



Building Europe on the Rails

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of Europe

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Preface:

This is a research design for a project entitled “Building Europe on the Rails”. The project is part of a broader project on “Transnational Infrastructures and the Rise of Contemporary Europe” financed by the Netherland’s Organization for Scientific Research (NWO).¹ By looking through the historical evolvement of transnational infrastructures, the overall research proposal aims at looking at the historical relationship between infrastructural development and the emergence of contemporary Europe.

The structure of this paper is as follows: first I briefly introduce the subject of my research. Subsequently, in a historiographical essay, I position my research with regard to relevant bodies of literature, so as to show the way in which my research will contribute to the historiography of Europe and of railroads. In the following paragraphs I present my research question, the overall aim of my project, my research hypothesis and case study selection that will help me test my hypothesis. In the two last paragraphs, I present a provisional structure for my thesis and my allocation of activities for the coming years.

My purpose is to show, through this research design, the originality of my research and its value for the field of history. Furthermore, I present my methodology and plan of activities for the coming years in order to show that I am capable of conducting this research and writing my thesis in the given time.

¹ Johan Schot, “Transnational Infrastructures and the Rise of Contemporary Europe”, a research proposal awarded by the Netherlands’ Organization for Scientific Research (NWO), in September 2002, Dossier number 277-53-001.

1. Introduction

The establishment of organizations like CER (Community of European Railroads, 1988) and Railnet Europa (Infrastructure Managers Brussels, 2002) or ERRI (European Rail Research Institute, 1950), reveals the existence of a wide array of actors that associate a future "Europe" with the emergence of a European Railway network. These actors ascribe a central role to a European railway network in shaping their vision of a future Europe: a politically and economically integrated Europe. The most profound push towards what the bodies of European Union (European Council of Ministers, European Parliament and European Commission) consider a European railroad network is taking place in EU transport policy: recent developments surrounding the Trans European Transport (TEN-T) network reveal the emphasis that is given by these actors to the development of the "trans-European transport infrastructures" as a means of achieving of the EU's primary goals: the establishment of a unified market as well as political and social cohesion within Europe.²

Looking at the visions of key actors indicates that the development of railway and transport infrastructure in general was an important part in constituting their ideal Europe (a United Europe). Historians have failed to address the research question of the role of railroads in the construction of perceptions of Europe, their place in projects for Europe and, finally, their role in shaping contemporary Europe.³ As I will show below, there are many studies that treat historical developments of railway infrastructures within nation-states. The authors of these studies address questions to the role of railway developments as part of the process of nation-state-building (e.g. emergence of a unified-national market, creation of political unity etc). However, the process of interconnecting national networks to constitute a transnational network that would accommodate international traffic as well as visions of a broader political and economic unity, have not been the subject of thorough investigation. In my research I plan to look at the international aspect of railway developments in Europe and thus, contribute towards filling this historiographical gap.

2. Literature Review.

2.1. The Idea of Europe

² Following the entry into force of the Maastricht Treaty in 1993, the Commission put forward a comprehensive global framework for the development of trans-European networks. "Trans-European Transport Network, TEN-T priority Projects, European Commission, Luxembourg: Office for Official Publications of the European Communities, 2002, p. 2. On July 1996 the European Parliament and Council adopted decision N 1692/96/ EC on Community guidelines for the development of the Trans-European Transport network. This project concerns the development of roads, railways, inland navigation and airports lines that "will serve the entire continent, carry the bulk of the long distance traffic and bring the geographic and economic areas of the Union closer together". The project derives its legitimacy from the articles 154, 155 and 156 of the Treaty of the European Union. According to these articles the achievement of interoperability and interconnection of national networks is regarded crucial for the achievement of a United Market but also for the establishment of social and economic cohesion in Europe, see http://Europa.eu.int/comm./ten/transport/guidelines/index_en.htm, Trans-European Networks, p.1

³ I use the terms "perceptions" and "projects" of Europe as defined by Peter Bugge, in Kevin & van der Dussen (ed.), 1995, pp.83-84.

Historiography on Europe reveals that there is no unanimity with regard to the definition of Europe. Different approaches to research in European history reveal a variety of concepts and understandings of Europe. Economic and political historians usually refrain from defining Europe; they use "Europe" in their work usually as a geographical category. Historical geographers (e.g. Pound) are more explicit when they adopt a geographical definition of Europe.⁴

On the other hand, a wide branch of historical research is concerned with the history of the idea of Europe. As this literature shows, a search for the different meanings that the concept of "Europe" attained over the years, until the present can give insight into important historical issues such as competing political and social scenarios for a changing socio-economic order in a geographically defined Europe. Different perceptions of Europe and projects for Europe have been also influential in shaping identities, a process that can be related to political and social changes in Europe.

A good overview of the origins of the idea of Europe and the different meanings that the concept of Europe attained throughout different historical periods is given by Pim den Boer, Peter Bugge and Ole Waever in their book *The History of the Idea of Europe*.⁵ This book is representative of the historiography on the idea of Europe.⁶ De Boer in his essay traces the emergence of the idea of Europe in the 18th century. Throughout his essay he shows how Europe has been always seen and interpreted in connection to particular national or political viewpoints. As Bugge mentions a plurality of conflicting interpretations of Europe, each drawing on specific historical references renders the notion of Europe a highly potent political concept. According to Bugge, historians, in their attempt to define Europe have been asking the following questions: Who belongs to Europe, and who can be excluded? Which values are genuinely and uniquely European? Is there a threat towards Europe and where does the threat come from?"⁷ Similarly, Ole Weaver in his essay discusses perceptions and projects of Europe in the second half of the 20th century. He shows how competing ideas of Europe within different nation-states shaped different political visions and political programs with regard to the establishment of a new sociopolitical order in Europe.⁸

Authors of other studies are concerned with similar questions: How did ideas of Europe emerge? What were the different meanings that the concept of "Europe"

⁴ Norman J. G. Pounds, *A Historical Geography of Europe 1800-1914*, Cambridge University Press, 1985.

⁵ Wilson, Kevin, van der Dussen, Jan, *The History of the Idea of Europe*, Routledge, London and New York, 1995.

⁶ Other important works looking at the history of the idea of Europe are: Mikael af Malmberg & Bo Strath, *The Meaning of Europe; Variety and Contention within and among Nations*, Berg 2002, Michael Wintle, "Renaissance maps and the Construction of the Idea of Europe", in *Journal of Historical Geography*, 25, (1999), pp. 137-165, Jan Nederveen Pieterse, "Fictions of Europe" in *Race & Class*, 32 (3), 1991.

⁷ Bugge in his essay traces different projects for Europe, developed in the first half of the 19th century by philosophers and politicians (such as Friedrich Naumann's "Mitteleuropa, T.G. Masaryk's "New Europe" etc). He shows how different projects of Europe were embodied in different ideologies Nazism and fascism. He also looks at different perceptions of Europe. Bugge, Peter, "The Nation Supreme. The Idea of Europe 1914-1945", in Kevin & van der Dussen (ed.), 1995, p.83. Bugge, Peter, "The Nation Supreme. "The Idea of Europe 1914-1945", in Kevin & van der Dussen (ed.), 1995, pp. 83-146.

⁸ Waever Ole, "Europe since 1945: crisis to renewal" in Kevin & van der Dussen (ed.), 1995, pp. 151-.

attained over the centuries? Who were the main actors defining the meanings of Europe? How do changes in the meaning of the concept of Europe relate to sociopolitical agendas and visions of Europe? How were visions of Europe shaped by, and how did they shape, national-identities? Historians have looked at maps, political and philosophical treatises and ideological programs as influential factors in shaping perceptions of Europe. They also have looked at these factors as instruments used by proponents of specific types of Europe for the realization of their projected Europe(s). However, they have not yet addressed the question of the role of infrastructures, and more specifically of railway development, in shaping ideas of Europe or within projects for the establishment of a future Europe.

2.2 Railroads in economic and political histories of Europe:

A first look at prevalent books on European economic and political history gives us an indication of the way in which historians have so far dealt with the issue of railroad history within Europe. Authors and editors of influential works such as *the Fontana Economic History of Europe* and *The Cambridge Economic History of Europe* refer to the developments on railways and to the developments of other transportation modes in general in the context of the nation-state.⁹ As a consequence of looking at Europe as a conglomeration of national states, these authors look at the economic aspects of national railway building. This pattern is reproduced in other economic histories of Europe such as the book *The European Economy, 1750-1914* edited by Derek H. Aldcroft and Simon P. Ville, and the book *Western Europe: Economic and Social Change since 1945* edited by Max-Stephan Schulze.¹⁰ The same is true for industrial histories of Europe such the works by Richard Sylla & Gianni Toniolo(ed.), *Patterns of European Industrialization, The Nineteenth Century* and by Robert Fox & Anna Guagnini (ed.), *Education, Technology and Industrial Performance in Europe, 1850-1939*, Maison des Sciences de l' Homme and Cambridge University Press 1993.¹¹

2. 3. Historiography on railroads:

With regard to the historiography on railroads, my project is original both in its subject of inquiry and its approach.

⁹ H.J. Habakkuk & M. Postan (ed.) *The Cambridge Economic History of Europe, Volume VI, The Industrial Revolutions and After: Incomes, Population and Technological Change (I)*, Cambridge University Press 1965.

¹⁰ Derek H. Aldcroft & Simon P. Ville (ed.), *The European Economy, 1750-1914, A Thematic Approach*, Manchester University Press, 1994, Max-Stephan Schulze (ed.), *Western Europe: Economic and Social Change since 1945*, Longman, Carlo M. Cipolla (ed.), *The Fontana Economic History of Europe*, *The Emergence of Industrial Societies*, V. 1-2, William Collins Sons & Co LTD Glasgow, 1973.

¹¹ Richard Sylla & Gianni Toniolo(ed.), *Patterns of European Industrialization, The Nineteenth Century*, London and New York, Fondazione Adriano Olivetti, 1991, Robert Fox & Anna Guagnini (ed.), *Education, Technology and Industrial Performance in Europe, 1850-1939*, Maison des Sciences de l' Homme and Cambridge University Press 1993.

In particular, as my research on railroad literature has revealed, historiography on railways in Europe and on transportation history generally is characterized by a national focus since railways have been mostly studied in the context of the nation-state.¹² The issue of international connections is touched upon only marginally within the context of the history of national railroad networks. Furthermore, in this literature we find scarce information on the formation of international organizations and their role in co-coordinating international traffic. International co-operation in railroad issues, the formation processes of international organizations, as well as their incremental role in promoting international railway traffic have not been studied extensively.

There are some studies on railroad history that have a broader, European scope.¹³ However, these are mostly comparative studies: their authors compare railway developments (and other transport infrastructures) in different nation-states in the geographical area of Europe. By leaving out of the narrative such issues as the construction of international lines and the forms of international co-operation at the European level, the authors of these studies fail to look at the international aspects of railway developments in Europe. Consequently, their contribution to discussions and interpretations of the internationalization of railways in Europe is limited.

The article of Douglas J. Puffert "The Technical Integration of the European Railway Network" is an exception: Puffert in his article looks at the process of integration of railways at a European level and the emergence of what he calls a European railroad network. He argues that railways in Europe developed diversity in their technical practices because network integration at a European level was less important to railway administrations than the integration of each local sub-network. According to Puffert, the technical differences in national railways hampered the process of interconnection of national networks and were (and still are) the main obstacle in the process of emergence of a European railroad network. Technical coordination has been so far achieved through international agreements, often a result of the activity of international organizations.¹⁴ Puffert's article is a valuable

¹² A useful tool for looking at this literature is the book by Michel Merger and Marie-Noelle Polino (ed.), *COST 340, Towards a European Intermodal Transport Network: Lessons from History, A Critical Bibliography*, AHICF, 2004.

¹³ Such studies are: Fremdling, Rainer, "European Railways 1825-2001", an Overview, *Jahrbuch für Wirtschafts geschichte*, Neue Ergebnisse zum NS-Aufschwung 2003/1, Akademie Verlag, p.209-221, Patrick O' Brien (ed.), *Railways and the Economic Development of Western Europe, 1830-1914* (Oxford: The MacMillan Press Ltd, 1983), Dunham, A.L., *The Pioneer Period of European Railroads*, Cambridge, Mass., 1946, Simon P. Ville *Transport and the Development of the European Economy 1750-1918*, , University of Auckland, New Zealand, St Martin's Press, New York, 1990.

¹⁴ Douglas J. Puffert in his article "The Technical Integration of the European Railway Network" in Albert Carreras, Andrea Giuntini and Michèle Merger (eds.), *European Networks, 19th-20th centuries; New approaches to the formation of transnational transport and communications system[s]* (Proceedings Eleventh International Economic History Congress, Milan, September 1994, B4) (Milano: Università Bocconi, 1994). Also Florian Cebulla in his research proposal to the German Science Foundation, (presented in the Transport, Traffic and Mobility Conference (T2M, Eindhoven, November 2003)) asks questions related to the

I find Meunier's book of particular interest: by looking at the reasons of prevalence of a specific railroad technology in post-War France (TGV) Meunier enters into discourse with the body of literature on history of technology. Throughout his narrative he argues that contingency played a significant role in the history of the TGV. He shows the way in which contextual factors such as national pride, foreign competition and the general political context in post-war France influenced the history of the TGV. He argues against technological determinism: by looking at the technical potentialities of technological alternatives, such as the aero train, and attributing their failure to socio-economic factors he shows that arguments of technical superiority cannot explain the prevalence of the TGV.

Lastly I would like to refer to two more works that approach railroad history from a cultural perspective: these are the books of Wolfgang Schivelbusch: *The Railway Journey: The Industrialization of Time and Space in the 19th century*²¹, and the more recent article of David Gugerli, "The Effective Fiction of Internationality: Analyzing the Emergence of a European Railroad System in the 1950s."²²

David Gugerli's article is historiographical: in his article he looks at the ways in which the issue of internationalisation can be treated historically and analytically. He argues that the problem of internationalisation can be approached historically and analytically from two directions: firstly, the emergence of an international railroad system can be approached from a bottom-up perspective i.e. from the national railways perspective. Secondly, the story can be told from a trans-European top-down perspective. He brings examples of the two ways of looking at internationalisation by looking at two case-studies: in the first he looks at the symbolic role of internationalisation in the Swiss Federal Railways. Internationalisation is seen from the point of view of national railways within a certain country. Gugerli, looks at the way the process of internationalisation was connected to the efforts of national railways to increase their status and share on the national market. With his second case study he looks at the Transeurope Express venture: he looks at internationalisation as the process of transnational co-operation of national railway companies; in order to interpret internationalisation in this second case he uses the concept of "emergence" from systems theory. According to Gugerli, only the combination of both top-down and bottom-up perspectives, can provide interpretations for what he names as new action-patterns.²³ His article is of great interest: Gugerli tries to conceptualise the issue of internationalisation of railways in Europe and the emergence of a European railway network and to disassociate it from the historiographical focus on national railroad history.²⁴ At the same time he suggests

²¹ Wolfgang Schivelbusch: *The Railway Journey: The Industrialization of Time and Space in the 19th century*, University of California Press, 1986.

²² David Gugerli, "The Effective Fiction of Internationality: Analyzing the Emergence of a European Railroad System in the 1950s" in Reprints zur Kulturgeschichte der Technik, ETH 2003, Nr.17.

²³ In his own words "It is only the combination of both approaches that makes clear in what way for instance the symbolic intensification "from below" (wagon restaurant) and the operational and technological simplification "from above" (TEE) have interacted to produce entirely new action-patterns, Gugerli 2003, p.4.

²⁴ Gugerli uses the concept of "emergence" from systems theory in order to interpret the development of the TEE services: according to this theory "systems of a higher (emergent) order can be of lower complexity than systems of lower order, as they themselves can determine the unit and number of elements of which they consist. In other words, in their self-complexity they are not dependent on the reality substructure". See Gugerli 2003.

a methodological framework for looking at these processes. Furthermore, his article is of great interest due to his original approach combining a cultural/symbolic perspective with organizational and technical issues with the purpose of interpreting and analysing the issue of internationalisation of railroads in Europe.

In his book Schivelbush looks at the "revolution" that the introduction and diffusion of railroad technology brought to the human experience of travelling- a revolution that he attributes to a great degree to technical characteristics of the railroads (increase speed compared with previous modes of transport, mechanized traction, mass transportation etc). Of great interest is his effort to show that the technical design of the railroads in Europe reflects cultural elements. He supports his argument by comparing specific technical parameters of the railroad networks in Europe and the U.S.A.: thus he argues that railroad lines in Europe follow curving lines as opposed to straight lines of the American railroads due to cultural reasons. Cultural difference also explains the different spatial arrangement of the trains in the two continents in the 19th century. I find his argumentation relevant to my research in two ways: first, by discerning commonalities in the technical design of railroads all over Europe in the early period of railway construction, Schivelbush makes legitimate my search for a "European style" in the development of railways in Europe. Second, by associating the technical characteristics of European railroads to a common European culture, he shows the importance of culture in shaping technology. Scivelbush also looks at the impacts of railroad technology to the changing cityscape in the mid 19th century, and this adds to the originality of his approach.

As I have shown above, a national perspective and a focus on economic and organizational issues characterize most of the literature on railroad history. The achievement of interconnection and interoperability of national railroad networks in a geographically-defined Europe and the discourse at a political, technical and general social level among agents promoting the achievement of a larger scale railroad network, are two key issues that have not been addressed sufficiently. Through my research I will try to address these questions.

3. Research Questions and Overall Aim of my Project.

Historians have studied the introduction and diffusion of railway technology in Europe almost exclusively from the perspective of the nation-state. This is -partially- due to the fact that most authors of railroad history have been focusing their analysis on the period of expansion of railway networks, which for the most European countries was the second half of the 19th century. As this literature indicates, nation-states, and in particular national governments of European countries were important actors in stimulating railway developments in the 19th century. However, a search through past issues of the railway journal *Railway Gazette* reveals that many

international railway organizations were established from the early 19th century onward. During the 20th century, international railway associations and international railway services increased. Furthermore, during the 20th century the international regulation and coordination of railway traffic in Europe seems to have been a main concern of international bodies that were established for dealing with important international political developments in Europe (in particular the League of Nations and The United Nations Economic Commission of Europe). Finally, the work of international railway organizations (UIC) and intergovernmental bodies (ECMT)²⁵ in drafting plans for European railway networks (of passenger and trunk lines), and in promoting the establishment of European services (e.g. transeurope express) and the creation of a common market for railways in Europe, indicate that international railway developments should be looked at as an important part of railway history as well as the history of Europe in general.

Throughout my research I will be looking at railway developments on an international level in a geographically defined Europe during the 19th and 20th century. My purpose is to look at visions that stimulated international railway developments within Europe (the establishment of international connections, promotion of interoperability between networks of different countries and establishment of international services). These visions can provide me with an insight to the changing ideas about Europe in what I propose as three different historical periods (see below). Thus, I can contribute to the body of literature on the history of the idea of Europe.

Furthermore, by looking at the way social and political scenarios (ideas and projects for a European railroad network) interrelate to technical factors in shaping railroad developments in Europe, I will try to show that the historical development of railways in Europe does not follow an internal logic of scale increase; railroads in Europe are shaped by constant negotiations among diverse actors. The current shape of the railroads in Europe is the result of contextual factors such as power games on a political level, political events and aspirations (expectations-visions) of a future Europe.

Thus, my research questions will be the following:

- How did an international railway in a geographically-defined Europe become possible? Who were the actors in this process and what did they envision?
- When did actors start thinking of railways in a European rather than national or international context?
- When and by whom were specific projects for the building of European railway network first formulated?
- Can we speak of continuity in international railway building between different historical periods? Or do discussions on a European railroad network inaugurate a new period in railroad history, a period in which actors look at railways for the first time from a new European perspective?

²⁵ ECMT worked on the development of European transport corridors in the 1970s.

4. Research Hypothesis:

I base the two research hypotheses that will guide my research on observations from my preliminary, exploratory research in archival material and secondary literature with regard to the history of railroads in Europe. My initial goal is to test both hypotheses. This concern has guided my selection of case-studies. However, I propose this as a flexible research design: in the coming years I will be focusing on testing my first hypothesis. Thus I will give priority to research of the case studies (international organizations) that will allow me to test this hypothesis. At the end of my first year and on the basis of the material that I have already collected I will be able to decide if I will extend my research to the rest of the case studies so as to test my second research hypothesis.

As my research so far indicates, the first plans for building a European railroad network were drafted in the second half of the 20th century.²⁶ The actors in this process were engineers, the administrators of the existing railroad infrastructure that were trying to preserve an important role for the railways in an era of great competition from other means of transport, and national governments that wanted to enhance the economy and political status of their country by improving its communication with the rest of the continent.

On the basis of this observation and the lack of material that shows that discourse on the building of a European railway network might have started earlier, I have formulated my first hypothesis: I see internationalization and europeanization as two distinct processes that characterize the history of railways in Europe in different historical periods. Internationalization concerns initiatives that transcend national borders (e.g. the construction of transnational lines that connected the railways of two or more countries) but are narrower in scope than Europeanization. Europeanization is a more concrete process and it is closely related to visions of Europe and projects for a European railroad network. The term Europeanization also implies an increasing consensus among different actors on what Europe is, a consensus that influences their ideas on the shape of a European railroad network. According to my hypothesis, Europeanization of railways started in the 1950s and was culminated in the 1970s with the formulation of projects for a European railroad network.

Both processes are relevant to my research. The process of internationalization that started in the 19th century gave rise to a railway infrastructure that transcended national borders and made international traffic possible. This infrastructure, due to its acquired momentum, provided the hardware on which actors built their views and plans of a European railroad network.

²⁶ The ECMT set up Eurofima: the role of this company was to finance the purchase of standard railway stock for European countries. *The European Conference of Ministers of Transport* (E.C.M.T.), Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 28. Rodney Leach and George McIsaac, "Blueprint for a European Railway", in R.G.I., April 1972, pp. 129-132, "UIC Drafts its Master Plan for Europe" in R.G.I., November 1973, p.429-431, "Europe's High-Speed Networks Take Shape, in R.G.I., December 1974, p. 469-471. So far in my research I couldn't find any plans or reference to a European railroad network before 1920. However, it is possible that further research will reveal earlier discourse on the emergence of a European railway network.

My second hypothesis concerns the early period of internationalization of railways in Europe. As my research so far indicates, in the early period of internationalization of railways, international organizations were formed out of the initiatives of specific national governments concerned with the establishment of international traffic. Such organizations initially played a role in the standardization of railway material (Union of German Railway Administrations- and later on, the Bern Convention on Technical Unit), the development and diffusion of technical knowledge (International Railway Congress Association) and in drafting the legal codes of international railway passenger and freight traffic (OTIF). However, these organizations didn't have any legal power to implement their decisions in their member-states (with the exception of OTIF); nation-states, and in particular national governments, had the power to decide on the routes that the lines in their territory would follow and on the implementation of what had been decided as technical standards in these lines. Consequently it seems that national governments, through negotiations and bilateral agreements, might have been the most important actors in making decisions on international railway connections and, thus, defining the route of international lines. Thus they were important actors in promoting the internationalization of railways in Europe. On the basis of this second observation, I derive a second hypothesis according to which internationalization in European railroads started as a highly decentralized process, out of national attempts to connect their networks to the networks of their neighboring countries with the ultimate goal of promoting their national interests.

In order to test my second hypothesis, I will look within the nation-state at the degree to which the construction of international lines and establishment of international traffic was influential in shaping national railways.

5. Research Time-Framework: Periods of Railway History in Europe.

The geographical area of my research will be Europe, while the time period that I propose to cover extends from the 1820s – to the 1970s. I selected the 1820s as a starting point for my research: this is the decade in which railway technology in the form of a locomotive running on iron rails was first introduced in Europe, and also worldwide.²⁷ The decade of the 1970s serves as an end decade for my research. During this decade projects for a European railroad network were formulated, while different actors (such as the UIC and ECMT) started working towards the realization of these plans. I divide the selected years for my research into three periods:

1. The first period: 1820s -1914:

²⁷ The first railroad line opened in 1825 in England. It was meant exclusively for industrial use connecting the areas Stockton-Darlington (39 km) *apa??a???? ? e?t???, ? ? ????????? S ?d??d??μ?? (1822-1910), Ge?p??t???, ? ?????μ???? ?a? ? ? ? ? ? ? ? ? ?ast?se??, ? ???d?s?, ? ???, ????a 1990p. 18.*

The main characteristics of this period are the introduction of railway technology and consequently the expansion of railway networks within nation-states, the establishment of the first international railway associations and the start of the first international services.

The construction and expansion of railways took place within a national context. Actors in this process were entrepreneurs and national governments that provided the capital for the construction of railways. In particular, Britain was the only country in which railways were built entirely by private capital. In the rest of the nation-states of Europe, national governments played an important role in promoting the building of railways either by undertaking the building of railways at their own expense, or by conceding advantageous financial terms to companies willing to undertake the construction of railways.²⁸ The expansion of national networks was followed by an intense activity at the international level to establish interconnections and interoperability between the independently evolving networks of nation-states. Actors in this process were national governments and international organizations. Early in this period the first international associations were established for setting technical standards and facilitating international railroad traffic both in terms of interoperability of rolling stock and in terms of settling legal issues at an international level. Such organizations were the Union of German Railway Administration (1849), the Bern Agreement on Technical Unity (TE, 1886), the Central Office for International Carriage by Rail, (COTIF, 1893), the International Railway Congress Association (IRCA, 1885) and the International Transport Committee (1905).²⁹

2. Second period: 1914-1945

Railway administrations and governments tried to cooperate on an international level in order to solve the intense problems that railways faced during this period. Such problems were mainly financial due to competition from the expanding road network and the damages that railways suffered during WW I.

In particular, since the beginning of the 20th century railway development in the European countries, with regard to the expansion of railway networks stagnated. The diffusion of the automobile and the expansion of road networks in Europe pushed railways into a secondary transportation role.. The situation intensified after the WW I. The "coordination" debate is one of the main issues that concerned most railway administrations and national governments in the 1920s and 1930s.³⁰

World War I had a negative impact in railways: railways suffered great damages during the war. A lot of capital was necessary for their restoration. Moreover, the changes in the political borders of Europe in accordance to the Peace Treaty created tensions between railway administrations on an international level. Disputes arose about the ownership and the right of exploitation of lines in areas of Europe where the political borders had changed.

²⁸ Patrick O' Brien (ed.), *Railways and the Economic Development of Western Europe, 1830-1914* (Oxford: The MacMillan Press Ltd, 1983).

²⁹ More information in regards to these organizations is given in the following paragraph.

³⁰ As is indicated by my research into issues of the Greek engineering journal *???*, and *?e????* *??????*, and the journal *Railway Gazzette* of the decades 1920s and beginning of the 1930s.

Railway administrations and governments searched for a collective solution to the problems that most of the railways in Europe were facing. Two international bodies were concerned with railway problems: The Transit and Communication Committee of the League of Nations (1919) which in turn set up the International Regime of Railways (1923). Its purpose was to help railways recover from the damages of the war. Furthermore, it would serve as a mediator in disputes about international railway traffic that arose as a result of the changing political situation in Europe. In 1922 the International Union of Railways was established (UIC). This was a result of the decision of the railway administrations of Europe to combine their efforts to combat the competition from automotive technology and to enhance the role of railways as a transportation medium in Europe.

3. Third period: 1950s to 1970s

In the post-war period railway's role in the transportation landscape in Europe increased. There were two main characteristics of railway development during this period: the first was an intense effort towards the reconstruction and renovation of railways in Europe with the development and implementation of new railroad technologies (e.g. electrification of lines and development of high-speed trains); this activity included the reestablishment of traffic in existing lines, but also later the creation of new lines (expansion of the railway network) and services. The second characteristic of this period was an increasing tendency towards the Europeanization of railways.³¹

A new period in railway history in Europe opened up in the 1950s. As my research so far indicates, a European focus is prominent in the thinking of actors that are concerned with international railway issues: international bodies drafted plans for a European railway network and pursued its establishment while promoting the creation of a common market with regard to railways in Europe. Developments that reveal this tendency were, among others, the establishment of the TransEurope Express Services in the 1950s,³² and the discussions and drafting of plans for the creation of a European high-speed passenger network and European trunk railway networks.³³ At a political level, the establishment of the High Authority of the European Coal and Steel Community commenced implementing common tariffs in the transport of coal and steel on the railways of the member-states and thus inaugurated a new period of common transport policy with regard to the railways of the member-states. Similarly, the European Conference of Transport Ministers, an intergovernmental association that was established in 1953, worked toward the standardization of railway rolling stock at the European level (creation of the Eurofima company in 1955), while, in the 1970s it cooperated with the UIC in drafting a plan for developing a European railroad network. (Map I)

6. Case-Study Selection

³¹ I used the term "Europeanization" here with the meaning that I gave to it in a previous paragraph in my essay.

³² "Ten Years of Trans-Europe Express" in *R.G.*, June 2, 1967, pp. 409-441.

³³ "UIC Working Party Looks at High-Speed Rail Links", in *R.G.I.*, March 1972, pp. 105, 6, and "Europe's High-Speed Networks Take Shape", in *R.G.I.*, December 1974, pp. 468- 474.

In the following paragraph I present what I regard as the most appropriate case studies to provide the material for testing my hypotheses and writing my thesis. I estimated the time that I need to spend in the archives on the basis of my first exploratory visits. However, I have not yet had the time to visit all the archives. Thus, for some of the archives I estimate the time and the material I can find there on the basis of descriptions from secondary sources or from sample material that my colleagues have brought with them after visiting these archives. I will be able to proceed with a final evaluation of the material that I can find there and the time I need to spend in these archives, after my exploratory visits to these archives, to take place within three months.

Furthermore, I would like to reiterate, that this is a flexible research design. I selected my cases in such a way that I can strategically narrow down my research to some of these in accordance with the quality of the material that I will find and the time in my disposal. Such a decision later on in my research will not threaten the validity of my conclusions.

(1) International Organizations

International organizations were forums where representatives of different nation-states met, discussed and took decisions on international issues with regard to railway developments in Europe. As such they can provide useful material for my research.

I will be looking at the activity of different types of international organizations (professional, inter-governmental, and supranational) during the 19th and 20th century so as to look at the role of different groups of people in promoting international railway traffic and their visions of future developments in Europe.

I will focus on organizations that were aiming primarily at the establishment of interoperability between railways of different countries by establishing technical standards, or organizations that they were responsible for handling legal issues that would make international passenger and freight traffic possible. Archives of organizations that had as their primary purpose the developments and dissemination of technical railway knowledge can provide additional material for my research.

I will look at the archives of the following organizations:

- **The Union of German Railway Administrations (Verein Deutscher Eisenbahnverwaltungen)**. The VDE was established in 1849 with the purpose of facilitating international railway traffic. It encompassed the German, Austro-Hungarian, Romanian, Dutch, Luxembourgish and Vienna- Warsaw lines.³⁴ During the second half of the 19th century the Verein developed technical standards.³⁵ Estimated time of research: 2-4 weeks.

- **The Central Office for International Carriage by Rail**, (COTIF) was set up in 1893, in Bern. It was the first intergovernmental organization concerned with issues of international railway traffic. It started as a series of conferences (the first of which took place in 1878) that led to The Bern Convention for the Transport of Goods by Rail (Convention International concernant le transport de Marchandises par chemins de fer, C.I.M) (1880). More specifically the C.I.M. dealt with the Commercial Conditions for the acceptance and conveyance of passenger and goods traffic; it

³⁴ "International Conference", in R.G., October 13, Vol, 37, 1922, p. 445.

³⁵ Puffert, 1994, p. 137.

defined the obligations and responsibilities of the various parties concerned.³⁶ The C.I.M. was signed by virtually all the standard-gauge countries of Europe.³⁷

Estimated time of Research: to be decided after my first exploratory visit in October.

- **The Bern Agreement on Technical Unity in Rail Transport** (Technische Einheit, TE) was founded in 1886 in Bern³⁸. It was the result of a series of meetings that began in 1882 and led to the International Protocol on the Technical Unity of Railways signed in 1886 and revised in 1907.³⁹ Its aim was to promote the interoperability of rolling stock. Through this organization governments coordinated the technical standards for railway stock and infrastructure for international traffic.⁴⁰

Estimated time: to be decided after my first exploratory visit in October.

- **The League of Nations:** The League of Nations (1919) was established after WW I (on the initiative of Woodrow Wilson and as a result of the Paris peace treaty) as an international body which would be responsible for the maintenance of peace at an international level and the promotion of economic and social cohesion in Europe. The Treaties of Peace assigned to it specific duties in the field of communications and transit. In particular the organization was called upon to deal with important problems which could be examined from the legal and technical point of view (to the exclusion of political considerations). The Geneva Conference of 1923 adopted a General Convention on the International Regime of Railways. As I mentioned above, prior to that date, a number of railway conventions and many bilateral agreements between railway administrations had been in force. However, this was the first attempt that was made to formulate and codify all the facilities necessary for the efficient international operation of railways, to specify the various obligations of states with regard to railway transport, and to prohibit discrimination in railway tariffs against the nationals or goods of foreign States.⁴¹ The General Convention on the International Regime of Railways came into effect in 1928.

According to the book *The Aims, Method and Activity of the League of Nations*, published by the Secretariat of the League of Nations in 1934, the Communications and Transit Organization have one of the most impressive records of all the technical organizations.⁴² Thus, the League of Nations can serve as an important case study for my research. The archives for the League of Nations are kept in Geneva, while part of the material can also be found at the Peace Palace (The Hague, Netherlands). I visited the Peace Palace archive in The Hague, where I found some of the material and in particular proceedings of the general Conference on Communications and Transit, and other issues of the *Series of League of Nations Publications*, on the organization of Communication and Transit. I am planning to visit the archives of the League of Nations in Geneva within three months.

³⁶ In 1985 the Intergovernmental Association for International Carriage by Rail (OTIF) was created as a successor of COTIF.³⁶

³⁷ Puffert, 1994, p.137

³⁸ Treichler, p.314

³⁹ Puffert, 1994, p.137.

⁴⁰ *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 11.

⁴¹ Secretariat of the League of Nations, *The Aims, Methods and Activity of the League of Nations*, Geneva 1935, p. 142.

⁴² Secretariat of the League of Nations, *The Aims, Methods and Activity of the League of Nations*, Geneva 1935, p. 140.

Type of Sources:

- Proceedings of the meetings, annual reports and other publications of the Special Committee on Transport and Communications and of the Convention on the International Regime of Railways.
- Official Journal of the League of Nations, (published by the secretariat in French, English, German, Spanish, Italian, and Czech): it contains among many other documents, the minutes of the meetings of the Council and Assembly, and the monthly summary of the work of the League.⁴³

-International Union of Railways (UIC): The International Union of railways was established in 1922. It held its first meeting in Paris. This meeting arose out of discussions by the Economic Conference of the League of Nations at Geneva. Approximately 70 delegates of railway administrations participated in its first meeting. The purpose of the UIC was the unification and improvement of European railway traffic conditions. As stated in an article published in the *Railway Gazette International*, "UIC was created for the very practical purpose of ironing out technical, operating and commercial barriers to the movement of international passenger and freight traffic in Europe. Out of this grew its secondary function as a clearing-house for information that was also of interest to the railways not physically connected to the European network."⁴⁴

According to my findings up to now, the UIC has been the most active organization in considering international railway issues since 1922. However, its role was mainly advisory, since it didn't have any power to implement its decisions. In 1948 other specialized railway organizations such as the European Timetable Conference sprung up around the International Union of Railways and it became the leader of railway associations and a point of reference for intergovernmental organizations.⁴⁵

As my research so far indicates, the UIC worked for the standardization of railway material in Europe, the compilation of international railway statistics (since 1925)⁴⁶, the drafting of plans for the building of European railway networks (passenger and trunk) and the establishment of services on a European level.

In particular, in the post-war period the work of the UIC in standardization of railway material and coordination of railway traffic in Europe resulted in the establishment of the "Office for Research and Experiments" (ORE) (set up in 1950 as a body of the UIC). For half a century ORE (the name changed later to ERRI) conducted investigative research with the purpose of promoting the use of standard

⁴³ Secretariat of the League of Nations, *The Aims, Methods and Activity of the League of Nations*, Geneva 1935, p. 192.

⁴⁴"International Union of Railways", in R.G., Vol 37, 1922, p.499.

⁴⁵ *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 15.

⁴⁶ The particulars in regards to the years 1925 and 1926 were published in the Bulletin of the Union (August, 1926, and August/ September 1927). From 1927 to 1939, the International Railway Statistics were published separately in two complete editions: French and German. From 1932 to 1939: a "key" English edition was also published. Since 1948 the Statistics have been published in French, English, and German...

material in the railways of Europe.⁴⁷ As a result of the activities of the UIC another company Interfrigo (Societe Ferroviaire Intenrationale de Transports Frigorifiques), was established in 1949. The purpose of Interfrigo was to promote and co-ordinate controlled temperature transport by railways.⁴⁸ The establishment of Interfrigo was an important point in the history of railways in Europe: this was the first time that railways transferred their managing or a part of their activity to a private company with a large degree of autonomy.⁴⁹ In the 1960s Interfrigo became one of the founding members of Intercontainer, a company that was set up at the end of 1967 to co-ordinate container movement on European Railroads⁵⁰. (Map II shows the network of activity of Intercontainer in 1970).

From the above it becomes obvious that the UIC can serve as a rich case-study for my research.

Kind of sources:

- Proceedings of conferences, annual bulletin, studies and any other publication concerning railway developments in Europe.

Estimated time of research: I will decide after my first exploratory visit within the coming three months.

Extensive reports on the activity of the UIC (and IRCA) are published in the journal *Railway Gazette* and later (1970 onwards) in the journal *Rail International* (a joint publication of the UIC and IRCA).

- European Conference of Transport Ministers:

The ECMT (European Conference of Ministers of Transport) was established in 1953, with a protocol that was signed in Brussels.⁵¹ One of the purposes of the ECMT as stated in this Protocol was to take measures for the achievement of the maximum use and most rational development of European inland transport of international importance.⁵² Thus, the ECMT worked on the standardization of railway material in Europe. In particular in 1955 it set up Eurofima, a company whose main role was the financing of common purchases of standardised rolling stock from the railways of the member-states. As my research in their annual reports reveals, in the 1970s transport ministers were discussing the development of European transport corridors and the establishment of a coherent European railway system of passenger and trunk lines.⁵³

Kind of sources:

- proceedings of conferences, section on railroads.

⁴⁷ www.erri.nl

⁴⁸ All international traffic under controlled temperature from a member railway administration was assigned to Interfrigo. "Interfrigo comes of Age, R.G.", September 18, 1970, p. 681.

⁴⁹ "Interfrigo comes of Age, R.G.", September 18, 1970, p. 681.

⁵⁰ *Railway Gazette*, Vol.125, 1969, p.453. (Includes a map of container services in operation and projected for 1970s.

⁵¹ <http://www1.oecd.org/cem/>

⁵² *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 18.

⁵³ ECMT, Annual Report, 1976⁵³

- records of the meetings of deputies,
- records of the meetings of ministers,
- annual reports of the ECMT
- resolutions,
- round tables: publications of the proceedings of workshops organized regularly on technical issues.

- **EU historical archives.** The first steps toward a common transport policy were made by the ECSC high authority which established common tariffs for the transport of coal and steel for the railways of the member-states.⁵⁴ In the following decade European Economic Communities was politically one of the most important forces shaping Europe's rail services⁵⁵. This, in combination with the fact that these were the only institutions (apart from the other historical bodies of what constitutes today the European Union) with authority to impose their decisions to the member-states makes their study interesting for my research. Thus, as part of my research I will be searching for and looking at articles on Transport Policy in the ECSC treaty, and the Treaty of Rome. Furthermore, I will be looking at the work (regulations) of the ECSC and the EEC on Transport policy in the following decades.

During my visit to the historical archives of the European Commission I found a lot of material on Transport Policy dating back from the period of the establishment of the European Coal and Steel Community.⁵⁶

Kind of sources:

Treaties, annual reports and other publications on transport policy: sections on railroads.

Estimated Time of Research (3-4 weeks)

Additional Material:

- The **International Railway Congress Association (IRCA)** was founded in Brussels in 1885 during a scientific Congress composed of delegates nominated by the Government and main railway administrations. IRCA was concerned with the development and dissemination of technical railway knowledge.⁵⁷

A first exploratory visit to the archives of IRCA revealed that there is not a lot of material for consultation. Annual Bulletins are available for the entire period of the existence of this organization (1885 till today). The material published in these bulletins consists mainly of reports of a technical nature about the development of

⁵⁴ During my visit in the archives of the European Commission I looked at a list of reports on tariffs for the transportation of steel and coal by ECSC , and later of the CEE, and had the opportunity to look at some of them more thoroughly. e.g. *Cooperation entre la CECA et la CEE pour une harmonisation des Tarifs des Transports*, Archives of the European Commission, Brussels, 1961.

⁵⁵ Rodney Leach & George Mclsaac, "Blueprint for a European Railway" in R.G.I, April 1972, pp. 129-132.

⁵⁶ In terms of regulation, a common transport policy is a definite aim of the Treaty of Rome Rodney Leach & George Mclsaac, "Blueprint for a European Railway" in R.G.I, April 1972, pp. 129-132.

⁵⁷ This organization aims at promoting the exchange of acquired experience and knowledge between its members. "IRCA was conceived as a means of bringing together railway operators from all over the world so that they could discuss common problems and exchange ideas. ("IRCA and UIC must find New Roles", in R.G.I., June 1974, p. 203).

different aspects of railway technology. The proceedings of its conferences are published regularly in the *Railway Gazette* and reveal the academic character of this association. Thus, I believe that research into the activity of this organization can best provide me with supplementary material for my research.

- **International Railway Transport Committee (CIT)** Research in the proceedings of the conferences of the CIT can provide insight into the developments on legal issues (legal standards) of international traffic in Europe. I do not yet have further information about this organization. However I am going to search for it in the coming months and consider further its importance as a case study for my research.

- **European timetable Conference and International Freight Train Timetable Conference:** The purpose of these conferences have been to draw up time-tables for international passenger trains and to plan international traffic movements in order to ensure the exchange of goods.⁵⁸ In particular the European Timetable Conference was set up in the 19th century and held meetings annually. The International Freight Timetable Conference was set up in the 1930s. A lot of information on these conferences is published in the *Railway Gazette*. I believe that it will be useful to follow the work of these organizations through the relative publications in this journal.

- **Internal Transport Committee of the United Nations Economic Commission for Europe, Transport Division:** it included three sub committees (on railroads, roads and waterways) a number of permanent or ad hoc technical groups and a secretariat that were assisting it in its work.

After my exploratory visit to the archives of this organization to take place within three months, I will consider its importance as a case-study for my research.

- The **ECITO (European Central Inland Transport Organization)**, an intergovernmental body, was set up in 1945 in London. Its was established by the Allied powers in order to help with the restoration of transport after WW II. Member states of ECITO were the following countries: Belgium, Denmark, USA, France, Luxembourg, Norway, Netherlands, Poland, United Kingdom, Czechoslovakia, USSR and Yugoslavia. After 1947 transport problems were taken over by the Internal Transport Committee of the Economic Commission for Europe of the United Nations Economic and Social Committee.⁵⁹ I will be looking for information on this Organization through the *Railway Gazette* and other publications.

- The **Organization for European Economic Cooperation OEEC** was set up in 1948 to implement the Marshall plan.⁶⁰ The OEEC included a committee for inland

⁵⁸ "Freight Train Timetable Conference" established in 1930. R.G, Volt 63, 1935, p.762.) *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 12.

⁵⁹ *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 14.

⁶⁰ *The European Conference of Ministers of Transport (E.C.M.T.)*, Booklet issued for the Centenary Session of the Committee of Deputies held in Stockholm on 10th June, 1969, p. 15.

transport. I will be looking for information on the work of this organization in publications in the *Railway Gazette*.

(2) Looking within the nation-state

Research within individual nation-states will allow me to look at the role of nation-states in international developments in the 19th century. I will be able to look at the logic that led national states to pursue and establish international connections, and at the degree to which this logic was influenced by visions of Europe. Thus, I will be able to look at national aspirations for an international order that did not find their way to international forums of discussion. In this way I can look at projects that were never realized and at a diversity of ideas about Europe.

In particular, I will be looking at the cases of two small countries, whose voice might have been less influential within international associations, Greece and the Netherlands. Both are small countries, in which the drive for international co-operation in the early period of railway construction was great. Both are in a geographically interesting location with regard to the rest of Europe: their access to the sea through their major ports, (Rotterdam and Pireaus) makes them potential routes of international traffic, and thus, potentially important as "European traffic corridors". By focusing on the early period of railway developments within these nation-states (19th century) I will be looking at the degree to which international considerations (the network's compatibility to the network of neighbouring or other European countries) influenced decisions on the shape of these lines. Throughout my research I will address the question of which visions of a broader railway network accompanied the construction of these lines and to what degree were these visions realized? Did discussions on a European railroad network shape ideas on the construction of these lines?

Thus, my research will be very specific. In the case of Greece I will be looking at the discussions in Parliament during the years that the decisions on the construction of major railroad lines were made (for Greece, these are the years 1884-5). Material that I have collected during my past research in Greek engineering journals of later periods can be very useful, since it provides useful information about these early developments. Reading of secondary literature and looking at Dutch railway journals of the 19th century will guide my research for the case of the Netherlands.

(3) Journals

I will collect important material for my research from two railway journals:

- *The Railway Gazette (1896 to 1970) and Railway Gazette International* (issues 1970- 1980): this is a very rich source of information on international railway developments. Due to the large number of international organizations, a journal like *Railway Gazette* can be very useful for my research. As my preliminary research in this journal has revealed, I can find there detailed reports of international railroad conferences, and on the work and the history of railway associations. Moreover, extensive information is given on the establishment of international services and the

composition of bilateral agreements on the establishment of interconnections between nation-states international railway traffic. (Estimated time of research: 3-4 weeks)

- ***Rail International (1970-1980)***: this journal is published jointly by the International Railway Congress Association and the International Union of Railways. (Estimated time of research: 1-2 weeks)

Epilogue (low priority)

This will be a comparative chapter. I will compare the historical development of railways in Europe (adopting an international perspective) to the development of railways in the U.S.A..I will look at the case of the U.S.A. on the basis of secondary literature. I will use this comparison to discern whether there is a specific pattern in European railway history (as seen from an international perspective), associated with the peculiar socio-economic context in Europe.

7. Planning for my activities in the next three years:

September 2004 - September 2005 (2nd year): during the whole year: learning Dutch and perhaps an introductory course in reading French.

September 2004- January 2005:

- 16th to 19th of September: attending the first international railway conference in Semmering (Austria). Working on the database. Attending SHOT conference, Participating in teaching
- Locate the archives of UIC and visit them (exploratory visit 2 to 3 days/ if they are in Paris). 1 to 1 ½ week.
- Exploratory visit in the Archives of the League of Nations, the United Nations Economic Commission of Europe, and L'Unite Technique, Technical Unit. (Switzerland, 1 ½ week).
- Exploratory visit in Bern: Union of German Railway Administrations and Convention for International Traffic by Rail.
(The purpose of these short visits will be to estimate the value of the material for my research and to calculate the time I need to devote in searching in this material and collecting what I think it can be useful for my research. Thus, I will be able to schedule my second visit there.)
- Spending 3-4 weeks on looking thoroughly at journals (*Railway Gazette* and *Rail International*), University library of Delft and Eindhoven, Railway Museum in Utrecht. Writing a paper on the basis of my findings in these journals.

Till January 2005, I will have an overall view of the material I can find in these archives, and thus, I can make final decisions with regard to additional international organizations that I would like to study or perhaps exclude from my research.

January 2005- September 2005:

- February: Exploratory visit to the library of the Railway Museum in Utrecht (opens in February) in order to look at the material on the history of the Dutch railways and in general of the archives of the National Railway Company of the Netherlands.
- Archival research in the ECMT: two to three weeks
- Brussels: historical Archive of the European Union: three to four weeks.
- Reading Literature on European history, railroad technique.
- SHOT or ICOHTEC: proposal for presentation of a paper in the upcoming SHOT or ICOHTEC meeting.
- During the first years I will be working also in my historiographical chapter.

September 2005- September 2006 (3rd year):

September 2005-January 2006:

- Looking at the archives of the UIC: if the material is so reach as I imagine, I may need 2 to 3 months.
- League of Nations, United Nations Economic Commission of Europe. (Estimated time of research: two to three 2-3 months)

January 2006- September 2006: Greek case

- COTIF, Union of German Railway Administrations and The Bern Technical Unit (three to four weekr)
- Looking at the case of Greece (two to three weeks: to the material that I have
- Looking at the case of the Netherlands (three to four weeks)
- Starting to write chapters: designing drafts on the basis of the material I have collected. Preparing a presentation for the up-coming SHOT meeting.

September 2006- September 2007 (4th year):

September 2006- January 2007: writing my thesis, presenting paper at SHOT, collecting any additional material of use for my research.

January 2007- September 2007: finalizing my thesis.

8. Structure of my Thesis

- 1. Introduction: literature review, research questions, aim of the project.**
- 2. 1st Period: The long 19th century. Expansion of railways in Europe; the international aspect of railways.**
 - 2.1. Chapter on History
 - 2.2. An outline of the developments of railway technology in Europe in the 19th century: expansion of railways.
 - 2.3. The formulation and work of the first international railway organizations.

- 2.4. Nation-State as an important actor in the development of transnational railways: The cases of Greece and the Netherlands.
- 2.5. Conclusion: What is the drive/visions behind the process of internationalization of railways in the 19th century?

3. 1914 to 1940s: railways in Europe in the interwar period.

- 3.1. Chapter on History
- 3.2. Interwar period. Railways and the work of the League of Nations (Communication and Transport Committee, Internatioal Regime of Railways).
- 3.3. The establishment of the International Union of Railways (UIC) and its work in the interwar period.
- 3.4. Conclusion: Can we find ideas on Europe related to the work of these associations? If yes, what image of Europe is projected through their work?

3. 1950s to 1970s: Building Europe on the Rails.

- 3.5. Chapter on History
- 3.6. The establishment and work of the European Council of Transport Ministers
- 3.7. UIC adopts a European approach to the railways. .
- 3.8. A new Era for Railways in Europe: Common transport policy in ECSC and EEC.
- 3.9. Conclusion: steps towards the Europeanization of railways.
4. Conclusion

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10. Appendix: Maps

Map I: UIC drafts its Master Plan for Europe, published in R.G. in 1973

Map II: Map of Intercontainer Service in Europe, published in R.G. in 1973

Map I.

