

EUROPEAN PARLIAMENT

# Working Documents

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DOCUMENT 1-93/81

## Report

drawn up on behalf of the Committee on Transport

on the construction of a Channel tunnel

Rapporteur: Mr P. de KEERSMAEKER

1.2.1



On 25 March and 18 June 1980 respectively the Motions for a Resolution by Mr BERKHOUWER (Doc. 1-48/80) and Mr BOYES and others (Doc. 1-242/80), pursuant to Rule 25 of the Rules of Procedure, on the construction of a Channel Tunnel were referred to the Committee on Transport.

On 18 June 1980 the Committee on Transport appointed Mr DE KEERSMAEKER Rapporteur.

It considered the draft report at its meetings of 20 February and 20 March 1981 and at the latter meeting unanimously adopted the Motion for a Resolution and explanatory statement.

Present: Mr Seefeld, Chairman; Dame Shelagh Roberts, Vice-Chairman; Mr De Keersmaeker, Vice-Chairman and Rapporteur; Mr Albers; Mr Buttafuoco; Mr Gendebien; Mr Janssen van Raay; Mr Klinkenborg; Mr Moorhouse; Mr Moreland; Mrs von Alemann and Mr Voyadzis.

The opinion of the Committee on Regional Policy and Regional Planning is attached.

The opinion of the Committee on Social Affairs and Employment will be published separately.

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A.

The Committee on Transport hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

MOTION FOR A RESOLUTION

on the construction of a Channel Tunnel

The European Parliament,

- having regard to the motions for a resolution by Mr BERKHOUWER (Doc. 1-48/80) and Mr BOYES and others (Doc. 1-242/80),
  - having regard to the report of the Committee on Transport and the opinions of the Committee on Regional Policy and Regional Planning and the Committee on Social Affairs and Employment (Doc. 1-93 /81),
  - whereas, in the preamble to the Treaty of Rome, the Member States of the Community declare themselves 'determined to lay the foundations of an ever closer union among the peoples of Europe',
  - having regard to Article 74 of the Treaty,
1. Affirms its wholehearted support for the construction of a fixed link across the Channel;
  2. Is convinced that the political importance and overall economic and trade advantages of a Channel link will be felt not only in France and the United Kingdom but throughout the Community as a whole;
  3. Considers that the linking of two Member States through a major infrastructure project of this nature would be seen by European public opinion as an unequivocal act of faith in the underlying objectives of the Community, and as such would provide a political and psychological boost to the Community's activities in general;
  4. Emphasises that plans for a fixed link have existed for well over a century, that current technology would enable the building of such a link today and that, according to detailed studies undertaken for the Commission, a number of projected schemes already seem to offer socio-economic benefits for the Community as a whole and to be financially viable;
  5. Therefore urges the competent authorities at both Community and national level, including the Council of Ministers, the Commission, and the Governments of the Member States most directly concerned,

to spare no effort in resolving any outstanding political or other problems in order to bring this project to fruition once and for all;

6. Considers that the Community could only benefit, in terms of both its development and its public image, from being associated and involved with this project at a practical level, and would therefore look favourably upon the principle of financial support from the Community; points out also, in this connection, that the Member States should give notice of this project to the Community in the context of the procedure laid down by the Council Decision of 20 February 1978;
7. Stresses the need for the swift adoption by the Council of the 1976 proposal for a regulation concerning aid to projects of Community interest in the field of transport infrastructure<sup>1</sup>, and mindful of the resources which might be made available in the context of the 'New Community Instrument', the ECSC and the European Investment Bank (and possibly the European Regional Development Fund as regards regional impact), feels that it might be in the Community's interest to consider a Community contribution to the construction of this link, in accordance with arrangements to be worked out and proposed;
8. Consequently urges the Commission to continue to treat the question of a Channel link as one of the priority issues within the framework of its attempts to launch a transport infrastructure policy;
9. Requests the Commission in addition to examining the possibilities of proposing a Community contribution towards the project in the form of loans, to draw up, by the end of 1981, a specific report on the problems of financing the link and the possibilities for Community assistance justified by a prior analysis of the cost and benefit to the Community, and more particularly on arrangements for a Community guarantee over a period to be determined; stresses, furthermore, that all the instruments to be employed should be set in the context of the 1976 proposal for a regulation concerning aid to projects of Community interest in the field of transport infrastructure<sup>1</sup>;

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<sup>1</sup> OJ No. C 207, 2.9.1976

10. Is convinced, moreover, that the successful implementation of a Channel link will constitute a most useful precedent for the implementation of other major fixed link and infrastructure projects throughout the Community (for example, a bridge across the Messina Straits, the Rhine-Rhone canal and others);
11. Welcomes the benefits which a Channel link will bring in terms of the application of a common transport policy and a common transport infrastructure policy, and takes the view that the economic advantages of such policies can only help to raise the living standards of all the peoples of the Community, in accordance with Article 2 of the EEC Treaty;
12. Welcomes the attention given by the report prepared for the Commission to the effect of the Channel link on less-favoured regions and urges the Commission to pay particular attention to the economic and social implications for the Community's less-favoured regions when examining projects for a Channel link;
13. Believes that the less-favoured regions of the Community have most to gain from a properly conceived transport infrastructure policy implemented alongside an effective regional policy;
14. Takes the view, therefore, that any impetus to Community infrastructure policy by the construction of a Channel link is in the long-term interests of the regions;
15. Points out that the study of possible alternative forms of fixed link recently undertaken for the Commission indicates that a fixed link would permit substantial savings to be made in transport costs, as well as stimulating the economy in general;
16. Stresses the particular benefits to be derived from the building of a fixed link by the construction and steel industries, and expresses the hope that the bulk of this demand will be met by plants in development areas;
17. Also believes that a substantial increase in freight and passenger traffic across the Channel should provide greater security for a continued growth in the labour force associated with that traffic;

18. Emphasises, without prejudice to the deliberations and final decision of the United Kingdom and French Governments, the following factors with regard to a rail tunnel scheme:
- (i) it should enable the operation of rapid freight services from provincial centres throughout Europe to provincial centres in the United Kingdom;
  - (ii) a rail scheme would seem to offer clear advantages in terms of cost, and environmental and energy considerations; furthermore, the construction of a single-track tunnel would not prejudice other projects which might be scheduled for a later date;
  - (iii) a fixed Channel link in the form of a rail tunnel would undoubtedly provide a boost to Community railway policy - a policy area somewhat neglected in recent years - without significantly altering the position of the road transport sector;
19. Expresses its earnest hope to the French and United Kingdom Governments that, given the dangers of cost over-run they will be in a position to reach an agreement on this matter without undue delay;
20. Instructs its President to forward this resolution to the Council and the Commission, and to the Transport Committees of the National Parliaments.



EXPLANATORY STATEMENT

1 THE EUROPEAN PARLIAMENT AND THE CHANNEL TUNNEL - BACKGROUND

1. In its resolutions over the years, the European Parliament has consistently supported the principle of a fixed link across the Channel between France and the United Kingdom. In the resolution contained in the general report by Mr HILL on behalf of the Committee on Regional Policy Regional Planning and Transport on permanent links across certain sea straits (Doc. 319/74), Parliament noted that 'certain sea straits within the Community constitute an impediment not only to the development of an inter-connected Community transport network, but also to the economic and social development of certain regions'.

2. The subsequent report by Mr NYBORG (Doc. 185/77), Part II of which had as its subject the motion for a resolution tabled by Mr BERKHOUWER and others on the construction of a tunnel under the English Channel (Doc. 7/76), refers specifically to the Channel Tunnel project and the possibility of Community financial assistance for such projects.

3. However, the main body of Mr Nyborg's report dealt with the communication from the Commission to the Council on action in the field of transport infrastructure and on the Commission proposals for a decision instituting a consultation procedure and creating a committee, and for a regulation concerning aid to projects of Community interest, in the field of transport infrastructure.

Your rapporteur would therefore point out that the present document is the first report drawn up within the European Parliament which deals exclusively with a Channel link.

4. In addition to the reports drawn up on behalf of the committee responsible, since 1970 individual Members of the European Parliament have tabled numerous oral and written questions with a view to stimulating debate and reviving interest in the subject of the Channel Tunnel<sup>1</sup>.

<sup>1</sup>

Written Question 426/70 De Oele	Oral Question 546/75 Berkhouwer
Written Question 213/71 De Conste	Written Question 119/78 Durieux
Written Question 836/75 Seefeld	Written Question 250/78 Seefeld
Question No. H-226/75 Dalyell	Written Question 310/78 Seefeld
Question No. H-264/75 Osborn	Written Question 339/78 Berkhouwer
Question No. H-214/76 Berkhouwer	Question No. H-80/78 Brown
Question No. H-237/76 Mrs Dunwoody	Question No. H-84/79 Cottrell
Oral Question 479/74 Hill and others	Oral Question 617/79 Galland & others
	Oral Question H-476/80 Berkhouwer

5. The Channel Tunnel has frequently been referred to as a test case in general discussions within the Committee on Transport relating to Community infrastructure policy, and particularly with regard to the 1976 Commission proposal for a regulation on aid for transport infrastructure projects.

The latest resolution tabled by Mr BERKHOUWER (Doc. 1-48/80) on the construction of a Channel tunnel, which was referred to the Committee on Transport on 25 March 1980, also affirms, inter alia, that such a link 'would represent major progress towards improving the entire transport infrastructure in the north-west of the Community'. A number of events have combined to make that resolution particularly timely viz: the publication of the preliminary British Rail/SNCF project in February 1979, the not unfavourable reaction from the British Minister of Transport in the House of Commons on 19 March 1980, the financing by the Commission of two studies concerning the construction of a fixed link across the Channel<sup>1</sup>, and the organization by the Commission on 6 June 1980 in Brussels of a colloquy on transport infrastructure. Your rapporteur pays tribute, in this connection, to the resolute pursuit by the Commission over the last few years of priority objectives in the vital field of Community transport infrastructure policy, and trusts that this resolve will eventually be matched by a similar sense of commitment and urgency within the Council of Ministers.

6. The second resolution forming the subject of this report, that by Mr BOYES and others (Doc. 1-242/80), is no less timely and was referred to the Committee on Transport on 18 June 1980. This resolution specifically refers to 'the expected social and economic effects on deprived regions of the building of a Channel tunnel'.

In the light of these two resolutions, and given the far-reaching implications of the Channel tunnel project, your rapporteur intends to give thorough consideration in this report to the economic, social and regional aspects of the project, in addition to those relating to transport infrastructure policy.

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<sup>1</sup> 'Study of the Community benefit of a fixed Channel crossing' - Coopers and Lybrand Associates/Setec Economie

## II EVOLUTION OF THE CONCEPT OF A FIXED CHANNEL LINK

### Origins

7. Since Mathieu's project in 1802 there have been various schemes for constructing a tunnel under the Channel between France and the United Kingdom. The idea of a bridge rather than a tunnel has also received support. As long ago as 1875, an Anglo-French consortium actually bored lengths of trial tunnel at Dover and Sangatte. However, despite the fact that the geology of the area posed comparatively few problems, even to the technology of a hundred years ago, the various projects came to nothing largely for military reasons, the United Kingdom in particular seeing the advantages of preserving the Channel as a defensive barrier of great value particularly when coupled with a strong naval force.

8. It was not however until 1955 that the United Kingdom Government announced that earlier considerations against a tunnel were no longer valid and shortly after this serious Anglo-French explorations of the possibility of constructing a tunnel or a bridge started. In 1963 a Working Group of British and French officials reported on these proposals<sup>1</sup>. This body concluded that either a bridge or a tunnel was technically feasible, but for reasons of price, danger to navigation and legal difficulties, it considered that a tunnel was preferable. The Working Group also recommended, for reasons of cost, that the tunnel should be for railway only and, for technical and legal reasons, should be bored rather than constructed as an immersed tube.

9. In 1964 the French and British Governments announced their agreement in principle to the construction of a rail tunnel under the Channel, subject to further discussion of the legal and financial problems. In 1972 parallel agreements between the governments and the members of the Anglo-French group chosen to finance and construct the tunnel were signed. Further details of these agreements are to be found in Section II of Mr Hill's report (Doc. 319/74), to which reference has been made in paragraph 1 above.

### The 1975 project and its abandonment

10. The tunnel defined under the abovementioned agreements consisted of a triple-bore tunnel 50km in length, with large-scale ferry railway facilities at either end located in terminals each covering an area of up to 250 acres.

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<sup>1</sup> Proposals for a Fixed Channel Link': 1963 Cmnd. 2137 HMSO

11. Furthermore, the 1975 tunnel project comprised the comprehensive improvement of rail connections between Folkestone and London and Calais and Paris. In the case of the United Kingdom link, this improvement amounted to the construction of large sections of new line. The entire stretch from Folkestone to London was to be electrified.

12. In the event, work on the Tunnel was started, and was in its second phase, that of the initial works, when the project was abandoned or suspended unilaterally by the United Kingdom on 20 January 1975. In addition to a number of environmental objections which were raised, the formal reasons for this abandonment arose because of the United Kingdom Government's refusal to accept the estimated costs of £500 million for a new rail link from London to the Channel tunnel. Such a link was deemed necessary in order to adapt British rolling stock to the wider continental loading gauge and to ensure high-speed communications. This estimated £500 million (which had been costed at only £120 million the year before) would, it has been estimated<sup>1</sup>, have doubled the cost of the tunnel and increased its revenues at the most by one-fifth.

13. The United Kingdom Government requested the two tunnel companies and the French Government to put back the original timetable to reassess lower-cost rail link possibilities, but these companies exercised their contractual right to withdraw from the venture, which they did despite proposals that the 'clock should be stopped' for a period ranging from several months to a year.

#### Revival of the concept of a fixed link (1979)

14. The year 1979 saw a remarkable resurgence of interest in the project of a fixed Channel link. The starting-point was the submission to the French and United Kingdom Governments in February 1979 of a report summarizing the results of technical and economic investigations into a single-track rail tunnel, on which the SNCF and British Rail had begun work the previous year. It was emphasized that, put in broad terms, the objective of the two national railway companies was to find the simplest and cheapest way of linking the two national rail networks. They therefore excluded the provision of the vast marshalling yards and new high-speed links which had been required under the previous project.

At a period of financial stringency throughout the EEC, the national railway companies' evident desire to cut costs to the minimum seemed to strike a favourable chord both in public opinion and in government circles (see paragraphs 24 and 25 below for the reaction of the United Kingdom and French Ministers of Transport).

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<sup>1</sup> 'The Economist' 30.11.1974

15. As mentioned above, less than one month after the submission of the initial SNCF/British Rail report, the EEC Commission published studies relating to a cross-Channel link which had been undertaken for it by Coopers & Lybrand Associates of London and Setec Economie of Paris. The former study, however, did not confine itself to the possibility of a rail link but looked at all the major options for a fixed link across the Channel viz:

- (i) single-track rail tunnel;
- (ii) double-track rail tunnel;
- (iii) road bridge;
- (iv) road bridge plus single-track rail bridge.

Below is a summary of the description of each option as given in the Coopers & Lybrand.

16. Single-track tunnel project: the SNCF/BR proposal is for a single-track tunnel carrying one rail track which would be used by trains in both directions. The tunnel would be built to accommodate the standard dimensions adopted by the International Union of Railways (UIC). According to the study, the provision of the gauge - larger than that used in the United Kingdom - requires further examination as it is unlikely that rolling stock on UIC gauge would ever be able to penetrate far beyond the tunnel terminal. The operating tunnel would be built to a 6m diameter (thus high enough for overhead electrification) and would be linked by passageways to a 4.5m diameter service tunnel.<sup>1</sup>

17. Double-track rail tunnel: this scheme would provide for two main tunnels constructed to a 7m diameter, the extra height (as compared with the single-track tunnel) permitting the operation of double-deck wagons for the convergence of road vehicles.

18. Road bridge: the version of the bridge considered consists of a double carriageway road with no rail facilities. The bridge would have a minimum clearance of 65m above sea level, consisting of two viaduct sections near the coast and eight 2km suspended spans in the centre of the Channel. The supports of the bridge would be protected from shipping by surrounding islands of tipped materials.

19. Road bridge plus single-track rail bridge: this is a combination of the above two schemes and offers the possibility of solving simultaneously the need for both road and rail links.

20. The study points out that the selection of these four options in no way implies that other projects have been rejected as being unattractive. Rather, the view was taken that there was no available evidence to suggest that extending the list would have a particular effect on the nature and evaluation of Community interest.

<sup>1</sup> Your rapporteur gained the impression from talks with French and British railway officials that, at the time of writing and contrary to certain affirmations, the questions of the gauge and the diameter had not yet been fully settled

21. The following tables, taken from the Commission's summary of the Coopers & Lybrand study, show the estimated capital costs and rates of return of the four options.

A. CAPITAL COSTS (in £m at January 1979 prices):

	Single-track rail tunnel	Double-track tunnel	'Link into Europe' bridge
Tunnel/main structure	495	754	1651
Terminal installations	62	202	75
Rolling stock	16	109	-
Misc. (studies etc.)	-	151	505
	573	1216	2231
Less work already carried out	-	44	-
	573	1172	2231
Complementary infrastructure	44	136	200
	617	1308	2431

NB The cost of a combined road bridge/single-track tunnel scheme is assumed to be equal to the sum of the costs of the bridge and the single-track tunnel.

B. RATE OF RETURN ('low growth'):

		FLOWS UP TO YEAR 2000				FLOWS OVER 50 YEAR LIFE			
		Single Track	Double Track	Road Bridge	Road Bridge plus Single Rail	Single Track	Double Track	Road Bridge	Road Bridge plus Single Rail
IRR (%)	(2)	11.0	8.3	-3.7	-2.0	14.3	12.6	8.7	8.8
NPV's (£m discounted to 1979)	3%	464	377	-971	-799	2162	4213	1725	2999
	5%	277	285	-1026	-966	1131	2074	282	901
	10%	26	-91	-1006	11086	213	289	-739	-857

C. RATE OF RETURN ('high growth')

		FLOWS UP TO YEAR 2000				FLOWS OVER 50 YEAR LIFE			
		Single Track	Double Track	Road Bridge	Road Bridge plus Single Rail	Single Track	Double Track	Road Bridge	Road Bridge plus Single Rail
IRR (%)	(2)	10.9	10.9	0.7	1.9	14.3	14.9	8.7	9.1
NPV's (£m discounted to 1979)	3%	469	887	-408	-257	2265	6651	5202	6512
	5%	279	586	-617	-573	1183	3335	2070	2698
	10%	26	54	-814	-904	223	612	-283	-243

22. The study attempts to calculate the profitability of projects both under a 'low growth' scenario, under which it is assumed that the relative cost of fuel will rise by 3% per annum to 1985 and by 1.5% per annum thereafter, and a 'high growth' scenario, under which it is assumed that the relative cost of energy will remain unchanged between July 1979 and 2000. Low growth assumes average EEC growth of 1.7% in 1985 and 2% in 1985-2000, high growth assumes average EEC growth of 3.2% to 1985 and 3.5% in 1985-2000.<sup>1</sup>

The study concludes that all the projects promise to be profitable over fifty years in the low growth case at discount rates of 5.7% or less. The return on the road bridge plus single rail, the double-track tunnel and the single-track tunnel are predicted to be 6.8%, 12.6% and 14.3% respectively.

The single and double-track tunnels promise profitability by the year 2000, in the former case using an 11% and in the latter case an 8.3% rate. Coopers & Lybrand affirm that neither of the bridge schemes are likely to be profitable within the same period.

23. However, your rapporteur wishes to point out neither the Coopers & Lybrand or the Setec study has made any independent assessment of costs, but merely reproduces the estimates put forward by the promoters of each project. Estimates also vary considerably with regard to the cost of the additional infrastructure which each project would require.

#### Position of the United Kingdom and French Governments

24. On 19 March 1980 Mr Norman Fowler, British Minister of Transport, made the following statement to the House of Commons: 'If a scheme is commercially sound I see no reason why private risk capital should not be available ..... If the detail of any scheme is right, then clearly there is a very good prospect that this tunnel can go ahead. The cost of any scheme would be very large and I should make it clear now that the Government cannot contemplate finding expenditure on this scale from public funds.'

Following that statement, the Minister asked for all other schemes for a Channel link, and the finalized SNCF/British Rail scheme, to be submitted to the United Kingdom Department of Transport by the end of 1980<sup>2</sup>, after which date the Government would undertake a detailed comparative study to determine the most suitable project. A final decision by the United Kingdom Government can reasonably be expected some time before the end of 1981.

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<sup>1</sup> All figures are net of inflation

<sup>2</sup> Deadline later extended to 31 January 1981

25. The French Government has taken a more cautious stance, and would appear unwilling to make a public statement of support for a Channel link before receiving the final report on the SNCF/British Rail project. Any reticence is understandable in view of the unilateral abandonment of the 1973-75 project by the United Kingdom. The French position has been defined in two statements by the former Minister of Transport, Mr Le Theule. On 24 May 1978 the Minister declared that 'the French Government would be prepared to resume studies with a view to submitting a new Channel tunnel project if the British authorities were to make it known that they had decided to reverse the negative position which they have held up to now'.<sup>1</sup> On 11 August 1978 Mr Le Theule stated that 'the French and British Governments have not resumed any negotiations on the subject of the Channel tunnel. The French railways are pursuing, under their sole responsibility, technical and economic studies on a new project for a single-track rail tunnel'.<sup>2</sup>

26. Your rapporteur therefore feels justified in assuming that, from the point-of-view of the French Government, two essential conditions must be fulfilled before it can publicly declare its support for a Channel link:

- (i) agreement between the two national railway companies;
- (ii) a political gesture from the United Kingdom Government.

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<sup>1</sup> Source: Submission to the House of Commons Transport Committee by Mr Ravenet, chargé de mission at the SNCF

<sup>2</sup> idem



### III IMPLICATIONS FOR THE EUROPEAN COMMUNITY

#### 1976 proposed regulation on Community aid for infrastructure projects

27. Few followers of Community transport policy are likely to be unaware that in 1976 the Commission submitted to the Council proposals for a decision instituting a consultative procedure and creating a committee in the field of transport infrastructure and for a regulation concerning aid to projects of Community interest in the field of transport infrastructure<sup>1</sup>.

In 1978 the Council adopted the first proposal, which became the Decision of 20 February 1978 instituting a consultation procedure and setting up a committee in the field of transport infrastructure.

As regards the second proposal, on aid to infrastructure projects the Council has not yet reached a decision. At the meeting of the Council of Transport Ministers held on 24 June 1980, 'the Council agreed to instruct the Permanent Representatives Committee to continue work on the whole matter in order to supply it as soon as possible with all the facts necessary for a decision at a forthcoming meeting'.<sup>2</sup>

28. In its Memorandum on the role of the Community in the development of transport infrastructure<sup>3</sup>, the Commission identifies certain infrastructure links which it believes merit particular attention, one such category being 'links overcoming natural obstacles'. With reference to this category the Commission states 'there are several links where the sea or mountains greatly reduce the quality of service: the Channel crossing, the Alpine link between Germany and Denmark (via Fehmarn), links between Germany and Italy and the Apennines crossings'.

29. In paragraph 31 of the Memorandum, the Commission makes the point that financial aid will assist the execution of projects which will allow a bottleneck affecting Community traffic to be removed, together with projects which facilitate the standardization of equipment and the coordination of work on the Community network and which would also increase the profitability of complimentary infrastructure situated in other Member States.

Your rapporteur is of the opinion that the proposal for a Channel link falls into both these two categories of project. However, as is known,

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<sup>1</sup> OJ No. C 207, 2.9.1976

<sup>2</sup> See PE 66.300/Ann.

<sup>3</sup> COM(79) 550 final, p.29; see also report on the Commission Memorandum by Mr KLINKENBORG (PE 65.509/rev.)