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5th January 2015
C-414/13

**Høring over udkast til Lov om anlæg af en fast forbindelse over Femern Bælt med tilhørende landanlæg i Danmark -**
Pre-Hearing for the Construction Law concerning the Fehmarn Belt Fixed Link (FBFL) to be brought before the Danish Folketing

**Objections (bemærkninger til lovudkastet)**

## Objection / Statement

The

1. Aktionsbündnis gegen eine feste Fehmarnbeltquerung e.V., represented by Mr. Hendrick Kerlen, Westermarkelsdorf 12A, 23769 Fehmarn,

2. Federation for Environment and Nature Conservation, Germany (BUND e.V.), East Holstein Group, represented by Mr. Wolfgang Hielscher, Am Moor 9A, 23611 Bad Schwartau, who also represents the BUND Schleswig Holstein,

3. Working Group of legally recognized nature conservation organizations in Schleswig-Holstein (AG 29) and its associated organizations,

   State Association of Nature Conservation (LNV)
   AG Geobotany
   Regional Hunters Association
   State Association of Sport Fishing
   Nature Conservation Society Wadden Sea, Conservation Centre,
   Schleswig-Holstein Heritage Association,
   German Forest Protection Association,
   Jordsand Association,

   all represented by the CEOs of the State Nature Conservation Association, Mr. Ragnar Schaefer an Michael Ott, business address: Burgstrasse 4, 24103 Kiel,

4. Verein zum Schutz von Umwelt und Wohnqualität e.V. (VESUV) represented by the Chairman Joachim Kuschinske, Sandstraße 25-27, 23552 Lübeck,

5. Umweltschutzverein Seeretz e.V. (UVS), represented by Chairman .Dr. Jörn Funck, Hammersberg 24, 23611 Sereetz

in the following to be referred to as

**objectors,**

have asked me to represent them in the above- mentioned procedure. I declare to have been properly empowered with powers of attorney as included.

In the name of and on behalf of the objectors I raise

**objections**

with representations as follows :

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## 1. Preliminary remarks

1.1 For technical reasons - as no Telefax communication was made available - Mr Kerlen from the "Aktionsbündnis" will personally deliver the present objections to the Transportministeriet. He will sign the latter and has been authorized to do so for all the objectors.

1.2 The person of contact, Ms Dorthe Gravgaard wrote to us on December 19, 2014:

> Dear Dr W Mecklenburg
>
> The Ministry of Transport is closed for the public holiday and I will therefore not be available until January 5.
>
> Best Regards
>
> Dorthe Gravgaard
> Head of Section
>
> Ministry of Transport
> Bro- og Metrokontoret
> Frederiksholms Kanal 27F
> DK-1220 København K

We hold this behavior to be unlawful under the general requirements of the EIA-Directive (public participlation clauses), to wit the public participation clauses ("effective opportunities to participate", Article 6 No 4 of said Directive).

In particular, certain files on the website www.hoeringsportalen.dk concerning the present procedure turned out to be corrupt and we had to ask for proper files. This problem could not have been solved without help from the Danish Authorities.

Also it will not be possible to send these objections by mail as the person on the "receiving end" of the mail communication will not be available to confirm receipt of the objection.

The objectors maintain that, if the Ministry feels it deserves a holiday during the Christmas period, it is unfair (in a legal sense!) that at the same time the public is put under the obligation to work and left without reliable communication line.

1.3 The objectors are NGOs who, under German Law, fulfil the necessary requirements to take legal action under Article 11 of the EIA-Directive.

1.4 Because German and English material is available only through the portfolios of the Espoo procedure

> "**Transboundary public participation** pursuant to § 9b of UVPG (the German law on environmental impact assessment) for the Danish section of the Fixed Link Project between Rödby and the German-Danish border in the Baltic Sea" –
>
> **"Espoo procedure"** for the Fixed Link, the party of origin: Denmark, notification by the Landesbetrieb für Straßenbau und Verkehr, (LBV-SH, State Authority for Road Construction and Transport) of 2 July 2013.

addressing the environmental effects of the Danish half of the FBFL on Germany and the German "Planfeststellungsverfahren" addressing the environmental effects of the German half of the FBFL on Germany the objectors sometimes refer to material from these procedures.

1.5 The public hearing procedure on the draft act is marred by two serious flaws that are completely invalidating the former and are turning it into a mere farce for the public.

**Firstly**, the recently published financial analysis, which is an important part for any decision on the Project Act, is still based on preliminary cost estimates of Femern A/S. It has already been announced that the financial analysis 2014 will have to be revised on the basis of the more relevant cost estimates quoted by the construction consortia in their tender submissions.

**Secondly**, the socio-economic analysis for the Project is not yet available for the hearing.

These two procedural flaws entitle the public to demand that the Ministry of Transport shall stay the current public hearing until these two decision-relevant analyses are available for public review and discussion.

1.6 We also remind the reader that the German public has not been consulted within the Danish scoping procedure under the EIA-Directive.

1.7 Furthermore and so far, the draft act raises a number of

important legal and forensic questions:

Can the building permit for the cross-border tunnel be issued by an act of Folketing?

Did Denmark comply with the regulations of the Espoo Convention when convening the transboundary hearings on the environmental impact of the Belt Tunnel?

Was the Minister for Transport rushed into making a hasty and uninformed decision on the immersed tunnel solution?

Are the EIA and the various risk assessments (e.g. tunnel safety, safety of shipping) providing a sound basis for a decision in favour of an immersed tunnel?

Does the traffic prognosis 2014 provide a sound basis for the economic evaluations?

1.8 We will in the following touch upon these questions in a concise manner. We refer the Danish Government, in particular the Ministry of Transport, to our objection with the German Planfeststellungsverfahren for the German half of the FBFL. This we consider to be part of the present objection. The material is available to Femern A/S and thus to the Danish Government.

## 2. Connection to the Espoo-procedure

2.1 The present hearing is connected to the Espoo-hearing having taken place in 2013 in Germany, but otherwise conducted by the Danish authorities. That hearing contained only a very small portfolio of material:

> a) Fehmarnbelt Fixed Link (coast to coast)-TRANSBOUNDARY-ENVIRONMENTAL IMPACT ASSESSMENT- Summary Report, with a German translation (of 62 pages). ("Summary")
>
> b) Fehmarnbelt Fixed Link (coast-coast)- TRANSBOUNDARY-ENVIRONMENTAL IMPACT ASSESSMENT- Documentation for the Danish Espoo Procedure, only in English ( 366 pages). ("Environnemental report").

The present hearing contains **no material either in German or in English** (the latter being, unlike German or Danish, lingua franca within the EU). As far as the Danish authorities are

concerned, the German public will altogether be informed only by the portfolio of the Espoo-procedure.

Within the Espoo-procedure, only two documents have been made available to the German public, to wit:

> a) Fehmarnbelt Fixed Link (coast to coast)-TRANSBOUNDARY-ENVIRONMENTAL IMPACT ASSESSMENT- Summary Report, with a German translation (of 62 pages).
>
> b) Fehmarnbelt Fixed Link (coast-coast)- TRANSBOUNDARY-ENVIRONMENTAL IMPACT ASSESSMENT- Documentation for the Danish Espoo Procedure, only in English ( 366 pages).

These two reports are hereinafter sometimes referred to as "**environmental report**" (b) and "**summary**" (a).

The documentation is totally inadequate.

The objectors consider this to be unlawful. The Danish Espoo-procedure was entirely insufficient as far as the material provided was concerned and cannot therefore substitute a participation within the procedure leading to the Construction Act.

Being a hearing of the German public of the effects of the **Danish** half of FBFL on the German public, the hearing's object was ridiculously formulated.

2.2 The construction act therefore can be passed only if the objectives of the EIA-Directive are met, cp Artikel 2 para (2) lit b of directive 2014/52/EU. The material leading to the Construction Act must therefore be available not only in Danish, but also in German (at least in English, even though this would not be considered to be sufficient).

However as Ms Dorthe Gravgaard told us expressly by eMail from December 5, 2014, the material for the construction law is available

**only in Danish.**

The objectors consider this to be unlawful.

## 3. Split development consent

3.1 The overall development consent is split into two: On the German side it will be the result of an administrative procedure, on the Danish side the Construction Act will be a formal parliamentary law.

3.2 This splitting is after all agreed upon in the Treaty for the building of a fixed link across the Fehmarn Belt. See Art.13, paragraph 3, which states:

> The implementation of the necessary approval procedures will be, for the part of the Fixed Link on German sovereign territory, subject to German law, and on Danish sovereign territory to Danish law.

The German authorities have confirmed that there will be no proceedings, in which the objections of the public regarding the entire project will be taken into account. (Answer of the State (Länder) Government of Schleswig-Holstein, parliamentary information 18/1119, Question and answer no 3.).

The objectors maintain that the splitting of the building permit for the Fixed Link is not only inappropriate but also illegal and the Treaty, therefore, must be altered (if the whole project is not abandoned).

3.3 In this context, it is to be emphasized that the Espoo procedure is **not** a Strategic Environmental Assessment for the entire project,

> cf. the SEA Protocol = Protocol on Strategic Environmental Assessment of the Agreement about the Environmental Impact Assessment in a transboundary context, OJEU L 308/35 of 19th November 2008.
>
> DIRECTIVE 2001/42/EC of the EUROPEAN PARLIAMENT and of the COUNCIL from 27th June 2001 on the assessment of the effects of certain plans and programmes, OJEU 197/30 21st July 2001 but concerns a project – EIA (Directive 2001/92/EU).

The objectors maintain that such a strategic assessment should have been carried out for the Treaty and before entering into the procedures for the respective national development consents.

## 4. Necessity for a coherent authorisation

4.1 The objectors maintain that it follows from the EIA-Directive that the development consent for the Fixed Link must be a single uniform decision based on coherent material encompassing the entire project (both halves of the link together). This follows basically from the fact that building half a tunnel would make no sense and might also be technically impossible.

4.1.1 Under the Boxus-decision of the ECJ the requirements of the EIA-directive effectively have to be fulfilled also within the legislative procedure at hand. This point has now been clarified within Directive 2014/52. Thus, in particular, the definitions of the EIA-Directive apply.

4.1.2 The term "development consent" or authorisation" is derived from

> **'Development consent'** means the decision of the competent authority or authorities which entitles the developer **to proceed with the project**",
>
> Article 1, para. 2, lit c) EIA Directive

The term **"project"** is also found in the EIA Directive. There it is defined as

> "**project** means the execution of construction works, other installations schemes
>
> or other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources".
>
> Article 1, para.2, lit a) EIA Directive

4.1.3 From the fact that the

> '**developer'**, as a person applying for authorisation for a private project or as a public authority which initiates a project",

is given the right to **proceed** with the project, it follows that the project **must be feasible**.

4.1.4 It corresponds to general legal principles that the right to authorisation of a non-viable project does not exist. The German courts label this under the term -

> "no interest in a decision".

4.1.5 There can be no interest in a development consent for half a tunnel.

Only in such a way can the public (concerned) properly participate in the procedures.

## 5. No development consent through a parliamentary law

5.1 The objectors maintain that Denmark must not grant a development consent by parliamentary law, to wit: The exemption Article 1 No 4 of the EIA-directive is not applicable.

The reason for this is basically that the Espoo-convention regulation concerning cross-boundary participation does **not** contain such an exemption.

5.2 In fact the Espoo-Convention only speaks of "decisions of competent authorities", see in particular Article 1 (v) of the Convention,

> "Proposed activity" means any activity or any major change to an activity subject to a decision of a competent authority in accordance with an applicable national procedure; …

and simply does not mention "specific acts of national legislation".

5.3 There are also rules of German constitutional law that would forbid giving a development consent by parliamentary law.

The reason for this is that the Danish half of the tunnel does after all have legal and material consequences for the German public concerned.

5.4 Putting together the objectors maintain:

(1) It is **not** permissible to approve a measure such as the Fixed Link in separate proceedings for two tunnel halves without the public having an opportunity to comment upon the project in a manner, which, in the framework of a contiguous approval, would have to be considered with legal effectiveness.

(2) It ist **not** permissible to restrict participation in the Danish Espoo Procedure to the above-mentioned small portfolio in particular since many further relevant documents were also available at the time, but only in English and Danish.

(3) It is **not** permissible to base the participation of the German public concerned on documents that are not in German.

(4) A Strategic Environmental Assessment had to be carried out for "Fixed Link and (at least part of) Hinterland Connections"

5.5 Indeed, only within a Strategic Environmental Assessment a parliamentary act would have been possible:

> 'plans and programmes' shall mean plans and programmes… as well as any modifications to them: which are subject to preparation and/or adoption by an authority at national, regional or local level or **which are prepared by an authority for adoption, through a legislative procedure by Parliament** or Government, ...
>
> Article 2 Nr 5 lit b) SEA-Protocol, see also Article 2 lit a) indent 1 SEA-Directive 2001/42/EG.

In asfar as the second indent of Article 2 lit a) of the SEA-Directives provides (only) for plans or programmes which are required by legislative, regulatory or administrative provisions, the following can be pointed out: A cross-border project always requires some state treaty which usually is adopted by the respective national parliaments, mostly in the form of some formal legislation. These state treaties or the corresponding national laws then are the "plans or programs" which are to be subjected to a Strategic Environmental Assessment.

That there has to be an environmental assessment for the entire tunnel (and not only the respective halves) also follows from the "principle of integrated permits" as outlined above. While the rules of SEA provides for unifying procedures for several projects and a plan or program common to these, the rules of

EIA by the definition "projects" and "permits" make sure that an **non-dividable** project is subject to a **single** EIA.

## 6. The Aarhus Convention

6.1 The Aarhus Convention allows the implementation of environmental impact assessments only through authorities (Article 6) and specifically excludes from the term “authority” those bodies and institutions acting in a legislative capacity (Article 2, No.2, in fine).

However, in the Boxus Decision the ECJ (C-128/09) holds that the Aarhus Convention excludes parliamentary legislative acts from its application.

The Court infers this from the formulation of Article 1 of the Convention,

> This definition (of a public authority, undersigned) does not include bodies or institutions acting in a judicial or legislative capacity.

The objectors maintain that the Court is wrong in concluding that the Aarhus Convention excludes legislative acts from the application of the Convention. They hold this to be true only in an inverse sense namely that the relevant decision making processes must be non-legislative in nature.

The objectors maintain that, similarly to the situation with the Espoo Convention, the Aarhus Convention does not allow to issue a development consent by parliamentary law.

6.2 Independent from which interpretation one chooses: The Court sets strict standards for the legislative procedure and maintains effectively that the requirements of the EIA Directive must be observed.

6.3 Furthermore, the objectors point out that the Court holds that the right to legal action of the public concerned is not diminished by the fact that the development consent is granted by a law, **and that frequently no legal redress exist against parliamentary acts,** as is certainly the case in Germany (with very few exceptions).

## 7. TEN-T regulations

7.1 The objectors maintain that the planning of the FBFL violates the requirements of

> REGULATION (EU) No 1315/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU, OJEU L 348/1, 20.12.2013

and

> REGULATION (EU) No 1315/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU, OJEU L348/129, 20.12.2013,

as well as certain related regulations.

7.2 Regulation 1315/2013 spells out certain requirements for the elements of the trans-European transport network (TEN-T). In particular a socio-economic cost-benefit analysis -

> 'socio-economic cost-benefit analysis' means a quantified ex-ante evaluation, based on a recognised methodology, of the value of a project, taking into account all the relevant social, economic, climate-related and environ mental benefits and costs. The analysis of climate-related and environmental costs and benefits shall be based on the environmental impact assessment carried out pursuant to Directive 2011/92/EU,
>
> Article 3 lit t) of Directive 1315/2013

must be carried out. This is to be the case at least when a project is to be subsidized under council regulation 1316/2013 (which is the case for FBFL).

7.3 Under Article 7, para 3 lit c) the projects must

> be **economically viable** on the basis of a socio-economic cost-benefit analysis.

7.4 The objectors maintain not only that

(1) this holds for any project to be an element of TEN-T and certainly for the FBFL for which EU financing

has already been applied,

(2) said "economic viability" can **not** be achieved for the FBFL and thus the project is

**materially unlawful** under EU-law.

## 8. State subsidies

8.1 In particular, compatibility with EU-regulations for state subsidies is **not given.**

8.2 The Danish model for the financing of the FBFL- state-guaranteed loans granted to a state-owned company constitutes an infringement of Articles 107ff TFEU (TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION) - state subsidies. The guarantees constitute a state aid incompatible with the internal market.

8.3 The

> Decision COM(2009)5513, finally to N 157/2009 (Denmark), 13th July 2009, (cf. OJEU C 202/2, 27th August 2009)

does not invalidate this argument, to wit:

The Commission bases its decision **firstly** on **the assumption** that Femern A/S is acting as a public authority in their participation in the planning process for the infrastructure. Therefore, the use of government funding, which is granted solely for the planning of the project is not State Aid within the meaning of Article 87, (now 107 TFEU), para. 1, EC Treaty. **In addition** , the Commission stated that such public support under Article 87 (now 107 TFEU), para. 3, letter b, is compatible with the common market anyway, because it serves the execution of an important project of common European interest.

8.4 The objectors are of the opinion that the **first argument** of the Commission is no longer compatible with the view of the European Court on the public financing of infrastructure,

> " ECJ C-288/11P, 19th December 2012 (Airport

Leipzig/Halle)".

As to the **second argument**, the objectors point out that the project **is not** and cannot be in the European interest, because it deviates significantly from the requirements of the TEN Guidelines, in particular not being economically viable in the sense required by the TEN-T-guideline (see above).

8.5 From the German perspective, the tunnel therefore can not, for legal reasons, be financed. Under German jurisdiction a "plan justification" is therefore missing making a planning consent for the German half of the tunnel unlawful and therefore, the Danish half of the tunnel becomes an unfeasible project.

## 9. Ecology

9.1 There are a number of significant objections to the environmental assessments carried out for the project.

9.2 First of all, the planning documents maintain that there will be

> no significant (negative) environmental effects of building and using the tunnel.

9.3 This is utterly ridiculous.

Millions of tons of seabed material will be displaced and for several years the surrounding waters will be muddied by the construction causing fauna to die or otherwise to suffer in a significant way. This in turn will have strong effects for instance on birds as well as sea life feeding in the area. Benthic fauna and flora will terribly suffer. The same applies to sea mammals like the harbour porpoises living in the area and migrating through it. They will suffer not only through the deterioration of the water quality (for which, by the way, the hydrographical simulation models turn out to be false) but will also be deeply afflicted by noise through the construction period and probably through vibrations and electromagnetic effects while the tunnel is operated.

Some details will be spelt out below.

9.4 As far as compensation measures are concerned, the German side only offers money claiming - falsely - a compensation *in natura* as impossible.

It seems that on the Danish side, coastal landfills are considered as compensation measures. The objectors strongly disagree with this point of view.

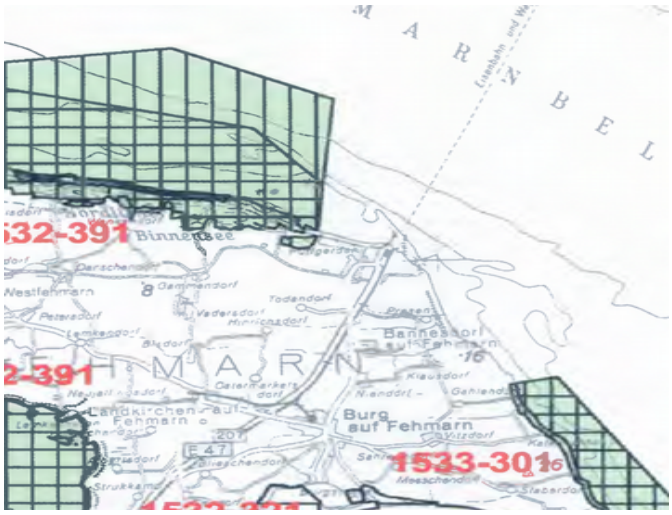
This distorted view becomes (formally) possible because of the Danish (and German) policy in designating special protection sites (birds directive and/or sites of community interest (habitats directive). There are great and unlawful gaps in the spectra of designated sites. If for examples, landfills are put into these gaps, they can for legal reasons not be considered to be compensation measures.

9.5 That political "keep clear" instruction is well known for German examples (Lübeck Airpoirt, A20).

9.6 On Fehmarn, the special (bird) protection sites look as follows:


(from the official publication of the map, the scale being slightly distorted for technical reasons), clearly leaving room for the FBFL.

9.7 For FFH areas see map:




(from the official publication of the map, the scale being slightly distorted for technical reasons)

The objectors maintain that “efforts to keep clear” are definitely recognisable here.

9.8 The corresponding situation on the Danish side cannot currently be assessed.

## 10. Tunnel safety

10.1 The objectors maintain that the planning process does not fulfil the requirements of Council Directive 2004/54, to wit:

> DIRECTIVE 2004/54/EC of the EUROPEAN PARLIAMENT and of the COUNCIL, 29th April 2004, on minimum safety requirements for tunnels in the trans-European road network, JOEU L 167/39, 30th April 2009 (hereinafter: Tunnel Directive)

10.2 According to Eur-Lex, Germany has implemented the Tunnel Directive through

(1) Revision of the "Guidelines for the equipment and operation of road tunnels" (RABT) and general circulars concerning road construction

Administrative act: Circular, number: 10/2006, Official Journal: Administrative measures, publication date: 27th April 2006; Reference: (MNE (2006)52992)

(2) Revision of the "Guidelines for the equipment and operation of road tunnels" (RABT) and a general circular concerning road construction

Administrative Act: Circular, number: 10/2006, Official Journal: Administrative measures, publication date: 27th April 2006;Reference: (MNE (2006)52991)

(3) 43. Regulation amending road traffic regulations and additional VwV-StVO, 10th April 2006

Administrative Act : Regulation, Official Journal : Federal Law Gazette, part 1 (BGB 1), publication date 30th March 2006,.Coming into force : 1st April 2006, Reference (MNE (2006) 52993)

It should be noted that the only legal act of realisation (number 3) above) applies only to the introduction of traffic signs. The RABT has been introduced by means of an administrative circular.

Denmark has implemented the Tunnel Directive as follows:

(1) Bekendtgörelse nr. 892 af 18 august 2006 om minimumssikkerhedskrav for tunneler, der er offentlige veje, og som indgar i det transeuropaeiske veynet

Act: Bekendtgörelse, number 892; Official Journal: Lovtidende A, date of publication: 18th August 2006, Reference (MNE (2006) 56288)

(2) Bekendtgörelse nr. 726 om minimumssikkerhedkrav for tunneler i det transeuropaeiske vejnet.

Act: Bekendtgörelse; Official Jounal: Lovtidende A, date of publication 8th July 2008, come into force 9th July 2008; reference: (MNE (2008)53956)

However, according to the established case-law of the European Court of Justice, an EU Directive cannot be implemented by means of administrative circulars. The implementation of the Tunnel Directive therefore is faulty in both countries.

The Tunnel Directive which should have come into force by 30th April 2006 has been, as yet, insufficiently transposed into German law and is, therefore, to be applied with immediate effect.

10.3 The objectors do not, of course, claim that the RABT (number 1 and 2 of the notification by Germany) should not be observed. The legal character of the RABT (or the accompanying introduction) is, however, only that of an anticipated expert report. It is not a general administrative regulation (cp Article 84, para. 2, GG (Basic Law of Germany))

10.4 The mandatory regulations of the Tunnel Directive with relevance to the circumstances of the present case include:

(1) Compliance with the **minimum requirements** according to Annex I (see Article 3, para.1 of the Directive);

(2) Designation of an **administrative authority** (Article 4)

(3) Appointment of a **tunnel manager** (Article 5)

(4) Appointment of a **safety officer** (Article 6)

(5) **Risk analysis** (Article 13)

(6) Exceptions for innovative technology (Article 14)

Important aspects to be ascertained relate to the transport of dangerous goods,

Annex I, number 1.1.2 of the Directive

the extent and importance of which needs to be explored, as well as **ventilation systems,**

Annex I, number 2.9 of the Directive.

The objectors consider the ventilation system indicated in the planning,

Environmental Report, Espoo-procedure, page 76,

which is

> made up of a **self-ventilating system due to piston effects** and **impulse fans** at the tunnel exits,

to be

> **totally inadequate.**

This is so specifically in view of the length of the tunnel and possible operational breakdowns (accidents), in particular large fires with an intensity in the region of 100 MW or possibly more.

The objectors have supplied many more technical details within their objections in the German participation procedure (Planfeststellungsverfahren).

According to Article 1, para.1, 3 of the Tunnel Directive, a single **administrative authority** is to be set up for each tunnel. Although Member States may, in principle, set up several administrative authorities (Article 1, para.1), this only applies to the Member State as a whole and not the individual tunnel (Article 1, para.3).

10.5 Article 5, para.1 of the tunnel Directive shows that this administrative authority must be established in the **planning phase**. Also, the tunnel manager (Article 5) is to be named in the planning phase.

This follows with greater clarity, from Article 4, para. 4, in conjunction with Annex II of the Tunnel Directive, whereby

> "the provisions of the Directive have to be applied from the beginning of the preliminary planning stage".

This is not a mere (nit-picking) formality.

The safety problems of the tunnel will not only arise with the opening of the tunnel but, quite definitely, in the construction phase as well.

In addition, specific elements of infrastructure of the tunnel must be assessed as to their necessity during the planning phase, so as to avoid at commissioning the experience that these measures would be necessary while it is too late for their supplementary installation.

10.6 It is not apparent that a single administrative authority was set up for the present planning. This constitutes a breach of the requirements of the Tunnel Directive.

It is, therefore requested that,

> the ongoing process be discontinued and, if necessary, not reopened until this authority has been set up and a tunnel manager appointed.

Otherwise this provision of the Tunnel Directive can not been fulfilled.

10.7 The objectors take this as a further argument to support their opinion that the planning should be carried out in total by a single administrative authority, since, for those affected, it is quite absurd and a fraudulent exploitation of their legal rights to authorise a tunnel in two halves.

10.8 Article 13, para 2 of the Tunnel Directive orders the Member States to develop a common methodology, with regard to risk analysis:

> "2. Member States shall ensure that, at national level, a detailed and well-defined methodology, corresponding to the best available practices, is used and shall inform the Commission of the methodology applied; the Commission shall make this information available in electronic form to other Member States."

10.9 Germany and Denmark should have co-operated in this respect to develop a joint methodology which is accessible to the public.

It cannot be seen that this has been done,

> which is being reprimanded as being a major omission.

10.10. Summarizing it has to be noted that the safety of the tunnel and its users has by no means been proven.

From the German perspective, a municipal political aspect is of particular importance. **Protection against fire** and of public safety fall, according to German law, (here: Fire Protection Act of Schleswig-Holstein, BrSchG-SH), under the responsibility of the local community i.e. presently the town of Fehmarn. This not only concerns the fighting of fires, but more general rescue operations.

It can be assumed **with certainty**, the town will not be able to fulfil its duties in relation to BrSchG-SH regulations.

As experience with the planning of the Elbe tunnel in connection with the A 20 motorway shows, the Federal State of Schleswig-Holstein, which may only become active on the initiative of the competent district authorities (in the case of the Belt tunnel the District of East Holstein), is not inclined to become active in a form of a contingent liability.

Should it turn out in this context, that the district and the state are united in their obstructive attitude, the **tunnel safety**

can indeed **not be guaranteed**.

Although the Federal Republic of Germany has transferred the operation of the tunnel to Denmark in Article 4, para. 1 of the Treaty, this cannot include the duties being subject of the Fire Protection Act of Schleswig-Holstein, since this is state law whilst the Federal Government, so far, is lacking relevant legislative competence.

## 11. Uninformed preliminary decision of implementing the immersed tunnel

### 11.1 General remarks

As mentioned in the introduction to the second part of the legislative proposal (Part 2 Explanatory statements on the Proposal), in February 2011, the immersed tunnel was selected from among the two technical solutions mentioned in the proposal for the Planning Act.

For the selection process, the following sets of criteria were used:

1) environmental impact,
2) security of shipping in the Fehmarn Belt,
3) operational security and hazard control,
4) technical construction risks,
5) duration of construction works,
6) economic efficiency.

Following a public meeting held on 20th January 2011 at Lalandia/Rødbyhavn, the Minister for Transport instructed

Femern A/S to focus its further planning on the immersed tunnel.

In this connection, it should be noted that contrary to the assertion in the explanations to the legislative proposal for the Construction Act (page 16) a good number of German participants at the Lalandia meeting brought forward a barrage of objections against the fixed link project in general and notably against the immersed tunnel.

Main arguments raised by them at that occasion were:

> Absence of proof of the socio-economic and financial feasibility of the whole venture;
>
> serious concerns about the marine environmental impact of the immersed tunnel and
>
> the risks to shipping during the construction phase.

Even the issue of a bored tunnel as an environmentally friendly solution was put forward by the German participants. On that occasion, directors of Femern A/S still argued that the Project would produce a net benefit of 1.2 billion Euro, though they knew very well that the net benefit of the immersed tunnel would range near zero.

Therefore, the Ministry is rebuked for alleging that, at said meeting, no new arguments were raised against the favoured solution of an immersed tunnel.

Although backed by the majority of Folketing, the 2011 instruction by the Minister in favour of an **immersed tunnel**

> **was based on an un(der)informed and thus incorrect and premature decision.**

The same flawed approach had already been taken in the proposal for the Project Planning Act of December 2008 in which the bridge solution was declared the preferred one; the immersed tunnel was only considered another possible option; a bored tunnel was not mentioned at all.

At that time, insiders knew already from the pre-feasibility studies (COWI-Lahmeyer, 1999) that a bridge would result in intolerable average risks for shipping and thus would not be feasible.

Likewise, the marginal (and deceiving) results of the earlier

socio-economic project evaluation (COWI—Danmarks Transportforskning, 2004 - not in compliance with TEN-T requirements!) on the poor economic efficiency of the immersed tunnel should have been considered in Folketing's decision on passing the Planning Act.

However, this important fact was omitted from the legislative proposal of 2008 in order to leave a loophole, if the bridge solution failed.

Nevertheless, and against all rational planning, Femern A/S has included the bridge solution in its German plan approval documentation as still "feasible" solution.

Irrespective of this, the immersed tunnel is now being presented as the only and final option for which Folketing shall issue its development consent. The legislative proposal for the Construction Act and its related documentation is grossly inadequate for Folketing to come up with a fully informed decision as will be shown below.

## 11.2 Further major faults in the project plan

### 11.2.1 Flawed selection of the favoured immersed tunnel

The selection of the best technical solution for the Fixed Link structure proposed for implementation is beset by a number of deficiencies indicated below.

### 11.2.2 Only cursory appraisal of the null alternative (baseline scenario)

Right from the beginning, i.e. already at the pre-feasibility stage, the Ministry of Transport failed to consider the null alternative for planning of the Project. The null alternative is marked by retaining the ferry service while freight trains continue using the existing Jutland route. This reference case has never been seriously evaluated. In 2004, COWI-Danmarks Transportforsknign indicated that assessment of this alternative might be beneficial. But the Ministry failed to heed this expert advice.

Due to the clear instruction by the Ministry to further planning

of the immersed tunnel, Femern A/S also failed to evaluate the do-nothing alternative.

The objectors rebuke Femern A/S for their obvious neglect of a self-evident obligation in plan preparation and demand that this fault is made good as precondition for a final decision on project implementation by an act of Folketing.

### 11.2.3 Unfeasible bridge solutions

The deceiving and wasteful manner by which the bridge solutions has been dragged along throughout project preparation from the pre-feasibility study, via the Planning Act, the subsequent feasibility studies and the current approval stage of the Project has been unveiled under Section 11.1 above. A lot of money has been wasted on studying this nonsense solution. The unacceptable average risks for shipping were already known by 1998. By cunning editing of the final pre-feasibility report of COWI-Lahmeyer, this fact was hidden somewhere in the annexes to the main report in order to ensure that no time pressed decision maker might stumble across this decisive technical planning restriction. Later on, the earlier findings from 1998 were corroborated through costly simulation runs on bridge design and fairway layout.

Moreover, the additional findings on the negative environmental impact of bridge piers in terms of the qualitative stratification of water currents as well as the quantitative impairment of the water exchange through the Fehmarn Belt should have been enough for abandoning the bridge solution. Irrespective of such obvious killer conditions, Femern A/S is still alleging that the bridge solution is a feasible option while including it in the final selection exercise for the optimum technical solution.

In Section 12.2.5 of its proposal for the Act (page 46), the Ministry alleges that all technical solutions have been examined through diligent and prudent analysis. The above representations give evidence that this claim is lacking substance.

Therefore, the objectors reprimand the Ministry for its failure to control the work of Femern A/S in order to avoid wasteful planning that is obviously deceiving the public. They demand that the Ministry subjects the plan to thorough scrutiny by independent international consultants.

### 11.2.4 Methodology of selecting the optimal fixed link solution

The proposal of the Construction Act only mentions the sets of criteria applied for the selection of the optimal fixed link solution (ref. Section 12.2.5). Therefore, the final decision-makers are assumed to just follow the Ministry's recommendation for their vote.

Neither the Ministry nor Femern A/S are disclosing how they established their preference for the immersed tunnel. The documentation in this respect on the websites of the Ministry and Femern A/S is exiguous. On 9th September 2013, Femern A/S just published a memo (2 pages) "The selection of the immersed tunnel as the preferred solution" without any indication on the methodology and criteria used. Apparently, the final choice has mainly been made under consideration of construction cost.

Since the bridge solutions are obviously unfeasible, decision makers' final choice will be reduced to the two tunnel options, i.e. the immersed tunnel and the bored tunnel – or an improved do-nothing alternative in case the latter is also assessed in depth.

The cost comparisons in Section 12.2.5 of the proposal suggest that the bored tunnel and the cable stayed bridge were mainly deselected by taking into account construction and recurrent cost. Though environmental impacts allegedly had been carefully assessed, they are not specifically mentioned as having played a role in the deselection process.

As mentioned before, any considerations of the bridge solution was and is absolutely superfluous because it is not feasible.

This leaves the question of whether the deselection of the bored tunnel can simply be decided through a mere cost comparison.

Taking into account the documentation which Femern A/S produced in their application for the German development consent, the question has to be answered in the negative. On the basis of their multi-criteria comparison, the immersed tunnel was clearly rated inferior to a bored tunnel in terms of former's significant environmental impact. Yet, in the course of the overall assessment, the bored tunnel was excluded by using its "higher" cost as the final "killer argument".

In this connection it is worth noting that Femern A/S is essentially still sticking to the outdated design concept of a tunnel with three single bored tubes as proposed in the pre-

feasibility study of 1999. Since then, technological advance in tunnel engineering make possible boring of large diameter tunnels. In consequence, only two bored tubes would be needed. Thus construction cost could be saved through scale effects.

Moreover, Femern A/S always claims that, in view of the geology, tunnel boring would involve a number of serious engineering risks. Such assertions are untenable. In recent years, a good number of bored tunnels have been implemented under similar geological conditions and without technical problems.

The headstrong negative approach of Femern A/S to the bored tunnel solution suggests that they obediently stick to the Ministry's order of February 2011 to construct an immersed tunnel. Any other solution is or has to be described as unacceptable.

### 11.2.5 Arguments from the Høringsnotat October 2014

The Ministry follows the same approach as can be seen from its hearing note (Høringsnotat – VVM-redegørelse for en fast vorbindelse over Femern Bælt, October 2014). Under Section 2.3.4 (p. 48ff) the recommendation of Dr. Silvino Pompeu Santos in favour of a bored tunnel solution is repudiated by the following arguments:

a) Femern A/S and their consultants had very carefully investigated i. a. the bored tunnel,

b) this solution offers only small advantages in terms of the environmental impact,

c) the high risks of constructing and operating the tunnel,

d) high construction and operation cost,

e) higher duration of construction time,

f) risks for shipping.

The objectors maintain however:

ad a):

> The asserted “careful” assessment of the bored tunnel is questioned because the state of the art had obviously not been applied (as evidenced by three tunnel tubes).

ad b):

> The allegedly “small” environmental advantage of the solution is the result of an obviously heavily biased overall assessment of all environmental impacts: By underweighting of the prevention of sediment spill related ecological problems while overweighting respectively exaggerating some negative environmental impacts (e.g. possibly toxic tailings, stabilization of tailings) not specified in the hearing note but in the final EIA report (Hørings-notat October 2014) for the Danish environmental public hearing of summer 2013.

ad c) through e):

> All these arguments appear artificial and forced having the sole purpose of imposing the “favoured” immersed tunnel solution. They are lacking thorough substantiation on the basis of state of the art engineering instead of following outdated design concepts.

ad f):

> The risks for shipping is not discussed in the Høringsnotat. That shipping will not be endangered during construction of the immersed tunnel is still maintained in Chapter 5 of the final EIA report prepared for the Danish public hearing.

Most of the tailings accruing on Fehmarn from the bored tunnel are envisaged to be transported across the Fehmarn Belt for land reclamation works on Lolland. The tug and tows crossing the fairway increase the risk of collision which Femern A/S rates a disadvantage of the bored tunnel (similar to the immersed tunnel). With respect to the alleged prudent planning of

alternatives, the question arises of whether any thought had been given to the obvious option to avoid, in the case of a bored tunnel, this technical problem by landfilling on Fehmarn.

### 11.2.6 Inadequate environmental assessment

11.2.6.1 In its Section 2.1 the proposal for the Construction Act acknowledges the inevitable environmental impact of the Project. It highlights the legal obligation to analyse the environmental impact of the Project and to develop mitigating measures to reduce the potential environmental degradation by the Project. These requirements have not been adequately fulfilled.

11.2.6.2 The Planning Act puts the Ministry of Transport in charge of supervising the EIA and related studies instead of leaving the competent Ministry of Environment responsible for this task. Already at this point of project preparation it should have been clear that this decision resulted in a permanent clash of interest between environmental concerns and engineering.

11.2.6.3 While the Ministry was and still is pressing ahead with project implementation, aspects of environmental protection are only considered as restricting technocrats'/engineers' scope of action and progress of planning. The two final environmental reports of the Ministry of Transport give strong evidence to suggest that, in this clash of interest, environmental considerations were sacrificed in favour of engineering expedience.

11.2.6.4 The fact that Femern A/S obviously authored the final environmental report is symptomatic for a deceiving approach taken to lull the public, and apparently this approach is supported by the Minister: The driver of the EIA is even enabled to defend his insufficient studies.

11.2.6.5 This obvious bias could have been avoided by completely entrusting the EIA to the Ministry of Environment.

11.2.6.6 Else, the environmental studies produced so far, should be reviewed by independent international experts directly employed by the Ministry of Environment.

## 12. The Marine Strategy – Framework Directive; Biodiversity

12.1 The objectors maintain that neither

> the "DIRECTIVE 2008 /56/ EC of the EUROPEAN PARLIAMENT and of the COUNCIL; 17th June 2008, for the establishing of a framework for measures of the COMMUNITY in the field of the Marine Environment (Marine Strategy Framework Directive), OJEU L164/19, 25th June 2008",

nor the

> Biodiversity Convention of the UN (Convention on Biological Diversity

have been properly applied.

The planning process restricts itself to (an inefficient) application of the Birds Directive and the Habitats directive (numerus clausus of species etc).

Biological diversity is an object to be protected in its own right, in which disruptions can be examined according to the **indicator method** developed by the German Federal Agency for Nature Conservation.

Such an examination

> is **demanded** by the objectors.

This could apply, in the project at hand, mainly to the Benthic species and communities, which will be significantly disturbed not only by the "footprint" and the sediment spill, but also by the fixation of the seabed along a longitudinal axis.

12.2 Such investigations should be furnished prior to the passing of the Construction Act and should have been already included in the public participation process.

## 13. Some obvious deficiencies in the investigations are presented in the following sections

## 13.1 Impact of dredging works

13.1.1 The Ministry admits in the law proposal (Section 15.1 p. 56f) that the dredging and landfilling works are likely to result in material losses. Yet, it plays down this environmental problem with the argument that natural sediment load of the Fehmarn Belt is much higher than the material losses caused by the construction works. Therefore, the impact on the marine flora and fauna is argued to be low.

The objectors challenge this claim as untenable (see already above).

13.1.2 On the basis of "in-depth" investigations and simulations by a set of numerical models, Femern A/S asserts that the settling of sediments will be mainly limited to the vicinity of the tunnel trench whilst only part of the sediments will be transported to more distant areas, e.g. the Arcona Basin or the Kiel Bight. The assurance of Femern A/S that the project design is based on reasonable optimizations of project works including a dredging plan minimizing sediment spills to marine waters has to be judged with strong reservations.

13.1.3 An expert's review of the various simulation models arrives at the following observations on the work of Femern A/S:

(1) The compilation and application of relevant data easily available from German authorities has been insufficient, own field investigations have been inadequate in terms of quantity, duration and spatial distribution; the source of data related to morphology and sea bed material is often not mentioned.

(2) The resolution of 1000 to 3000 m (and above) of the numerical models for the simulation of hydraulic and morphological processes in the local and regional sea areas is too low for arriving at any meaningful predication about the environmental effects of the construction works, especially in terms of sedimentation.

(3) Model data input is partly defective in terms of bed roughness relative to the local seabed conditions; fine material has not been considered and samples were only taken in the Danish part of the Fehmarn

Belt.

(4) The investigations are obscure due to lacking descriptions of the simulation models used.

(5) The significance of the models cannot be verified because in many cases the imperative calibrations of the models are missing.

(6) The results are obtained on the basis of averaged input data; extreme events have not been duly considered.

(7) Existing structures of coastal protection are not indicated.

(8) There is a glaring discrepancy in the assertion that sediments are mainly settling within the vicinity of the construction site while a substantial part is also transported to the Arcona Basin.

(9) The simulations do not adequately consider the importance of the Fehmarn Belt for the qualitative and quantitative water exchange especially during extreme events (change of salinity and oxygen content of water, current velocities as well as sediment loads and transport).

As to the impact on individual functional elements of the immersed tunnel, the expert states:

For the immersed tunnel, only the change of current velocity in the upper surface of the Belt and wave heights have been determined.

(1) Information on salinity, temperatures, water levels and stratification is lacking; without this data some of the results cannot be verified;

(2) No scenarios of extreme events have been taken into account, i.e. extreme storm floods, design scenarios for coastal protection, current surges of saline water: therefore the impact of the fixed link structure cannot be reliably assessed;

(3) The investigations on the cumulative impact of the fixed link structure cannot be reproduced because of the missing basic data and the limited extent of the map section applied;

(4) It is impossible to comprehend why no serious functional impairment by the project has been determined though several hundreds hectares of coastal areas will be also lost due to the immersed tunnel.

Furthermore, the expert deals with the negative effects of the construction related measures and raises the issues of:

(1) site reinstatement in order to re-establish the environment to its original conditions;

(2) the absence of any information on the type and quantity of material used for backfilling the tunnel trench; this information is important for assessing the long term consequences of the works;

(3) the respective duration of such recovery; in this connection, the expert warns against grave misjudgement of such processes.

13.1.4 Trench stability is another issue not properly dealt with in the studies of Femern A/S. Already the pre-feasibility study by COWI-Lahmeyer gives evidence that the trench slopes may be instable and that considerable sea bed erosion has to be anticipated in the close vicinity of the trench. This expectation is corroborated by the more detailed geological information available by now.

13.1.5 In consequence, the quantities of dredge spoils and refill material will be much higher than indicated in Section 15.5.7 (p. 78) of the legislative proposal at hand.

13.1.6 The above expert opinion on the multitude of critical environmental issues clearly shows that the studies by Femern A/S are incomplete and not suited as basis for the legislative proposal at hand. His observations leave the impression that the very basic investigations have been presented under the cover of a highly scientific work approach which in fact has been debunked a mere deception.

13.1.7 In view of the fundamental importance of the above observations, especially for the marine ecology, and while taking into account the principles outlined under Section 6.1 of the legislative proposal for the handling of environmental issues

the objectors strongly urge the Ministry to

- stay the initiated legislative process
- order a comprehensive revision of the EIA
- resume the legislative process only subject to a new, objective and altogether sound decision making basis.

## 13.2 Impact on benthos and plankton

13.2.1 Construction of the immersed tunnel will pose a massif intervention into the benthic habitat caused by dredging works (tunnel, extraction of sand), erosion of the sea bed in the vicinity of the tunnel trench and increased water turbidity as well as settling of sediments in sea areas the locations and sizes of which have not yet credibly established.

13.2.2 This environmental problem is briefly mentioned in Section 15.5.7 of the legislative proposal. Potential loss of benthos is obviously played down as being of low significance, because affected benthos communities will recover within 1-2 years.

13.2.3 The objectors reject such assertion as not substantiated by the environmental assessments performed so far.

13.2.4 The assessments are marred i.a. by the following deficiencies:

(1) The case studies are quite old (about 5 years)

(2) The location and density of the sampled sea areas is dubious so that the statistical significance of the results obtained is insufficient.

(3) The disturbing effects for the benthos habitat are not made transparent.

(4) Environmental sensitivities of benthos are verbally described but not quantified.

(5) The ecological impact forecast fails to determine the severity of the intervention into the habitat.

(6) In conjunction with their “scientific” approach, the assessments elucidate once again that they are

performed only in order to justify the feasibility of the immersed tunnel.

13.2.5 The objectors challenge this manipulative planning approach biased in favour of the immersed tunnels and demand a thorough review of the methodology and approach by independent experts in order to provide decision makers with reliable facts.

## 13.3 Impact on birds

13.3.1 In several sections, the legislative proposal at hand stresses the importance of bird protection in connection with the construction works. Yet, in view of a still fragmentary baseline study on the bird populations possibly affected, it is futile to argue about mitigation measures without knowing the facts.

13.3.2 All in all, the environmental report focusses, from the outset, on only five out of about 230 known species. This can, by no means, be sufficient for an environmental assessment.

13.3.3 Apart from the objection to an inadequate collection of data, the impact assessments are contestable:

**"unlikely to cross the alignment area" (Red-necked Grebes)** is not enough as a reason for irrelevance, crossing must be excluded.

**"areas are assessed to be of minor importance to the species, since these areas are already highly disturbed" (White-tailed Eagle)** – a principle of already existing disturbance levels does not exist; it is rather the other way round, if the species still appears in the area despite disturbances, it is highly probable that further disturbances will be fatal.

**"not being sensitive to habitat change" (Gulls)** – cannot be accepted. The fact that a species suffers a loss of habitat cannot be conjured away with the comment that the species could move away. The alternative areas, if suitable, are, firstly, likely to be already occupied and, secondly, it is precisely this "salami slicing" which lead, in the end, to no more suitable areas being available.

**"The total loss of such shallow water habitat on the German side would be rather small (approximately 22 ha)" (Terns)** – 22 ha are not a small area! It is, in this case, only necessary to refer to the Santona Decision of the ECJ.

13.3.4 The planners' considerations addressed are paradigmatic for their biased planning approach. By assuming the size of the chosen area affected, the impact on large sub-areas is belittled, the – theoretical – avoidance options of species are, in effect, rated as contribution to nature conservation, and the killing-rates are verbally and qualitatively downgraded to insignificance.

All this **cannot be tolerated and calls for thorough review and revision in order to arrive at an fully informed decision on project feasibility.**

## 13.4 Impact on bats

13.4.1 The legislative proposal mentions only mitigating measures for the protection of bats in connection with the land based works (see for instance Section 15.4.3.1). There is no information on the impact of the tunnel on bats.

13.4.2 With regard to the Bat-background studies, in particular to the impact assessments, it should be noted that this (and this also applies to other background studies) contain a huge "overhead" of general statements, i. e. statements which re-appear in every background paper and are not directly related to the problem concerned. In view of the abundance of material to be scrutinised, this is to be criticized.

That said in advance, the objectors note:

13.4.3 The studies focus on migrating bats,

> Environmental Report for the Espoo process, page 283.

The approach is contested, as in coastal areas and especially in the area of the tunnel portals, also bats on the hunt, which are not migrating, have to be expected.

13.4.4 The planners must admit that "average" collision risks exist, but they regard them as being insignificant.

In view of the significant migration perpendicular to the route of the FBFL (on land: motorways and railway, power lines) this is contested.

13.4.5 Nevertheless, the assessments come to the conclusion; for instance on page 284 of the Environmental Report of the Espoo hearings:

> "Most of the potential pressures in the operational phase were assessed to cause no impacts on the relevant bat species during their migration phase. Only the pressure 'Traffic-related collision risk' was assessed to have an impact on migrating bats.
>
> The degree of impairment regarding traffic-related collision risk is assessed to be minor for Noctule and medium for Nathusius' Pipistrelle and Soprano Pipistrelle in the area of the tunnel entrances.
>
> The impact assessment therefore concludes that any predicted impacts are insignificant at local (the Fehmarn Belt) and population level. Furthermore, the investigation on bat migration predicts that only a few bats on a local scale will be impacted. Therefore, no trans-boundary impacts are expected."

The objectors maintain that this conclusion is false.

13.4.6 Once again, the above statement is symptomatic for the structural deficiencies of the environmental studies and planners' approach of playing down environmental problems:

(1) Limitation of the approach used in the investigations "migrating bats").

(2) Exclusion of significant risks ("only the pressure 'traffic-related collision risk' was assessed to have an impact on migrating bats")

(3) Conclusion of not inconsiderable impact ("the degree of impairment is … medium …").

(4) Conclusion that these are insignificant in the Espoo Procedure (- "only a few bats on a local scale will be affected" – "no trans-boundary impacts"), whereas the method used is questionable because the basic investigations do not just restrict themselves to trans-boundary impacts. The problem lies in "only a few", since the assessments, according to the laws

on species protection, on the one hand, must be quantitative, on the other hand "only a few" casualties should be sufficient in some cases for invoking the regulations governing exceptions.

## 13.5 Impact on fish

13.5.1 Stock taking of fish species for the baseline survey was restricted mainly to the Danish territorial waters. As German fisherman from Fehmarn noted, a number of endangered species were not listed in the records, though their presence is known from by-catch. Likewise, fisherman from Fehmarn reported that they have obviously not been considered as resource persons on the local fish fauna.

13.5.2 Turbidity and sediment spill as well as landfills in coastal waters will have a massively effect on the local fish fauna as in particular spawning and spawning grounds will be either completely lost or at least greatly affected.

13.5.3 This will also have indirect effects on birds and direct effects on commercial fishery.

13.5.4 The objectors maintain that the planning process does not assess these damages properly.

## 13.6 Impact on the harbour porpoise

13.6.1 In the legislative proposal the species harbour porpoise is casually mentioned in Section 15.5.3.1 (p. 69) but only with respect that these mammals will leave the Fehmarn Belt if exposed to excessive noise or in response to deliberately applied scaring measures.

13.6.2 The objectors note again that the most critical issues for project feasibility are left unmentioned in the Ministry's explanations:

(1) Harbour porpoises are a highly endangered species in the Western Baltic Sea.

(2) Recently published results of continuous surveys over several years on the species' abundance and migratory behaviour in the Baltic Sea west of the island of Rügen confirm the high importance of the Fehmarn Belt for the reproduction of the population (Federal Agency for Nature Conservation, 2014); this has been evidenced by flight observations and counts of calves.

(3) Scaring away of harbour porpoises from the construction site will result in a reduction of their already confined habitat and respective feeding grounds.

13.6.3 The environmental assessments carried out so far by Femern A/S play down potential conflicts between this species and construction interests resulting in such statements as reflected above under 5.3.13.1.

13.6.4 In view of the high significance of this environmental problem for the feasibility of the immersed tunnel solution, the objectors demand to stay the legislative procedure until this issue has been thoroughly analysed by independent experts commissioned by the Ministry of Environment.

## 14. Dynamics of the sea bed

14.1 An extremely important dynamic factor is that of sediment spill (see above). Its relevance (impairment of water composition, light conditions and feeding grounds) is not disputed. The objectors, in their in-depth analysis of the German "Planfeststellungsunterlagen" found that already the hydrodynamical models were wrong and the overall effects of sediment spill widely underestimated.

14.2 This said, it appears to be most strange that the question as to the impact on the seabed by a huge trench, which will be filled in by the watertight tunnel, has not been dealt with,

cf Environmental Report Espoo, page 75.

The objectors maintain that the sheer presence of this structure will render transverse movements of the seabed virtually

impossible along the stretch of the Fehmarn Belt. Consequently, not only the morphological conditions that cannot be perceived as being static will be significantly affected, but also the Benthic Flora and Fauna which will no longer be able to migrate across this barrier.

Hence, the tunnel will result in

> a significant barrier effect for the seabed.

Therefore, the conclusion to the contrary of the planners,

> Environmental Report Espoo, Section 1.6.7 and 1.6.8,

is refuted.

It is however not so that the planners view the seabed as not being dynamic. In the brief summary of the morphology (see above, 1.5) is stated :

> "The impact simulations show that the seabed is dynamic and that sediment spill is characterised as temporary impairment."

The objection raised is that the assessments stop here whereas the disruption of the dynamics as such is not discussed.

## 15. Economics of the Fixed Link Project

### 15.1 Traffic Forecast 2014

15.1.1 In Section 12.3.1 of the legislative proposal, the updated Traffic Forecast 2014 (published by Femern A/S in November 2014) is mentioned. In principle, it should a basic building block the basis for the economic evaluation of the FBFL in terms of the latter's socio-economic and financial feasibility.

15.1.2 Credible and robust forecasts on traffic volumes by mode are forming key parameters to this end. The recent traffic forecast fails to fulfil this requirement in several decisive aspects.

15.1.3 The B Case scenario of the forecast is still basically based on the assumption that Scandlines will completely abandon its service

across the Fehmarn Belt.

The objectors maintain that the assumption that ferry services will completely close down with opening of the fixed link is unrealistic.

Though the impact of a continued ferry service is formally attempted, this happens in a half-hearted way only. The respective approach and assumptions are obviously tailored in a way to play down the significance of such competition.

15.1.4 Definitely not taken into account is the scenario of all ferry services closing down before the opening of the crossing. The building of the tunnel will greatly affect traffic across the Belt and without financial compensation and/or mitigating measures during the building phase might turn out to be economically unrealistic.

The objector cannot see that SCL or other ferry services providers are under any legal obligation to provide these services.

15.1.5 According to the material provided, the planners expect a rapid increase in traffic numbers after opening the tunnel.

A substantiation for this "four years ramp-up effect" is not given however. A ramp-up of 40% of the traffic at opening of the tunnel previously forecast was at least drawing on the experience of the Great Belt and Øresound crossings.

In the Traffic Forecast 2014, the traffic jump (ramp up effect) for all road vehicles is predicted to reach 54% (66% increase for passenger vehicles).

It seems these forecasts have been “adjusted” by inverting the approach, in which the “needed” traffic demand 2035 became model input and the traffic jump output. The objectors suspect that those traffic numbers needed to have the tunnel financed by toll payments are inserted into the calculation as a starting point from which the needed ramp up is derived.

The objectors reject such forecasts on the traffic jump as pure fiction and plucked from the air, because the FBFL can not be compared with the links across the Great Belt and Øresound

15.1.6 In this context, the exclusion of the phenomenon of tunnel

phobia from the forecasts is another fault symptomatic of how the traffic volumes have been predicted with a positive bias.

Norwegian studies (SINTEF) suggest that tunnel phobia and tunnel fear have an impact (of 5% – 30%) on drivers' (and passengers') decision to use a tunnel. This holds true especially for long subsea tunnels like the one of the FBFL where road users have the choice to use a ferry.

The objectors request that the effect of tunnel fear on the traffic forecast for the tunnel resp. ferry service must also be assessed

15.1.7 The prospects of an important competitor for the FBFL coming up with the railway tunnel crossing the Baltic to link Trelleborg and Sassnitz/Stralsund is not assessed in the assessment of transport in the Scandinavia-Continent Region. Planning of the COINCO project is steadily progressing and decisions makers should pay due attention to this project. Failure to address this project in the making is another indication of planners' sweeping problems under the carpet, if the latter become relevant for feasibility decisions.

15.1.8 In conclusion of the before said, the new Traffic Forecast 2014 does **not** represent a sufficiently robust and reliable basis for sound decision making on the feasibility of the FBFL.

This will have legal consequences at least on the German side, where the Supreme Court will minutely dissect the traffic forecast in the context of "plan justification".

## 15.2 Financial Analysis 2014

15.2.1 The Financial Analyses 2014 - another fundamental component of the economic analysis - mentioned under Section 12.4 of the legislative proposal are still speculative guesswork, because they lack substantiation by robust traffic forecasts (see above) and cost estimates.

Moreover, the assumption of substantial grant funding from the TEN-T coffers has also remained mere speculation.

15.2.2 The update of the previous cost estimates by using the price index of 2014 raises the question of the source of this index

which may be only known in 2015. Irrespective of this observation, the new index does not materially improve the previous cost estimates of the FBFL because the latter remain essentially based on semi-detailed quantity computations as is usual practice for feasibility studies. The more realistic assumption of increased contingency costs (30%) was long overdue. Nevertheless, the current estimates remain shaky.

15.2.3 A construction budget of around 52.7 billion DKK (7.1 billion Euro) for the tunnel component of the FBFL plus some 9.5 billion DKK (1.3 billion Euro) for the Danish hinterland infrastructure sums up to the big amount of 62.2 billion DKK (8.4 billion Euro).

15.2.4 In view of the poor average daily traffic by 2035 of around 13,000 vehicles (possibly substantially lower in view of the highly questionable traffic jump), decision makers are faced by a striking imbalance between traffic demand and total cost.

15.2.5 The problem of low road traffic is still aggravated by the project objective to relocate freight transport from road to rail.

15.2.6 The financing model proposed envisages the total cost of the FBFL (construction and operation/major replacements plus the borrowing cost) to be essentially refinanced through user charges. While the railway operators are assumed to pay only the trifle amount of operating cost saved by using the 160 km shorter rail link of the FBFL (ref. Section 12.3.2 of proposal), the road users are presumed to shoulder the main burden of refinancing the FBFL. In view of the poor average daily traffic demand, it should be obvious that the refinancing model is doomed to failure; this in turn having the consequence that compatibility with EU-regulation on state subsidies can not be achieved.

15.2.7 The Ministry is not free to fix road user charges at levels which would be needed for enforcing refinancing in a reasonable period of less than 40 years. Tunnel charges would always have to remain in balance with the charges of the competing ferries.

Increasing railway operators' charges is also constrained by their option to revert to the existing Great Belt Link / Jutland route.

15.2.8 As the FBFL is always rated an integral project of the Union's TEN-T programme, it would, in principle, be entitled to grant funding from the respective EU budget. For the cross-border tunnel the maximum rate for grant funding could amount to 40% of the construction cost – provided the requirements of TEN-T Regulation 1315/2013 are fulfilled (see Article 7, paragraph 2 (c) of said regulation).

The objectors maintain that these requirements are **not** fulfilled.

In particular, conformity not only with environmental standards but also wit e.g. state subsidy law is required, all depends on the traffic using the tunnel passing a "break-even point" in terms of enough vehicles paying a high enough toll.

Even the planners concede that this break-even point can be reached (and only just be reached) under the assumption of state-guaranteed (and thus cheap) bank loans.

15.2.9 In the Financial Analysis 2014, the Ministry assumed a comparatively low EU funding rate of 18% instead of 40%. In view of the low income basis due to a possibly grossly overrated traffic forecasts, the Ministry's modesty is difficult to follow, not only for the public, but even for experts.

15.2.10 On 28th December 2014, more reliable estimates of the construction cost have been submitted by the contractor consortia in response to the tenders performed by Femern A/S. Accordingly, a revision of the financial analysis was already announced which shall be ready shortly before the beginning of Folketing's deliberations on the Construction Act. This approach suggests once again that the Financial Analysis 2014 has only been floated to deceive the public in the current "hearings".

## 15.3 Mandatory macro-economic project justification

15.3.1 According to Article 7 Para 2 lit c) of the TEN Directive 1315/2013 a TEN-T project of common interest "shall ...

> be economically viable on the basis of a socio-economic cost-benefit analysis; … .

If, as is the case for the FBFL, such an analysis is not even

provided and fundamental socio-economic assessments remain missing, the legal consequence can only be that

> FBFL is not a project of common interest (in the sense of the TEN-T Guidelines).

15.3.2 The TEN Regulation 1315/2013 (Article 3 lit t)) defines the "socio-economic analysis" within the framework of the TEN-T guidelines as follows:

> 'socio-economic cost-benefit analysis' means a quantified ex-ante evaluation, based on a recognised methodology, of the value of a project, taking into account all the relevant social, economic, climate-related and environmental benefits and costs. The analysis of climate-related and environmental costs and benefits shall be based on the environmental impact assessment carried out pursuant to Directive 2011/92/EU;

It thus outlines the essential components resp. project effects to be taken into account in such analysis. It is thus not only limited to cost components or direct benefits (various economic advantages accruing to infrastructure users and operators) but looks also at social, environmental and induced economic effects.

15.3.3 For more than ten years the Danish government has been avoiding to come up with a comprehensive and in-depth evaluation of the FBFL. The project evaluation of 2004 by COWI and Danmarks Transportforskning was the last exercise of this kind.

The analysis was very limited in terms of the socio-economic project effects assessed. More importantly however, the evaluation was seriously blemished by methodological flaws of double accounting of benefits (objectionable aggregation of direct benefits with financial revenues).

Already at that stage of the FBFL the project should have been abandoned because the true/corrected results would have shown that the project was unfeasible.

15.3.4 The call for a new socio-economic evaluation, voiced by opponents of the FBFL time and again and since 2007, remained without response.

At the EIA hearing in Rødbyhavn of 29th August 2013, the issue of a new socio-economic analysis was raised again by H. Kerlen.

In their reply, Femern A/S (CDY) denied any need for a new analysis. It is noteworthy that the Ministry's Høringsnotat of October 2014 is reproducing the respective reply of CDY in a contradictory manner – just another example of how Femern A/S is manipulating facts.

Following an enquiry of the "Aktionsbündnis gegen eine feste Fehmarnbeltquerung" to the then-Minister of Transport, Ms Pia Olsen Dyhr, she replied in a letter dated 16th September 2013

> "I can confirm that the Danish Ministry of Transport has no plans to initiate the preparation of a new socio-economic analysis of the Fehmarnbelt Fixed Link."

The Ministry's statement in the legislative proposal (see Section 12.5) on a new socio-economic evaluation of FBFL is indicative of a more active approach and that it has given up its evasive attitude on this issue.

Nevertheless, in December 2014 the project evaluation report has not been published as announced in the legislative proposal and thus was not made available for the public hearing. Possibly, the study was commissioned much too late for coming up with a thorough assessment of all the complex macro-economic issues of the FBFL.

15.3.5 As already mentioned above under 15.2.8, the TEN-T Directive 1315/2013 establishes mandatory preconditions for any grant funding of TEN-T projects.

Article 7, paragraph 2 (c) reads (see also above)

> "A project of common interest shall: ….
> be economically viable on the basis of a socio-economic cost-benefit analysis;

Moreover, Article 7, paragraph 4 reads:

> "Member states shall take all necessary measures to ensure that the projects are carried out in compliance of Union and national law, in particular with Union legal acts on the environment, climate protection, safety, security, competition, state aid, public procurement, public health and accessibility".

15.3.6 Thus the Danish government will have to come up with a comprehensive and in-depth socio-economic assessment of the FBFL which provides convincing proof of the project's viability – and this not only for the national government but especially for the European Investment Bank that will be in charge of

examining the cost-benefit analysis.

The numerous requirements that must be still fulfilled in accordance with para 4 of Article 7 are putting a big question mark behind Denmark's present eligibility for grant funding under the TEN-T programme.

The objectors maintain that at least presently such grants would be unlawful.

Moreover they maintain that the requirements of Article 7 of the TEN-T Guideline

**cannot be fulfilled**

as the requirement socio-economic feasibility

**cannot be obtained.**

15.3.7 Therefore, lawful co-funding by the EU

**is impossible,**

as Article 3 of Council Regulation 1316/2013 (CEF - Connecting Europe Facility) clearly spells out:

> The CEF shall enable projects of common interest to be prepared and implemented within the framework of the trans-European networks policy in the sectors of transport, telecommunications and energy.

This means that those projects which are not of common interest (which is the case for FBFL) shall not be supported under the provisions of Regulations 1315/2013 und 1316/2013.

## 16. The draft law (lovudkastet) is moot

16.1 Consequently the objectors maintain that the draft law is moot.

16.2 There is no way visible that the Folketing could pass a law based on this legislative proposal that would be either compatible with European Law, European environmental standards and German constitutional law.

16.3 Certainly a sufficiently informed decision of the Danish Folketing on building the FBFL is presently not possible.

16.4 The material provided to the public is not only

> **insufficient** (outdated and incomplete assessments of the environment, no usable material on climate or social effects and so on)

but also

> in vital aspects (traffic under toll conditions, parallel ferry operations and alternative rail routes through Jutland, financing in general) **conjectural in nature.**

16.5 So far, the kingdom's procedures in letting the public participate (like now, during the Christmas holidays with officialdom's absenteeism) has been at best evasive in nature and certainly entirely unfair procedurally.

16.6 The objectors **request -**

> provision of all documentation in all necessary languages, at least (also) in German,
>
> clear information about competent authorities, the importance of time frames and other procedural questions including judicial relief,
>
> availability of Telefax connection in order to make submissions provable in court,
>
> availability of collateral material in German such as is available to the Danish public as well as to the Danish Folketing.

(Hendrick Kerlen, who has been authorized by Dr W Mecklenburg, Lawyer, and the objectors themselves, is to sign this letter for all objectors)

Fehmarn, 4-01-2015..... Hendrick Kerlen .....