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Title: *The slow and difficult implementation of high speed rail interoperability in Europe: the case of the Atlantic corridor*

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Introduction

Since the 90s, the European Commission tried to improve the interconnection among state members and the interoperability of national transport networks through a Trans-European Transport Network (TEN-T). However, it is only since 2013 when the focus shifted from the articulation of existing national networks to the structuring of nine major European transport corridors, including the Atlantic corridor (*Beyer, 2015, 2020*). It aims to link both Spanish and Portuguese ports to Le Havre port (northern France) and to the Rhine axis, at Strasbourg and Mannheim (Germany). This corridor has many interests, such as improving rail freight and passenger transport in Western Europe. Nevertheless, the development of the Atlantic corridor is hampered by major political, technical and operational difficulties, complicating the emergence of unified strategies around this object and hindering the strengths of rail freight in the European Atlantic arc and Eastern Europe.

State of the art

The article builds on existing scientific productions on European policies (*Drevet, 2008; Elissalde and Santamaria, 2008; Decoster and Versini, 2009; Badenoch and Fickers, 2010; Dühr, Colomb and Nadin, 2010; Faludi, 2010; Jean and Baudelle, 2010; Baudelle, Guy and Mérenne-Schoumaker, 2011; Beyer, 2014, 2020; Santamaria 2015*), on transportation corridors (*Prentice, 1996; Hall, 2011; Alix, 2012; Debrie and Comtois, 2010; Libourel, 2015*), and on rail interoperability (*Auphan, 2003; Châtelain, 2003; Fontanel, 2003; Mourareau, 2003; Lamming, 2003; Wurmser, 2003*). Until the moment, few works have focused on the Atlantic corridor (*Sánchez Hernandez, 1994; Prieto, 2015; Bairras, 2021*). This article therefore puts the focus on the European railway system through this case study of the Atlantic corridor, particularly the cross-border relations between France-Spain and Spain-Portugal.

Issue

European transport corridors are development projects that identified as a lever for integration, making possible to meet the challenges of accessibility, attractiveness and access for the movement of goods. However, when we look at the level of cross-border regions, we find that the Atlantic multimodal corridor has been plagued for many years by technical, political, economic and social challenges. Thus, the article provides elements of answers to two main questions from the different scales of analysis. The first concerns the Atlantic corridor itself, i.e., how it was conceived and what its technical difficulties are. What are the elements that are hindering the arrival of this transport development? The second question concerns the relevance of this corridor for the countries, regions and cities it crosses. While the realization and technical harmonization of a transport network is at the center of European discussions, whether it is better or not to improve the conditions on both sides of the borders in order to provide alternative solutions?

Plan

This study case is divided into three parts. The first part provides an opportunity to update the evolution of the trans-European transport network, from its inception to the present day, as well as the factors that complicate the emergence of a unified corridor. The second part aims to highlight the different political visions of this transport corridor in each of the three countries (France, Spain & Portugal). Finally, the third part highlights the fact that the territorialization of this corridor is partial, taking into account only the desire for interoperability between the countries and ignoring more local solutions, even though initiatives do exist.

Materials and methods

This research is the result of a joint reflection of two PhD theses that started at the Laboratoire Ville Mobilité Transport (laboratory attached to the Ecole de Ponts Paristech and the Université Gustave Eiffel) in 2020-2021. The first work focuses on barriers to entry in the rail transport markets in France and Europe. The second one, on the difficulties of territorialization of the European transport policy and, in particular, the European Atlantic corridor (France, Spain, Portugal). This work is based on abundant and precise grey literature on our subject, such as official reports on transport from different administrative levels (such as the European Commission, strategic and action plans for transport planning, etc.) and the infrastructure managers concerned. In order to better understand how interoperability is implemented, several semi-structured interviews with institutional and non-institutional actors have been conducted.

Fields of study

The article focuses on the many technical and physical challenges of harmonizing the rail network in three European countries: France, Spain and Portugal. While many studies on interoperability discuss technical resolutions, very little analysis focuses on the coherence of the construction of a transport corridor itself. For this purpose, the analysis focuses on the Atlantic corridor and more precisely on cross-border projects such as the Great South-Western Railway Project (GPSO) and the Basque Y project which is studied jointly as well as the railway line from Evora (Portugal) to Madrid. The main issue of this article is to identify the different reflections underway at both the European and national levels, while asking whether a better political understanding at the regional level would help (or not) to solve the missing cross-border links.

Objectives and Results

The research on interoperability in Europe is therefore an issue and can be studied from two simultaneous perspectives: in time and in space by addressing different scales. Several theoretical contributions and objectives will be put forward. First, this article is centered in the field of transport geography. It highlights the European transport policy and the evolution of the rail transport network in Europe. Furthermore, it examines railway policies in three European countries, France, Spain and Portugal, from several angles. Secondly, it provides a contribution to the field of planning and urbanism. It also reveals the complexity of land use planning in France, Spain and Portugal. It questions the positioning of countries, regions and cities with respect to the Atlantic corridor. It presents alternative solutions and a prospective analysis. Finally, in the third part, it sheds light on European political studies. It highlights the diversity of actors, characterizes the different railway policies over time and lifts the veil on the real desire for cross-border cooperation between these three countries.

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