

Horsens – Skanderborg rail-link

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Background information

Development object

The aim of the project is to upgrade the railway line between Fredericia and Århus (of which the link between Horsens and Skanderborg is a part) and to further the electrification of the primary national railway-routes.

The project was proposed by the Danish National Railway Agency (Banestyrelsen) which is a subsidiary division of the Ministry for Transportation. The project was formally proposed in Parliament by the Minister of Transportation in order that expenses could be approved and initial investigations of the proposed project could be performed.

Background

The renewal of the main railway routes is an issue of national importance in Denmark, and is one which is regularly discussed by Parliament (to date one project has been adopted and given regional planning development consent). As with the construction of motorways, permission to undertake the construction of railway-lines necessitates the following of set Parliamentary procedures regardless of the size/length of the individual infrastructure project.

The history behind the proposed project dates back to the beginning of the 1990's when a political framework-agreement was constructed between a majority of the parties in Parliament. The agreement was based on the "Trafikplan 2005" (Traffic Plan) document (published by the DSB¹). The agreement was entered into in

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¹ DSB (Danish National Railway Company) is the national rail-operator. Before 1997 the DSB and the Banestyrelsen formed one entity, from 1997 onwards however the organisation was divided into two different companies.

November 1994. The agreement outlined the need to strengthen railway-transportation in relation to other forms of transportation. One of the beneficial “spin-offs” of the agreement was a furtherance of the investigations into the upgrading and further electrification of the main railway-routes in Jutland.

As a further continuation of this agreement the parties to it further enhanced their co-operation commitment in October 1996 by supporting the drafting of a national law on the upgrading and electrification of the route between Århus and Fredericia. Upgrading was primarily thought to consist of a straightening of the existing curved routes, which in essence meant the establishment of new tracks in several places along the total railway-route.

In February 1997 the parties to the agreement decided that the decision-making process should be divided into two separate procedures. The first outlined the main elements of the proposed projects, the adoption of which was required in order to allow for the payment of expenses related to the undertaking of detailed investigations of the proposed projects. The second concerned the proposed projects’ presentation to Parliament, which had to be accompanied by an Environmental Impact Statement (EIS).

A basic overall study was performed by a Commission (Baneplanudvalget) working under the auspices of the Ministry for Transportation during 1995/96, and was finalized in April 1997. The Commission’s task was to produce an overall plan for the extension and renewal of the Danish rail-infrastructure on the main-lines. Furthermore, it was stressed that the Commission should assess the demand for transportation and outline the needs of a national high-speed strategy. The tasks of the commission should be viewed in the context of the coming establishment of a Trans European Network. The study should form a basis for political decision-making on the furtherance of the proposed projects in the plan.

The report from the Commission called for the modernization of the main-routes of the railway-net (Modernisering af jernbanens hovednet, april 1997) resulted in a recommendation to straighten several sections of track along the existing main-routes in order to pave the way for high-speed traffic on the line. The section between Horsens and Skanderborg was, from an early stage, viewed at as ready

The DSB is now the rail-operator, whilst the Banestyrelsen is the railway infrastructure Agency.

for modernization. The report emphasizes that the existing rail-line between the two localities is actually double the length of the straight line distance between them. The report suggests that travel-time will be cut by 5-6 minutes if the project is carried out. The report does not however state the existing travel-time, which means that the expected reduced time is not related to any present value.

The report envisages that environmental problems linked to project realization will mainly be centered on landscape, barrier-impacts and noise. The report outlines two alternative routes, each of which has different environmental impacts. The cost of the project is estimated in the report to be approximately 0.7 billion DKK.

The report may be characterized as a deformed Strategic Environmental Assessment of a proposal to modernize the main routes of the Danish Railway-net. Although there is no underlying legal framework from which a conformity evaluation can be made, there can no doubt that environmental considerations form a part of the approach to planning.

Characteristics of the project

Characteristics of the project are:

- International railway-line, restructuring of (EIA-Directive Annex I, 7), 15 km in distance
- Estimated cost of project 0.7 billion DKK
- Estimated cost of EIS-investigations 25 million DKK.



Planning legislation and procedure

The overall procedure underlying the adoption of the project is composed of multiple requirements. The procedure is not however

formally laid out in a single piece of legislation. It is therefore necessary to describe each of the procedural requirements in turn. Any such description must however also include the procedural requirements of the Planning Act and the Danish Constitution. Furthermore an administrative target group was formed as soon as the proposed project was formulated. The administrative target group is composed of officials from the Ministry of Transportation, the Danish National Railway Agency (Banestyrelsen), the body who instigated the project, and the different departments under the Ministry for Energy and Environment. This administrative target group can be subdivided into groups focusing on specific problems in the project. The group as a whole met, on average, on a monthly basis during the 1½ years that the planning-procedure lasted – sometimes more frequently.

The planning procedure process followed the formalized path laid down in the Planning Act. The procedures described in the Planning Act, divides project/plan adoption into three formal phases. After it is decided to submit the project proposal for an EIA-procedure, which is done by the proposing Agency (Banestyrelsen), the project concept is publicized together with an extended project description, and also combined with a proposal for scoping of the EIS to come. The documentation is then submitted for public discussion. Public hearings are held in the local areas affected by the proposed project (this early public solicitation of ideas and proposals for the proposed project is prescribed in the Planning Acts art. 22). The duration of this public scoping phase is at least 4 weeks – more often than not it lasts up to 8 weeks. The outcome of such hearings are then elaborated upon by the proponent Agency and included in the final EIS.

If the results of the public scoping phase do not present significant cause for concern amongst the general public, the proposed project is then “translated” into a proposal for a law on this basis. The adoption of this law acts as the formal consent from Parliament to carry out the detailed investigations necessary for the production of a full EIS on the project. (The specific project that concerns us here is the Horsens Skanderborg project, proposed to Parliament as Law no. 205 of 19. March 1997, to straighten the railway-line between Eriknaer and Horsens, and from Horsens to Skanderborg).

If the expenses required to produce a full EIS are granted by Parliament the final EIS is produced and submitted for public comment for a period of at least 8 weeks. During this eight weeks period public meetings are held, and the views of other pertinent

authorities on the proposed project are submitted to the proponent Agency. Along with the publication of the final-EIS, a proposal for a construction act is also submitted for parliamentary decision. If Parliament adopts the act, the project has then in principle attained the necessary level of consent in relation to the EIA-procedure. The project in question here was however never subjected to the scrutiny of this decision making phase because (implementation of the zero+-alternative (no go alternative) was chosen after the initial hearings.

The formal legal requirements relating to the decision-making process in such cases are laid out in the rules of the Danish Constitution itself, which calls for a triple reading of each proposal presented to Parliament with interchanging handling in standing committees under the Plenary Session of Parliament. The present project proposal came under the auspices of the Committee for Transportation/Infrastructure.

EIA Legislation

The decision-making procedure is undertaken within the context of the requirements of art. 1(5) of the EIA-Directive. It should be noted however that the Directives detailed rules do *not* apply to the decision-making procedure. The only requirement in art. 1(5) is that of producing all relevant information required by arts. 5-8 of the directive, as a part of the legislative procedure. This requirement may be derived from the contents of Annex IV of the Directive combined with input from hearings with the general public and other specified competent authorities.

EIS Content and quality

The Scope of the EIS

The proposal for scoping of the EIS² was to describe the environmental impact of the proposed project. The identification of such impacts was performed in accordance with the EIA-legislation in the Planning Act. The objects of such environmental impacts were grouped like so:

- 1 Human beings
- 2 Nature

² The proponent (Banestyrelsen) does not characterize the documentation as a draft EIS, but instead characterizes it as an extended project description.

- 3 Landscape
- 4 Requirements for the operation and construction of railways
- 5 Costs of the project

The identification of environmental impacts was elaborated in further detail which themselves contained the following categories:

- 1 Relation to existing planning in the area
- 2 Impact on the landscape
- 3 Conflicting interests in nature protection (fauna and flora)
- 4 Impact on the groundwater
- 5 Barrier-effects of the proposed project (human-mobility, property-related and biotope-oriented)
- 6 Noise-impacts (in operation-phase and construction-phase)
- 7 Geological impacts
- 8 Impacts on the cultural heritage of the area concerned
- 9 Interference with contaminated-soil spots
- 10 Energy-savings related to cutting the total distance between Horsens and Skanderborg.

The impacts listed here were subsequently elaborated upon in a number of different contexts, though the overall impression was that the impact on the landscape and conflict with the aims of nature protection were given adequate attention in the proposal for the scoping of the EIS.

Alternatives, cumulative impacts and related developments

The proposal for the scoping of the EIS points out seven alternatives besides the reference-alternative (zero-alternative). The seven alternatives are laid out in two principal corridors and described as two basically equal opportunities for attaining the purpose of the proposed project. The seven alternatives are location-alternatives only differing with regard to their impacts on nature-protection, groundwater interests and landscape impacts. All alternatives were described using the same techniques and are based on the use of similar design techniques

The zero-alternative was presented separately and used for comparison of the two alternatives. The zero-alternative was comprehensively conceptualised and described in the draft-EIS.

Quality of the EIS

The proposal for the scoping of the EIS roughly met the required criteria in the legislation (Annex 3 of Regulation 847 of 30. September 1994 containing the EIS-requirements pursuant to the Planning Act).

The proposal for the scoping of the EIS addressed the most significant environmental issues as stated in the EU-Checklist.

A brief review, based on the conformity with the EU Checklist, of the proposal for the scoping of the EIS, leads to the judgement “acceptable”.

The EIA-Procedure

The Report on the Strategic Development of the National Railway-lines

This report laid down the scope for action in the upgrading and renewal of the main-lines of the national railway-net. The report outlined 13 individual projects to be undertaken in order that the reports’ conclusions be fulfilled. The report builds on a dual technology approach to modern high-speed railway-transportation in which the straightening out of existing railway-lines is one approach to the problem, with the other being the employment of curve-steered trains to obtain high-speed velocities on existing multi-curved railway-lines.

The plan was produced under the auspices of a specific committee connected to the Ministry of Transportation in 1995/96. The plan was then submitted for discussion and Parliamentary approval by the Standing Committee for Transportation as well as by the Government.

Identification of project proposals to further the findings of the strategic development report

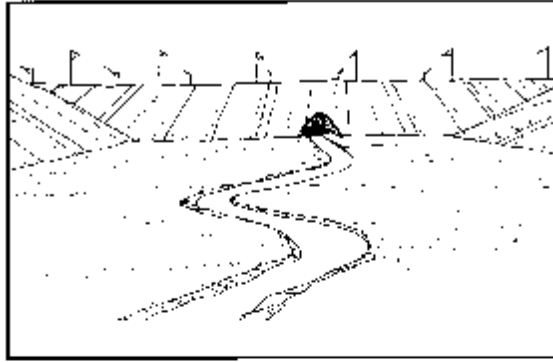
The design of 13 individual projects identified in the strategic report is based on the “straightening-out” approach to the upgrading and renewal of existing lines outlined above. No particular explanation is offered as to why the projects are not being presented and discussed in the overall context of the dual-technology approach explained in the general chapters of the strategic plan.

Definition of Project Proposal

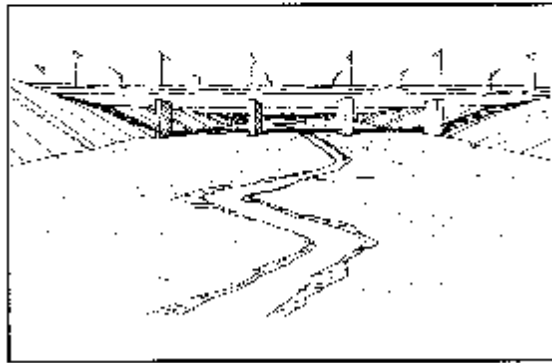
The specific project discussed here was selected because it was identified as one of the major obstacles to achieving the object of modernization of the railway-lines. The definition of the project is solely based on the physical characteristics of the existing railway-line, which is very curved, meaning that the distance currently travelled between the two major cities Horsens and Skanderborg is more than double the actual straight-line distance between them. In a report dating from February 1997, the project is defined as resting on the specific prerequisites of a transport-specific and railway-technical nature. The prerequisites are not however explained any further, though the report does refer to a further report in which these basic prerequisites are explained.

Preliminary Description of the Project and Environmental Assessment submitted (together with the proposal for a projecting-law)

An Environmental Assessment (EA) was prepared and submitted in the spring of 1997 in which the overall environmental considerations were presented and possible solutions suggested. The EA was also accompanied by several detailed reports in which considerations concerning landscape issues were developed in an alternative fashion. The EA itself presents six different geographical areas in which specific solutions are called for. The report is characterized as a pre-feasibility study based on the landscape-modelling needs identified in further investigations of the project.



En dæmning danner prop i dalen



*En landskabsbro bevarer dalens karakter
og sikrer fortsat passagemulighed for dyr*

Fig 3. Example of visualization from the Project Documentation

The report is an initial mapping of the main environmental considerations linked to the proposed project. As landscape impacts represent the main environmental concerns of the project, the report contains several photographs and drawings of existing environments overlaid with possible solutions.

The Projecting-law proposed to and adopted by Parliament

A proposal of law was submitted to Parliament in March 1997 on the further projecting of the proposed project. The law was adopted by Parliament in May 1997.

Call for ideas and proposals on the proposed project

In August 1997 the general public was given the opportunity to submit ideas and comments on the proposed planning issue. The opportunity to participate in the process was announced via a four page newspaper-like pamphlet in which the project was outlined in brief. The newspaper was distributed to 93 000 individual households in the area that would supposedly be affected by the project. At the beginning of August 1997 the proposing Agency (Banestyrelsen) submitted a call for ideas and proposals on the proposed plan in to the general public. The submission was based on a non-technical summary of the hitherto performed investigations. The submission contained three different alternatives, an eastern-line, a western-line – the two main corridors laid out in the landscape – and one based on the existing railway-line.

The submission calls for the general public to submit their ideas and/or proposals concerning the planning proposal, in order that those conducting the Environmental Assessment can be furnished with the requisite information. A second, more detailed, assessment of the proposed project resulted in the submission of a proposal for the scoping of the EIS to be submitted as a formal initiation of the local public hearings

The submission was further elaborated in a 16 pages pamphlet describing the different options surrounding the proposed project. The pamphlet also explained the remaining procedural steps to be undertaken before a final implementation of the proposed project could be initiated. The pamphlet may be signified as a non-technical summary of the proposal for the scoping of the EIS.

Local Public Hearings

During September 1997, public meetings were held in the local area effected by the proposed project. The hearings represented the culmination of a public procedure that had lasted six weeks, in which the general public were given the opportunity to put forward comments and objections to the proposed plans of the project.

Before the public hearings commenced, the local, regional and central authorities were given an opportunity to express their opinions on the proposed project. The local and regional authorities also sent representations to the public meetings, as did the proponent.

The public hearings revealed a profound opposition, amongst the local inhabitants and the regional/local authorities, to the proposed project. One of the main factors influencing the character of this opposition was the projected substantial impact on the landscape, given the – at least from a Danish view – rather hilly landscape. The nature of the landscape in the areas affected meant that vast earth works had to be undertaken in order to constitute a regular fundament to the proposed project. Moreover, these earthworks made the project more costly than was originally anticipated.

Further investigation however was to prove that the expected time saved in travelling on the newly updated line between Horsens and Skanderborg was to be diminished from 10 minutes to 2 minutes given the advances made in the technological development of so-called curve-steered trains. This knowledge, combined with the vast earth-works expected as a result of the proposed project, thus suggested that very little was to be gained from the proposed project.

The Minister for Transportation therefore decided, during winter and spring of 1998, that the proposed project would not progress beyond this point.

The Final EIS (including the proposal for the construction-law)

The project never reached the final EIS phase.

The Public hearings, and the Parliamentary passage of the proposal

The project never reached the final decision phase

Adoption of the proposed project

The project never reached the stage of being proposed for adoption in Parliament. The act that was adopted in May 1997 was nullified by Parliament on the request of the Minister for Transportation in 1998.

Scoping of EIS/draft-EIS

The proposal for the scoping of the EIS was decided upon primarily by the proponent Agency (Banestyrelsen), and this was done on the basis of informal working-groups constituted by officials from the Ministries of Environment and Transportation. A decision was made on the proposal on the basis of Annex IV of the EIA-Directive

(85/337/EEC as amended by 97/11/EC). The proposal for scoping was on this basis thus decided upon by the proponent.

The proposal for scoping of the EIS was maintained under review throughout the design phase by the informal inter-departmental working group. The design of the proposal for the scoping of the EIS was also under development through the process, though no formal review was undertaken during the process. If the project had gone through the final steps of the decision-making procedure, the working group would then have been responsible for the reviewing process.

Public participation

As we have already seen, public participation was integral to all of the individual phases of the project design accounted for under point 3. The approach taken to the solicitation of such public participation, after the plan as a whole was defined as an individual project was similar to the different approaches used in the EIA-procedures contained in the national Planning Acts, chapter 6.

The principal steps of the public participation process as outlined in the Planning Act are as follows:

- Application for development-consent
- Proposal for the scoping of the EIS
- Call for ideas on the proposed planning from the general public
- Production of the draft-EIS
- Public hearings and comments
- Final-EIS
- Decision-making

Public input was secured through the fulfilment of several individual tasks undertaken to inform the public of the project, and through the process of holding public hearings on the project and its connected documentation. As mentioned above, 93 000 individual pamphlet-like newspapers were distributed throughout the local-media informing readers about the project. Moreover, a more formal description of the project and its different environmental aspects was subsequently distributed to all public offices in the area potentially affected by the project. Five thousand of these formal description papers were distributed.

Last but by no means least the general public were given the opportunity to participate in public meetings with the project proponent, local and regional politicians and their administrative staff

(local and regional authorities have no formal competence in project design or decision-making, but are heard in administratively initiated procedures).

The object of the public participation hearings, and of the public meetings was to introduce lay people to the project, as well as to have lay input into the production of the final-EIS. The public meetings and hearings in general may be viewed as successful since the public succeeded in convincing decision-makers that the project should not be implemented. The central issue at stake in the decision-making phase was whether the financial costs and the environmental impact of the proposed project could be justified by only a minor time saving in the expected travelling schedule.

The role of EIA in the Planning Process

Feedback between the different parts of the planning process

The proposal for the scoping of the EIS played a dominant role in the decision-making process, as it became one of the ultimate influences in decision-making. The proposal revealed that significant impacts on landscape were to be expected from the proposed project, and that the resulting earth-works would be extremely costly.

Full synchronization occurred between the EIA-procedure and the overall planning and decision making procedure. This synchronization is partly borne out by the fact that the proponent and the decision-maker are two separate actors in the constitutional power balance, and also by the fact that the sequential approach to decision-making, inherent in the national infrastructure decision-making procedure was undertaken by way of specific legislation. The sequential approach divides the decision-making procedure into at least two different legislative procedures.

The results of the proposal for the scoping of the EIS submission were presented to the decision making level before the final phase of the decision-making procedure was entered.

The Legitimacy of the EIA-process

The costs of the EIA-procedure have been calculated at approximately 25 million DKK. Project planning started in October 1996 and continued through 1997 until the beginning of 1998. The proposal for the scoping of the EIS was made ready for publication in the autumn of 1997. It is difficult to estimate whether the resources committed to

the proposal are justified by the size and financial constraints required by the project, as it was not carried through to conclusion. Preparation of the proposal followed the same set of procedures laid down by the proponent organization (Banestyrelsen) as have been used in similar situations where other national rail infra-structure projects were being planned. The effort made in the preparation of the proposal for the scoping of the EIS did however reflect the size and severity of the possible impact of the proposed project.

In general it should be noted that much public attention is often paid to larger infra-structure projects in Denmark, as well as to the decision-making procedures surrounding such projects. This may be so simply because of the nature and concomitant implications of some of the projects duly undertaken. The fact that a number of these recent projects have been characterized as “national scandals” in the press is a further contributing factor. Such scandals have arisen mainly because of uncontrolled public expenditure, or from the fact that environmental problems were not handled in a proper manner.

In this light, it can be said that the EIA-procedure has proved to be a good instrument for allowing different interests to meet and to create a forum for the exchange of views on a specific project, or on policy in general. Furthermore the EIA-procedure has given voice to public concern in the face of the project in question.

In general it can be said that the EIA-procedure has played a dominant role in the legitimisation of the decision-making process. That said, it must be underlined that plenty of room for improvement remains, as we are starting from a very low legitimacy base.

Project decisions were taken after the EIS scoping proposal was made and the public hearings concluded.

Viewed in comparison to other EIA-procedures in Denmark, the procedure undertaken in the present case elicited some benefits that may prove to be of use in the future development of the Danish EIA-system. First of all, a clear separation existed between the proponent and the decision-maker, in terms of competence and interest. The proponent was the Ministry for Transportation whilst the decision-maker was Parliament. Secondly, a clear separation of interests could also be seen to exist between the consultants on the content of the EIS and the proponent organization. Although personnel from both sides took part in the interdepartmental working group, they represented two different ministries with two different administrative cultures behind them. Any disagreement between the personnel of the working

group would automatically be taken to a higher level of administrative decision-making – ultimately to governmental level.

At least four vital elements stand out, as examples of how balances of power, in this context, are organized and how such situations should be addressed in the general organization of a national EIA-system. Firstly, the proponent must be independent from the decision-maker. If not, stringent rules should be brought into play through which biased decision-making may be easily uncovered. Secondly, the reviewer of the contents of the EIS should ideally be free of any personal or organisational interest in the proposed project, and/or in the production of the EIS. Thirdly, the general public should be given the opportunity to influence the contents of the EIS. And fourthly, ideally the decision-maker should be held directly accountable to the general public.

Generally speaking, and in accordance with the Planning Act, Danish EIA-procedures do live up to the points one, three, and four (outlined above), whilst point two is problematic in the sense that the county administration bodies both produce and control the contents of the EIS. The Danish EIA-system does however benefit from the inclusion of the general public in the scoping phase, as well as from the political rather than administrative decision-making.

Conflicts

There is always an immanent danger that decision-making processes like the one described here may be perceived as overly bureaucratic and unsuited to the needs of the people who in the end will face the daily consequences of the project. Most participants in the public hearings expressed their concern about issues that had already been raised in the proposal for the scoping of the EIS. Besides the general local-central dichotomy, the conflicts inherent in the project-decision making procedure related mostly to the NIMBY (Not in my Backyard) phenomenon.

The Match between EIA work and the decision

The proposal for the scoping of the EIS faced up to the vast majority of the environmental impacts that were likely to occur from the proposed project. The proposal envisaged the problem of developing new technology in high-speed railway-lines by giving specific attention to a thorough description of the zero-alternative, in which the newly developed curve-steered trains could provide the main benefits

of the proposed project without giving rise to a vast number of the likely impacts of the proposed project.

The final decision reflected the findings of the proposal for the scoping of the EIS such that the Minister for Transportation decided to renew the rail-route between Horsens and Skanderborg with only slight modifications to the existing tracks, and to phase in curve-steered trains for future service on the tracks. Although this outcome was not the one desired by the proponent, it did reflect the findings of the proposal for the scoping of the EIS such that the findings revealed the likelihood of considerable landscape impacts and the need for substantial earth works to be undertaken.

The Performance of the EIA

The EIA-procedure provided the different stakeholders in the decision-making process with relevant and qualitative information vital to the final decision. The EIA has in general contributed to the relative openness of the public decision-making process as compared to the situation that previously prevailed before the EIA legislation was implemented in Danish law. Along these lines the implementation of the EIA legislation has contributed to the improvement of the level of relevant information available to public decision-makers in several ways, as well as to an improvement in the level of public insight into the decision-making process.

Besides such formal off-spins from the implementation of EIA-procedures into national law, implementation has also sparked an extension of cross-sectoral cooperation in the design and management of the different elements in the decision-making process. Among other things it should be noted that cooperation in informal working groups across departmental borders is now a more frequent aspect of the public decision-making phase of the planning process than before.

The EIA-procedure did result in the enhanced protection of the environment vis-a-vis the proponents' project proposal. The result of the EIA-procedure, however, was not due to the impact mitigation procedures raised in the proposal for the scoping of the EIS, but was rather a result of a political choice in light of a situation where the benefits of implementing the proposed project were minimal, whilst the impact on the environment and on the local community was substantial. On reviewing the outcome of the EIA-procedure in substantive terms it is obvious that the main success of the EIA-procedure was its provision of alternatives by which the proposed project could be assessed.

On reviewing the EIA-procedure in terms of the contribution it made, it is obvious that the mere presence of a formalized, timely, and informative procedure led to the solicitation of an increased level of informed opinion regarding project design and the likely impact on the environment, in comparison with a situation without such a procedure. The EIA-procedure itself revealed that the proposed project rested on a commitment, in technological terms, to specific developments in high-speed train-technology that no longer seemed as beneficial as they had five years earlier. The result of this commitment, in terms of the expected level of environmental impact is represented by the difference in implementation of the zero-alternative as opposed to implementation of the initially proposed project. The EIA-procedure thus resulted in a change in the preferred technological basis for developing high-speed trains.

Implementation of the EIA-procedure was, broadly speaking, in conformity with the procedural framework of the Planning Acts, chapter 6.

When generally reviewing the performance of the EIA-procedure in terms of the influence of the procedure on the actual decision, it becomes more difficult to judge whether the performance of the EIA-procedure does influence decision-making. The crucial question in the decision-making procedure in the Horsens Skanderborg-case was not that unforeseen environmental impacts occurred, and that the occurrence of such impacts dissuaded decision-makers from taking the obvious decision. The crucial question was rather that the underlying choice in high-speed train-technology made the costs of the proposed project too large.

Much of the EIA-research literature takes the view that whenever a decision-making procedure does not live up to the ideals of a sequenced approach, inherent in the ideal EIA-procedure, the decision-making procedure is flawed. The underlying assumption being that the EIA is rational and that anything less than a perfect EIA procedure represents a step back from rationality.

In general however it is possible to give some indication as to whether a detectable EIA based influence on decision-making can be said to exist. Given that some of the environmental impacts, in relation to development consent for example, highlighted in the EIS were conditional upon agreement from the operator of the project in question, these conditions are bound to have had some influence on decision-making as well as on subsequent behaviour. As yet, no

national investigations or research work has been done on this specific problem.

The EIA-procedure thus played an indirect role in decision-making in the sense that it provided a formal procedure in which most of the relevant information regarding the proposed project was presented. This formal procedure was concluded with the revelation that there were underlying technological assumptions behind the proposed project that did not provide sufficient benefit to justify the costs of giving development consent.

It is hard to tell whether the EIA-legislation provided a good basis for the timing of and sufficient gathering of information of the proposed project as the procedure is not regulated by legislation other than that of the exemption clause in the EIA-directives art 1(5). Indirectly it seems, however, that the framework-legislation in the Planning Act is well thought, and thus can be usefully applied in contexts other than regional planning decision-making. The decision-making procedure studied in this context has undoubtedly benefited from the general procedural framework of the Planning Act, whilst also avoiding the pitfalls inherent to the Planning-system, where EIS-production is so closely linked to the decision-maker in organizational terms that hardly any quality control is retained in terms of the EIS. In other words, it appears that an organizational set-up has been created which caters both to EIS-production, and to a decision-making process that allows for the necessary power-balance to actively influence the outcome.

The power of national EIA-legislation is in general weak, especially in the context of national decision-making on infrastructure projects because it rests solidly on the exemption-clause of the EIA-directives art 1(5). The exemption-clause leaves discretion to Parliament without however securing sufficient legal safeguards to cover the interests of the general public.

Conclusions

Success or failure?

The success of the EIA-process in this particular context is due in no small part to a number of factors that influenced the outcome. First of all, the careful design of the proposal for the scoping of the EIS must be considered as the main reason for its success. The fact that so much attention was devoted to describing the so-called zero-alternative, combined with the fact that the envisaged benefit from straightening

out the rail-tracks between Horsens and Skanderborg did not materialise after all, seem to be the balancing point in the final decision. It should also be noted however that profound local opposition to the construction of vast earth works in an area of unique beauty did add support to the final decision to abandon the project.

Furthermore, local and regional opposition were for once united in their demands that the proposed project be re-thought.

As to the timing of the overall procedure, it would appear that the sequential approach to public inclusion in decision-making did indeed bear fruit. Local residents were initially informed of the idea behind the proposed project, and after the production of an environmental assessment that was made publicly available, the public themselves were invited to attend hearings on the proposed project. The gradual introduction of information to the public seems therefore to have been a good strategy for engaging local and regional interests in the decision-making process.

One of the fundamental reasons for the success of the procedure undertaken is the inclusion of the general public in the scoping phase. Their inclusion meant that they were able to participate in the formulation of the problems that should be highlighted and addressed by the EIS. This particular feature of Danish EIA planning (in the Planning Acts EIA-provisions) has probably been the main development in terms of public engagement with EIA-procedures.

Although there were, and still are, favourable political sentiments in Denmark towards the upgrading of the national rail network, this sentiment does not seem to exclude a thorough and rational approach to decision-making as may be the case in other contexts, e.g. motorway-projects. Furthermore, it must be underlined that the Minister for Transportation that took the decision to abandon the project was probably the first to explicitly commit themselves to the inclusion of the general public in the decision-making process relating to national infrastructure projects. Although not directly discussed in detail in this study, it is probably true to say that this would not be the case as regards similarly sized motorway-projects.

What could have made a difference?

As much of the success of the procedure was due to its thorough design, and to the timely release of information it is hard to point to any particular point for improvement.

In general it seems that the existence of a formalised procedure is beneficial because it can function as a mediator between different

interests, and as a forum in which such interests can meet. Furthermore it seems that the EIA-procedure provides a framework for decision-making that was noticeably lacking in earlier decision-making arrangements. The phasing of the individual steps in the procedure allows developer and decision-maker to prepare for each step individually without being required to oversee all information at one time.

The existence of an independent review element to the EIS would probably have played a positive role in terms of thoroughness of document preparation on the proponents part. In general however the importance of having an independent review should not be overestimated. This is mainly due to the fact that such reviews only concentrate on the formal parts of decision-making. Although necessary in the well laid-out EIA-procedure, independent reviewing in reality adds little to the quality of decision-making in general.

The public scoping-phase appears now to have become a significant part of Danish EIA-procedures. The fact that developers are required to face the general public, taking on board their ideas and comments at this early stage has undoubtedly contributed to a more open EIA-procedure.

The following comments are of a more general nature based on experiences with other similar decision-making procedures.

In general it is true to say that many nationally significant infrastructure projects in Denmark are initiated within the context of the established political consensus, thus opposition to them is often hard to uncover. Seen from this perspective, much of what passes for "received wisdom" within the EIA-context can be seen as naïve, given its insistence on a the need for a "clean record" as far as decision-making procedures are concerned. Thus as Lerstang and Stenstadsvold rightly suggest in this report, there may thus be a need for a different approach to decision-making in specific and highly controversial projects, where the factor of legitimacy is more explicitly catered for.

Such "ideal type" decision-making procedures require careful design and need to be both thoroughly rational and transparent. In reality however this is often impractical. This does not however mean that insistence on a democratic decision-making procedure inclusive of all participants is obsolete. On the contrary, the development of democratic decision-making in complex societies requires primarily that comprehensive monitoring of the current decision-making process is put in place in order to highlight the problematic phases of decision-making, as well as helping in the identification of specific issues that

are hard to handle. Evaluation of such problematic phases and issues in decision-making is in itself a further step that must be explicated and fed into the loop of future procedures, providing the opportunity for constant improvement.

Another approach would be to encourage a more proactive approach to providing the means and support for counter-expertise to develop independently in each individual procedure. Such counter-expertise can be organized for example around locally initiated initiatives supported by funding or information campaigns, or it may be organized by central and independent boards playing the role of an outside-reviewing agency.

One of the ways in which the Danish EIA-system has been developed has been through use of litigation in the courts. Although many view this practice with great suspicion, it does seem to be a rather useful instrument in providing a balance of interests against an all-encompassing bureaucratic power. The power of litigation paved the way for the development of the Federal American EIA-system as well as similar developments in other jurisdictions. In Denmark three “EIA based” cases have so far been decided in the courts. Two of them were lost by the applicants – the most famous being the Greenpeace-case against the decision to build the Oeresund-bridge. The third was actually won by the applicants. The construction of a 800 metre long road-section was declared illegal by the Supreme Court because no EIA-procedure had been performed before the decision to grant consent was given. Two further cases are currently on their way through courts at time of writing.

Although litigation is by far the slowest method of developing national EIA-systems, it does seem rather effective in promoting change in administrative behaviour and routine. In order to have an effect, such changes do not however necessarily require applicants to win their case in the courts. The most “successful” litigation in Danish EIA history was lost by the applicant, but nevertheless caused immediate and identifiable changes in administrative behaviour. Indeed, ratification of the Århus-Convention calls for renewed activity in the field of litigation as jurisdictions ratifying it must provide an adequate basis for litigation in national law, as well as a basis for preliminary injunctions to be filed against ill-informed decision-making.

The Legislative framework

Since decision-making is based on the exemption-clause of the EIA-directive, the most obvious flaw in legislative terms is that there is practically no legislation that regulates decision-making under this rule. This also means that as the exemption-clause was upheld in the amended Directive (97/11/EC) there was no change in the requirements. Furthermore the Danish commitment to the exemption-clause meant that widespread experience in exploiting the legal boundaries of the clause have settled things in a manner such that an EIS with the contents under the requirement of Annex IV of the amended Directive (97/11/EC) is produced before the proposal for law is introduced to Parliament.

Decision-making under the exemption-clause is regulated by administrative practice as well as by the sparse practice from national courts and from the EC-Court. Two leading court-decisions exist on the exemption-clause. The first was the Danish Supreme Courts' decision in the Øresund-case, in which the court decided that the requirements of Annex IV provided a minimum-requirement regarding sufficient information to Parliament. The other case is that of Bolzano-Airport, from the EC-Court (C-435/97) in which the court decided that a project could not qualify, under the exemption-clause, if the decision-making in the proper context relied both on Parliamentary-decision as well as a subsequent administrative decision that itself filled in the Parliamentary framework-decision. In other words all of the details of a project must be decided upon by Parliament if the decision-making is to be subsumed to be applicable under the exemption-clause.

It is still as yet unclear what competence Parliament holds in situations where Parliament itself decides to alter the proposed project in ways not envisaged in the accompanying EIS-documentation, or where Parliament decides to adopt a profoundly different project. Although one may be quite certain that if Parliament decides to adopt a profoundly different project, and the exemption-clause cannot be revoked, it is not clear when the legal boundaries are surpassed.

These obvious legislative flaws also have an influence on control of powers. If an environmental organization wants to challenge the basis of decision-making because of profound omissions in the information presented to Parliament, the organization is bound to litigate against the Parliaments' power to adopt the laws Parliament itself thinks fit.

A Special case?

The Horsens-Skanderborg case is not unique in Denmark. One year after the case was closed another similar project to renew and extend the railway-line between Copenhagen and Ringsted was abandoned because of profound local and regional opposition, underscored by the fact that no clear benefit could be found to justify the expenditure. Although every case is in some sense “unique” in itself, the overall procedure followed in the present case is similar to that of any other case regarding infrastructure projects of national importance. The same working groups will be organized on the central administrative level and a similar procedure will be employed.

This particular case – Horsens-Skanderborg – should not however be considered representative in terms of the way in which proposed projects are abandoned rather than adopted at the decision-making stage. Though it should be noted that the procedure that unfolded would probably be much like the one described in the report. The case in itself however does not have any precedence in the national planning context.

In Denmark the consensus over EIA-procedures at the national administrative level seems to have developed into a fruitful tool for the preparation of decision-making on larger infrastructure projects. This consensus has led to a noticeable improvement in the standard of EIS's launched in Parliament accompanying the proposal for law. This is basically an improvement in technical terms in particular relating to the content of documentation and information.

Important experiences

The major point to be made in this case regarding EIAs is the confirmation, if such were needed, of the importance of careful and thorough design of the role of public participation in decision-making. Furthermore, the case has confirmed that the benefits of any proposed project must outweigh the environmental impacts and cost expenditures by more than an appreciable margin to gain support from local, regional and national publics, and from decision-makers. From this perspective therefore one could say that environmental impacts alone played only a marginal though still nonetheless appreciable role in the decision-making context.

The careful handling of environmental impacts and other similar issues in general is thus vital to the overcoming of potential local and/or regional opposition to large infrastructure projects such as

Horsens-Skanderborg. Although the proponent had designed the proposed project with great care, and whilst such projected impacts were not deemed to be “insurmountable” in environmental terms, the proposed project did give rise to significant levels of local and regional opposition.

One of the main conclusions in procedural terms is thus that the design of procedures taken from the Planning Act seems to be quite useful in terms of timing, phasing and participation. Furthermore, the careful balancing of different interests in the composition of administrative working groups seems to have had a beneficial input on the development of procedures and information passed on to participants. This particular experience could however be further elaborated in the perspectives of the regional EIA-system in Planning Act in order to provide for a more fruitful outcome.

The strength in linking decision-making to EIA is currently borne out by the fact that consensus has emerged between the different administrative authorities at the national level on how to employ the EIA process vis-à-vis decision-making and public participation. This consensus has been borne out in practice within the context of the Øresund-litigation that threatened to overthrow the decision to build the Øresund-bridge. The main weakness here is however the uncertainty surrounding the legal requirements that leaves the general public in an unenviable position should the information passed to Parliament and to the public themselves be deemed to be insufficient.

Finally it should be noted that adoption of the SEA-Directive would probably have had no direct influence on this case. One could on the other hand argue that the adoption of the SEA-Directive would have included several technological alternatives to high-speed rail-technology in an assessment of the original strategic plan for a renewal of the main-railway lines in Denmark. Such an assessment may therefore have led to the abandonment of the proposed project at an earlier stage, as the basic technological choices would have been placed on the agenda at an earlier stage in decision making.

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