



Twenty Years under the Channel, and beyond: Capital and Governance in major infrastructure projects

*Vingt années sous la Manche, et au-delà :
Financement et gouvernance des grands projets d'infrastructure*

Second International Conference
Deuxième colloque international

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Mardi 8 décembre 2015

Our Partners for the International Conference



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Association pour l'histoire des chemins de fer

Rails et histoire - French Railway Historical Society

9, rue du Château-Landon F-75010 Paris

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Twenty Years under the Channel, and beyond: Capital and Governance in major infrastructure projects

Vingt années sous la Manche, et au-delà : Financement et gouvernance des grands projets d'infrastructure

Programme

09:30 Registration and Coffee

10:00 **OPENING KEYNOTE ADDRESS**

Christian de Boissieu, Professor of Economics, **Université de Paris 1 Panthéon Sorbonne**, Chairman of the **Franco British Council - French Section**, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

10.30 **SESSION 1 MAJOR RAILWAY INFRASTRUCTURE PROJECTS: DOES HISTORY TEACH LESSONS?**

CHAIR: **Richard Threlfall**, Partner, UK Head, Infrastructure, Building and Construction, **KPMG LLP**

10.30 **THE CHUNNEL IN HISTORY: BREAKTHROUGH OR CONTINUITY?**

Hugh Goldsmith, Head of Quality Management, **European Investment Bank**, and **Patrick Bœuf**, former Head of Division, Mobility Department, **European Investment Bank**

BELOW THE ALPS LYON-TURIN. THE 19th CENTURY RAILWAY TUNNEL AND THE PRESENT PROJECT THROUGH THE SUSA VALLEY

Andrea Giuntini, Professor of Economic History, **Università di Modena e Reggio Emilia**, Dipartimento di Economia Marco Biagi, and **Stefano Maggi**, Associate professor, **University of Siena**, Director of the Department of Political and International Science

Discussion

11:45 **Networking Break**

12:00 **A CASE STUDY OF THE POLITICAL ECONOMY OF HIGH SPEED RAIL FINANCE IN THE UNITED STATES: FLORIDA, 1981 TO PRESENT**

James Cohen, Professor Emeritus, **The City University of New York (CUNY)**, Associate Director, Research Initiatives, Institute for Transportation Systems (CUNY)

GOVERNANCE AND FINANCING: THE EXAMPLE OF CTRL

David Azéma, former CEO, **Eurostar**, Chairman, **Rails et histoire**

Discussion and chair's closing remarks

13:15 **Lunch, Le Bistrot (upon registration)**

**Twenty Years under the Channel, and beyond:
Capital and Governance in major infrastructure projects**

***Vingt années sous la Manche, et au-delà :
Financement et gouvernance des grands projets d'infrastructure***

Programme

14:00 **SESSION 2 GOVERNANCE, RISK AND CAPITAL IN MAJOR (RAILWAY) INFRASTRUCTURE PROJECTS**

CHAIR: **Jean-Pierre Ghuysen**, Inspecteur général de l'Équipement, ancien chef de la délégation française à la Commission intergouvernementale du tunnel sous la Manche (Grand Témoin)

14:00 ***PUBLIC-PRIVATE FUNDING FOR INFRASTRUCTURE PROJECTS –
THIRTY YEARS OF CONFUSION***

Roger Vickerman, Dean for Europe and Professor of European Economics, **University of Kent**, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

A REVIEW OF PPPs IN THE RAIL SECTOR

Julien Dehornoy, SNCF

Discussion

15:15 **Networking Break**

15:30 ***THE CHANNEL TUNNEL AND HIGH SPEED 1 – A LEGAL PERSPECTIVE*** **Patrick Mitchell**, Partner, Head of Infrastructure, UK & EMEA, and **Tim Briggs**, Partner, competition, regulation and trade, compliance and regulatory, **Herbert Smith Freehills LLP**

RISQUES, INCERTITUDES ET PLANIFICATION DES PROJETS DE LGV EN FRANCE. ANALYSE DES PRATIQUES ET PROCEDURES ET DE LEURS LIMITES

Dr Geneviève Zembri-Mary, Maître de conférences HDR en Aménagement et Urbanisme, **Université de Cergy-Pontoise**

PRIVATE INVESTMENT AND RENOVATION OF EXISTING RAILWAY NETWORKS

Christophe Pélissié du Rausas, Executive Vice-President, Programme Management, **VINCI**

Concessions, Chairman, **VINCI Railways**

Discussion and chair's closing remarks

17:00 **CONCLUSIVE KEYNOTE ADDRESS**

Terence R. Gourvish, Visiting Professor, Economic History Department, **London School of Economics**, and President, Business Archives Council, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

17.15 **End of Conference.**



Twenty years under the Channel, and beyond

Vingt années sous la Manche, et au-delà

Twenty years under the Channel, and beyond: Capital and governance in major infrastructure projects is the second international conference on the agenda of **Twenty years under the Channel, and beyond**, the research and events programme led by **Rails et histoire**, the French Railway Historical Society, to celebrate 20th Anniversary of the railway Channel tunnel and 30th Anniversary of the Channel Tunnel Treaty.

The topic for the programme is the Paris-London-Brussels Cross-Channel rail system in the broadest sense of the term, including the Channel Tunnel and its connecting high-speed rail links.

It has three targets:

- to ascertain the knowledge available about the Channel Tunnel rail link: experience, expert analyses, written sources, living memory and recorded oral history
- to gauge achievements at regional, national and European level and explain any disparities by comparison with the project's original assumptions
- to draw conclusions for future reference, in particular with regard with funding and operating arrangements for major transport systems.

Twenty years under the Channel, and beyond strongly encourages the dialogue between the academic world, corporations and administrations. Participants in the conferences are a mixture of transport, town & country planning, finance and economic sector protagonists and scientists, analysts and academics.

On a parallel, an oral history campaign is under way, and the programme should also be an opportunity to ensure the conservation of archival collections belonging to both companies and individuals, by making their owners aware of the historical value and importance of the documents in their possession and encouraging them to donate them to archival centres.

All are welcome to take a part in the open discussion which is one of the main objectives of the **Twenty years under the Channel, and beyond** programme.

The Partners for the Programme



Monsieur Christian Cambier

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Twenty Years under the Channel, and beyond: Capital and Governance in major infrastructure projects

Vingt années sous la Manche, et au-delà : Financement et gouvernance des grands projets d'infrastructure

Abstracts

Résumés

OPENING KEYNOTE ADDRESS

Christian de Boissieu, Professor of Economics, **Université de Paris 1 Panthéon Sorbonne**, Chairman of the **Franco British Council** - French Section, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

Professeur d'économie à l'Université Paris 1 - Panthéon-Sorbonne, professeur au Collège d'Europe à Bruges et membre du Collège de l'Autorité des marchés financiers, Christian de Boissieu a été membre de la Commission Attali, de la Commission du Grand Emprunt, président du Conseil d'analyse économique et conseiller économique de la Chambre de commerce et de l'industrie de Paris. Agrégé des facultés de droit et de sciences économiques, docteur ès-sciences économiques et diplômé de l'Institut d'études politiques de Paris, ses principaux domaines d'expertise sont : monnaie ; finance ; banque ; politique économique ; intégration européenne.

Christian de Boissieu a publié notamment *Économie contemporaine*, Tome 2, *Les Phénomènes monétaires* (avec Denise Flouzat), Paris, Presses universitaires de France, 2004 ; *Économie contemporaine*, Tome 3, *Croissance, mondialisation et stratégies économiques* (avec Denise Flouzat), Paris, Presses universitaires de France, 2006 ; *Défendre la France et l'Europe* (avec Ph. Esper, B. Bigot, F. David et Y. Th. De Silguy), Paris, Perrin, 2007 ; *Eurodefense. Pour une relance d'une Europe de la défense* (en collaboration), Édition Unicomm, 2009 ; *De la crise des subprimes à la crise mondiale* (avec P. Artus, J.-P. Betbèze, G. Capelle-Blancard), Paris, La Documentation Française, 2010 ; *Et si le soleil se levait à nouveau sur l'Europe ?* (avec J.H. Lorenzi), Paris, Fayard, 2013 ; *Les Systèmes financiers. Mutations, crises et régulation* (dir.), Paris, Economica, 4^e édition 2013 ; *Comment la régulation financière peut-elle sortir l'Europe de la crise ?* (avec François-Gilles Le Theule, Paolo Bailo, préface de Jean-Claude Trichet), Paris, La Documentation Française, 2014.

SESSION 1 MAJOR RAILWAY INFRASTRUCTURE PROJECTS: DOES HISTORY TEACH LESSONS?

CHAIR: Richard Threlfall, Partner, UK Head, Infrastructure, Building and Construction, **KPMG LLP**

Mr. Richard Threlfall has been UK Head of Infrastructure Building & Construction for KPMG LLP since 2011. Mr. Threlfall has over 15 years experience in the financing and structuring of infrastructure projects. Before joining KPMG, he was at Citigroup, and before that was employed as a civil servant at the UK Department for Transport where he held positions in the road, rail and aviation directorates. From 1996 to 1998, he served as Private Secretary to the secretary of state for transport and the Deputy Prime Minister.

THE CHUNNEL IN HISTORY: BREAKTHROUGH OR CONTINUITY?

Hugh Goldsmith, Head of Quality Management, **European Investment Bank**, and
Patrick Bœuf, former Head of Division, Mobility Department, **European Investment Bank**

This paper places the Channel tunnel project (the Chunnel) in a historical context of privately financed transportation mega-projects. We examine the extent to which the Chunnel represents a break or continuity with the past by looking at the technological, institutional and financial dimensions of innovation compared to previous projects. Although rightly hailed as an engineering triumph, the Chunnel's main innovation was in the scale and form of private financing. Rather than being something completely new, we argue that this was a reinvention of financing techniques commonly used in the latter half of the nineteenth century. The project's failings in terms of cost overruns, delays and over-optimistic demand forecasts certainly represent continuity with the past. In contrast to previous authors, we argue that the Chunnel should be portrayed as both a financial and economic success story. To support this case, we present a new simplified economic analysis suggesting a 3% to 6% return over the very long term. The Chunnel's place in history is assured, but its long term legacy and continued relevance will depend in part on how well we learn lessons for delivering the trans-European networks of the future.

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The Authors

Hugh Goldsmith works for the European Investment Bank (EIB) and is based in Brussels. With a background in consulting engineering, economics and research, Hugh has been involved in the design, appraisal and monitoring of global infrastructure investment projects for over 30 years. At EIB, he specialised in project finance and public private partnerships (PPP), including providing policy advice to the European Commission and IMF. Hugh is a regular visiting lecturer at UCL in the UK. His publications include papers on PPPs and the history of infrastructure. His conviction that the past holds valuable lessons for the present led him to sponsor the EIB Institute funded research programme "*The History of European Infrastructure Finance*".

Patrick Boeuf

Patrick Boeuf was up to 2014 responsible for the road sector in the European Investment Bank's (EIB) Projects Directorate. He joined the EIB in 1991 as a specialist in transport economics and finance, and has contributed to the appraisal of more than 100 transport projects financed by EIB in European Union (EU) and non-EU countries. He has also worked on various topics, such as EU transport policy, including the Trans European Transport Network (TENT), Cost Benefit Analysis and Public Private Partnerships. He holds a Degree in Civil Engineering and a Master's Degree in Economics.

BELOW THE ALPS LYON-TURIN. THE 19th CENTURY RAILWAY TUNNEL AND THE PRESENT PROJECT THROUGH THE SUSA VALLEY

Andrea Giuntini, Professor of Economic History, **Università di Modena e Reggio Emilia**, Dipartimento di Economia Marco Biagi, and **Stefano Maggi**, Associate professor, **University of Siena**, Director of the Department of Political and International Science

The tunnels through the Alps are considered as the greatest achievements in the realm of railway technology during the 19th Century. The first was the so called Mont Cenis tunnel, dug under the mount Fréjus between Modane and Bardonecchia. The paper compares the 19th Century 13.6 km long infrastructure and the current HST line project including a 57 km tunnel between Susa/Bussoleno and Saint-Jean-de-Maurienne. The comparison embraces not only the route and the structure, but also the importance for the region crossed, the financing of the two projects, the management between public and private enterprises. A key element for comparison is the traffic, expected and accomplished in the 19th Century, a forecast only for the 21st Century.

The construction of the Mont Cenis tunnel was decided in 1857 by the Kingdom of Sardinia, in order to establish a direct communication between Turin and the Savoy. There was no technical or economic certainty that it would be possible to complete the works. In 1860, after the Savoy was sold to Napoleon III, the tunnel became an international transit route between Italy and France, and the French government guaranteed its financial participation in the construction. Works on the Mont Cenis tunnel proved to be difficult and demanded careful studies drawn up by the best technicians of the time. The tunnel was finally completed thanks to mechanical drills.

The 13.6 km long Mont Cenis tunnel was inaugurated in September, 1871, two years after the Suez Canal. The first train ride between the two ends of the tunnel was 40 minutes long, when 12 hours were needed to travel by road. Later, the British Company Peninsular & Oriental, in charge of the India Mail service, connected London and the port of Brindisi in Southern Italy in 47 hours. The international railway route thus established was of great momentum for the new Kingdom of Italy, and a source of economic development.

The current 'Turin-Lyons' infrastructure project is a new international high-speed/high-capacity railway line of 235 km dedicated to freight and passengers transport between France and Italy through the Susa and Maurienne valleys, designed along the existing line. The realization of a new base tunnel of 57 km (originally 52) with two single track galleries is at the core of the project. Since the beginning of the 1990s and then again in the first years of the new century, it has been included among the strategic lines in the new high-speed European network. Following the preliminary agreement settled in 2001 between the Italian and the French governments, the project plan was prepared by the *Lyon Turin Ferroviaire* company in 2001. Three sections have been identified for the work, and route proposals have been made. Works began in 2005. After the treaties which have been signed between the two countries, in February 2015, the public promoter Telt (Tunnel Euralpin Lyon-Turin (50% Railways, 50% French State)), is responsible for the construction and future management of the cross-border section.

The project was positively assessed by the governments, but received strong criticism, especially in Italy, with the birth of some of the movements of protest and even violent opposition. The line has been, and still is, in the middle of a very turbulent and furious political debate. Local opponents, who are not under the umbrella of environmentalist movements or beholden to political parties, have paralyzed or even stopped construction with fierce sit-ins and radical clashes with the police. On the other side, the supporters of the project claim that such infrastructures are essential to the integration of Europe through mobility. Others argue that infrastructures mean modernization *tout court*, and deploy a very high level of rhetoric – sort of mystical view of infrastructures.

From many points of view this case-study is now the paradigm for the innovative relationship between large scale infrastructure projects and democracy. In the Italian case, the *participative process* went wrong, compared with the French mandatory *débat public*. The negotiation stage was poorly managed by Italian institutional power, and thus the social conflict inevitably escalated.

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- M. Merger, *Le projet de la ligne ferroviaire Lyon-Turin: "Trop grand, trop cher ou indispensable?"*, in *Verkehrsgeschichte. Histoire des transports*, édité par H.U. Schiedt ; L. Tissot ; C.M. Merki ; R.C. Schwinges, pp. 449-463.

The Authors

Stefano Maggi

Associate professor in Contemporary History, Director of the Department of Political and International Sciences at the University of Siena (Italy), where he teaches History of communications and transport and History of economy and territory. He lectured and presented papers at conferences in Italy and abroad. Member of research groups in a national and international context, he worked for public administration for the development of the railway heritage and transport networks. His studies mainly concern social transport history and sustainable mobility. Main book: *Colonialismo e comunicazioni. Le strade ferrate nell'Africa Italiana*, Naples, 1996, *Storia dei trasporti in Italia*, Bologna, 2009, *Le ferrovie*, Bologna, 2012.

Andrea Giuntini

Professor of Economic History, Università di Modena e Reggio Emilia (Modena, Italy), Dipartimento di Economia Marco Biagi, A. Giuntini, doctor in Economic History (Ph.D.) at the Istituto Universitario Navale of Naples in 1988, teaches Economic history at the University of Modena and Reggio Emilia since 2002. His research deals with contemporary economic history. Main fields of research: history of networks, energy, transport and communications, public infrastructure, urban history, postal history. Journals editorial board: *Ricerche Storiche*, *Memoria e*

Ricerca, Transportes, servicios y telecomunicaciones, Archivo per la storia postale. Latest publications: *Submarine telegraphy as a global emerging technology in the second half of the nineteenth century (1851-1902)*, in *Economics and politics in submarine telegraph cables (XIXth and XXth centuries). A global perspective between history, heritage and preservation*, edited by A. Giuntini and A.P. Silva, "Storia economica", 2013, 2, pp. 239-266; *La misura dell'Atlantico. I cavi telegrafici sottomarini e la percezione della distanza nella seconda metà dell'Ottocento*, in *Spazio e misura. Rappresentazioni, tecniche e modelli storici e geografici*, "Memoria e ricerca", a cura di C. Giovannini e A. Giuntini, 2014, 45, pp. 83-100; *Technology Transfer, Economic Strategies and Politics in the Building of the First Italian Submarine Telegraph*, in "History of technology", 2014, vol. 32, pp. 277-293.

THE POLITICAL ECONOMY OF HIGH SPEED RAIL FINANCE IN THE UNITED STATES: A CASE STUDY OF FLORIDA, 1981 TO PRESENT

James Cohen, Professor Emeritus, **The City University of New York (CUNY)**, Associate Director, Research Initiatives, Institute for Transportation Systems (CUNY)

Over the past 50 years, public authorities and private corporations have made many attempts to construct dedicated, very high speed rail lines in the U.S. (with trains running at maximum speed of 150 miles per hour and faster). Yet, to date, no new lines have been successfully put in place. Why not? Much of the research on this question examines the failure of rail promoters to develop viable financing for their projects. I, too, focus on finance, but within a broader context than has previously been considered. I locate financing plans within the history of American capital markets, and show how changes in those markets undermined the ability of promoters to attract investment for very high speed rail. In addition, I raise fundamental questions about when it makes financial sense to construct very expensive dedicated high speed rail infrastructure.

In 2012, *All Aboard Florida (AAF)*, a private rail corporation, announced plans to build a moderately high speed passenger line, on a 240 mile right-of-way, from Miami to Orlando. (Jaffe, 2013) Construction of stations in Miami and West Palm Beach began early in 2015, and trains will start running in 2017. *AAF* will be the first private entity to operate passenger service in the U.S. since the federal government nationalized railways in 1970. Miami-Orlando is the same corridor where, between 1984 and 2011, four different public-private partnerships (P-3's), and one State authority tried, but failed, to implement very high speed passenger service. Why did these P-3 projects fail, while privately-owned rail service is succeeding? Based on original archival research, interviews, and supporting documentation, my paper answers this question by analyzing the financial history of high speed rail in Florida, focusing on changes in American capital and credit markets since the 1970's. Additionally, I look at ways in which Channel Tunnel financing affected Florida P-3 rail initiatives; whether the *AAF* project should be considered a P-3 since it is seeking tax-exempt credits from the U.S. government; and the implications of changes in American credit and capital markets for current and future high speed rail projects in California, Texas, and other parts of the U.S., and for European countries interested in participating in American projects will benefit European and other foreign companies that wish to enter the American high speed rail market.

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The Author

James Cohen is Professor Emeritus, The City University of New York (CUNY), and Associate Director for Research Initiatives, Institute for Transportation Systems/CUNY. His current research concerns relationships between finance and speed. He is co-editing, with Professor Peter Lyth, a volume on the history of speed from multi-modal, multi-disciplinary, and transnational perspectives. Cohen’s publications include: “Le rail avant l’avènement de la grande vitesse : la vitesse des trains aux États-Unis de 1889 à 1980”, *Revue d'histoire des chemins de fer* (volume 46-47, Spring, 2015); “Financing high speed rail in the United States and France: the evolution of public-private partnerships,” with C. Kamga, *Research in Transportation Business and Management* (Volume 6, April, 2013: 62-70); “Financial Institutions and Structural Change in the U.S. Transportation Sector, 1870-1939,” *Journal of Transport History* (Volume 31:1, June, 2010); and “Divergent Paths, United States and France: Capital Markets, the State, and Differentiation in Transportation Systems, 1840-1940,” *Enterprise and Society* (Volume 10: 3, September, 2009: 449-497).

GOVERNANCE AND FINANCING: THE EXAMPLE OF CTRL

David Azéma, former CEO, Eurostar, Chairman, RAILS et histoire

David Azéma is Chairman of Global Infrastructure Group and Head of infrastructure investment banking for Europe, the Middle East and Africa for Bank of America Merrill Lynch. He has a law degree and is a graduate of Sciences Po (political sciences institute in Paris) and the Ecole Nationale d’Administration. He started his career in 1987 as an Auditor in the government accounting office. In 1993, after two years in the cabinet of France’s Minister of Employment, he joined SNCF, the French railway company, where he held positions as project manager reporting to the strategy department, advisor to the chairman and director of subsidiaries and investments. He

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moved to the UK to take up the position of chairman of ICRRL (Intercontinental and Regional Railways Limited) before becoming chairman and CEO of Eurostar Group Ltd, the subsidiary of SNCF, SNCB and Eurostar UK that operates the Eurostar high-speed rail service. He joined VINCI in October 2002 as chief operating officer of VINCI Concessions. In June 2008, David Azéma came back to SNCF Group as Chief Strategy and Finance Officer and became Deputy CEO in October 2011. He also became a member of Keolis' supervisory board in 2012. From June 2012 to September 2012, David Azéma was appointed Executive Chairman of Keolis. From 2012 to 2014 he was Commissioner for the French Government Shareholding Agency.

CHAIR: Jean-Pierre Ghuysen, Inspecteur général de l'Équipement, ancien chef de la délégation française à la Commission intergouvernementale du tunnel sous la Manche

Jean-Pierre GHUYSEN, ancien élève de l'ENA, a occupé différents postes dans l'administration des transports : conseiller budgétaire du secrétaire d'État en 1974 (où il a eu à connaître de l'abandon du précédent projet de Tunnel par le gouvernement britannique et de ses conséquences financières) puis directeur du Cabinet en 1977. Il rejoint Montréal en 1978 en tant que représentant permanent de la France au Conseil de l'Organisation de l'Aviation civile. À son retour en 1985, il est chargé d'assurer le secrétariat général du groupe d'évaluation du Lien Fixe Transmanche et participe également à ce titre aux groupes de négociations du Traité et de la Concession. En 1987, il est chargé de mission auprès du ministre délégué aux transports (où il suit également le dossier du TGV Nord). En 1989, il est directeur d'exploitation des Aéroports de Paris puis Directeur général-adjoint d'Air-France. Il retrouva le dossier du Tunnel en 1996, comme chef de la délégation française à la Commission intergouvernementale, responsabilité qu'il exerça jusqu'en 2006.

PUBLIC-PRIVATE FUNDING FOR INFRASTRUCTURE PROJECTS – THIRTY YEARS OF CONFUSION

Roger Vickerman, Dean for Europe and Professor of European Economics, **University of Kent**, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

The Channel Tunnel was hailed as the shining example of how private finance could be harnessed to deliver major infrastructure projects. Since the heady days of the early 1980s much has changed. Financial crises in Asia in the 1990s and then more recently world-wide reduced the amount of private money at the same time as public budgets were squeezed. In this overview we look at the way attitudes to Public-Private partnerships (PPP) have changed over the last thirty years and ask the question as to whether experience with the Channel Tunnel coloured later views. Starting with the question as to whether the Channel Tunnel was really a private sector financed project we look at the role of the public sector in leveraging private finance for major projects. The growth of PPP, and its variant the Private Finance Initiative (PFI), has been seen as a way of marrying public and private interests accelerating investments and increasing efficiency. However, experience has increasingly been that the PPP route is not guaranteed to lead to successful outcomes. The basic question in all cases is who bears the final risk from such projects and whether the public sector can ever succeed in shifting risk onto the private sector sufficiently to make a real difference. Experience with the Channel Tunnel can still offer useful lessons here, many of which continue to be ignored.

The Author

Roger Vickerman is Professor of European Economics and Dean for Europe at the University of Kent. He studied at the Universities of Cambridge and Sussex and after a period as a Research Fellow at Sussex and a Lecturer at Hull moved to the University of Kent in 1977, becoming Professor of Regional and Transport Economics in 1989 and Professor of European Economics in 1998. He was Head of School from 1993-1999 and again from 2005 to 2009. He founded the

Centre for European, Regional and Transport Economics in 1993 and has been its Director since then. He was also Director of the Kent Centre for Europe, a Jean Monnet Centre of Excellence.

He has held visiting posts at the Universities of Münster (Germany) and Guelph (Canada) and was Visiting Professor at the Institute of Transport Studies, University of Sydney (Australia) in 1999 and the Central European University in Budapest 2001-2005. He has worked as a consultant to the European Commission, the UK Government and Kent County Council. He was a member of the Planning Advisory Group of the Department of the Environment (1994-96), of the Standing Advisory Committee on Trunk Road Assessment, Department of the Environment, Transport and the Regions (1996-1999), and Economic Advisory Group of the Home Office since 2006.

He was a member of the Wissenschaftlicher Beirat (Scientific Advisory Council) of the Deutsches Institut für Wirtschaftsforschung (DIW), Berlin from 1998 to 2005, and has been a member of the Conseil Scientifique of the Groupement Régional Nord Pas de Calais pour la Recherche dans les Transports (GRRT), Lille since 1991. He currently serves on the Editorial Boards of *Regional Studies*, *Transport Policy* and *Letters in Spatial and Resource Science*.

In 2001 he was elected to the Academy of Learned Societies for the Social Sciences of which he was elected to the Council in 2007. In 2002 he was awarded the honorary degree of Dr. rer.pol by the Philipps Universität Marburg, Germany. He is also a member of the Academy of Social Sciences, the Royal Society of Arts and the Chartered Institute for Logistics and Transport.

A REVIEW OF PPPs IN THE RAIL SECTOR

Julien Dehornoy, SNCF

PPPs in the rail sector have become increasingly common in the last two decades. They have been praised and criticized for a variety of reasons. This paper provides a comprehensive study of all rail PPPs to date, in order to observe long term trends and to quantify the potential of failure or success of such PPPs. Our key finding is that optimization of risk management explains two major trends : (i) projects are moving from integrated, stand-alone systems toward sub-systems with complex interfaces with other networks or sub-systems, (ii) moral hazard, incomplete contracts and strategic behaviors create an incentive for concessionaires to make over-optimistic ridership forecasts and explain why most traffic-based concessions failed.

The Author

Julien Dehornoy, with a background in engineering and economics (Ingénieur des Ponts et Chaussées), is currently deputy director for the SNCF « région de Paris Sud-Est ». He was previously head of the cabinet of the President of SNCF, after an experience in railway infrastructure projects as CEO of SNCF America, head of Office at the French ministry of Transports and Rail sector analyst for the French Treasury.

THE CHANNEL TUNNEL AND HIGH SPEED 1 – A LEGAL PERSPECTIVE **Patrick Mitchell**, Partner, Head of Infrastructure, UK & EMEA, and **Tim Briggs**, Partner, competition, regulation and trade, compliance and regulatory, **Herbert Smith Freehills LLP**

Herbert Smith – the predecessor firm to Herbert Smith Freehills – was at the heart of both the Channel Tunnel and the High Speed 1 projects. In 1986, we were appointed by Eurotunnel in both England and France in the year that the consortium was awarded the concession. We advised on its debt financing and subsequent flotation at the end of 1987.

In 1994 we were appointed by London & Continental Railways, which was subsequently awarded the concession to build the Channel Tunnel Rail Link – now High Speed 1. We advised throughout the construction of the link, and on the various re-structurings of LCR, culminating on the successful sale of High Speed 1 to Canadian pension funds in 2010.

Both authors were involved in High Speed 1. Mitchell was a member of the team advising LCR from the date of our appointment and led the team through the final restructuring and the sale of the railway. Briggs advised on establishing the regulatory regime for High Speed 1 in preparation for its sale.

Our paper will look at the Channel Tunnel and High Speed 1 from a legal perspective: how the two projects were similar, how they were different, and what lessons we can draw for future major railway projects.

We are also going to consider how legal developments – particularly at the EU level – would make a difference to the way in which these projects could be undertaken today, and what that means for the next generation of railway infrastructure projects.

The Authors

Tim Briggs specialises in competition and regulatory matters with particular emphasis on the energy, water and rail sectors. He also advises on European Union procurement law and state aid. Tim spent two years on secondment to the UK Department for Trade and Industry (as it then was). He was a member of the team responsible for reviewing the UK's gas and electricity regulatory framework, which led to the creation of the *Utilities Act 2000*.

Tim has advised: Northern Ireland Electricity in connection with its 2012 price control review and, subsequently, on the reference of that price control to the Competition and Markets Authority; London and Continental Railways on the establishment of the bespoke regulatory regime for, and the subsequent sale of, the High Speed 1 rail link used by Eurostar and UK domestic high speed services; EDF on competition and regulatory issues relating to the construction of proposed new nuclear facilities in the UK; Virgin Trains on procurement law issues arising in relation to its bid for the West Coast passenger rail franchise and its subsequent challenge to the award decision; China Light and Power, and ExxonMobil on the amendment and renewal of regulatory arrangements applying to their electricity related activities in Hong Kong; the Northern Ireland Department for Regional Development on a comprehensive review of the water industry regulatory framework in Northern Ireland, including preparing new legislation and drafting the licence for the government owned water company; QinetiQ on procurement law and State aid issues arising in relation to its long term partnering agreements with MOD; Cabinet Office in relation to its pathfinder project for the "*mutualisation*" of public services.

Patrick Mitchell is Herbert Smith Freehills' Head of Infrastructure for UK and EMEA. He has over 20 years' experience advising on high-profile and highly complex project developments and the buying and selling of project assets in the Infrastructure sector, both in mature and emerging markets.

Career highlights include advising London & Continental Railways on the development of the Channel Tunnel Rail Link, now known as High Speed 1, for some 16 years, and being Team Leader for the period of construction completion, the final restructuring of the infrastructure and its privatisation in 2010. Patrick was also recently appointed to lead the Herbert Smith Freehills team in advising High Speed Two Ltd on the development of the HS2 railway – the most significant railway project in the UK and Europe, and the first new railway north of London in over 120 years. Another recent highlight saw Patrick lead the Herbert Smith Freehills team advising the Bazalgette Consortium on its successful bid to become the Infrastructure Provider for the £4.2 billion "super sewer" Thames Tideway Tunnel project.

RISQUES, INCERTITUDES ET PLANIFICATION DES PROJETS DE LGV EN FRANCE. ANALYSE DES PRATIQUES ET PROCEDURES ET DE LEURS LIMITES

Dr Geneviève Zembri-Mary, Maître de conférences HDR en Aménagement et Urbanisme, **Université de Cergy-Pontoise**

Dans un contexte de planification stratégique territorialisée (appelée aussi collaborative), le planificateur et le maître d'ouvrage font depuis plusieurs années face à d'autres incertitudes que leurs prédécesseurs de la planification rationnelle. Ils ne sont plus sûrs de réaliser un projet car ils ne plus sûrs d'obtenir les autorisations administratives (comme celles liées à la loi sur l'eau ou la DUP). Par exemple, aucune DUP n'a été annulée en Conseil d'Etat avant celle de la A 400 en 1995. Ils ne sont plus sûrs d'avoir les moyens financiers de réaliser le plan (alors que cela a été le cas pour une bonne partie des schémas autoroutiers avant 1998) et ils ne sont plus sûrs que la demande sera suffisante pour justifier le projet.

Ces incertitudes peuvent se caractériser de la façon suivante :

Le processus de décision relatif à la planification des projets d'aménagement n'est plus réservé à l'expert et au politique, mais s'ouvre à l'ensemble des citoyens depuis la mise en place du débat public en 1992 (circulaire Bianco) et en 1995 (loi Barnier). C'est un processus délibératif, multi-partenarial et multi-objectifs (Sfez, 1994), qui peut remettre en question les choix proposés par la puissance publique. Des exemples récents de l'actualité le montrent (recours contre la déclaration d'utilité publique de la LGV Lyon-Turin).

Prévoir avec fiabilité des trafics à une échéance lointaine est difficile eu égard à la volatilité des entreprises (dans un contexte économique incertain) et à l'évolution des modes de vie qui impacte les choix de mobilité des habitants. On s'interroge aujourd'hui par exemple sur la fréquentation de la future LGV Sud Europe Atlantique.

Le contexte de crise économique et financière rend le recours au financement public des projets difficile, et oriente parfois les décideurs publics vers les partenariats publics-privés, dont les actionnaires sont sensibles au retour sur investissement et à la limitation des risques et des incertitudes. Les banques prêteuses sont aussi soucieuses de limiter les risques liés à un projet.

Des projets peuvent être aussi en concurrence, ce qui rend leur fréquentation future (et leur rentabilité) plus aléatoires.

Enfin, la question de l'impact potentiel sur l'environnement qu'un projet peut générer est au cœur de la planification. L'application de la procédure sur les mesures compensatoires est restée limitée pendant les années 1970 à 2000 (Vanpeene-Bruhier, Pissard, Bassi, 2013) mais elle a été renforcée par les services de l'Etat avec la loi n°2010-788 du 12 juillet 2010 portant engagement national pour l'environnement. Ces mesures permettent d'obtenir les autorisations administratives nécessaires à la poursuite du projet. La compensation des impacts du projet sur l'environnement peut induire des risques de retard et de surcoût si elle est sous-évaluée par la maîtrise d'ouvrage et si elle ne permet pas d'obtenir les compensations.

Ce contexte peut générer des incertitudes et des risques pour le processus de planification, de décision et de conduite de projet. Ces risques sont multiples (Flyvbjerg, Rothengatter, 2008 ; Miller, Lessard, 2008). Ils peuvent être politiques, sociaux, institutionnels, financiers ou techniques. Le risque trafic peut occasionner un risque commercial pour l'exploitant.

Ce contexte incertain (Méric, Pesqueux, Solé, 2009 ; Callon, Lascoumes, Barthes, 2011) peut rendre le processus de décision et de planification vulnérable et flexible, et amener à modifier le projet, quitte à accepter de modifier les objectifs de départ ou un surcoût.

Dans ce contexte les pratiques des maîtres d'ouvrage publics et privés se sont adaptées. Elles

ont, notamment depuis les années 1990, formalisé des méthodes d'anticipation et de management des risques et utilisent des procédures issues de la réglementation (concertation continue, débat public, évaluation financière et environnementale liée aux risques, etc.).

La question de recherche traitée ici est d'analyser comment ces procédures et méthodes (utilisées de façon formalisée depuis les années 1990) permettent de diminuer l'incertitude et le risque et quelles limites elles peuvent rencontrer. Notamment, peuvent-elles générer d'autres risques ?

La communication propose de traiter les trois points suivants :

- Expliquer pourquoi des pratiques et des procédures d'anticipation et de management du risque ont été intégrées à la planification et à la conduite des projets. La méthode repose sur une analyse historique des textes encadrant l'évaluation socio-économique et environnementale des projets, la concertation et le débat public et sur des éléments de contexte ayant pu influencer ces pratiques comme la création de RFF en 1997 et le recours aux PPP à partir de 2004.
- Montrer en quoi les pratiques du secteur privé et du secteur public se rejoignent. La méthode est basée sur l'analyse historique précédente et des entretiens avec des maîtres d'ouvrages (SNCF Réseaux, Eiffage, Vinci).
- Montrer les limites de ces pratiques par une analyse des objectifs (desserte, aménagement, coût, délai, qualité, etc) atteinte ou non par des projets récents (LGV SEA, LGV BPL, LGV Perpignan-Figueras, LGV Lyon-Turin). Notamment ces pratiques et procédures permettent de « sécuriser » le processus de décision et de le rendre irréversible, ce qui peut être mal perçu par le public. Ces pratiques et procédures peuvent-elles générer de l'instabilité et d'autres risques qui ne permettent pas forcément d'atteindre tous les objectifs ? Y a-t-il alors trop de procédures ?

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L'auteur

Geneviève Zembri-Mary est maître de conférences HDR au département de Géographie et d'Histoire de l'université de Cergy-Pontoise.

Elle est responsable du master Exploitation et développement des réseaux de transport public. Elle est l'auteure d'une Habilitation à diriger des recherches récemment soutenue à l'université de

Lille 1 intitulée « Risques, incertitudes et flexibilité du processus de décision et de planification des grands projets d'infrastructures de transport ». Elle a travaillé de 2007 à 2014 avec la Bartlett School of Planning (University College London) et neuf autres universités d'Europe, d'Amérique du Nord et d'Asie sur une recherche comparative internationale intitulée « *Improving the treatment of complexity, uncertainty, and risk in the planning of urban mega transport projects face up to sustainable development challenges* » (financement Volvo Research and Educational Foundation).

Elle est l'auteure d'une quinzaine d'articles et de communications sur la prise en compte des incertitudes et des risques dans le processus de planification et de décision des grands projets de transport et des grands projets urbains.

PRIVATE INVESTMENT AND RENOVATION OF EXISTING RAILWAY NETWORKS

Christophe Pélissié du Rausas, Executive Vice-President, Programme Management, **VINCI Concessions**, Chairman, **VINCI Railways**

Mr. Christophe Pélissié Du Rausas serves as Executive VicePresident of Programme Management at VINCI Concessions at VINCI S.A. and served as its Director of Clientside Project Management. Mr. Du Rausas served as a Vice President of Southeast Europe of VINCI Concessions SA since 2004. Mr. Du Rausas joined VINCI in 1997, where he served as Head of Concessions at Campenon Bernard from 1997 to 1998, Deputy Managing Director of Campenon Bernard (now VINCI Construction Grands Projets) from 1999 to 2001 and Managing Director of VINCI Energies Nord from 2002 to 2003. He began his career at France's Ministry of Infrastructure before joining Spie Batignolles group, where he served in several management posts at Spie Enertrans. He serves as Chairman of VINCI Railways at VINCI S.A. Mr. Du Rausas is a graduate of the Ecole Polytechnique and the Ecole Nationale des Ponts et Chaussées civil engineering school, and holds a Postgraduate degree in Finance from Paris-Dauphine University.

CONCLUSIVE KEYNOTE ADDRESS

Terence R. Gourvish, Visiting Professor, Economic History Department, **London School of Economics**, and President, Business Archives Council, Member of the Scientific Board of Advisers for the Programme, **Twenty years under the Channel, and beyond**

Terry Gourvish is Visiting Professor, Economic History Department, London School of Economics, and President, Business Archives Council, and a Fellow of the Royal Historical Society. Known principally as a railway historian, he undertook commissioned histories for the British Railways Board in 1986 and 2002. In 2001 he was appointed an official historian of the British Cabinet Office, publishing in 2006 *The Official History of Britain and the Channel Tunnel* (Routledge). It was followed in 2008 by a history of the Strategic Rail Authority entitled *Britain's Railways 1997-2005: Labour's Strategic Experiment* (Oxford University Press). In 2003-4 he was an adviser to the House of Commons Select Committee on Transport, and in 2009-2010 adviser to the Department for Transport and HS2, contributing a report on *The High Speed Rail Revolution : History and Prospects* (2010).

General Information

Registration through our website www.ahicf.com is free and includes refreshments and lunch.

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Please note that food or drinks are not allowed in the **Ciné Lumière**.

Cloakroom / luggage room is provided inside the **Ciné Lumière**.

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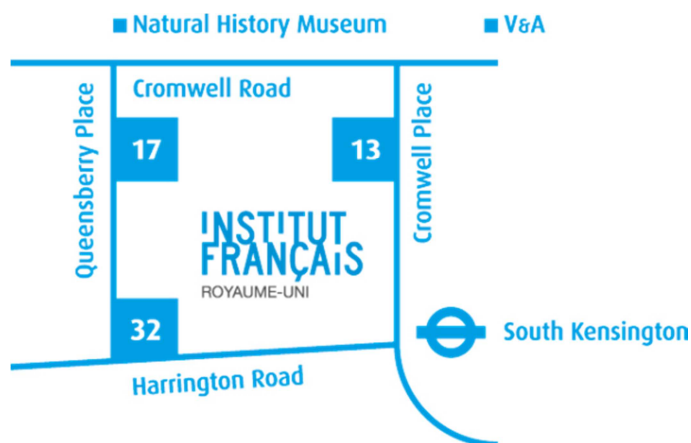
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