six contacted experts had different core occupations, in particular:
 - Public governments and authorities (22 respondents)
 - Business environment (23 respondents)
 - Consultancy and research (28 respondents)
 - Education (23 respondents) That allowed to bring together and compare different points of view and different perspectives on logistics policies priorities.
- Bottom-up approach. The policy measures which underwent the experts' opinion were selected by the project partners on the base of an analysis of companies' supply chain management strategies and of public policies in transport and logistics in the project partners' regions, which are diversified in terms of logistics status and trends.
- Open attitude. The experts had the chance to propose in an open way further public policies in order not to limit the policy proposals to the ones identified by the project partners.

The survey asked to the experts to express their opinion (both with closed and open questions) on the following main issues for each of the different measures:

- Target bodies of the measure (who should the measure address)
- Specific thematic fields to which applying the measures
- Experience on existing practices and on the measure implementation stage (was the measure implemented and what is the success level, which gaps in the measure implementation)
- Constraints in the measure implementation (such as technical, organisational, normative, financial, economic)
- Most suitable sources of finance for the measure.
- Role of the public bodies (which specific actions should be activated by public authorities)
- Significance/importance of the individual measure (ranking of the measures in each of the 3 categories on a five levels scale from null to top)

It must be pinpointed that for each measure partially different questions were asked on the base of the single measures characteristics. In order to interpret the survey results, as reported in the following pages, some considerations on the methodological approach must be pinpointed. Many of the answers do not present

a high level of discrepancy. This can be due to the fact that the evaluators were often allowed to choose the priority's level without expressing a ranking order. Moreover this survey on logistics measures dealt with a wide array of different topics (in order to give to the readers a wide array of policy proposals) and the level of experience of the experts on the different measures and topics may vary. In case of a lower expert's knowledge on some of the specific technical questions, we may expect that the average value prevails and that homogenous answers are given. Therefore on some of the answers we expect that this issue influenced the presence of low discrepancies among the answers given by each expert. Taking into account these considerations, in some cases the analysis of the answers drove to technical priorities and conclusions even on the base of small value discrepancies among priorities and related answers. That was also possible thanks to the interpreting of the open replies given by the experts. The analysis has been drafted in a mainly descriptive form, focussing on the aggregated results and identifying any possible occurring trend in the answers, both according to the different categories of experts contacted and to the different countries taken into consideration. This approach was developed on the base of a specific sum up of all the experts answers which were analysed at national level for each of the respondents categories, then merged into a transnational structure and analysed at transnational level.

3 The Survey Results

This chapter presents the survey results grouped on the base of the three categories of interventions: incentives, implementations, harmonisations.

3.1 Incentives

The first part of this chapter concerns INCENTIVES, which were referred to intermodal transport (measure A.1), short sea shipping & motorways of the sea (measure A.2) and logistics training (measure A.3). Concerning incentives for intermodal transport, to be distributed to the bodies involved in the development and managing of intermodal logistics operations and nodes, they were given the first priority among the incentive measures (followed by short sea shipping & motorways of the sea and by logistics training, which ranked as 3rd). Intermodal transport seems to be the hot topic for the public interventions and incentives. This is due to the fact that there is a high need to shift freight transport from highly saturated road networks to railways networks and sea transport, in order to lessen transport negative effects. Yet reaching this goal appears to be an hard task especially in consideration to the fact that there is a the lack of experiences and in particular of success stories in this type of measure. 53% of the answers of the experts indicate that no measures in incentives/ subsidies to intermodal transport

have been implemented yet. However there is a survey evidence that the world of the public authorities considers that an improvement in the diffusion of incentives for intermodal transport is necessary. Successful examples of implementation are not pinpointed by the experts, with very few exceptions in the business and education categories. Incentives should be mainly directed to nodes and infrastructures, but also to the promotion of innovation in logistics operations and equipments. Incentives for transport users and providers do not have on average high priority.

Geographical breakdown shows that countries characterized by high economic development feel a deeper need to increase nodes and infrastructure availability. Another important issue emerging from the analysis of the answers is represented by the need for incentives to the start-up of intermodal initiatives, supported by public authorities. Constraints in the implementation of the incentives are mostly normative (lack of regulations and procedures) and financial (lack of funds), with homogenous answers among the different categories of experts. Concerning incentives for Short Sea Shipping (SSS) and Motorways of the Sea (MoS) the survey answers present a strong consistency with those concerning intermodal transport. In particular the consistency concerns:

- An almost complete lack of experience in the measure implementation (83% of the respondents confirmed it). There is still a strong need of best cases and models on financing and developing SSS and MoS.
- The presence of normative and financial constraints; SSS and MoS are relatively new concepts and in general they are not included in funding programs by national governments (due also to lack of culture on these topics). Economic constraints are not considered important as potential market demand is seen as growing.
- A strong priority on nodes-infrastructure links connections and on ports equipment (also in terms of information systems).

One of the most critical success factors seems nevertheless to be represented by the choice of the target groups of the future financing and promotional initiatives. In this case, and differently from the previous measure on intermodal incentives, logistics providers are considered as priority beneficiaries, because they are operational integrators which can grant an effective development of SSS and MoS with a co-ordination role among the local sector operators to manage in an effective way the supply chain. On the other hand a low importance is assigned to incentives to road hauliers.

The third measure concerns incentives for logistics training. About half of the experts pinpoint that incentives for logistics training have been experimented, nevertheless with few success examples. Concerning the most relevant topics for training incentives all the topics proposed to the experts present a good ranking. The first three priority topics are represented by transport optimisation, best practice transfer and logistics activities planning. ICT, inventory management and

warehousing follow in the priority ranking. ICT is in particular targeted in the answers of the educational and business categories. The survey results prove that there is a consciousness among the experts on the presence of margins of improvements which can be gained through the building of logistics professionals which can better plan logistics resources, adopt logistics innovations and better control the logistics processes: that means a shift from a daily management of logistics emergencies and logistics unexpected events to a pro-active and structured approach in logistics management. That also means there is a need of enrichment of the logistics function and of the variety of its jobs.

According to the interviewed experts, the first selected target group for training should be white collars, though training in logistics seems to be needed for all the proposed categories. Training courses for public servants seem to be a strong priority which is expressed by public servants themselves. The funding for training should primarily stem from the European Union and from the national governments, and minimally from direct users (trainees). This issue seems to confirm the priority of promoting training in logistics. Registered constraints concern, further than financial resources availability, the lack of training models and the economic risks due to possible market demand reductions.

3.2 Implementation of Actions for Logistics Regional Policy Development

The second part of this chapter concerns the implementation of actions for logistics regional policy development. Different measures were presented to the panel of experts, who were asked to rank them. The implementation measures, ranked by priority order on the base of the experts results, are:

- B.1 - Implementing public private partnership schemes in the field of logistics.
- B.5 - Actions for logistics improvements.
- B.4 - Spatial planning for industrial areas settlement.
- B.2 - Establishment of a logistics agency.
- B.3 - Development of databases on logistics.

Public private partnership (PPP) schemes (measure B.1) in logistics have been implemented only up to 44% of experts' answers, but it is ranked as the first priority among implementations measures, thus confirming the high need for public incentives to infrastructural developments. Of this percentage of past experiences, the greatest part is covered by consolidated economic conditions countries (e.g. Austria and Italy). The main target of PPP is infrastructural development and investments (79% of respondents) more than logistics and intermodal services development (21%). This reply is homogeneous in all the survey countries. In particular the priority is set for logistics centres (in order to afford high area acquisition costs), followed by transport multimodal terminal.

This view is agreed by the public and private/business spheres, thus pinpointing a significant track for future public private co-operations in nodes development within the regional and national/EU transport and logistic backbone. Concerning the services development, training, the management of existing logistics facilities and research are seen as three priorities of PPP. Concerning logistics education this conclusion confirms the public role in financing training which was previously stated.

Constraints to PPPs are generally technical (lack of experience and models) and normative. Normative constraints are identified in particular in Greece and Slovenia.

Concerning **actions for logistic improvements** (measure B.5), the experts were asked to judge a sub-set of measures concerning possible improvements in logistics management in manufacturing and logistics companies. Very high priority is assigned to all actions included in the analysis, thus proving the need of operational improvement in logistics management (please see the next chapter for the detail on the single sub-measures).

The maximum priority is given to the cooperation among companies in order to share and exchange best practices. This answers pinpoints the need for new logistics organisational solutions in companies and it pinpoints that best practices transfer can generate imitation process among companies and represent a valuable instrument to generate innovation. Other important actions are represented by the improvement of ICT for logistics activities rationalisation, especially in terms of supply chain optimisation and in terms of the relevant better integration of the supply chain (improvement of logistics activities in manufacturing/trading companies by means of better coordination of their suppliers and customers).

The main constraints in the measures development are organisational, more than financial or technical. In particular all the measures for which a horizontal cooperation among companies is envisaged (such as the cooperation among transport providing SMEs for strengthening their market position and optimizing transport services, the rationalisation of logistics activities by means of networking of manufacturing companies in the field of logistics procurement and sales) present a higher level of organisational constraints. The highest feasibility rate is on the other hand assigned to solutions helping manufacturing companies in finding optimal logistics providers and services. It is also worthwhile to say that answers vary in a significant way depending on the respondents' country.

In order to implement the identified actions, a public-private promoter and supporter is generally reputed as optimal (maybe due to the more formalised way of operating of the public sector and to the dynamic approach typical of private promoters). Public subjects should be a fundamental part in financing and supporting the initial feasibility studies and tests, while private subjects should be involved in the large scale implementation of the actions. This answer is shared in all the respondents categories and in all the survey countries.

Further than the above mentioned measures and actions, experts were also asked to assess specific interventions. Joint transport ordering systems and the cooperation among companies in managing joint shipments for outbound logistic optimisation are considered the most important actions. Nevertheless generally, technical and organisational constraints are widely perceived and confirm the constraints in fostering horizontal cooperation among companies.

Logistics criteria for land and territorial planning (measure B.4), for example in terms of putting logistics requirements within the start-up documentation that a company must supply for its location in industrial areas, is quite diffused (52% of the experts answers). In particular the survey emphasises that in order to achieve sustainable logistics solutions at regional and national level, logistics criteria should be adopted in spatial planning, in the planning and set up of industrial areas and in the choice of the companies to be located in production areas. This conclusion pinpoints that there is a general consensus on the need to address the generators of freight traffics in order to optimize logistics activities and on the need to ensure a rationale and effective connection between the industrial areas and the regional transport and logistics infrastructural backbone.

If logistics criteria represent driving factors in order to choose the companies to be located in industrial areas and in order to reduce traffics, the analytical choice of these criteria represents a major challenge. Amongst the various criteria to be taken into account to locate companies in industrial areas, great priority is assigned to the willingness of companies to share logistics facilities, more than to criteria concerning the belonging to the same industries or the sharing of common procurement and destination geographic areas. We think this issue pinpoints how business relations of companies cannot be a criteria for their settlements, as they quickly change. Therefore an attitude to cooperation with other companies in logistics should be the priority criterion.

The establishment of logistics agencies (measure B.2) is quoted as existing measure only in 20% of the answers. Successful events of start-up of a logistics agency are in Italy and Poland. The main functions of the agency should be the promotion of best practices transfer, the logistics policy framework definition and the training standards definitions. The agency ownership should be assigned to public-private subjects, while on the organisational sphere there are no real priorities for a national or regional horizon. International structures are mostly excluded. A specific proposal is an organisational structure with a national central unit and some regional branches.

The agency stakeholders should be mainly associations of enterprises and business clusters, logistics service providers and logistics nodes. National and regional governments are judged less important, though among these two the priority is on the latter. This answer seems to pinpoint an agency's role related to the transport and logistics industry at regional and national level. We can interpret this results as a need for logistics marketing and industrial strengthening felt by the business world who is willing to take part to the agency.

Development of logistics databases (measure B.3) is the last measure of the implementation category and it is infrequent and almost without successful implementation cases. In general, respondents affirm that logistics data have been collected, but data organisation and classification is poor and the availability of information on specific topics is partial. The users' needs are not satisfied by the present performance showed by Eurostat, and nor regional and national databases can guarantee satisfying results (performances are even worse if the territorial level detail is increasing to the national and regional levels). Some incoherence is present between Eurostat and national/regional data. In particular, lacks in data availability for analysis and logistics planning are found by users. Database users require information on logistics capacities (warehouses, container terminals, logistics centres), transport providers characteristics (capacities and characteristics of rolling stock, transport capacities per mode, destinations, transport frequencies), but also about studies and researches, logistics training and education (in terms of courses and related contents, available financing). The need for formalised data and information is mainly underlined by the research and education sectors. The constraints in this area are both technical (data collection and mining tools), normative (information harmonisation, communication transparency and visibility) and financial (data collection and classification costs).

3.3 Harmonisation

The third part of this chapter concerns harmonisation needs at European level for logistics measures, interventions and regulations.

Due to the presence of different logistics environments and of particular logistics conditions in the various involved countries, training, education and logistics professional knowledge (measure C.1) are not formalised and structured. Therefore it is necessary to find some common definitions at EU level on jobs in logistics and on the relevant needed skills. In particular the diffusion of logistics professionals certifications is quite absent and needed; only in Austria and Poland successful results can be found. At the moment in Europe, some harmonisations according to ELA standards are being carried out even if the level of completion is presently low.

The public sector has witnessed the greatest part of implementations of such a measure, but results have been modest. The professional knowledge harmonisation need is felt in particular for managers, logistics executives and logistics ICT experts. The involved subjects are all high level specialists, with specific responsibility in logistics development, management and performance. The operative jobs are considered less relevant.

The differences in the answers given by the various countries can be considered as an index of different logistics development, upgrade and harmonisation needs. For example Greece requires a complete harmonisation for all levels, including operative ones, in order to develop the whole logistics area in a coherent way.

The second measure evaluated by the experts with reference to **harmonisation need concerns road carriers regulation** (measure C.2). The measure has been deeply analysed, due to road transport diffusion in Europe. The regulations harmonisation has been rarely implemented (less than 50% of answers) and with poor results. However, the answers show that in some countries in the Eastern part of Europe this measure has been carried out in several cases. The issues to be harmonised should concern fiscal measures for environmentally friendly vehicles and working days and hours. Secondly, attention is given to fees on fuel and insurance. Among the respondents, the public and education sectors underline the need for environment friendly policies. Constraints in harmonising road transport are mainly normative (lack of evaluation procedures, shared norms, common standards), technical (control on vehicle circulation compliance under restricted standard regulation) but also economic (side effects on labour market and competitiveness).

Finally the experts were asked to judge the **overall need for harmonisation** (11th transversal measure) for all the listed measures of the three groups. The experts assign the maximum harmonisation priority to incentives for intermodal transport and to logistics professionals standards and knowledge. Secondly attention is given to actions for improving logistics activities and for implementing and regulating PPP schemes. It is suitable to say that the EU harmonisation of procedures for establishing logistics agencies is not seen as a priority and that the potential agencies seem to have a national and regional focus more than a EU one.

Conclusions

As general conclusion, after having analysed the answers given by the experts and having evaluated the results, it should be underlined that, mostly concerning the constraints, the public sector shows very different perspectives compared to business sector. While the public sector offers a positive idea of policy actions, the business seems to highlight a low effectiveness on practical implementations of these actions and a slight presence of the public policy itself. This can be considered as a crucial element, showing how the lack of communication between different sectors can bring to different points of view and consequently a sort of stillness in the interactions between them to increase logistics efficiency at all levels. In this sense the CORELOG project seems to have addressed a hot topic in logistics development: cooperation among public and private bodies in logistics.

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