

Fehmarnbelt

Enquiry of Commercial Interest

December 6, 2000 the Ministers for Transport of Germany and Denmark decided to launch an Enquiry of Commercial Interest (ECI), with the aim to acquire further knowledge of the private sector's possible involvement in a Fixed Link across Fehmarnbelt (in the following named the Project).

The outcome of the ongoing ECI process will be of decisive importance to the German and the Danish Governments, as it will be the basis for their decision whether or not the work for realizing the Project should continue.

One of the core elements of the ECI process is the response from the market to this Questionnaire. The responses will – together with other ongoing investigations – be the basis for the Fehmarnbelt Development Joint Venture's (FDJV) reporting in April 2002 to the Steering Committee formed by the two Ministries.

The key questions to be answered in this report will be:

1. Is the private sector willing and able to design, plan, construct, finance and operate a Fixed Link across Fehmarnbelt?
2. What seems to be the optimal financial and associated technical solution for the realization of the Project?
3. Under which organizational framework, including preconditions and obligations would private investors realize the Project?
4. How should the risks involved be distributed between the private sector and the states?

The next step for realizing the Project will be discussions and negotiations between the two Governments in order to decide whether the Project should be realized and under which conditions.

These conditions could be formalized in a Government agreement on basis of which a public procurement process for election of the concessionaire can be started.

Before the procurement process can be started a Government agreement would have to be presented to the Parliaments of Germany and Denmark prior to the Governments' ratification.

A Government agreement is anticipated to include the following items:

- A description of the general requirements to the technical solution
- The Governments' commitments regarding hinterland infrastructure, regarding support in the approval procedures, (coordination between the two countries) regarding taxation, and regarding financial contributions
- That the Governments free of charge give the right to use the necessary area in territorial waters to the concessionaire for investigations and construction of the Fixed Link
- Responsibility for planning, authorities approval, design, construction, maintaining, operating, financing and transferring the Fixed Link
- Principles for administration of the interfaces between road and railway infrastructure management on land and on the Fixed Link
- Principles for the Governments' handling of questions related to border control (customs, passport control, etc)
- Principles for arbitration between the two Governments
- General statements regarding the Governments' requirements and commitments to be regulated in the concession agreement

Questionnaire

On basis of the investigations carried out so far the Questionnaire presented on the following pages has been developed. The Questionnaire is based on:

- a. Two business cases presented in the Information Memorandum, chapter A-1. They are selected from the 6 solution models used by COWI-Lahmeyer and PLANCO-COWI for assessing the feasibility of the Project.
- b. A diagram showing a schematic contractual and organizational structure
- c. A table listing the identified risks involved giving a suggestion to the distribution of the risks between the concessionaire and the states.

The business cases, the diagram of a schematic organizational and contractual structure and the list of risks presented in the Questionnaire are meant as guidelines in order to help the participants to structure the responses. The participants are of course free to add other ideas or comments that may be considered relevant.

It should be noted that the participants also will be invited to develop their general views on the Project at the forthcoming interview sessions.

The Questionnaire has been structured in five main sections, four sections corresponding to the above-mentioned key elements of FDJV's coming report to the two Governments and one section concerning other matters.

In case the participants find, that the investigations carried out so far do not give sufficient information to evaluate the risks and/or their possible distribution, they should not hesitate to convey your own views.

The participants are requested to present their responses to the Questionnaire in writing and with reference to the specific number of the question. The answers should be as specific as possible in order for FDJV to evaluate and develop the participants' responses before presenting the results of the ECI-process to the Ministries of Transport.

It is possible to answer questions by providing reports/studies which have been produced in the past by the participant.

In addition to the written answers the FDJV especially would like to see the following "key products" delivered by the participants:

- A financial model (to be provided in printing and as an Excel-file and to be described in detail; see also questions 2.1-2.9)
- An organizational structure (to be drawn as a chart and to be described in detail; see also questions 3.1-3.6).
- A risk distribution model (to be shown as a table and to be described in detail; see also questions 4.1-4.3).
- A schedule for a preferred implementation of the Project (to be shown as a diagram and to be described in detail; see also questions 5.3-5.7).

Questions

1 Private Sector Involvement

1.1 Which area do you cover (e.g. financing, construction, operation, other)?

1.2 Please confirm you would be willing and able to commit yourself to this Project, if it goes ahead.
Describe your preconditions and main concerns.

2 Commercial and Associated Technical Aspects

2.1 How do you technically/commercially rank the 6 technical solutions described in the Information Memorandum (IM)?
Please describe your considerations.

2.2 The choice of technical solution will be influenced by a number of factors, such as Project costs, expected future traffic demand, standards of the hinterland infrastructure, safety & rescue requirements, navigational conditions, environmental conditions, geotechnical conditions, operation & maintenance costs.
Please comment on how these factors in your view influence the choice of technical solution (i.e. 3+1 versus 4+2, as explained in the Information Memorandum, chapter B 3, and tunnel versus bridge)

2.3 Please comment on the estimated total project costs?

2.4 Describe the different possibilities you see of reducing the costs.

2.5 Describe the different possibilities you see of increasing the revenues for road and rail respectively.

2.6 Based on the two business cases and the distribution of risks described how many years of concession would you need to accept the Project?
(The concession period starts on the date of signing the concession agreement and it ends on the date of transferring the Project to the Governments. State minimum and maximum concession period).

2.7 Comment on the assumptions in the two business cases item by item and state the consequences of changing them.

2.8 Which toll model for road- and rail traffic respectively would you suggest?

2.9 Describe your own preferred business model and develop a financial model to calculate key figures, such as internal rate of return (IRR) and net present value (NPV).

Two possible business cases

(based on the PLANCO-COWI report)

Solution model

(term used in technical and financial reports)

Cable-Stayed Bridge

(4 + 2 solution)

Immersed Tunnel

(3 + 1 solution)

Costs

Total construction costs +	MEUR	2674	2567
Construction contingencies+risk add-on =	MEUR	366	307
Total project costs	MEUR	3040	2874
Total operation and maintenance costs +	MEUR/year	69	48
Operation and maintenance contingencies+risk add-on =	MEUR/year	10	8
Total project operation and maintenance costs	MEUR/year	79	56
Construction period	Years	6 1/2	7
Distribution of costs		Evenly over the construction period	
Market interest rate (real terms)	%	4	4
Lending fees	%	1.5	1.5
Risk premium	%	1.3	1.3
Debt/equity ratio		5	5
Depreciation		Full straight line depreciation of the total cost of investments over the operation period	
Right to carry past losses forward		Granted the right to carry past losses forward indefinitely	
Corporate taxation	%	32	32
VAT during construction		Allowed to deduct VAT in Germany and Denmark (average of 20.5%)	
VAT during operation		Pay VAT according to ordinary rules	
Sovereign guarantees		None	None
Rate of return of capital invested (real terms) (see note 2)	%	7.3	9.1

Revenues

TEN support		5% of construction costs	
Government support	MEUR	0	0
Road traffic (Annual growth after 2010)	%	1.7	1.7
• number of passenger cars (figure in 2010)	1000	2268	2171
• number of busses (figure in 2010)	1000	59	58
• number of trucks (figure in 2010)	1000	481	479
• toll rate passenger cars (VAT included) (see note 1)	EUR	58	58
• toll rate busses (VAT included) (see note 1)	EUR	212	212
• toll rate trucks (VAT included) (see note 1)	EUR	212	212
Railway revenue (VAT excluded)	MEUR/year	76	76
Bonus payment related to performance (see note 3)	EUR	0	0
Additional commercial opportunities (see note 3)	EUR	0	0
Revenue guarantee	EUR	0	0
Payment for transfer of Fixed Link	EUR	0	0
Length of concession period (see note 2)	Years	7 + 30	7 + 30

Price level 1996

Note 1 Road tolls in 1997 prices to be deflated by 1.5% to arrive at 1996 prices

Note 2 In the financial analysis in the PLANCO-COWI report a construction period of 7 years and an operation period of 30 years has been used to calculate the rate of return.

Note 3 The business cases are based on the financial analysis in the PLANCO-COWI report, but these two possibilities have been added by FDJV

Questions

3 Organizational and Contractual Structure

3.1 Which corporate and organizational structure would you recommend for this Project (to be shown as a chart)?
Please describe your considerations.

3.2 Which main assignments/tasks would you find mandatory and which would you prefer to be covered by the Governments, which by the concessionaire and which by third parties?

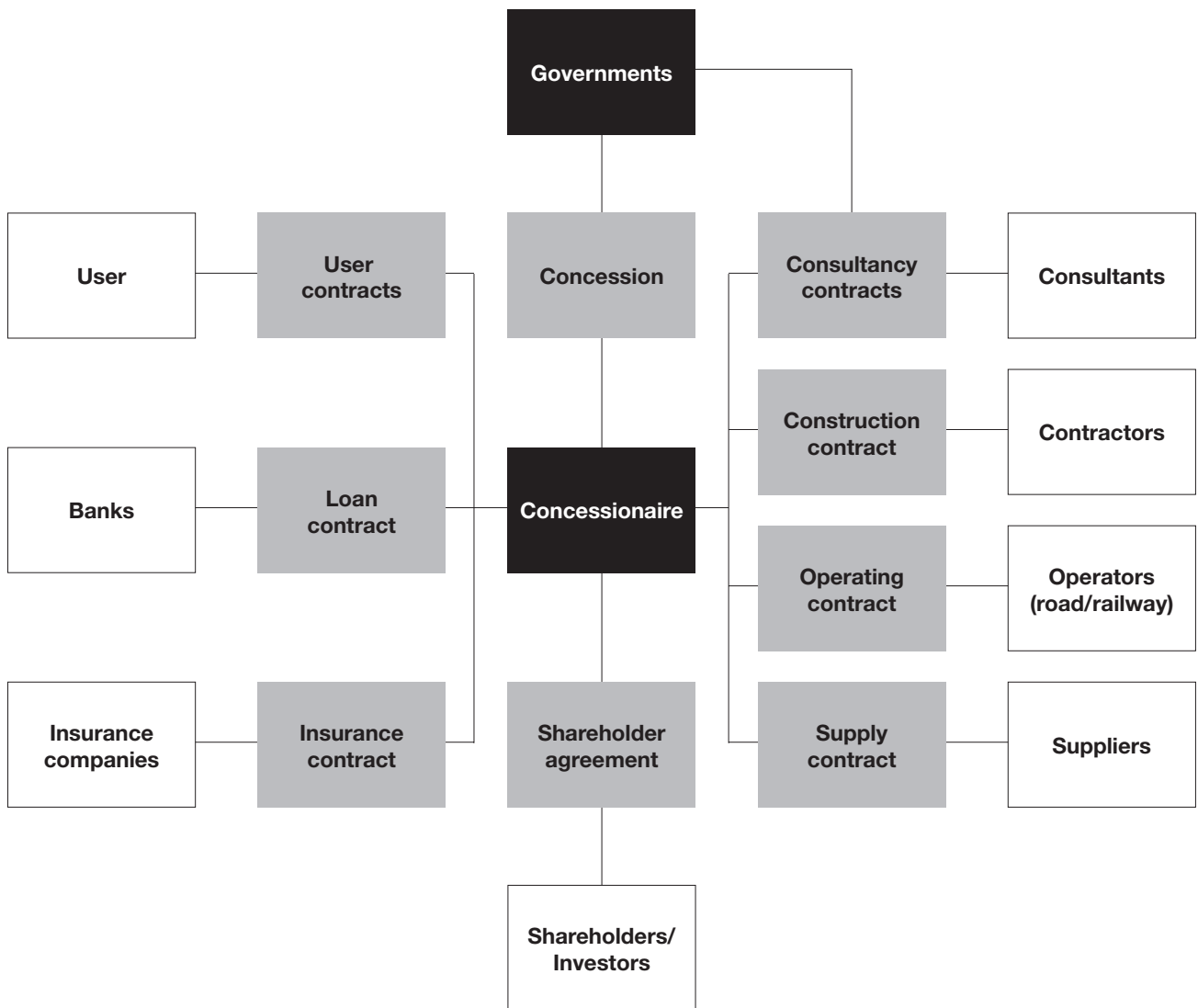
3.3 Where in the Project structure may conflicts of interest arise and how can they be neutralized (e.g. contractors which are also investors or banks who provide both loans and equity capital)?

3.4 Under which law should the Concessionnaire operate regarding taxation matters?

3.5 Would you regard other structures than BOT (e.g. Build Operate Lease or Build Operate Own) as more meaningful for this type of project?

3.6 How would you prefer, that the Danish and German Governments organize themselves?

Schematic Organizational and Contractual Structure



Questions

4 Distribution of Risks

- 4.1 Comment on the possible set up of the risk distribution in general and item by item. Which of the risk items do you find mandatory to rest with the Governments?
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- 4.2 How can financing risks be treated concerning inflation, future variation in exchange and interest rates?
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- 4.3 Describe your own preferred distribution of risks and its impact on your own financial model.
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5 Any Other Matters

- 5.1 Which benefits would there be of having performed further geotechnical, financial, traffic, and environmental investigations before signing the concession contract?
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- 5.2 Do you consider the available traffic forecasts methodologically adequate, detailed enough and sufficiently reliable for a financial closing? What else would be required?
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- 5.3 Which planning approvals should be in place before signing the concession contract?
-
- 5.4 Is it considered reasonable, that the concessionaire is responsible for documenting compliance with all authorities' environmental requirements related to the design, construction and operation of the Fixed Link?
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- 5.5 Comment on the activities after the ECI-process.
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- 5.6 On the basis of the information provided and your own experience please develop your own time schedule for realizing the Project.
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- 5.7 Considering your own time schedule, which subjects should be regulated in government agreements and to what level of detail should they be developed?
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- 5.8 State other matters to be discussed during the interview phase.
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Possible Distribution of Risk

Risks (to be regulated in the Concession Agreement)	Governments	Concessionaire
General risks		
(i.e. adverse events caused by external parties)		
Changes in project specific requirements (safety, design)	●	
Delay in access infrastructure (Hinterland infrastructure)	●	
Changes in general road user taxation and in general road user charges (e.g. road pricing)		●
Demands for regulation of road tolls and railway infrastructure payments	●	
Changes in Great Belt and Øresund toll	●	
Other external political risks (such as risk of war)	●	
Terrorist attacks		●
Protestor risk		●
Design and development risks		
Design contractor fault		●
Delay in access to site	●	
Geotechnical conditions		●
Changed environmental requirements		●
Delay of permits and approvals (Governments responsibility)	●	
Delay of permits and approvals (Concessionaire responsibility)		●
Construction risks		
Delays in construction		●
Environmental risks		●
Cost overruns		●
Accidents during construction		●
Failure of plant to meet performance criteria at completion tests		●
Force majeure		●
Operation risks		
Possible underestimation of cost of operation		●
Accidents (carrying liability or closure of the link for a period of time)		●
Shortfall in traffic due to operator's fault (malpractice)		●
Financing risks		
Future development in the general economy (inflation, exchange rates, interest rates)		●
Financing structure (extent of loan capital, availability of guarantees)		●
Market (traffic) risks		
Variations in predicted traffic due to general economic development		●
Variations in predicted traffic due to competitive action (e.g. ferry routes between Scandinavia and Central Europe)		●
Any other risks		
		●

Response procedure

Request for clarifications

The participants in the ECI process can forward questions to the received documents or regarding any other matter concerning the ECI process to the address mentioned below.

Furthermore FDJV will invite all participants to an *Information Meeting in Lübeck August 14, 2001*. Please forward in advance any questions or topics that should be discussed during the meeting.

Answers to Questionnaire

Answers to the Questionnaire shall be submitted before *October 1, 2001* to:

Fehmarnbelt Development
Joint Venture
c/o Arthur Andersen
Real Estate GmbH
Französische Strasse 48
D-10117 Berlin

Further Procedure

The FDJV will examine the responses and organize interviews with participants in the ECI. The responses and interviews will form the basis for the final report to the Danish and the German Ministries of Traffic.

Time Schedule for the ECI

Publication in the Official Journal of the European Communities	19 May 2001
Closing date for applications	22 June 2001
Selection of applicants	9 July 2001
Forwarding of Information Memorandum and Questionnaire	10 July 2001
Closing date for return of answers to Questionnaire	1 October 2001
Interview phase	November 2001 – January 2002
Final report	April 2002
Governmental decision	End 2002

Further information

The information available for this ECI process is further to this present Questionnaire an introductory Leaflet, an Information Memorandum and a number of background reports from the feasibility studies carried out during 1995 – 1999.

The Information Memorandum gives a general overview of the Project as it stands today.

The purpose is to give a summary of the results of the feasibility studies carried out in 1995-99, supplemented by relevant aspects and new information that could affect private investors' evaluation and realization of the Project.

The results of the feasibility studies are summarized in the following reports.

Furthermore a number of detailed background reports are available on request to FDJV.

1. Investigation of Technical Solutions, Summary Report, COWI-Lahmeyer JV, January 1999.

Investigation of Technical Solutions Phase 2 Report, Volume 1-5, Cowi-Lahmeyer JV, January 1999.
2. Investigation of Environmental Impact, Summary Report, Phase 2, COWI-Lahmeyer JV, January 1999.

Investigation of Environmental Impact, Phase 2 Report, Cowi-Lahmeyer JV, January 1999.
3. Fehmarnbelt Traffic Demand Study, Final Report, Fehmarnbelt Traffic Consortium, January, 1999.
4. Economic and Financial Evaluation of a Fixed Link Across the Fehmarn Belt, Final Report, PLANCO-COWI JV, June 1999.
5. Geological/geotechnical Investigations, Phase 2 Report, Fehmarn Link Consultants, September 1996

