

Financing Eurotunnel

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Background

Eurotunnel is the largest privately-financed infrastructure in history by a long way. In what it has achieved it has been a stunning success—in its current financial situation it is obviously also a failure at this stage if measured by return on investment. This makes Eurotunnel unique and interesting in all sorts of ways. The intention of this article is to take you through the history of how the Channel Tunnel Project actually was made to happen, particularly in the financing area, what went wrong, and so far as it is possible without taking unfair advantage of hindsight, to draw some lessons which may be useful for other privately financed infrastructure projects.

Eurotunnel is the embodiment of the extraordinary engineering feat that is the Channel Tunnel, a feat that has captured the public imagination ever since the idea of a Channel Tunnel was first seriously considered 200 years ago.

The Channel Tunnel is comprised of three

tunnels connecting Britain to continental Europe from terminals in Folkestone in Kent, and Coquelles near Calais in northern France. The three tunnels are 50-km long, with 38 km under the sea. They are bored some 40 meters below the seabed in a layer of impervious chalk marl. Two are single-line rail tunnels, the third is a smaller service tunnel. It runs between the other two and acts as a permanent safe haven.

The Channel Tunnel took 7 years to build and is still the longest undersea tunnel in the world. Some 8 million m³ of spoil were excavated and used to create a new piece of land at the foot of the cliffs near Dover, and a new hill in northern France.

Train Services

Four types of trains use the Tunnel:

- Eurotunnel's own *Le Shuttle* services for cars, coaches and caravans
- *Le Shuttle Freight* for trucks (temporarily suspended)
- *Eurostar*, the passenger service oper-

ated by the British, French and Belgian railways

- Rail freight services operated by the British, French and Belgian railways

The first *Le Shuttle* carrying passengers and their cars journeyed to France on 22 December 1994.

Each shuttle has a locomotive at each end and travels at 140 km/h. Normal crossing time is 35 minutes, and the service operates 24 hours a day every day of the year. In 1996, *Le Shuttle* became the market leader on the Dover/Folkestone to Calais car crossing, carrying a total 2,076,954 cars and 57,962 coaches.

A quarter of the customers are business people, compared with only 10% of the market overall. Roughly the same percentage are families, some 22% are young couples and the rest, about 28%, are older couples or retired people. They travel for short breaks, long holidays or just day trips. Some buy their tickets well in advance, others just enjoy the facility of turning up and buying their ticket on arrival at the terminal. All, however, enjoy the speed and facility of the service.



View of two train tunnels and central service tunnel under construction at French side

(Eurotunnel)

Table 1 Promoters and Founder Shareholders

Construction Companies (Contract with TML for delivery of operational system)

- Five UK Companies (TRANSLINK)
- Five French Companies (TRANSMANCHE)

Banks (Arranging Eurotunnel Credit)

- Two UK Banks (Midland, Natwest)
- Three French Bank (Credit Lyonnais, Banque Nationale de Paris, Banque Indosuez)

Long History

The first idea for a Channel Tunnel was conceived in 1802; tunnelling was actually begun in 1882 but was soon abandoned. Then in 1974, a mile of tunnel was completed before the governments abandoned the project again because of increasing cost estimates.

In 1985, the French and British Governments issued an invitation to submit proposals for a fixed link—not necessarily a tunnel—between England and France. Contenders were given 6 months to submit an incredibly detailed set of plans (the paperwork filled 2 trucks). There were three or four serious contenders and the Eurotunnel proposal was chosen in January 1986, probably because it was technologically the simplest and financially the most robust. In the light of what we now know to have happened, this may seem surprising, but it is not difficult to speculate what might have happened had one of the other proposals been chosen.

Contract Complexities

The Channel Tunnel proposal was originally conceived as a combination of two functions: financing and construction, so it is natural that the two groups of promoters were banks and construction companies. The construction side was

handled by a massive consortium of 10 contractors called TransManche Link or TML for short, together with five banks, making 15 founder shareholders (Table 1) who put up the initial equity of £47 million (Equity 1). The founder shareholders were evenly divided between English and French, like almost everything else in this project.

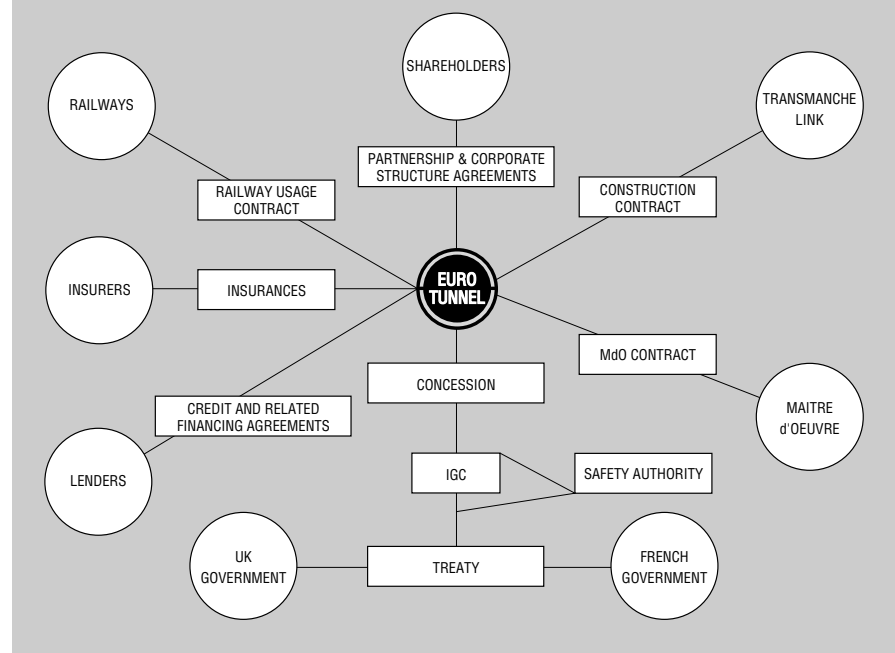
It is important to look at the network of legal contracts (Fig. 1) that define the project because in the early days

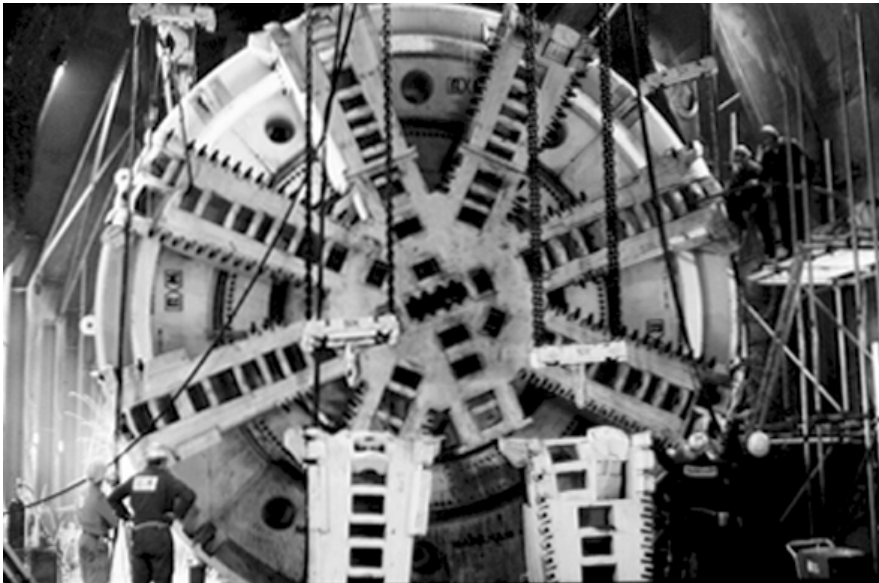
Eurotunnel as a company did not exist. All there was, was a series of contracts and a number of dedicated staff all of whom were on secondment from the interested parties.

The Construction Contract outlined without any great definition, most of the engineering work not just in digging the tunnel but also in setting up the physical side of the operations. This was a design-and-build contract between Eurotunnel and TML.

The Anglo-French Treaty and the Concession set the framework within which Eurotunnel operates. Article 1 of the Treaty states that, 'The Channel Tunnel Link shall be financed without recourse to government funds or to government guarantees of a financial or commercial nature'. This was the only basis on which British Prime Minister Margaret Thatcher would accept the project. The Concession was originally for a period of 55 years but was later extended to 65 years. It expires in 2052 and Eurotunnel then has to hand back the

Figure 1 Project Contractual Structure





Tunnel Boring Machine (TBM) - Eurotunnel was cut using 11 of these machines (Eurotunnel)

system in good working order. The Treaty provided for the setting up of a bi-national Intergovernmental Commission (IGC) and Safety Authority who monitor Eurotunnel's compliance with the Concession, and who have exercised considerable power over Eurotunnel's operations.

The Railways Usage Contract provides Eurotunnel's only committed source of income. Under this Contract, Eurotunnel is required to make half of the tunnel capacity available to the British, French and Belgian railways for their *Eurostar* and freight trains. In return, the railways pay a fixed charge and tolls based on the volume of traffic passing through the tunnel together with a contribution to Eurotunnel's operating costs. There is a minimum charge level, a mechanism to ensure a guaranteed level of cash flow to Eurotunnel over the first 12 years of operation. The Contract will provide 35%–40% of Eurotunnel's expected revenues.

The Partnership and Corporate Structure Agreements govern the relationship between the various subsidiaries within the Eurotunnel Group, and provide for a Joint Board for the Group.

The Maitre d'Oeuvre (MdO) is an independent Consulting Engineer who advises the IGC, the banks and Eurotunnel on construction safety, etc.

The Concession was awarded by the British and French governments to Eurotunnel in January 1986. One of the features that led to the award was the financing plan and the very early commitment in principle by 31 leading banks to underwrite the debt part of the funding.

Critical Period

The critical period in the formation of Eurotunnel was between January and September 1986 when the 10 construction companies and 5 banks negotiated among themselves two of the key contracts, namely the Construction Contract and the detailed term sheet for the credit facilities. A private placement of shares with institutions (Equity 2) was launched in October 1986. This reduced the 15 original promoters to minority shareholders.

One key question that could be asked is who represented the future shareholders during that critical period to September 1986? The banks argued that they had to represent Eurotunnel in dealing with the construction companies. There were also the equity advisers who had to consider the effects of both the Construction Contract and the banks' term sheet on the economics of the project and on their

ability to write a prospectus and underwrite a significant equity issue. Whoever did the job, there was no strong representative of the future shareholders to negotiate the two key contracts at arm's length with the contractors and the banks.

Increasing Equity

The completion of Equity 2 was a cliff-hanging saga and it almost failed. With hindsight, institutions were being asked to take more risk than they were prepared to accept. The legislation to ratify the Treaty and bring the Concession into force was not in place, the Credit Agreement was neither negotiated nor committed, the contract with the railways was still only outline terms and conditions (again not negotiated by the future shareholders) and the design of the project was a long way from completion. There was also an approaching general election in the UK which could have meant a serious delay if there had been a change of government. All-in-all, the reluctance of institutions, particularly in the UK where there was considerable opposition to the project, was understandable.

There were boardroom changes in early 1987 which brought Sir Alastair Morton in as the UK Co-chairman of the Eurotunnel Joint Board alongside André Bénard who was already French Co-chairman.

One of Alastair Morton's first steps was to recommend that the planned launch of the Equity 3 public issue should be postponed until after the summer of 1987. Eurotunnel needed this time to reduce the key risks still outstanding at the time of Equity 2. There was a general election, which meant a delay in completing the UK parliamentary processes until the end of July. The completion of the Railway Usage Contract took place around the same time. This was a difficult and well publicized negotiation.

Banking syndicate

The European Investment Bank's (EIB) participation as a co-financier in the project was a vital signal of European support for the project. An agreement was signed in September and greatly assisted the loan syndication which had to be completed successfully before the Equity 3 issue could be launched. Eurotunnel could not afford to have reports of reluctance in the banking community ahead of the approach to the equity market. However, one result, was a much larger syndicate of banks than anyone wanted. The group of 50 banks who underwrote the deal, syndicated it very successfully to over 200 banks. Eurotunnel was grate-

ful for the support, but it has nonetheless made the task of managing the Credit Agreement much more difficult. The loan agreements were completed in October subject to the equity issue going ahead.

High-Speed Line

One of the most helpful things leading up to the flotation was the announcement that the high-speed line, joining the Tunnel to Paris, Lille and the Belgian border, would definitely go ahead. Eurotunnel had been lobbying hard for this and it was vital to the success of the share launch since it reduced the London to Paris journey time to 3 hours, making the Tunnel very competitive with the airlines.

After completion of the funding arrangements in 1987, it was generally thought that 1988 would be a quieter year on the financial side while the tunnellers got on with their work. However, the first sign of the difficulties of managing such a complicated loan agreement and large banking syndicate became evident right away. Bank funds were only available after nearly all the equity funds had been spent.

Unforeseen Problems

In the financing package put together in 1987, there was a 25% cushion which most parties thought was more than sufficient. What went wrong? First, tunnelling



Aerial view of Folkestone Terminal

(Eurotunnel)

progress was initially poorer than expected (due in part to imprecise specification of the tunnel boring machines). The contractor had also underestimated the challenge of organizing the logistical support for the boring machines and the cost controls were not wholly adequate.

Second, there were some changes in the terminal and fixed equipment work. Third, the rolling stock costs had been seriously underestimated. The rolling stock itself was more complex than initially conceived and the market was very tight, resulting in higher than expected bids from suppliers. In addition, TML had made large claims for additional expenses and this affected the cost forecasts.

From mid-1989, Eurotunnel had to struggle to retain access to the Credit Agreement facilities and from October 1989, the banks had to waive a number of breaches of the Credit Agreement.

It took almost 18 months to develop and implement the second round of financing in November 1990. There was pressure from the banks to go to the market earlier, nevertheless the rights issue (Equity 4) was postponed until the first tunnel breakthrough, which provided a backdrop for a positive reaction. The banks' concerns were met by putting in place a trail-blazing 9 month unconditional standby underwriting agreement in May 1990. This satisfied the banks that equity would be available. In the end, breakthrough was achieved two days before the close of the equity issue.

The syndication of the planned additional £2 billion credit facility was another Eurotunnel cliff-hanger, and it was only with considerable help from the four agent banks (Midland, Natwest, Credit Lyonnais and Banque Nationale de Paris) that a funding level loan of £1.8 billion was reached. EIB was again very helpful in agreeing that its £300 million parallel line could be considered additional funding, thus getting over the £2 billion target.

Additional Claims

During 1992, difficulties started to appear again, as TML launched a claim for additional construction costs of some £1.5 billion. Eurotunnel considered this so outrageous that it went to the Disputes Panel set up under the Construction Contract. However, the Panel ruled that the matter should be dealt with at a higher level by the Arbitration Tribunal. In the meantime, Eurotunnel was compelled to pay £50 million a month to TML as interim funding. This was a severe blow, although it was reversed when the dispute was eventually considered by the Arbitration Tribunal.

It was becoming evident that, while Eurotunnel had sufficient funds to open, there would be a need for further funds after opening, mainly to pay bank interest until cash flow breakeven.

Again, Eurotunnel had to operate under waiver from the banks and wanted a bridging arrangement to defer any equity funding, if it was needed, until after the first full summer of operation. A long waiver was agreed together with a

programme to develop a funding plan with the banks. The usual debate followed about the needs for equity, the amount and the timing.

After considerable discussions, Eurotunnel reluctantly agreed to raise equity at or around the date of the official inauguration by Her Majesty, Queen Elizabeth II and President Mitterrand in May 1994. The target was broadly 50/50 debt and equity.

The final problem was that the construction companies were behind schedule making negotiations more difficult for Eurotunnel. This led to an agreement in July 1993 to separate the claim from the construction work, while Eurotunnel would take on much of the commissioning to proceed from the completed tunnel to a fully operating company.

The site was handed over to Eurotunnel in December 1993. The contractors' main claim was settled in April 1994 considerably reducing the uncertainty for existing and potential investors. There was also a claim from Eurotunnel Consortium Wagon Group (ESCW), led by Bombardier, for additional costs on *Le Shuttle* wagons. This was settled in November

Table 2 Equity Issues (FFr10 = £1)

	£ Million	Timing
Equity 1 (Founder Shareholders)	47	September 1986
Equity 2 (Private Institutional Placement)	206	October 1986
Equity 3 (Public Issue)	770	November 1987
Equity 4 (Rights Issue)	566	November 1990
Equity 5 (Rights Issue)	793	May 1994
Units Issued to Bombardier (ESCW Settlement)	35	June 1994
Exercise of Warrants and Options	17	June 1994
	<u>2434</u>	
Potential Additional Equity:		Final Exercise Date
Founder Warrants (Underwritten in 1994)	48	June 1995
1993 Warrants (Issued to Unit Holders)	158	October 1995
1992 Warrants (Issued to Underwriting Banks)	25	March 2000
Bank Warrants (Still to be Listed)	37	March 2000

1993.

A prerequisite for the launch of the rights issue in 1994 (Equity 5) was obtaining the first operating certificate from the IGC. Investors had to know that the system worked. A certificate covering all four services using the Tunnel would have been preferable, but only the initial certificate for *Le Shuttle Freight* was awarded, and they were barely operating.

On the debt side, these project milestones were also important, but in addition the banks, particularly those in Japan, wanted evidence of continued official support for the project. After prolonged discussion, the two governments agreed to extend the Concession by 10 years and Eurotunnel dropped certain claims against the governments. This was an important signal for the banks.

New Funding Round

The 1994 round of funding added a new feature to Eurotunnel's financing—known as Senior Debt. Many alternatives were considered in a series of discussions which developed into one of the most intense and prolonged arguments of the project's history—mostly between the banks themselves.

Table 2 shows the equity issues. The equity issues were larger than by normal standards of the equity market, and it was creditworthy that after one sizable equity issue, Eurotunnel succeeded in returning to the market twice with further very large issues. The warrant issues listed under potential additional equity sources are now history. The first one, the Founder Warrants was successful because TML was obliged to take them up as part of the settlement. The second—£158 million due in October 1995—did not succeed, because the share price was too low. The purpose of issuing the original warrants was to interest French investors since the travel privileges offered to shareholders

Table 3 Debt Structure
(FFr10 = £1 = US\$1.50)

- £6.8 Billion Junior Credit facilities (Advances and Letters of Credit)
- Parallel Loans – EIB £300 Million
– ECSC £200 Million
- £647 Million Senior Credit Facilities (Advances)
- Co-Financing Facilities – EIB £1 Billion
– Credit National FFr2 Billion (Originally FFr4 Billion)

The co-financing facilities are secured by Letters of Credit under the Junior Credit facilities.

They are not additional funding but give Eurotunnel access to long-term fixed rate funding.

were only really of interest to the British. This is just one example of many enormous complications involved in making a bi-national issue and dealing with regulations of the London Stock Exchange as well as the Bourse de Paris.

Debt Structure

Table 3 shows the debt structure. The loan is currently structured in 12 tranches to accommodate different currencies and different types of loan. Administering this innocent-looking structure even without a crisis in the company is a very complicated task. The problem is that no matter how hard lawyers try to account for



Unloading car from tourist shuttle

(Eurotunnel)

every eventuality, no matter how many hundreds of pages of clauses they draft, the documentation simply cannot meet the test of reality. So what happens is that exemptions and waivers have to be sought, and frequently the documentation itself has to be changed, which means drawing lawyers back into the process at large cost. In principle this should be done reasonably smoothly but when there are more than 200 banks amongst whom agreement is required, the difficulties can only be imagined.

Restructuring

Increasing expenditures and delayed opening led to further difficulties and on 14 September 1995, Eurotunnel announced suspension of interest payments for 18 months.

Difficult negotiations with the banks led to the appointment of an independent arbitrator in February 1996. Finally, in October 1996, the Steering Group representing the syndicate of 220 banks agreed in principal to the restructuring plan outlined in Table 4.

Based on this agreement, a final settlement about debt restructuring was expected to be reached with the syndicate of 220 banks and shareholders in early 1997. During the summer and autumn of 1996, both passenger and freight traffic through the Tunnel was growing fairly rapidly and prospects seemed better. However, a fire in the England-bound Tunnel on 18 November, thought to have originated from a truck, was a serious blow, resulting in the continued suspension of freight traffic and restricted passenger services.

In February this year, Eurotunnel and the banking syndicate agreed to postpone a final settlement until the autumn. ■

Table 4 Restructuring Plan

<ul style="list-style-type: none"> ● The Plan must ensure that Eurotunnel's capital structure is sufficiently robust to accommodate wide variation in financial performance in the years ahead. ● The plan relates to an estimated \$8.7 billion of Junior Debt and unpaid interest outstanding as of October 1996. ● A debt equity swap at 130p per Unit. This will reduce outstanding Junior Debt by £1 billion. A further £3.7 billion of Junior Debt will be converted into new instruments to be created as part of the restructuring plan. Indebtedness will be reduced by the redemption in Units of £1 billion of these instruments by 2003. ● The interest rates on the Junior Debt and new instruments are fixed for 7 years at levels significantly below market rates. ● Under the terms of the restructuring plan, interest that cannot be paid when due in cash is settled with notes which do not bear interest for the next 9 years. ● The restructuring plan also results in a significant lengthening of the maturity profile of Eurotunnel's debt. ● Existing Eurotunnel shareholders will be diluted by the restructuring plan, but they will have the opportunity to retain a clear majority of the enlarged equity. 	<ul style="list-style-type: none"> ● Following the debt equity swap, existing shareholders would retain approximately 54.5% of the enlarged equity. However, it is intended that shareholders will be able to participate in this issue on a basis to be agreed. ● Shareholders' interests may be reduced further to 39.4% by 31 December 2003 as part of the restructuring. However, existing shareholders will be issued with free warrants entitling them to subscribe, prior to that date, for a proportion of the Units that would otherwise be issued to redeem instruments issued to the banks as part of the restructuring. This gives shareholders the opportunity to increase their stake to 51.3%, in addition to any participation by existing shareholders in the initial debt equity swap. ● The ability to start paying dividends and their subsequent growth will depend in the first instance, on Eurotunnel's operating performance over the next 10 years. Strong operating performance should allow a first dividend to be paid within that time frame.
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Mike Grant is a Chartered Civil Engineer and a Fellow of the Association of Corporate Treasurers. He has an MBA specializing in finance. Since joining Eurotunnel in 1987 as a Senior Financial Analyst, he has held the positions of Head of Investor Relations and, most recently, Corporate Finance Manager. In his current role as Group Treasurer, he is responsible for the Treasury, Corporate Finance and Bank Relations departments.