TIDE

Tidal River Development

Development / implementation of a new communication concept

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HPA Hamburg Port Authority

The Interreg IVB North Sea Region Programme

Investing in the future by working together for a sustainable and competitive region

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1 Introduction

In order to reduce the upstream sediment transport and to decrease tidal energy the Hamburg Port Authority (HPA) and the Federal Waterways and Shipping Administration (WSV) set up an innovative concept for a new approach to sustainably develop the tidal Elbe. Besides an optimisation of sediment management and river engineering measures at the Elbe mouth this concept includes the creation of shallow water areas connected to the tide which are suited to moderate the tidal action. As a first step out of a comprehensive catalogue of measures HPA is creating a new shallow water area at a location called Spadenlander Busch / Kreetsand.
At this site, located in Hamburg on the island Wilhelmsburg between the Norder- and Süderelbe, dyke realignment had already been carried out in 1999. However, the excavation of this high lying new foreland was not executed by now so that the area is not influenced by the daily tidal action today. Therefore HPA decided to transform the area outside the dyke as a tidal shallow water area with the overall objective of dissipating tidal energy. This project is designed as a pilot for a new river engineering concept and as an exemplary model for future measures of similar purpose. Additionally, this practical example of sustainable river engineering shall be used to improve the public understanding of the function of tidal systems and estuaries.
To foster these intentions and bearing in mind that, due to the understandable fear of the local inhabitants concerning dyke security and flood protection, the former dyke realignment was a drawn-out and hard fought process, HPA decided to set up a new communication strategy for the planning and execution phase of the project “Tidal area Kreetsand”.

Figure 1: Scheme of the area after realisation (computer simulation)

2 Communication Concept

2.1 Planning phase

One important aim of the communication concept was to ensure an early involvement of the local inhabitants in order to engage them in the process of developing ideas and to make them familiar with the project´s overall background. This information and participation process right from the start of the project was considered necessary in order to become aware of neighbours´ wishes and concerns that might be taken into account by the planners and to gain public acceptance by this transparent approach. Therefore a first information meeting was held close to the measure site right before the beginning of the planning phase. In order to enhance public interest and “give a face to the authority“ the letter of invitation for the residents was not just sent by mail but was directly distributed on-site by members of the project. This ensured a first informal contact to parts of the locals and increased the interest for the project and the information meeting.
At the first meeting the overall management targets and possible synergies with nature conservation and flood protection were presented to the local public. Chances for local recreation were highlighted and first ideas for possible designs of the new area discussed. The locals were invited to give advice and provide ideas for the next planning steps and also to raise concerns. The concerns and ideas were communicated to the planning office and the planning company in order to check the possibilities of taking them into account.

During the proceeding planning process a second meeting was held, in order to present the intermediate results of the first planning phase and to answer the questions and discuss the ideas of the first meeting. Again this forum turned out to be a good opportunity to keep close contact to the locals and to sensitise the people for the aims of the project. Furthermore the positive aspects and benefits of the measure were presented.

At the end of the planning process, right before preparing the documents for the planning approval, another information meeting was scheduled. This meeting gave an overview about the planning steps, the assessment of alternative designs and computations which resulted in the special design of the new area in order to consider all widespread aspects of the project in the best possible way. The design of the measure led to a couple of questions concerning the stability of the dyke and the sustainability of the shallow water area. However, after comprehensive expert explanations and open discussions the audience was contented with the given information and no escalation occurred.

Besides involving the local inhabitants during the whole planning phase, other authorities being responsible for special aspects like nature conservation, or for the protection of water and groundwater, were contacted. Their questions and concerns were checked right before they could become a problem in the approval phase or later on in the status of execution.

2.2 Planning approval phase

After completing the documents and directly prior to requesting the planning approval, two meetings with non-governmental organisations (NGO´s) for nature conservation, that later on in the approval phase had to be consulted anyway, were arranged. During these meetings again the overall details of the project and the design were explained, and the NGO's were asked for their agreement. Although this way of acting is normally unusual in planning approval processes it was a great concern of the planners to convince the NGO's of the project´s aims and to point out the mutual benefits of the measure both for the favourable impact on the tidal action and on nature conservation issues. This was considered crucial for the minimisation of objections to the approval. After initial scepticism this procedure indeed was appreciated by the NGO's. By acting so "historical" antagonisms between river engineers and conservationists were broken up and a new basis for a future dialogue between the port authority and nature conservation organisations was created.
When due to legal reasons a project delay was unavoidable both neighbours and NGO´s were informed on facts and reasons by individual mail.

In the planning approval phase, HPA tried to identify and to solve potential problems that could possibly raise or could lead to difficulties in a later phase. For their detection and solution again a close contact to the local stakeholders was established. One example for this cooperation was the case of a pair of sea eagles in search of a nesting site. HPA brought together the local conservation association, the nature conservation authority and the environmental planning company that worked for the project, to a field visit. Subsequently a solution that took into account both local sensitivities as well as legal requirements was worked out. In this case a nest for the sea eagles was built in a proper site not far from the measure area in order to prevent them from searching for a breeding opportunity directly on the building site.

Accompanying to the planning approval the local inhabitants were kept informed on the status of the project via information leaflets that were distributed in the vicinity of the project area.

2.3 Execution phase

After the approval was granted and the project entered the execution phase another an information leaflet was disseminated and an information meeting was organised for the local residents.

The execution phase of the project "Tidal area Kreetsand" is estimated to take 3 to 4 years. Due to this long term period and the fact that at the beginning the construction area will look like a big excavation site rather than a scenic shallow water area plus that there will be a lot of truck-traffic from and to the building site, a new approach to accomplish an innovative communication concept was developed. Supported by an experienced landscape architect company residents and other interested people were informed on the

objectives, the present status and perspectives of the measure “Tidal area Kreetsand”.
As a prominent information point for both the concept for the sustainable development of the tidal Elbe by HPA and WSV and its pilot project Kreetsand the idea of a temporary exhibition pavilion located on top of an already existing dyke sluice, the so-called ”Deichbude Goetjensort” was introduced. The exhibition pavilion ”Deichbude” (Dyke Booth) will be on site at least during the construction phase of the project. It will help to inform the public on the project and its background and also on aspects of tidal action and estuarine functioning. The Dyke Booth will also function as an information centre during the IBA (International Building Exhibition) which takes place in 2013 and will draw a lot of public attention to the region. In the context of the IBA the Dyke Booth will provide information on the Kreetsand development as a part of IBA‘s ’Constructing Waterscapes‘-project.

The ´Goetjensort´ sluice building is situated on the Wilhelmsburg river island directly on the dyke adjacent to the Kreetsand area. Thus, from the Dyke Booth on top of the ´Goetjensort´ sluice the Kreetsand construction site can be overlooked. The pavilion offers scenic views across the future Kreetsand shallow water area and its tidal inlet. It is the ideal location to see and understand the tidal landscape in its context as well as to communicate the topic of tidal river development by creating new shallow water areas.
The dyke sluice forms the connection between the dyke foreshore and the land behind the dyke and is part of the flood control and drainage structure. It is located at the boundary between the dynamic tidal foreshore and the cultivated land behind the dyke: an ideal position to transfer knowledge on the interdependency between the water management of the Wilhelmsburg area and the need of a new understanding on the functioning of a tidal river and the connected processes.

Figure 2: 360°-view from the Dyke Booth

The Dyke Booth is located on top of the dyke, where it can be seen from far away by people passing the location - residents and visitors. In this way it forms a visual and functional magnet for the measure “Tidal area Kreetsand”. The booth is easy to access and can be reached by car, bicycle and public transport.

Figure 3: Prospect of the Dyke Booth

The Dyke Booth exhibition space will provide information on flood control and the cultivated marshland. In addition it will function as a resting place as well as an observation spot where the construction works at Kreetsand and their relation to the Tidal Elbe Concept will be explained.

Additionally, the exhibition will provide a stage for the Elbe Island‘s three prominent features: tidal waters, dykes and marshlands. Under the aspect of landscape these three units can also be regarded as ‘tidal land’, ‘defence land’ and ‘control land’. These three landscapes can be seen through the windows of the Dyke Booth.

Figure 4: Visual axis of the Dyke Booth location

Thereby each window of the Dyke Booth frames one of the three landscape character types. The specific features of those water landscapes will be illustrated on panels that can slide into view. The panels are transparent and

allow the abstract explanations to overlay the view of the actual landscape. The panels will show an annotated diagram of the landscape. Headlines will refer to further information, which is available on the wall right beside the window.

The walls will be dedicated to special landscape themes, depending on their orientation. The south-facing wall with a view on the dyke will represent the 'defence landscape', and the west view towards the drainage canals and ditches will describe the 'control landscape'. The northern wall will explain the Kreetsand construction project as a part of 'tidal landscape', and in addition the Tidal Elbe Concept.
Visitors will be able to directly observe the construction site and its on-going activities from the terrace in front the entrance. A brief summary of the project "Tidal area Kreetsand" will be shown on the handrail of the terrace.

3 Conclusions and recommendations

3.1 Present status of *Tidal area Kreetsand* and *Dyke Booth*

After having received the planning approval for the new shallow water area at 'Spadenlander Busch / Kreetsand' in April 2012 construction works were tendered immediately. Preliminary works such as reinforcing the dyke for crossing soil transports or measures for continuous ecological functionality (CEF) finally started in June; major earthworks will start by the End of 2012.

For the Dyke Booth a feasibility study assessing technical, architectural and communication aspects was carried out in 2011; subsequently the final investment decision was taken by the HPA and respective plans were drawn and planning approval was granted in the first half-year of 2012. After tendering for the construction of the Dyke Booth in August 2012, the construction will be ordered and completed by the beginning of 2013. The opening and dedication of the Dyke Booth will be used to raise publicity for the "Tidal area Kreetsand", for the sustainable development of the tidal Elbe and also for the integrated estuarine management as promoted by "TIDE".

3.2 Recommendations

The following recommendations for a communication concept concerning planning and implementation of river engineering measures in tidal estuaries can be derived from the experience hitherto gained at the tidal Elbe:

1. Give the stakeholders a face. The more you show up personally and directly get in contact, the better are you chances to achieve acceptance.
2. Explain your reasoning for measures planned and executed in estuarine management in a plain and understandable way. Very often stakeholders and involved parties are simply lacking information and therefore stick to “professional” opinion leaders who may follow their specific interests. The better you communicate your ideas, rationale and plans the better is your chance to get acceptance by the involved parties.
3. Look for synergies that may affect different parties. The more synergies there are the more “partners” you will get and the broader the acceptance for a project can be.
4. All involved or interested parties should be informed and heard at an early planning stage. This early participation and openness allows
   - early recognition of frictions or opposition and adequate reaction
   - identification of win-win situations and the forming of partnerships,
   - to demonstrate your integrity and subject orientation.
5. Look for local players, neighbours, stakeholders, organisations who might be affected by your plans or projects. Your communication plan should primarily focus on these.
6. Identify opinion leaders and try to convince them in advance of planning processes, preferably by direct contact.
7. Show people that you take care of their concerns by listening to and balancing their interests. This requires an open dialogue.
8. During longer processes keep stakeholders informed – sustain their engagement by repeated information events, newsletters or individual mail. Otherwise stakeholders or involved parties will feel misused and doubt your integrity.
9. Look into the subjects / criticisms brought forward and discuss these openly and straightforwardly with the involved parties. If you will not follow suggestions or arguments do explain why you cannot. Even if the involved parties do not follow your reasoning they will at least have the chance to accept your reasoning.
10. Try to identify the reasons for opposition. The real ones might be hidden behind the ones brought forward.
11. In discussions on measures / plans affecting different parties and concerns try to involve different stakeholder groups. The direct clash of classic conflicts such as recreation vs nature conservation will force the parties to look for mutual benefits rather than build up barriers against each other. The communication task for the planners is to mediate and look for solutions that suit different purposes or concerns.
12. If possible set up and use new ways of communication, e.g. a temporary exhibition with relation to the background and positive aspects of the project, in order to reach wider public and to enthuse people for the measure.