



Summary of projects and results from topic
Regulatory Framework in Public Transport

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INTRODUCTION AND METHODOLOGY

This report has been compiled by AMOR to summarise the conclusions of the activities undertaken in Key Topic 1b "Regulatory Framework in Public Transport" as part of Work Package (WP) 2 of the PORTAL project. WP 2 is titled "Identification and analysis of existing EC high quality research materials, including experts who could be trainer / teachers and demonstration sites".

1.1 Methodology

The stated aims of WP2 are to:

- select on-going projects or projects which start during our project,
- collect and analyse existing materials,
- identify the availability of materials for key topics in European transport research,
- select qualified project leaders / persons in charge of projects who could present their projects - or even better - their complete key topic as guest teachers / trainers in courses of leading educational institutions (LEI),
- select potential sites for study visits where demonstrations have been established or where demonstrators could present their results.

In order to fulfil these aims, the following steps were taken:

- project identification and pre-selection using the CORDIS database, the Knowledge Centre for results from the Fourth Framework Transport RTD Programme, as well as DG TREN's project summary fiches of the 4th Framework Transport RTD Programme.
- final project selection together with WP2 leader and in co-operation with the European Commission. Only projects promising to contribute significantly to the aims of PORTAL (development of education and training materials, identification of study sites, LEIs and experts) were eventually selected for further analysis,
- the analysis proper was based on the screening of the project websites, deliverables and reports. Where information was not available via the internet, personal contact was established with individual project co-ordinators in order to collect all the information required. All information was entered in a database.

1.2 Problems encountered

There were no major problems encountered during this phase of the work. This is partly due to the fact that the KT "Regulatory Framework in PT" comprises a limited number of well-documented projects.

Regarding IPR, a more detailed investigation of the existing copyrights will be necessary. As a rule, copyrights on all text materials lie with the author (i.e. the project consortium) which necessitates at least the citation of the author. Copyrights on all illustrative materials lie with the owner/producer. This can be the author of the text or a third party. In the latter case, some more effort will be needed to obtain the required authorisation.

2. REGULATORY FRAMEWORK IN PUBLIC TRANSPORT

The last years have seen in a number of Member States significant changes in the legal and organisational frameworks of public transport. These changes aim at improvement in transparency, economic efficiency and quality of the service. The European Commission promotes this development through the provision of an appropriate legal framework at European level, as originally suggested in the Citizens' Network Green Paper and later reinforced and clearly indicated in the Communication "Developing the Citizens Network". In practice it has turned out that, whatever regulatory regime is in force, its success strongly depends on the effectiveness of the relationship between authorities and operators. That is, one of the main functional roles of authorities is to induce operators to conduct their business towards the achievement of the strategic goals of the system, for which complementary schemes of incentives and penalties are an indispensable tool.

The regulatory framework determines the way in which transport services are designed, planned and produced. The definition of transparent rules for the allocation of responsibilities and sharing of risks between the different agents of the system is thus an indispensable tool for the management of public transport. Operators from different modes and authorities and from different legal entities have to coexist both in time and in space. Moreover, transport authorities have to devise, together with authorities from other areas, common strategic goals for the same urban area if congestion relief and environmental protection is to be achieved. Evidence exists in several cities around the world, that the balance between private and public means of mobility can only be achieved through the application of co-ordinated "pull" and "push" measures, the former entailing the improvement of the quality of public transport facilities and the later aiming to restrict the use of individual transport in certain areas and periods.

Under the 4th RTD Framework Programme a number of projects was dedicated to the issue of regulatory framework development, such as ISOTOPE, SORT-IT, QUATTRO etc. Within the 5th FP, MARETOPE is most prominent in addressing the problems of adaptation and management of change processes, considering the perspective of the different groups of stakeholders and the potential conflicts that might accrue from the impacts produced by those changes.

The following five important projects were selected under the Key Topic:

ISOTOPE: Improved Structure and Organisation for Transport Operations of Passengers in Europe (4th FP)

LEDA: Legal and regulatory measures for sustainable transport in European cities (4th FP)

QUATTRO: Quality Approach in tendering urban public transport operations (4th FP)

SORT-IT: Strategic organisation and regulation in transport (4th FP)

MARETOPE: Managing and Assessing Regulatory Evolution in Local Public Transport Operations in Europe (5th FP)

3. PROJECT OVERVIEW

3.1 Results of the ISOTOPE project

ISOTOPE: Improved Structure and Organisation for Transport Operations of Passengers in Europe

Background and objectives

The objectives of the project were:

- To describe and compare the existing legal status and organisational structures for urban public transport operations in urban areas in the European countries;
- To analyse what the pros and cons of various organisational forms were in terms of effectiveness and efficiency;
- To provide a strategic approach to the development of urban public transport operations for political decision-makers, transport planning authorities, public transport authorities and operators. This appraisal would identify how organisational structures may be improved, respecting the political and legal frameworks of each Member State, in order to increase the role of public transport in European urban areas;
- To improve urban transport systems through a better understanding of the impact of legal status and organisation of the urban transport system with regard to effectiveness and efficiency;
- To help achieve the performance of the internal market through an analysis of the compliance of urban public transport operations with internal market orientations (deregulation and privatisation developments) and through a wide dissemination of this information.

Results and conclusions

Political and economic research: The project was divided into two segments: political research and economic research. Political research identified the various existing organisational structures (deregulated, limited competition, regulated) and legal frameworks (production risk including or excluding revenue-risk for the public transport operator) and evaluated their effectiveness and appropriateness from both the social and political point of view. Economic research evaluated the efficiency of the different organisational systems in both demand and supply side perspectives, through the identification of variables and criteria that will allow the establishment of significant relationships between objective variables reflecting efficiency in production in one hand and the ones reflecting efficiency in consumption in the other hand. For evaluating existing organisational structures regarding to their efficiency, so called key-indicators were defined, divided into objective and subjective (qualitative) categories. These indicators included: cost recovery ratio [%], supply, fare per passenger kilometre [E/passenger], network design, mean load [passenger/vehicle], effectiveness, cost per passenger kilometre [E/km], convenience, wage rate [E /a],

environmental data, non-staff cost per vehicle-kilometre [E /km], speed, revenue per vehicle-kilometre [E /km], security, cost per vehicle-kilometre [E /km], affordability, vehicle-kilometre per staff [km/staff], delivery, customer-opinions

Benchmarking process: The willingness to publicise data of the company to a third party is another problem mentioned by the ISOTOPE project team. A successful benchmarking process is ensured, if public transport operators are willing to participate in the benchmarking-procedure actively. As public transport operators are receiving the results of the EQUIP-project for further improvements of their companies an incentive is given to them to participate and hand over their data. The ISOTOPE project team developed so called “key indicators” described above for different public transport operators and different cities to compare their performance.

Interpretation of the results: The initiative for the creation and specification of urban public transport is best left with the authorities. Comparing regulated and deregulated markets, there is a significant difference of the key-indicators values. This means that, for public transport operators the external framework has to be taken into consideration when benchmarking the performance of public transport systems. The network-design should be made by a professional team under control of the administrative authority (possibly under limited tender). The responsibility of the network-design is another external impact, which has to be taken into account. At the current European situation the network-design lies usually in the hand of the public transport operator. The possibility of designing a network is dependent on the size of the public transport operator and the concession system in the country. A limited competition regime is the best choice, since the stability of the system can be maintained at lower costs and with improved prospects for permanent improvement. This means a splitting of the responsibilities between the public sector on the one hand and the private sector on the other hand. This leads to the need of an adequate contractual framework (quality partnerships). In general, Gross-cost contracts with minimum standards for production resources (vehicles, staff) and service-levels, as well as incentives for quality of service, levels of patronage and market-share in key-areas of the city are a solution that presents a lower risk of capture of the authority by the operator (by lowering barriers to entry of new competitors), a relatively low burden for authorities, and easier mobilisation of investment-resources by private companies than by local authorities. Currently, there is a big range of contracts in use over all European countries, influencing the performance of the public transport operators.

General conclusions:

- the initiative for creating and specifying the UPT network should rest with local authorities - a fully deregulated system was found not to address collective goals and system integration in an adequate way;
- network design should be under the control of the administrative authority, although the design work may be contracted out;
- a UPT authority must include representation from the communities directly affected by the UPT system;
- traffic management and parking should be controlled by the same authority as the UPT, in order to integrate the management of urban mobility;
- a regime of ‘limited competition’, where authorities define the transport product to be delivered and invite tenders for its execution by candidate operators is to be preferred over full regulation (monopoly supply) or full deregulation;

- in order to tackle urban mobility problems, partnerships between operators and authorities should be established that include clear definitions of standards of service and responsibilities.

Overall, the project found support for the Citizens' Network (EC Green Paper) preference for some form of limited competition. Various forms of contract appropriate to this regime were identified, with special consideration to the case of rail-based systems. ISOTOPE concluded that reductions in unit operating costs of around 15% are feasible over fully regulated operations, even with no redundancies or wage reductions.

Policy implications: The project presents limited competition as a preferred regime. However, it is acknowledged that transition costs are significant. Policy goals, like fare integration, concessionary fares and employment of minorities can be accommodated within the tender conditions of limited competition. Improved access to development areas, congestion and pollution issues can be handled by retaining public control of network design. Any move to comprehensive competitive tendering would require improved data collection, to enable value for money to be assessed in the use of taxpayers' money.

Materials

- ISOTOPE Research Consortium (1997), Improved Structure and Organization for Urban Transport Operations of Passengers in Europe, Transport Research – Fourth Framework Programme – Report 51, 177 pp., Office for Official Publications of the European Communities, Luxembourg.
- Brochure, Report on Data Collection
- WP2 Report on Political Research
- WP3 Report on Economic Research
- Conclusions of the Lisbon Seminar

3.2 Results of the LEDA project

LEDA: Legal and regulatory measures for sustainable transport in European cities

Background and objectives

Traffic problems are present in conurbations throughout Europe. Congestion, safety, environmental problems and dispersed land use all call for solutions. Legal and regulatory measures can change the demand pattern in favour of sustainable modes like public transport, cycling and walking and, as such, can reduce urban traffic problems and their negative impacts.

- How can legal and regulatory measures be used innovatively to promote sustainable transport in cities?

- How can legal and regulatory measures contribute to a long-term balance between the growing demand for mobility and the need to respect spatial, environmental, social and economic constraints?
- How can legal and regulatory measures be effective and how can they safeguard the quality of urban life today and in the future?

Results and conclusions

Legislation, Powers and Duties Across Europe: The LEDA project screened legislation in all EU states, 5 central and eastern European states, Switzerland and Norway. This screening revealed a number of different approaches towards the structure of legislation and identified where the different powers and duties in respect of traffic, transport and mobility are situated. This screening has enabled LEDA to formulate a number of conclusions and recommendations. Of overriding interest is what local government (cities / municipalities) in Europe can (and should) achieve in pursuit of more sustainable patterns of transport given the legal and regulatory frameworks in their respective countries. Of no less interest is what they cannot achieve, often because they are bound to policies and decisions made at higher levels of government, and what could be changed to bring about a more satisfactory situation.

Competency in respect of public transport services: In all countries, national legislation sets the overall framework for public transport service provision (with respect to the routing, fare levels and structure, service and operator licensing, quality standards, etc.). Supplementary regional law is enacted in some states (such as Austria and Italy). In countries where deregulation of public transport is advanced (notably the UK), the governing legislation is less strict and rigid, prescribing merely minimum standards and setting strategic rules. Public transport services are offered by either publicly or privately owned operators. Public operators are common in most European countries. Italy is a good example of a country where public transport is provided primarily by publicly owned companies. In the UK, where privatisation of the transport sector is almost complete, nearly all services are provided by commercial operators on a commercial basis. The remaining services are procured by local authorities under normal competitively tendered arrangements. In most countries, cross-subsidy within the transport sector is common, that is, money brought in from fuel duties or other taxation is earmarked for public transport (e.g. Austria, Switzerland). In France, a transport tax is imposed locally within a certain perimeter around a locality. This money is devoted to financing public transport in that locality. Local level authorities are usually responsible for planning, funding and control of public transport in their own area. (They are, however, bound by national (regional) law). A striking exception to this rule is Belgium where regional governments are in charge of public transport. Another exception is Ireland, where no legislation is in place to give local authorities duties and powers in this matter. Public transport services are either run by the municipality itself or contracted out to private operators. Often, there is a mix. Across Europe, the right to operate urban public transport in larger cities has traditionally been a municipal function. Local authorities' influence over public rail transport is significantly lower than that over road transport. Severe shortage of national funding for public transport is now (after 1989) a common and pressing issue in the central and eastern European countries (e.g. Hungary and Slovakia). Networks and services, which formerly were extensive and functioned well, are being curtailed. Across most countries, there is a striking lack of regionally co-ordinated public transport (for instance Slovenia, the UK). Factors impeding

regionalisation of services are found, inter alia, in the absence of a regional level authority with financing capability, and the deregulation of public transport as a whole, making co-ordination more than difficult and leading to network fragmentation (as exemplified in the UK). Authorities are affirmed and empowered in their work towards sustainable mobility.

Transferability of Measures: As mentioned above, the legal framework is less important as a barrier to transferability than public or political acceptance. There is a close relationship between these two issues. It is worth noting that in the simulation exercises the political 'sector' often considered a lack of public demand for a measure to be a major barrier. However, in many cases the public appeared willing to accept measures, provided that there was a political commitment to financing and implementing them effectively. It is also worth noting that these two 'sectors', the political and the public, are not homogenous. For example, the elected politicians and the council officials are two separate 'sub-sectors', as are the general public and the business community. The LEDA project did not just concentrate on legal and regulatory matters, but was also concerned with issues of enforcement and public acceptance. The results of the analysis of the transferability barriers have confirmed that this was a wise decision. The fact that the most significant barriers relate to political frameworks and public acceptance underlines the vital importance of obtaining political and public support for particular measures. The keys to gaining that support include a thorough consultation process and an appropriate public awareness campaign. Analysis of the 20 measures studied in depth during the LEDA project, and subsequently included in the transferability study, also emphasises the crucial role played by involving all relevant parties in the consultation process at all stages of measure planning and implementation.

Conclusion: An important conclusion is that local authorities have the greatest freedom to take action when it comes to transport issues confined to their own local road network. This may not be surprising, yet it has important implications. Thus, relatively extensive powers already exist for most municipalities to implement sound and effective measures covering parking management, traffic calming, public transport, cycling and walking, without waiting for change from above. It is recommended that cities should make maximum use of their local powers and, in order to exploit this potential, should exchange information and enter intensive discussion on a European wide scale. The European Commission's ELTIS initiative is an extremely useful tool for this purpose. Another instrument is LEDA's methodology for the transferability of measures, which encourages a common, structured approach towards the wider implementation of locally developed measures.

Materials

- Report "An overview of the legal system in EU-countries regarding transport policies", Annex 1 "Analysis of policy documents", Annex 2 "Analysis of national legal and regulatory frameworks", Deliverable 1
- Main Report - Inventory of legal and regulatory measures, Annex 1 "Screening of EU programmes and projects of relevance to LEDA", Annex 2 "Database of measures on disk", Deliverable 2
- Report "In-depth Study of a number of less well known but effective legal and regulatory measures", Annex "Description of 20 measures", Deliverable 3

- Report "In-depth study of a number of less well known but effective legal and regulatory measures", Annex "Transferability - Reports from partners", Deliverable 4
- LEDA Final Brochure "Best Practice and Transferability of Measures", online database
- LEDA Final Report

3.3 Results of the QUATTRO project

QUATTRO: Quality Approach in tendering urban public transport operations

Background and objectives

Recent development in the public transport sector within Europe shows an increasing use of contracts in order to regulate the relations between operators and authorities. Open procedures for the selection of operators are also in development. This stresses the need for performance specification of the proposed operation in order to allocate the roles and responsibilities between the contracting parties. Quality monitoring procedures, total quality management and bench-marking practices are also being specified.

The Quattro research project systematically reviews the stakeholders, tools and systems involved in the quality of urban public transport service. Recommendations and best practices identified cover operations and development. On the side of operations, Quattro concentrates on the performance of the service provided to the users and its impact on the local communities. Quattro analyses the way to integrate quality in urban public transport (UPT) design, to stimulate innovations with impact on quality, and considers the life cycle impact of decisions. Quattro can be seen as a contribution to the achievement of the single European market, in particular through the dissemination of tools and best practices that will increase the ability of the authorities to specify their requirement and to appraise the value of the services provided by operators.

Results and conclusions

Quality in urban transport: quality results from the capacity of the operator to manage and develop its organisation. However, it is also the result of the conditions in which this operator is working. These conditions are partly in the hands of the public authorities in charge of urban planning, traffic management, etc. The Quattro research develops a specific quality management tool, "the UPT quality loop", which can be applied at the firm's level as well as at the whole UPT system's level. Just as the quality matrix is a reference for defining UPT quality and breaking it up into different determinants, the quality loop provides a reference framework for fine-tuning the level of quality standards and for optimising service provision notably on the basis of market reactions. The quality loop is based on four distinctive benchmarks:

- Expected quality: This is the level of quality demanded by the customer. It can be defined in terms of explicit and implicit expectations.

- Targeted quality: This is the level of quality that the transport undertaking aims to provide for its passengers. It should be defined on the basis of the level of quality expected by the passengers, external and internal pressures, and budgetary constraints and competitor/market performance.
- Delivered quality: This is the level of quality that is achieved on a day-to-day basis in normal operating conditions. Disruptions to service, whether they are the fault of the undertaking or not, are taken into consideration.
- Perceived quality: This is the level of quality perceived by passengers during their journeys.

“Quality” in tenders and contracts: In the framework of Quattro, different contract scopes are identified, all within the boundaries of infrastructure design and operations. Reference is made to the use of appropriate legal frameworks and to the choice of measures to optimise quality. Such measures serve as a means to correct deficiencies in weaker legal frameworks, which only rely on market-based initiatives to produce the desired level of quality in UPT. Different methods for sharing contractual risks among the parties are also reviewed. Net cost contracts (production and revenue risks are borne by the operator), gross cost contracts (only the production risks are borne by the operator) and management contracts (originally, all risks borne by the authority) constitute a basic classification. However, variants and combinations do exist, including clauses on rewards and penalties and other risk-sharing schemes. In long term arrangements covering the total lifecycle of a system or sub-system, other risks matter, which pertain to political, environmental, financial, administrative and land use uncertainties. In Deliverable 3 of the Quattro project, the unfolding of a typical tendering procedure is reviewed. This document explains in great details and illustrates with practical examples the different elements making up the procedure, that is:

- the tender invitation and the methods for pre-selection and pre-qualification;
- the offer or service proposal submitted by the bidders;
- the procedures used to evaluate the different bids and award the contract, including such aspects as non compliant bids and negotiation processes;
- the contract and its appendices as well as the administrative and review procedures associated with them.

The whole tendering process must be regarded as a series of opportunities for applying sound quality management principles. Moreover, service quality needs to be envisaged in a broad perspective during the tendering process, that is, considering not only the interest of UPT passengers but also those of all the stakeholders concerned with UPT provision.

Materials

- QUATTRO Research Consortium (1998), Quality approach in tendering urban public transport operations, Transport Research - Fourth Framework Programme Urban Transport - Report 76, 229 pp., Office for Official Publications of the European Communities, Luxembourg.
- Summary Report
- Survey and data collection, Deliverable 1

- Definition and evaluation of quality of service in UPT, Deliverable 2
- Tendering and contracting in UPT service, Deliverable 3

3.4 Results of the SORT-IT project

SORT – IT: Strategic organisation and regulation in transport

Background and objectives

The overall aim of the SORT-IT project has been the determination of regulatory and organisational structures for transport that promote economic efficiency in its widest sense. The key concepts involved include production efficiency, consumption efficiency, externalities, interconnection, interoperability, intermodality and multimodality. These concepts reflect the two main issues at the heart of SORT-IT, namely the relationships between organisation and efficiency and between interoperability and interconnection and efficiency.

Results and conclusions

Organisational issues: In the air sector, there would be substantial cost savings if the remaining flag carriers were privatised. In addition, competition has been shown to lead to higher frequencies and greater demand in both the passenger and freight sectors and should be encouraged. For inland waterways, the end of the tour de rôle system will lead to the pooling of resources and risks via co-operation, more work for chartering companies or mergers and it should be speedily implemented. The rail sector could benefit in terms of efficiency in production from further commercialisation and liberalisation. For the large railway companies, some horizontal separation would appear to be sensible, whilst for smaller railway companies mergers with neighbouring companies could be desirable. The issue of network re-configuration should also be examined. The road freight industry appears to exhibit some symptoms of excess capacity. Further analysis is required to determine whether vehicle scrappage is at an optimal rate. In the road passenger sector, our work supports the introduction of cabotage and the deregulation of domestic coach services. In addition, the establishment of a competitive inter-urban express coach market may be an important way of injecting competition into the rail passenger sector. In terms of short sea shipping, the continuing growth in importance of flags of convenience, which accounted for 60% of tonnage of the EU merchant fleet in 1996, is an important issue. Countervailing measures such as subsidies, tax exemptions and cheap loans have not proved to be effective. Further research is required to determine what package of measures might be effective.

Interoperability and interconnection: In the air sector, the main technical barrier is Air Traffic Control (ATC) congestion. The key organisational barrier is hub dominance by particular airlines. Technical barriers should be overcome through new research and development, whilst hub dominance requires a review of existing slot allocation systems. In the rail sector, organisational barriers may be more important, especially the lack of a one-stop shop in the European rail freight industry. In addition, the rail freight freeway concept needs to be developed and entrepreneurial cross entry from

the private sector road freight and short sea shipping industries encouraged. There is also an urgent need to develop infrastructure access and pricing systems that are simple, transparent and equitable. For road freight, interoperability would be improved with further harmonisation of technical matters (such as lorry weights), of fiscal matters (such as standardising the Euro vignette system) and of social matters (such as working time legislation). In the road passenger sector, experience from the United Kingdom suggests that access to terminals might be an important barrier, but one which is covered by the essential facilities doctrine. The 100 kph speed limit on coaches has also been identified as a possible barrier to the industry being able to compete effectively with other modes. For inland waterways the main barrier is an organisational one and it is believed that Government policy should concentrate on promoting inland waterways as part of an intermodal transport chain. An important drawback to the further development of short sea shipping is an environmental one. The sector is responsible for significant emissions of SO₂ and NO_x. Charging in this sector, and indeed all other sectors, should reflect environmental externalities. The slow turn around at ports also represents an important barrier, with ships spending 60% of their time in port, on average. Our analysis of intermodal transport indicates that consumers gain when coach and train services are co-ordinated, but these advantages may be offset by some disbenefits to producers. Nonetheless, further cost-benefit analysis of integrated policies would be useful. After assessing the impact of telematics on the interoperability and interconnection of transport systems, some generic issues were identified that need to be addressed to ensure that telematics systems are themselves interoperable. These issues relate to research and development, harmonisation and standardisation and evaluation. The areas of potential benefits include: advanced transport information systems and trip planning systems; public transport management systems; fleet management systems; and traffic management systems.

The overall conclusion is that the benefits from liberalisation and commercialisation appear to outweigh the benefits from reducing barriers to interoperability. The organisational reforms recommended by SORT-IT should be the main policy priority. Future research should continue to examine the implications and constraints of the evolving organisational structures and hierarchies of transport policy implementation. This research should identify the optimal decision-making level for the implementation of different transport policies. The impact on transport of policy decisions in other sectors of the economy should also be examined.

Materials

- Report on Interviews (Summary of Country Reports), Deliverable 1
- Model Specification, Data Requirement and Data Availability, Deliverable 2
- Summary of National Reports, Deliverable 3
- Final Report on Modelling, Deliverable 4
- Sectoral Reviews of strategic organisation and regulation, Deliverable 5
- Joint Report on Railway Case Study, Deliverable 6
- SORT-IT Final Report, Deliverable 7
- SORT-IT/MINIMISE Joint Final Report, Deliverable 8

3.5 Results of the MARETOPE project

MARETOPE: Managing and Assessing Regulatory Evolution in Local Public Transport Operations in Europe

Background and objectives

MARETOPE investigates in an integrated way the impacts of change in legal and organisational frameworks in local public transport, with focus on the roles and activities of the different stakeholders, such as: public transport operators and associations, public authorities (political and transport authorities), citizens/customers (collective, i.e. society as a whole, and individual) and producers of transport means and systems.

MARETOPE's central aim is to develop and provide tools to support decision/makers, in particular, and in general all groups of affected actors, in the process of adaptation to change and management of the transition periods, which will be a reality which all local public transport systems will be faced with in the coming years.

Results and conclusions

Since the project is ongoing at the time of writing, the majority of the results can only be anticipated according to the WP description of the project:

The first stage results (WP1) is devoted to the updating views on current legal, organisational and financial frameworks and also to the harmonisation of concepts that will constitute a reference framework of MARETOPE, mostly based on the work developed in the above referred previous research projects and other studies;

The next step (WP2) is dedicated to the in-depth analysis of at least 20 case studies, where the analysis will focus on clusters of cities (or urban areas) in order to allow comparability of quantitative results as well as the qualitative analysis of the cause-effect processes behind change phenomenon within the economic, financial and social domains;

The evaluation phase (WP3) will assess the impacts of change on economic (market, market share) financial (subsidisation, etc.) performance of the different case studies, and will identify the main institutional, organisational and political barriers to change. In addition this WP will assess the social impact of changes occurred;

The next step (WP4) is dedicated to the development of tools to support the different actors in their changing roles and to help them to reduce inefficiencies and slowness in the adaptation to change;

A synthesis of MARETOPE (WP 5) will provide recommendations to the different groups of stakeholders. The final recommendations will be presented with a clear identification of the role of each key players in the process, and for each legal and organisational setting insight recommendations will be provided concerning the main vectors of the changing process, i.e. nature of possible changes, agents of change and their roles in the process, available ways of intervention, possible transition paths, consequences of intervention process.

Materials

The following materials will be produced according at points in time indicated (month 0 corresponds to June 2000):

- Report - Reference framework and harmonisation of concepts (WP1, Deliverable 1, month 2)
- Report – Updating views on the current legal, organisational and financial frameworks of local public transport systems (WP 1, Deliverable 1 , month 19)
- Intermediate Report – Development of case studies (WP 2, Deliverable 1, month 12)
- Report – Synthesis of case studies (WP 2, Deliverable 1, month 18)
- Report – Assessment of impacts of change and identification of barriers to change (WP 3, Deliverable 1, month 24)
- Report – Tools to assist key players in the process of change (WP 4, month 27)
- Report – Recommendations for the management and assessment of regulatory evolution in local public transport operations in Europe (WP 5, month 30)
- Final project report (month 30)

4. RECOMMENDATIONS FOR NEW MODULES

All five projects reviewed form a suitable basis for the creation of new modules. In the light of the project results the major requirements (recommendations) for the new modules are summarised as follows:

Stakeholder groups

New modules should look at the evaluation and development of regulatory frameworks from the angle of various stakeholders. These are:

- Public transport operators and associations,
- Public authorities (political/transport),
- Citizens/customers,
- Producers of transport means and systems (transport industry).

Levels of the regulatory framework

New modules should focus on the development of regulatory framework at three distinct levels (see also MARETOPE project workplan):

- The strategic level, where the mobility policy is defined reflecting the needs of the citizens. This is performed by the political authorities, if these authorities have the task to create all passenger transport services. If an autonomous market is allowed, this task is shared between the conditions set by the authorities in terms of conditions of access to the market and the competing behaviour of operators basing themselves upon their commercial strategies. Besides this the authorities always retain a possibility to initiate additional services to fulfil their mobility policy goals.
- The tactical level, where the transport system is designed and the respective policies are defined translating the strategic goals into operational specifications, assuring the effectiveness (i.e. the capacity to achieve the goals established for the system) and coherence of the mobility system. Depending on several parameters, the functions that this level entails can be performed by different agents.
- The operational level, where transport services are produced and consumed that can be performed directly by the transport authority, in which case it accumulates also the design of the system, or contracted out to an operator (private or public), by direct negotiation or through a tendering procedure.

Topics

New modules should take up a series of important topics which are subject to regulatory frameworks to various extent. These are listed in the table below 5:

Stakeholders	topics	sub-topics
Public Authorities (political / transport)	<ul style="list-style-type: none"> • Staff resources • Strategic planning and network design activities • Tendering procedures • Monitoring systems 	<ul style="list-style-type: none"> • Training • Planning guidelines • Tendering guidelines and contract typologies • List of indicators and data base • Citizens/customer satisfaction surveys
Operators/ Associations	<ul style="list-style-type: none"> • Competition with new in-comers • Labour productivity • Trade union relations • Quality assurance • Marketing activities • Transparency and accountability 	<ul style="list-style-type: none"> • New management techniques • Training • Systems of incentives • Internal systems of quality control • New accounting frameworks • Benchmarking groups • Surveys
Transport industry (producer of transport means and systems)	<ul style="list-style-type: none"> • Product quality standards • Environmental standards • Integrated system applications (ITS etc.) 	<ul style="list-style-type: none"> • Technology demonstration activities • Labelling schemes • Voluntary agreements
Citizens/ Customers	<ul style="list-style-type: none"> • Modal choice under changing money/time constraints • Effects of prices/taxes on the household budgets • Changes of public transport accessibility • Internal quality of transport service • External quality • Job reduction/creation • Social exclusion 	<ul style="list-style-type: none"> • Customer charts • Customer surveys • Local consultations • User/neighbourhood associations

Adapted from: MARETOPE project workplan

5. FINAL CONCLUSIONS

The Key Topic "Regulatory Framework in Public Transport" is indeed one of utmost importance. The public transport markets, and its regulatory frameworks, have been increasingly deregulated over the past decade or so. Fuelled by the Commission's endeavours, this will continue to be the case almost in all Member and Accession states.

The results of a range of informative EU research projects on the topic should be taken up by PORTAL and be exploited to the benefit of all stakeholders in this transformation process. The creation of some common EU-wide minimum reference for regulatory frameworks in public transport will also be directly beneficial to transport operators and authorities all over Europe.

The adequate dissemination of the project results through the means designed by PORTAL will help the recipients to assess and cope with the impacts of changes in the regulatory frameworks. Furthermore, they will be in a better position to produce tools that will help them to improve and complete these changes. A wider implication, the quality of the services provided can be steered more effectively, which in turn enables to influence mobility patterns towards the objective of sustainable mobility.