



Mr Schlar ✓

10 DOWNING STREET

→ Mr ~~Rehett~~  
~~Mr Hoskyns~~

Please see the attached.

The PM is seeing Mr MacGregor  
at 0930 next Tuesday  
to discuss his Eurovante  
proposals. If you have any  
comments, perhaps you  
could give them to Michael  
Schlar by Monday evening.

We have no comments  
(esp. at such short notice)  
13/11 Obviously much effort  
will be needed to analyse  
both cost/benefit & risk for  
Euro.vante vs other projects. It

EUROROUTE: BRIEF FOR PRIME MINISTER'S MEETING WITH MR MACGREGOR, BSC.  
17 NOVEMBER 1981

## BACKGROUND

### EuroRoute

1. EuroRoute is a Group set up by Redpath Dorman Long (a BSC subsidiary) and Sir Robert McAlpine & Sons Ltd. It is advised by Lazard Brothers (on finance) Mott, Hay & Anderson (on engineering) and Coopers & Lybrand (on traffic and revenue). Mr MacGregor, Chairman of BSC, originated the EuroRoute scheme for a fixed Channel link. His interest stems largely from involvement in the Chesapeake Bay crossing, a similar scheme built in the USA. He discussed it with the Secretary of State (Mr Fowler) on 11 February. A note on BSC's involvement is at Annex A. Sir John Howard is an engineer who has also shown a keen interest in the proposal.

### The Scheme

2. The EuroRoute project (March 1981) is one of eight schemes submitted, and proposes a combined viaduct bridge and immersed tube for road and rail. Twin viaducts from the English and French coasts span inshore shipping lanes carrying roadways to artificial islands (where frontier controls would be located) at the edges of the main shipping lanes (8 - 10 km out). The roadways then continue in immersed tubes alongside a railway which is in immersed tube throughout. The railway is an essential part of the ventilation for the road. Three ventilation islands are needed as well as the two main islands.

### Cost

3. EuroRoute estimates that the link, including road infrastructure at portals would cost about £3,800M at mid 1980 prices (nearly £4,000M at Jan 1981 prices). This estimate excludes the cost of rail facilities at portals, rolling stock, and inland road and rail infrastructure which could add more than £500M to the total cost (Jan 1981 prices).



## Traffic

The proposed link would cater for all types of road and rail traffic, for which EuroRoute gives the following estimates for traffic in 2000:

rail passengers (m. crossings)	10
passengers with cars (m. crossings)	9.1
rail freight (m. tonnes)	4.2
road freight (m. tonnes)	8.6

## Finance

5. The promoters are confident of their ability to raise private finance, including provision for overruns but have not specified likely sources. The amount of equity would be small, though some loan finance might involve a degree of participation in profits. Government indemnities covering political cancellation, delay in provision of public sector infrastructure, interference in commercial operation and changes in the tax laws would be required.

## Current Position

6. <sup>Decision in the year it was</sup> Mr Fowler hoped that a decision in principle on a fixed Channel link might be reached by the end of 1981, but initial discussions with French officials suggest that the French Government may need a little longer. Some provisional conclusions should be reached in early 1982 but it is not yet possible to be certain how detailed these will be. Mr Howell's minute of 27 October (at Annex B) gives the background.

## Provisional DTP View of Scheme

7. The proposal is very ambitious, but well thought out and presented. EuroRoute's financial and engineering consultants are amongst the best in the world, and much detailed planning has gone into the scheme. However, the scheme combines the practical problems of bridges with those of immersed tubes in a difficult location; bored tunnels would avoid these difficulties but could not provide for direct road transit.



There would be serious navigational problems. The Channel is the world's busiest international waterway. During construction, the laying rigs for the tubes would be stationary and huge prefabricated sections would be on tow in the Channel. Once completed, the inshore viaducts (which could not economically be proofed against every type of collision damage) and artificial/ventilation islands would pose a serious permanent hazard to shipping. Reaching an international agreement on the placing of obstructions in the Channel would involve lengthy and complex negotiations. There are no precedents for dredging and laying tube sections at such depths and in such weather conditions. No equipment capable of doing this work exists. The scheme is costly and there is a high risk of time overrun, caused by the need to develop special equipment, carry out extensive geological surveys and undertake complex negotiations (within the Inter-Governmental Maritime Consultative Organisation). There is a significant risk of a shipping incident during construction. Should the structure be abandoned before completion, or damaged thereafter, obstructions in the Channel would have to be removed which might cost as much as had been spent up to that time. Since the company might not be able to pay for removal or repair, or arrange insurance, liability could well fall on the two Governments.

8. Much of the inspiration for this scheme comes from the Chesapeake Bay crossing in the USA. While it is of similar scale, there are several important differences between this crossing and the proposed Channel Link. Chesapeake Bay is within US national waters, it is relatively shallow and lightly trafficked, mostly by US Navy ships. (It has, nevertheless, been hit 5 times since being opened.) The Chesapeake Bay crossing is not thought to operate profitably.

#### Views of the Department of Industry

9. Annex A sets out Department of Industry's views as BSC sponsor.

In summary three of the schemes under consideration are steel intensive -



EuroRoute itself, and two bridge schemes. The remaining options, mostly bored tunnels, would use much less steel but would provide some welcome business to BSC. In every case we must assume that at least half the steel would come from France. The relative shares of UK orders taken by BSC and by private steel makers depends on the types of steel required, but BSC would expect to gain 80-95 per cent of the orders for EuroRoute (but rather less for either of the bridges).

10. All three schemes would help to safeguard jobs and improve profitability in BSC and, to a lesser extent, in the private sector. But the effects would not be dramatic. If BSC gained the maximum share of steel orders for EuroRoute, that might safeguard about 400 jobs over 5 years in BSC (but not create new ones) and might add up to £5M a year to the Corporation's profits. These results would be proportionately reduced for the less steel-intensive schemes.

11. The effect on Redpath Dorman Long, BSC's constructional steelwork subsidiary, would be welcome. It is a prime candidate for privatisation, and the prospects of a major flow of new work would improve the likelihood of privatisation if current negotiations for a merger with Trafalgar House fell through.

#### EuroRoute Publicity

12. EuroRoute has conducted a well managed publicity campaign, concentrated largely on the scheme's direct effect on the UK economy, and in particular, on employment. EuroRoute claims that about 100,000 jobs could be created for 4 or 5 years in the UK alone, largely in depressed areas where the structure might be prefabricated. EuroRoute has done some fairly intensive lobbying in Parliament and maintained contact with officials (including French officials).



#### LINE TO TAKE

13. EuroRoute should not be offered any direct encouragement in view of the British doubts as to practicability and cost and the French Government's need to consider further.

14. Hence, the Prime Minister is recommended to give Mr MacGregor's presentation a full hearing and to assure him that bilateral discussions with the French will consider all available options, including EuroRoute, and in particular, none of the schemes submitted to the Secretary of State will be excluded from the joint study.

15. As to timing, Mr MacGregor might be reassured that HMG and the French are pressing on with the fastest practicable timetable, but that we might need a little longer than the rest of 1981 in which to reach some decisions of principle.

#### POINTS TO MAKE

16. Technology: This is a very ambitious scheme, some elements of which stretch the limits of existing technology (dredging and laying tubes at these depths and in such exposed and busy waters). Why is such an option considered preferable to one of the simpler options such as either a bored tunnel or a straightforward bridge?

17. Employment: EuroRoute claims that 100,000 jobs would be created in the UK alone. Would a further 100,000 jobs be created in France? Can we be sure that the prefabricated tunnel and viaduct sections will be made in the UK? What longer term employment gains and losses have been estimated following completion?

18. Capital Costs: What is the likelihood of serious time and cost overruns? How does the possibility of cost overrun affect the raising of finance?



19. Timetable: Discussions with the French have recently begun and a final decision will therefore take rather longer than originally expected. How does this fit in with EuroRoute's timetable for developing the scheme and raising the finance?

20. Monopoly: Unlike some smaller scale options (particularly the single track rail 6 metre tunnel), this form of link might establish a dominant position in the short sea market. Any disruption of services through the link would thus have very serious consequences. Why should the two Governments put all their eggs in one basket? Has EuroRoute any detailed thoughts on the degree of Government pricing control that might be necessary in the link's operation?

21. France: How strong is support in France? What benefits would accrue there?

#### CONCLUDING REMARKS

22. Mr MacGregor and Sir John Howard might be thanked for their presentation and reassured that a decision will be taken by the two Governments as soon as practically possible. They should also be reminded that both Governments will have to contemplate the likely consequences of a fixed link (or of no fixed link) very carefully before that decision is reached.



FROM  
SIR JOHN HOWARD, D.L., D.Sc., F.I.C.E.

VICTORY HOUSE,  
MEETING HOUSE LANE,  
CHATHAM, KENT, ME4 4PP.  
MEDWAY (0634) 402040

20 August 1981

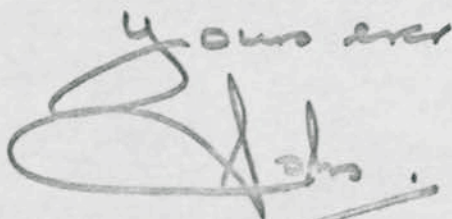
Ian Gow Esq MP  
10 Downing Street  
London SW1

*Dear Ian.*

As requested by Mr Ian MacGreggor, I am enclosing herewith a brief confidential memorandum on the EuroRoute project for the Prime Minister to see before the meeting with her, which you have kindly said you would arrange.

I hope this meets your requirements. I assume you have already had the brief version of the Scheme, but please let me know if you require further copies.

Kindest regards,

*Yours ever*  


John Howard



To the  
Prime Minister

EUROROUTE

Free Enterprise Road and Rail Channel Crossing

The EuroRoute proposal for a combined road and rail fixed channel crossing was conceived by Mr. Ian MacGregor (Chairman of the British Steel Corporation) and is based on similar successful fixed water crossings carried out at Chesapeake Bay (U.S.A.), Hong Kong and in other parts of the world. The main feature of its design is based on the modular system of prefabrication adopted for the building of the Mulberry Harbour in 1943 and its methods are now extensively used by oil companies operating in the North Sea.

The route to be followed would be from North of Folkestone to Cap Gris Nez. The EuroRoute system is a combination of 'above' and 'below' water construction which, for psychological and ventilation reasons, it is important to reduce to a minimum the length below water. Two large concrete islands built on the coast would be floated and sunk into position 19 Km apart, one each side of the main deep water shipping channel. Between these two islands submerged tunnel units would carry 4 road lanes for vehicular traffic and 2 rail lines. These two islands would be quite extensive and would be used for customs and other facilities.

From the English coast to the West Island the roads will be carried above water on viaducts and likewise from the East Island to the French coast.

It must be stressed that this is a free enterprise scheme financed entirely without relying on money from the taxpayer or from any nationalized industry.

It is known that the British Government is now considering several forms of a fixed channel crossing but an early decision is now awaited as to which project the British Government is going to encourage.

Will they choose :-

(a) a rail connection alone by tunnel (bored or submerged) without any provision for vehicular traffic, considered to be of limited usefulness  
or

(b) a combined road and rail crossing such as EuroRoute which would cater



for the needs of the 21st Century and beyond, which if we are going to remain in Europe must be considered of importance.

If the crossing is left as a monopoly in the hands of the two Nationalized industries, the British and French Railways, both influenced by strong Trade Unions, there must always be a risk to the public and industry by interruption to a regular service and doubt as to whether it would be possible to operate an economic fare structure.

The construction of a bored tunnel alone would allow work being carried out only at its two ends and would throw considerable congestion on these two localities, particularly in Kent. It relies mainly on one type of labour and would do little to relieve the national unemployment problem. Moreover its construction could be easily disrupted by industrial action, delaying completion and increasing the cost of financing it.

The EuroRoute, although more costly, is a complete answer to the channel crossing problem. It is designed on the unit or modular form of construction, a method well tried by the construction industry and would not disturb unduly the environment of Kent as the design enables units to be built round the coast of England, Wales and Scotland (and to a lesser extent in Northern Ireland) and mainly at many different places of high unemployment. These units, in steel and concrete, are built at many points round our coast, towed by water and correctly sunk in position on the site of the channel crossing thus largely relieving construction traffic on our roads.

This dispersal system of construction involves many small firms as well as large in the construction and general engineering industries and because of its wide national spread can be less affected by strikes or industrial disputes and brings in greater competition to cheapen the work.

On the question of employment our experts have made a close study of the extra labour required for carrying out this project on a dispersal basis and they estimate that throughout its 4 year construction period it would employ an average of an additional 100,000 men and women on the U.K. side alone and to operate the scheme afterwards 1,000 persons would be required. Whilst the final design has still to be completed it is sufficiently far advanced now for close estimates of the final cost of completion to be made and, what is equally important,



to state that the work can be started and sub-contracts placed before the end of 1982 provided a government policy decision is reached by October, 1981.

Discussions with British Rail have taken place over the past 12 months and our offer to them is to build a twin rail track in a submerged tunnel from Folkestone to the French coast (to link with Paris and Brussels) and as well to build the new London terminal which they say will be required, all free of capital cost to them. When completed the railways would lease the facilities from the EuroRoute Operating Company. British Rail are attracted by these proposals.

Monopoly. It is realized that the British Government, before granting what amounts to a monopoly to private enterprise, would want to safeguard the users position for the future. Presumably an Act of Parliament would be required into which a toll and fare structure would be incorporated and if necessary a date provided for the future when the assets of the EuroRoute Operating Company would revert to the British and French Governments. Although the Governments might require representation on the operating company's board, it should be understood that since private enterprise will be carrying all the risks it must, within reasonable limits, be allowed to get on with the job and planning facilities as far as they are required must be forthcoming without delays.

It is realized that the Dover Strait is one of the busiest shipping lanes in the world, therefore the EuroRoute crossing is designed to meet the requirements of the Inter-Governmental maritime Consultative Organisation (I.M.C.O.) particularly to enforce the traffic separation scheme now in existence. Navigation and monitoring aids will be provided on an extensive scale to give warning of the crossing and to increase safety, emergency craft will be stationed at or near the Crossing to give assistance, something which is not in existence today.

The Capital Cost of the EuroRoute project, that is for a combined structure to carry both road and rail, at 1980 figures is estimated to be £3.8 bn allowing for reasonable contingencies. Traffic forecasts have been carefully made and rechecked and the promoters' expert advisers are satisfied that this is a sound commercial proposition provided that it is free enterprise controlled.

Messrs. Lazard Brothers of London, who have advised EuroRoute since its inception are satisfied that this can be financed in the London, Paris, Brussels and New York markets without recourse to public funds provided there is



Government assurance that once work has started it will be allowed to be completed. They believe that it will be easier to finance because its construction is less likely to suffer from industrial disruption and can be brought into use in a shorter time. As far as the European Parliament is concerned, all U.K. members of the three political parties have had details of the project and many have expressed their support for it.

The Technical Advisers to the EuroRoute project are :-

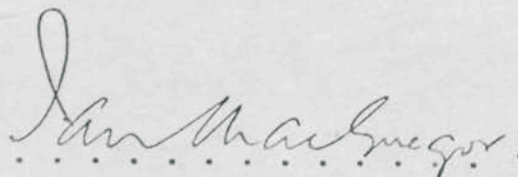
- Finance - Lazard Brothers & Co. Ltd.
- Engineering Studies - Mott Hay & Anderson.
- Traffic and Revenue - Coopers and Lybrand Assoc. Ltd.

The following firms are promoting EuroRoute and some have given much of their skill in perfecting the scheme :-

- Redpath Dorman Long Ltd. British Shipbuilders Ltd.
- Robert Mac Alpine Ltd. Boots Railway Engineering Ltd.
- John Howard & Coy Ltd. Technip S.A., Paris.
- Fairclough Construction Ltd. Zanen Verstoep N.V., Holland.
- Trafalgar House Ltd. Raymond International Ltd.

Full details of the EuroRoute Scheme was placed before the Minister of Transport in March 1981 and a brief version of the Scheme is attached herewith.

Because we believe that this project is of such great National and European importance and would enhance the prestige of the present Government for its imaginative concept and for the fact that it must have a very stimulating effect on employment, starting we would hope before the next General Election, it is considered right that its details should be brought to the notice of the Prime Minister.



18th August, 1981.