

THE TRANSPORT AND THE SUSTAINABLE DEVELOPMENT IN THE EUROPEAN UNION

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Abstract: The modern society needs a great mobility therefore the transport is a key factor in every economy. The public opinion is more and more intolerant confronted with the delays which became chronic and confronted with the poor quality of some transport services. The European Community is obliged to take into account the improvement of the transport sector in order that these ones to be able to satisfy the increased demand of the movement which intensified with its extension to the East, and in order to allow a sustainable development on this continent. At these conclusions had been arrived on the occasion of the European Council-Gothenburg 1994. A modern transport system must be sustainable from an economic and social, as well as an environmental viewpoint.

The development of the trans-European networks followed step by step the socioeconomic development of the EU Member States and of the European Community. This infrastructure contributed by a feed back reaction at the economic development of the Member States and it was and it is of a vital importance for the economic integration of Europe, because it plays a key role in the assurance of the internal market contributing in the same time in the GNP of the EU with over 6%, providing jobs for over 10 millions people.

The approach of the transport problem in the context of the sustainable development is very important, taking into account that in Europe this sector was responsible for the emission of 28% from the total of CO₂ emitted in 1998. The sustainable development is that type of development which allows the satisfaction of the present needs without preventing the next generations to satisfy their own needs. The reduction of the petrol dependence from the actual level of 98% by using the bio-combustibles and by the increasing of the energetic efficiency in the case of all the modes of transport becomes both an ecological need and a technological challenge.

The European Economic Community wanted, even from its establishment to promote a policy of the common transports, being aware that in order to assure the balanced development of all the modes of transport it was necessary a coordinating action at the community level. Later, Maastricht Treaty reinforced the political, institutional and budgetary bases of the transport policy. For the first time appeared the concept of trans-European network, making possible the identification of an infrastructure plan at the European level, which will be realized with the communitary financial support . The first White Paper regarding the future development of the common policy in the transports was published in 1992, its main principle being the opening of the transport market. The advantage of this approach took shape in the transport price reduction and in the increasing of the transport service qualities.

Despite of the opening of the transport market from the last years, the completion of the internal market is hard to approach and it is difficult to accept the competition distortion due to a lack of social and fiscal harmonization.

In the present EU is confronted with the following great problems because at the communitary level it was not registered a harmonious development of the transport common policies:

- congestion on the main road and rail routes, in towns, and at airports;
- unequal growth in the different modes of transport. While this reflects the fact that some modes have adapted better to the needs of a modern economy, it is also a sign that not all external costs have been included in the price of transport and certain social and safety regulations have not been respected, notably in road transport. Consequently, road now makes up 44 % of the goods transport market compared with 41 % for short sea shipping, 8 % for rail and 4 % for inland waterways. The predominance of road is even more marked in passenger transport, road accounting for 79 % of the market, while air with 5 % is about to overtake railways, which have reached a ceiling of 6 %;
- harmful effects on the environment and public health, and of course the heavy toll of road accidents.

The principles of the transport sustainable development

In this context of the sustainable development, the White Paper published by the Commission in 2001 has at its base the option to assure the total break of the link between the economic growth and the transport growth by some principles:

1. **Building the trans-European transport network.** Given the saturation of certain major arteries and the consequent pollution, it is essential for the European Union to complete the trans-European projects already decided. For this reason, the Commission intends to propose a revision of the guidelines adopted by the Council and the European Parliament, which will remain limited until funding is secured for the current projects. In line with the conclusions adopted by the Gothenburg European Council, the Commission proposes to concentrate the revision of the Community guidelines on removing the bottlenecks in the railway network, completing the routes identified as the priorities for absorbing the traffic flows generated by enlargement, particularly in frontier regions, and improving access to outlying areas. In this context, the list of 14 major priority projects adopted by the Essen European Council and included in the 1996 European Parliament and Council decision on the guidelines for the trans-European transport network must be amended. A number of large-scale projects have already been completed and six or so new projects will be added (e.g. Galileo or the high capacity railway route through the Pyrenees). To guarantee successful development of the trans-European network, a parallel proposal will be made to amend the funding rules to allow the Community to make a maximum contribution — up to 20 % of the total.

2. **Promoting transport by sea and inland waterway,** Short-sea shipping and inland waterway transport are the two modes which could provide a means of coping with the congestion of certain road infrastructure and the lack of railway infrastructure. Both these modes remain underused. The way to revive short-sea shipping is to build veritable sea motorways within the framework of the master plan for the trans-European network. This will require better connections between ports and the rail and inland waterway networks together with improvements in the quality of port services. Certain shipping links (particularly those providing a way round bottlenecks — the Alps, Pyrenees and Benelux countries today and the frontier between Germany and Poland tomorrow) will become part of the trans-European network, just like roads or railways, therefore it must have tougher rules on maritime. To reinforce the position of

inland waterway transport, which, by nature, is intermodal, 'waterway branches' must be established and transshipment facilities must be installed to allow a continuous service all year round. Greater, fuller harmonization of the technical requirements for inland waterway vessels, of boatmasters' certificates and of the social conditions for crews will also inject fresh dynamism into this sector.

3. Striking a balance between growth in air transport and the environment.

Today, in the age of the single market and of the single currency, there is still no 'single sky' in Europe. The European Union suffers from over fragmentation of its air traffic management systems, which adds to flight delays, wastes fuel and puts European airlines at a competitive disadvantage. It is therefore imperative to implement, by 2004, a series of specific proposals establishing Community legislation on air traffic and introducing effective cooperation both with the military authorities and with Eurocontrol.

4. Turning intermodality into reality. Intermodality is of fundamental importance for developing competitive alternatives to road transport. There have been few tangible achievements, apart from a few major ports with good rail or canal links. Action must therefore be taken to ensure fuller integration of the modes offering considerable potential transport capacity as links in an efficiently managed transport chain joining up all the individual services. The priorities must be technical harmonization and interoperability between systems, particularly for containers. In addition, the new Community support programme 'Marco Polo' targeted on innovative initiatives, particularly to promote sea motorways, will aim at making intermodality more than just a simple slogan and at turning it into a competitive, economically viable reality and diminishing the pollution.

5. Adopting a policy on effective charging for transport. It is generally acknowledged that not always and not everywhere do the individual modes of transport pay for the costs they generate. The situation differs enormously from one Member State and mode to another. This leads to dysfunctioning of the internal market and distorts competition within the transport system. The White Paper develops the following guidelines:

- harmonization of fuel taxation for commercial users, particularly in road transport;
- alignment of the principles for charging for infrastructure use. The integration of external costs must also encourage the use of modes of lesser environmental impact.

The price for using infrastructure should vary in the same manner according to category of infrastructure used, time of day, distance, size and weight of vehicle, and any other factors that affects congestion and damages the infrastructure or the environment. In a good many cases, taking external costs into account will produce more revenue than is needed to cover the costs of the infrastructure used. Priority would be given to building infrastructure that encourages intermodality, especially railway lines, and offers a more environmentally friendly alternative.

6. Developing high-quality urban transport. In response to the general deterioration in the quality of life of European citizens suffering from growing congestion in towns and cities, in line with the subsidiarity principle the Commission proposes to place the emphasis on exchanges of good practice aiming at making better use of public transport and existing infrastructure. A better approach is needed from local public authorities to reconcile modernization of the public service and rational use of the car. These measures, which are essential to achieving sustainable development, will cer-

tainly be among the most difficult to put into practice. This is the price that will have to be paid to meet the international commitments made at Kyoto to reduce CO₂ emissions.

7. **Putting research and technology at the service of clean and efficient transport.** The Community has already invested heavily in research and technological development over the last few years in areas as varied as intermodality, clean vehicles and telematics applications in transport. Now it is time for less concrete and more intelligence in the transport system. These efforts must be continued in the future, targeted on the objectives set in this White Paper. The European Research Area and one of its main instruments, the new research framework programme for 2002–06, will provide an opportunity to put these principles into action and to facilitate coordination and increase efficiency in the system of transport research. In the case of air transport, the priority will be to improve the environmental impact of engine noise and emissions — a sine qua non for adoption of stricter standards — and to improve air safety and aircraft fuel consumption.

8. **Managing the effects of globalisation.** Regulation of transport has long been essentially international in character. This is one of the reasons for the difficulties encountered in finding the proper place for the common transport policy between the production of international rules within established organisations on the one hand and often protectionist national rules on the other. As the main objective of these international rules is to facilitate trade and commerce, they do not take sufficient account of environmental protection or security of supply concerns. Consequently, for some years now, certain countries such as the USA have been implementing regional transport accords, particularly in the maritime or aviation sector, to protect specific interests. The European Union has followed closely in their footsteps in order to guard against catastrophic accidents at sea or to abolish inappropriate rules on aircraft noise or on compensation for passengers in the event of accidents. With enlargement on the horizon, and the transport policy and trans-European networks soon to extend across the continent, Europe needs to rethink its international role if it is to succeed in developing a sustainable transport system and tackling the problems of congestion and pollution.

9. **Developing medium and long-term environmental objectives for a sustainable transport system.** Numerous measures and policy instruments are needed to set the process in motion that will lead to a sustainable transport system. It will take time to achieve this ultimate objective, and the measures set out in this document amount only to a first stage, mapping out a more long-term strategy. This sustainable transport system needs to be defined in operational terms in order to give the policy-makers useful information to go on. A monitoring tool has already been put in place by way of the TERM mechanism (transport and environment reporting mechanism).

10. **Revitalising the railways.** Rail transport is literally the strategic sector, o which the success of the efforts to shift the balance will depend, particularly in the case of goods. The priority is to open up the markets, **not only for international services, as decided in December 2000, but also for cabotage on the national markets (to avoid trains running empty) and for international passenger services.** This opening-up of the markets must be accompanied by further harmonisation in the fields of interoperability and safety. Starting next year, the Commission will propose a package of measures which should restore the credibility, in terms of regularity and punctuality, of this mode in the eyes of operators, particularly for freight. Step by step, **a network of railway lines must be dedicated exclusively to goods services** so that, commercially, railway companies attach as much importance to goods as to passengers.

11. **Improving quality in the road transport sector**, The greatest strength of road transport is its capacity to carry goods all over Europe with unequalled flexibility and at a low price. The Commission will propose **legislation allowing harmonisation of certain clauses in contracts in order to protect carriers from consignors and enable them to revise their tariffs in the event of a sharp rise in fuel prices**. The changes will also require modernisation of the way in which road transport services are operated, while complying with the social legislation and the rules on workers' rights. The Commission has therefore presented an independent satellite radio-navigation programme, Galileo, involving the launch of an array of 30 satellites covering the entire planet, with local ground transmitters to provide universal services available to all users in any location.

12. **Improving road safety**. Commission intends to give priority to exchanges of good practice but it reserves the right to propose legislation if there is no drop in the number of accidents, all the more so since the figures are still high in the candidate countries. In the immediate future, the Commission will propose two measures for the trans-European network only. The first will be to harmonise signs at particularly dangerous black spots. The second will be to harmonise the rules governing checks and penalties for international commercial transport with regard to speeding and drink-driving. How else can the relative tolerance towards road accidents be explained when every year there are 41 000 deaths on the roads.

13. **Recognising the rights and obligations of users**. With the air passenger rights charter the Commission therefore set an example which will be followed for other modes. In particular, air passengers' rights to information, compensation for denied boarding due to overbooking and compensation in the event of an accident could be extended to other modes. As in the case of the air passenger rights charter, the Community legislation must lay the foundation for helping transport users to understand and exercise their rights. In return, certain safety-related obligations will have to be clearly defined.

14. **Creation of the 'Sea Ways'** The intra-community maritime transport and the transport on the inland water ways are two key components of inter-modality which offer the possibility to exceed the problems due to the congestion on the European roads and on the railways, reducing in this way the air pollution level. Until the year 2000, these modes of transport had been underutilized and at the community level there is an enormous potential 35 000 km of coasts, hundreds of maritime and fluvial ports and unlimited transport capacity. Therefore, in order to reinforce these modes of transport it is necessary to build true 'maritime ways', accompanied by the simplification of the procedures and by the increasing of the ports and water transport service qualities. In order to develop the trans-European water transport network, one must give a special attention at the national level, at the ports which have good connections with the continental network and a special attention has to be given to the ports situated on the Mediterranean coasts and on the Atlantic coasts of Europe which could be also parts of a true logistic chain.

From old times the water transport had been that one at which resorted many times when different goods had made the change object, the great empires and the antiquity civilizations 'had relied on' the big river banks and especially on the sea coasts. This fact is resulting from the simple discovery of the vessels which suffered shipwrecks a long the Mediterranean Sea coasts in the old times, which informs us that the maritime

transport on the short distances had been and could become an extremely profitable activity.

Nowadays, the maritime traffic on the short distances assures a shifting of 41% from the goods transported at the intra-communitary level, being the only means of transport that registered an increasing rate of 27% during the years 1991-1998. The volume level of the goods transported on the sea at the short distances had been in 1998, 2.5 times bigger than in the year 1970, representing 2 3% from the goods value transported in Europe. In spite of these facts, the using of this means of transport is not of its potential, even if it offers a competitive alternative of the terrestrial transport.

For this reason it is necessary to create some well determined maritime connections-especially those ones which offer an alternative to the terrestrial transport over the Alps and Pyrenees-which become parts of the pan-European transport network, in the same way as the roads and the railways.

Besides the coasts length, the EU has a natural extremely valuable 'gift' the rivers and channels dense network, that facilitates the connections between the basins of the different European rivers and the transport on the inland waters that comes to complete the maritime transport in a perfect way. In terms of energy efficiency and the weight of goods which can be moved one kilometer by one liter of fuel, the figure for road haulage is 50 tonnes, for rail haulage 97 tonnes and for inland waterways 127 tonnes (38). Apart from anything else, this is a very safe mode of transport so it is particularly suitable for transporting dangerous goods, such as chemicals. In terms of the volumes carried, the accident rate is virtually zero. River transport is reliable and ideal for the carriage of heavy low-cost commodities over long distances (heavy materials, bulk industrial goods, building products, waste, etc.).

But the future development of the water transport depends in a big measure of the increasing port service efficiency, having at its base the competition principles. In Europe, beginning with 1990 appeared certain ports where the ships belonging to certain ship owners from different countries towards the country where there is the respective port, stopped for a little time in order to load and unload the containers.

Ports like Le Havre, Antwerpen, Rotterdam or Hamburg had been transformed in real 'hubs' of the international commerce because they offer services of a high quality reported at the price which must be supported by those who resort to these services, these ports having a modern equipment and good connections in all over the world.

Despite progress following the fleet renewal and the full opening-up of the inland waterway market, better use could still be made of the mode. For example, there are still a number of infrastructure problems (bottlenecks, inappropriate gauge, height of bridges, operation of locks, lack of transshipment equipment, etc.) which prevent the uninterrupted passage of vessels throughout the year. The free movement of vessels is also hampered by the diversity of legal systems with different rules, particularly on technical specifications for vessels and pilots' certificates. This mode of transport needs to be made more reliable, efficient and accessible by:

1. eliminating bottlenecks, correcting gauges, providing missing links, revitalizing goods transport waterways which have fallen into disuse, establishing links to rivers and installing transshipment equipment;
2. installing highly efficient navigational aid and communication systems on the inland waterway network;
3. continuing to standardise technical specifications throughout the Community's inland waterway network;

4. further harmonisation of pilot certificates throughout the Community inland waterway network and harmonising the rules on rest times, crew members, composition of crews and sailing times of inland waterway vessels.

So, the measure packet and the analyses from the Whit Paper - which are essential but not sufficient in order to direct the transport common policy could realize the demands imposed by the sustainable development - could be summarized in the following way and they are concentrated on the following main problems:

- the congestion risk on the Europe main roads and the regional unbalance;
- conditions which have to be achieved in order to assure the modification of the balance for different transport modes;
- granting a special attention in order to eliminate the bottlenecks;
- installing the users in the center of the transport policy;
- managing the effects of globalization

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