

INTRODUCTION

In the time when railways were born, distances were an important isolating factor for countries and regions. Every form of communication was therefore, and besides of linguistic differences, more difficult than they are today, and the necessity of compatibility did not exist. In this context, the first lines were developed with technical solutions adapted to the local requirements and capabilities.

As time went by tracks needed to be connected and therefore the technical characteristics had to be standardised. Owing to the creation of national railways and to the fact that Europe was a conglomerate of belligerent and politically closed countries, the standardisation and development was carried out internally, and in some cases with more than one combination of technical features inside a country. Isolation from the other railways was good for the state railways to exercise their monopolies and to have more flexibility on the development of solutions.

But, since Europe decided to grow together, what once were advantages turned into frontiers: different gauges, power supply, control, safety and signalling systems together with operational and organizational impediments and incompatible forms of production and market strategies have become the major obstacles to the use and growth of the international rail market. Furthermore, the fact that at some time it was considered to be technologically outdated resulted in a reduction of the investments in rail; the rolling stock became obsolete and the infrastructures insufficient whereas the lack of competitors cared for the inefficiency and waste of public funds. Other transport modes benefited and forced the rail to a secondary position. Nevertheless, it kept being used and developed due to its social importance.

Realising the need to improve the transport capacity so as not to limit the growth of Europe and given the importance of the real advantages of the rail system (ecology, capacity, durability, etc), it became the main item in European transport politics for the future. In an attempt to rebalance the shares whilst increasing the overall capacity, a wide variety of projects are being impelled by the European Commission and the EU. The success of the applied measures will decide the future role of rail transport in Europe and the degree of sustainability of the transport increment.