

3 THE OBJECTIVES OF EUROPE

With the development of the road transport, it was soon evident that the importance of rail was diminishing. Its decreasing share in the transport sector was worrisome, and the necessity of strengthening its position in the market stated. Even more considering that road transport will grow a 50% for 2010 if nothing is done [17].

The first important attempts to rebalance the modal split were carried out by the railways with the introduction of high speed; first the SNCF and its TGV lines, and then the link of Paris, Brussels, Köln, Amsterdam and London (PBKAL). After the meeting that the involved railways held with the UIC their point of view was communicated to the EU, which from the middle nineteen eighties on decided to support the revitalisation of the rail market [18]. The completion of the interior market, the reinforcement of the social and economic cohesion and higher competitiveness to assure the growth of its countries demanded the elimination of the deficiencies in the transport sector. Therefore, as the EU Commission stated [17], measures are to be taken to make both rail and road grow a 38% for 2010 and a 50% for 2015.

3.1 DEFINING THE TARGETS

To successfully reach the main goal, study and planning was necessary so as to develop far-sighting conceptions and avoid wrong short-sighting investments. The already existing organisms (e.g. UIC) and the new created ones started working in the direction pointed out by the EU, designing new lines and planning upgrades of old ones. The deficiencies and advantages of the rail sector were detected and listed, and consequent improvement programmes and measures defined. Today we can read directives building a suiting frame for the changes to come and different agendas and strategies indicating necessary targets and medium-term steps.

3.1.1 E.U.

The European Union and the European Commission, according to the traffic expectations, detected the need for more capacity of the transport networks. Since then, thanks to the political might of the EU, both have played a key role in defining major targets to be achieved, in selecting main infrastructure projects, by writing directives that lay down a joint legislation

and by creating assessment bodies and others. A very important step was the signature of the Maastricht Treaty by the EU member states.

The White Paper of July 1996 “A strategy for revitalising the Community’s Railways” comprehensively explains the need to improve the rail transport and contains far-reaching proposals to urge railways to provide commercially viable services and integrate national railway systems to form international corridors, with open access for all rail operators. Therefore a network is required which is interoperable on the legislative, technical and operational fields.

The White Paper of September 2001 has a wider scope that concerns all transport modes and sets a whole policy ending with 60 individual measures to improve the overall transport in a sustainable way. The most important are [6, 17]:

- Expansion of the European networks with priority in railway projects and interoperability.
- Acceleration of railway reforms to open up the networks to competition and its guidelines.
- Harmonization of social provisions in road freight sector, tougher requirements (driving and rest times), closer supervision.
- Fair infrastructure prices including internalisation of external costs.

There is also a White Paper (May 95) for the central and eastern European countries suggesting measures they should apply to get integrated in the European market. Provided these countries are neighbours of the EU and most of them will become members of it soon, and that for European integration to be effective, the amendments to national law need to be brought into line in all the countries concerned, the interest of them sharing the same transport policies and technologies is high.

The Green Paper of December 1995 about the important subject of internalisation of external costs had also noticeable influence in the European transport policy and the directives.

3.1.2 U.I.C.

Besides of its habitual activities the UIC wrote the “UIC Rail Plan” in October 1997; a first strategy paper that, after describing the present scenario and its requirements, sets a strategical approach and incorporates a whole range of actions that countries, infrastructure operators, railways and related industries shall investigate, carry out and develop to improve the rail sector concerning passenger and freight transport as well as infrastructure.

The UIC also has a research and development programme whose objective is to enhance quality, productivity, flexibility, interoperability, costs and safety. Part of the projects is carried out by the European Rail Research Institute (ERRI), which also carries out research projects for the EU.

3.1.3 European Rail Research Advisory Council

The ERRAC was founded 2001 by UIC, UNIFE, CER and UITP to re-organise and optimise research within the European Union by means of developing a common strategy for rail research to support the creation of a single European railway system. Its members are railways, operators, enterprises, representatives of national and European research programmes, users and environmental groups.

Its first duty was to prepare a strategical research programme (Strategic Rail Research Agenda of 2002) that would orientate the European, national and private programmes. It first describes a horizon for 2020 with the next goals among others:

- Average speed: 150 km/h for passenger traffic and 80 km/h for freight.
- Punctuality of 95% at least.
- Costs reduced by 50%.
- Double capacity of tracks and stations.
- 15,000 km of high-speed lines and 15,000 km tracks mainly for freight.
- New integrated networks (multi-modal stations).
- Reduction of sound impact to 59 dB for freight traffic and to 83 dB for high-speed trains.
- Reduction of accidents by 75%.

In order to reach this horizon the companies and enterprises should satisfy the following strategic customer priorities:

- Seamless passenger services.
- Customized freight services.
- Integrated mass transit services.
- Fully interoperable infrastructure.
- Modular interoperable rolling stock.
- Reduce impact and heighten sustainability.

At the same time, the research effort and technological innovation is focused on the next five main fields:

- Interoperability of the networks.
- Promotion of intelligent mobility (information technologies).
- Improvement of safety.
- Reduction of environmental impacts.
- Investigation of innovative materials and production methods.

On its technical annex dates are suggested for the necessary steps and, expectations if successfully completed, effects on the scenario 2020 and constraints to be removed are very explicitly described.

3.1.4 Railways and infrastructure operators

Railways and operators are very interested in the role of rail in the transport market being changed. In this sense they are aware of the need to [DB AG]:

- Reduce passenger travel times and make prices convenient.
- Reduce costs and simplify processes.
- Split slow and high-speed traffic using different tracks.
- Eliminate national barriers and differences or to technically overcome them.
- Reinforce international traffic.
- Improve all networks so as to avoid neighbour countries becoming a barrier.
- Have rolling stock certified in every country.
- Open the market to competitors to heal the railways.
- Politically harmonize the world of transport with equal conditions for every enterprise.

Most of the countries are undergoing these changes by designing plans to take the most out of their current infrastructures and then expand them (e.g. "Netz 21", see 4.7) and smooth the transition to the new requirements.

These targets are of course very important to the enterprises using the infrastructure, such as logistic operators. On their turn, their options for the future will be bound to two requirements. Mastering the networks of all transport modes and be able to offer quality and information, and work their

fleets with stability [19]. It is necessary that the targets of the infrastructure operators be attained to make rail be an important part of the transport chain. The second requirement is to master the logistics of warehouses and transfers [19].

3.1.5 Industries

Industries will play a vital part on the success of these rail reforms, since they will be the ones investigating and developing most of the technical improvements to be introduced. For these investments to be profitable and for the production prices to be cheap enough so as to make rail competitive, they need to find simple solutions which will satisfy simple but homogenising European standards as well as an international homologation body that sets barriers down and opens up the doors to a bigger market. In this context they are represented by the UNIFE, which is playing an important part in defining the objectives for the future (see 3.1.3).

3.2 COMPATIBILITY OF TARGETS

Although objectively everybody agrees that the improvement of the rail system requires of the described changes, some parties are not that enthusiastic about implementing them.

On the one side are the railways who, accustomed to enjoy the monopoly of exploitation and to have guaranteed incomes, see how they will have to work more and better to get the same results and how many workplaces will be withdrawn. At the same time the discriminations towards foreign railways still benefit the national railways.

On the other side are the infrastructure operators who feeling the need of upgrading and expanding their networks and after investing important sums of money on developing their procedures and technical systems, are urged to change them for newer ones, which in some cases are not yet proved, with their own funds. The cost of these investments is very high and it can hardly be paid through the fees on the use of the infrastructure. Meanwhile, in defining the future European standards and requirements, some operators still try to impose theirs to reach a more advantageous position.