Fle

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Policy Unit

MR TURNBULL

cc Mr Redwood
Mr Owen

CHANNEL TUNNEL LINK

In line with our conversation the other day, I am minuting you purely for advance information.

1. The recent history

In June 1982 an Anglo-French Study Group (AFSG) comprising officials from the UK and French Governments completed an assessment of six options for a fixed Channel link - three tunnel schemes, two bridge schemes, and a composite bridge and tunnel. It found in favour of a double bore rail only link. (The term 'double bore' is slightly misleading, as there would be a third bore running between the other two for maintenance and emergency purposes).

Armed with the AFSG analysis, the two Governments asked an independent group of banks (comprising NatWest, Midland, Banque Nationale de Paris, Credit Lyonnais, and Banque Indosuez) to assess the financial feasibility of all the schemes proposed, to advise on a legal and organisational structure and to devise financial concepts.

The Banking Group delivered Part I of its Study in July ±983. This confirms the AFSG recommendation that the double bore rail link was the preferred option, financially as well as technically.

Part II, which deals with the financing arrangements and the legal, organisational and political aspects of the link, is due to be published late this month or early next. It seeks specific responses from both Governments, and in my view will re-awaken public interest in the project after years of hibernation.

2. What will Government be asked to do?

It will be asked:

(a) To approve the idea of a fixed Channel link.

(b) To approve the recommended form of link.

(c) To agree a legal and organisational structure.

(d) To make certain political and financial guarantees, which themselves are bound up with the selection of a financial structure.

(e) To fund part of the Development Phase Costs, which are put at £18 million over two years at 1983 prices. This phase covers project detail design, legal and parliamentary drafting, and fund raising.

Commitment to (e) above will be taken as commitment to the project unless insuperable technical obstacles arise.

Finally, the report seeks responses from both Governments within six months.

3. <u>Why a Fixed Channel Link and why this form of Link</u>?

I understand that the need for a link is based on forecasts of increasing traffic demand as used in the 1982 AFSG study. I expect to obtain the up-dated calculations shortly. Suffice it to say for the moment that the fixed link promoters see the markets for the link as freight, the business traveller and the holiday-maker in that order.

The double bore rail tunnel was chosen because it offered the least technical risk in combination with the greatest financibility (the two are of course related). Bridge schemes were ruled out as too hazardous to be insurable, and in view of the long bridge spans which would be involved, technically too risky as well. Tunnels for road vehicles over such a length present unsolved problems of ventilation and a relatively high risk of accident hazard. The composite Euroroute scheme which involves a bridge out to an island, then down to a cast iron tunnel lying on the seabed, then back up to an island and bridge, was ruled out on grounds of time scale and financibility (again, the two are related) and technical uncertainty.

The scheme proposed provides a rail shuttle between a site near Folkestone and a site near Calais. The shuttle will accommodate passengers and roll on/roll off vehicles from cars up to heavy lorries. It will also permit long distance through services by rail for passengers and freight, between UK and Continental destinations.

4. Legal and Organisational Structure

What is proposed is an Anglo-French Government to Government Treaty which gives birth to an Anglo-French Channel Tunnel Authority which in turn will produce a Joint Venture Agreement binding two national companies. An Arbitration Body is also proposed. It is intended that the Treaty should give the Authority a fifty year licence to operate the link.

5. Financial and Political Guarantees

The two principal problems are:

(i) The scale of the finance to be raised and

(ii) The differing attitudes of the Conservative UK and the Socialist French Governments.

5.1 Taking finance first, we should note that statements of cost of the various options in 1983 money are entirely misleading. The period of detail design (two years), construction (upwards of six years) and operation before cash neutrality is reached (upwards of a further eight years) mean that financing costs will greatly outweigh those of labour and material inputs. The recommended dual bore rail link is priced at £1.9 billion in 1983 money, but at roughly £5 billion in outturn terms. Euroroute, c£5 billion in current money, is forecast to cost £50 billion plus in outturn terms.

Furthermore, it is highly desirable, and probably essential that the scheme promoters should be assured of access to funds over the whole period of 16 to 20 years before cash flow turns positive. Finance on a year by year basis does not look suitable.

There is, according to the Banking Group, no tried and tested method in the Western World of financing such a large single project over such a long period; so novel methods will be required. These are complicated by the fact that the UK side wishes to see its half share privately financed while the French wish their half share to be under public ownership. Furthermore, the French, it is said, will take a deeply suspicious view of the untrustworthy British, who have pulled out before. They will look for especially tight guarantees of continuity.

The Banking Group has outlined two financing concepts, known as 'Procedural Structures' 1 and 2. Structure 1 is essentially a UK proposal and Structure 2 the French proposal. I attach a summary of both procedures in the Annex to this note, with key points underlined.

5.2 In reality it is hard to distinguish a dividing line between political and financial guarantees.

Towards the political end of the spectrum are guarantees of non-cancellation (other than for insuperable technical reasons) and the provision of planning consent and connecting infrastructure.

At the financial end lie some form of contribution to the Development Phase Costs, guarantees of further funds if costs over-run even the insured limit, and some form of support to the Link Company when it needs to convert bank debt to bond financing. The thought here is that the Company will need Triple A rating to bring this off, but that it will have too little record to have earned it, so that some sort of guarantee might be needed.

6. Presentational Issues

Once Part II of the Banking Group Report is published, the ball will effectively bounce into the court of the UK and French Governments. Both will need to play a shot, and not take too long over it.

At very least, each Government will have to say whether or not it supports the idea of a fixed Channel link and whether it supports the particular scheme recommended. There will of course be a cacophony of lobbying throughout - from the anti-link groups, from rival scheme promoters (especially, I think, Euroroute), from the road and rail lobbyists, from MPs and MEPs, from industry, and of course, from the French. It will seem like A320, but much much worse.

All that apart, the Governments will have to decide whether they can reach any decision in the six months suggested, let alone commit to a financing procedure and the legal/operating proposals. In the case of A320, we took six months to get from final proposal by British Aerospace to an announcement of go-ahead. Can we expect to do the same for the Channel link, with a recess occurring part way through?

Do we have the right Government machinery in place to look at the scheme in detail? I doubt it. For instance, if we wanted to recheck the market for the fixed Channel link, and therefore the commercial soundness of the scheme, how would we do it? How will we communicate simultaneously with banks, promoters, and the French Government? Do we entrust the lead role to the Department of Transport, and if not where else?

To use a fashionable phrase, I do not see the fixed Channel link as a grade A banana skin. But I well recall the Prime Minister's opening remarks at the meeting of E(A) which took A320 - 'this looks pretty bad, so I guess we'll have to do it.'

R.J.

ROBERT YOUNG

Financing Concepts

A private sector led financing for a project of the size and nature of the Channel Link is unprecedented. Consequently it has not been possible to provide a tried and tested financing plan. This factor coupled with a strong demand on the French side that there must be Government undertakings to ensure completion of the Link on this occasion has led to the preparation of two Financing Plans referred to as Procedural Structures.

Procedural Structure I is essentially the work of the UK Banks and Procedural Structure II is essentially the work of the French Banks. The two concepts are outlined below on a comparative basis.

All figures are in £ millions and estimated repayment dates are based on January 1986 start of construction and the Medium Traffic profile.

The Internal Rate of Return of the Project is;

Base Case	Overrun Case
17.6	15.6

Procedural Structure I / Procedural Structure II

(a) Financing Structure

Procedural Structure I: Concepts not well known within all sectors of the European and full International Banking Markets but have a similarity to those used in the USA for construction of utilities. However, such a financing structure has never been used for a project of the size and nature of the Channel Link.

Procedural Structure II: Concepts well known to International Banking markets as they have a similarity to those used in natural resource and related primary industry projects. However, some aspects of the financing structure have never before been presented to the markets.

(b) Funding

Procedural Structure I: Requires all funds to be committed prior to start of construction.

Procedural Structure II: Require progressive commitment of funds during the initial years of construction.

(c) Investors

	PS I Base Case	PS I Overrun Case	PS II Base Case	PS II Overrun Case
Total Capital	£ 540	£ 849	£ 540	£ 540
Above in 1983 terms	£ 393	£ 542	£ 393	£ 393
Return to investers	20.4	17.3	21.6	19.9

Procedural Structure I

The major part of equity is raised by issue of Convertible Loan Stock with further stock being issued in lieu of interest payments. Investors are allocated 25% of net revenue after payment of debt interest throughout repayment period subject to principal repayments being met. All excess revenue will be for the account of investors.

Procedural Structure II

The major part of equity is raised by issued of Convertible Loan Stock with further stock being issued in lieu of interest payments. Investors are allocated 10% of net revenue through the repayment period and share up to 50% of future excess revenue with non-recourse lending banks and Indexed Bonds holders until all debt has been repaid.

(d) Lending Banks: Non-Recourse Loan (NRL) risk

	Structure I Base Case	Structure I Overrun Case	Structure II Base Case	Structure II Overrun Case
Maximum NRL	£5,398	£5,936	£3,493	£3,329
Above in 1983 terms	£1,920	£1,776	£1,242	£ 996
Year of Final Repayment	2000	2002	2002	2002

Structure I:

Commitment from outset includes a specified amount of additional non-recourse monies in the event of limited cost overrun.

Substantial cost overrun cover to be provided if possible by the insurance market and/or in case of need Governments/EEC. In addition lending banks have a re-financing risk for which particular support is required from Governments/EEC.

Structure II:

Commitment is expected to be after the first two years of construction. Funds provided in a manner which permits a progressive increase of non-recourse drawings within an overall committed limit. Normally, two years after completion all bank debt should be non-recourse.

Lending banks do not take any cost overrun risk before completion of the service tunnel but thereafter they may have to share additional cost overrun risk unforeseen at that time.

(e) Contractors: Terms of Contract and Constructors Loan Stock (CLS) Risk

	Structure I Base Case	Structure I Overrun Case	Structure II Base Case	Structure II Overrun Case
Maximum CLS Value	0	£1,018	N/A	N/A
Above in 1983 terms	0	£ 235	N/A	N/A
Year of Final Repayment	-	2004	N/A	N/A

Structure I:

The terms of contract proposed involve acceptance of an overall target price. In addition certain uninsurable risks, if they occur, will result in issue of Constructors Loan Stock in lieu of direct payment. In effect this is a prescribed method of extended retention.

Structure II:

The terms of contract are not prescribed and it is envisaged that they would follow the cost reimbursable standard pattern established by Governments relative to major infrastructure projects

Procedural Structure I

(f) Insurance Market

All normal levels of insurance cover for construction and operation of a major infrastructure project will be obtained plus, to the extent possible, cover against failure of individual contractors and suppliers.

In addition insurance cover will be sought relative to major unforeseen cost overrun with particular emphasis on technical/geological difficulties and interest charges during resultant delay. The cover is intended to be obtained either through a direct claim insurance or by way of surety.

Indicative figures are £500 million for construction problems (increasing with inflation) plus £500 million fixed for interest charges.

Procedural Structure II

All normal levels of insurance cover for construction and operation of a major infrastructure project will be obtained plus, to the extent possible, cover against failure of individual contractors and suppliers.

No additional insurance cover is envisaged.

(g) Governments/EEC

(i) Risk taken pre-completion

	Procedural Structure I: Base Case	Procedural Structure I: Overrun Case	Procedural Structure II: Base Case	Procedural Structure II: Overrun Case
Recourse Loan (RL)				
Maximum RL	0	£4,605	£ 868	£ 952
Above in 1983 terms	0	£ 691	£ 366	£ 338
Year of Final Repayment	-	2011	1995	1997
Indexed Bonds (IB)				
Maximum IB Value	N/A	N/A	£3,211	£8,008
Above in 1983 terms	N/A	N/A	£ 572	£1,428
Year of Final Repayment	N/A	N/A	2005	2009

NOTE: If it is not possible to issue Indexed Bonds then an equivalent Recourse Loan or Normal Bond attracting interest at 13% p.a. would increase the Governments/EEC guaranteed debt by £2,218 million in the Base Case and £5,214 million in the worst case of Cost Overrun and Low Traffic.

Procedural Structure I

Procedural Structure II

(ii) Risk Taken Post-Completion

Revenue Bonds
(RB)

	Procedural Structure I Base Case	Procedural Structure I Overrun Case	Procedural Structure II Base Case	Procedural Structure II Overrun Case
Maximum RB Value	£5,290	£5,758	N/A	N/A
Above in 1983 Terms	£1,222	£1,120	N/A	N/A
Year of Final Repayment	2007	2013	N/A	N/A

Governments/EEC must assess and accept technical and economic risk from the outset. At such time they are required to provide undertakings to cover uninsurable substantial cost overrun risk and post completion revenue decline risk after transfer of the Non-Recourse Bank Loan to the Bond Market.

The former referred to as a Continuity of Funding Undertaking is needed to support the raising of additional funds in the event of unforeseen cost overrun. However, the impact of the undertaking should be alleviated in terms of volume by virtue of initial commitments from investors, lending banks and contractors plus the provision of insurance cover. Furthermore the undertaking can only be triggered if the project is still demonstrated to be economically viable when calls for assistance are made.

The latter referred to as a Bond Issue Support Agreement is required in order to facilitate the transfer of non-recourse bank debt progressively to the capital markets by issue of Revenue Bonds. Such action is intended to take place as from the third year of operation. The acceptance by Governments/EEC of this post completion revenue decline risk is mitigated by the fact that Revenue Bonds can only be issued after it has been demonstrated that the estimated future net revenue over a maximum period of 25 years from the date of each issue is sufficient to repay the bond amount at maturity.

Governments/EEC must assess and accept full technical and economic risk from the outset. Initially Governments/EEC are committed to accept the market risk in case of any failure in the non-recourse loan syndication which is not strictly due to a deterioration in the project economics. Secondly, when bank debt is committed a part of it will be guaranteed until such time as any recourse drawings are converted to non-recourse debt in accordance with declining cover ratios on regularly re-estimated future net revenue. Governments/EEC must also undertake to guarantee the necessary level of Indexed Bonds to complete the base case financing plan. All cost overrun arising or estimated to arise before completion of the service tunnel are also guaranteed together with a limited stand-by bank loan arranged for covering cost overruns arising after completion of the service tunnel.

All of the guarantees required from Governments/EEC are intended to have concise limiting terms and conditions and the impact of some of them should diminish over time. Others are conditional upon events presently unforeseen such as failure of bank loan syndication, and construction cost overrun. All are limited by the requirement of continued economic viability of the project throughout the construction period. However, at start of construction Governments/EEC will bear all risks other than a downturn in project economics during the initial construction years. Furthermore, it has to be assumed that they will be bound politically to complete the project.

Procedural Structure I	Procedural Structure II

Both Procedural Structures require Governments/EEC support relative to:

- Development Phase costs, estimated at £18 million in 1983 terms;
- Political abandonment of the project: the notion of political risk covers any governmental act which either cancels or destroys the equilibrium of the project at any time during its life;
- Provision of all connecting infrastructure by or prior to the estimated completion date of the project.

(h) Assessment

It may be concluded that Procedural Structure I could be acceptable to Governments/EEC in so far as the levels of support required from them are considered to be the absolute minimum needed for implementation of the project. However, the risks proposed for investors and particularly lending banks are substantial. Therefore overall acceptability to all parties involved cannot be prejudged.	It may be concluded that Procedural Structure II could be acceptable to lending banks in so far as their assumption of non-recourse is geared to progressively increasing knowledge of project economics. However, the risks proposed for investors and particularly Governments/EEC are substantial. Therefore overall acceptability to all parties involved cannot be prejudged.

Conclusion

The two financing concepts presented are not mutually exclusive, there are obviously many variations inbetween and a definitive financing plan can only be reached by negotiation. If the two Governments are prepared to enter into discussions with the Banking Group then it should be possible to establish an initial financing plan that can be tested in the market. Although such a market test would not be conclusive it will enable Governments to obtain a clearer appreciation and understanding of market capacity.