## Networking as necessity - The inland harbour example

## Background

The maintenance and improvement of existing infrastructures is for some years one of the very important affairs in Germany to do. In some cases like sewage disposal and waste management the decided way to do is the strategy of concentration because of high costs and declining public revenue [for instance Deutscher Städtetag<sup>1</sup>]. In future, the author guesses, this strategy will have to be transferred to different subjects like public swimming pools, theatres, libraries etc, where the public discussions have just begun.

Another very important national affair is the sustainable development of settlement. Here the strategy tends not only to economise the new settlement areas, but to the reuse of waste and also lowly used areas. So in some recent years the conversion of given up barracks and former industry sites became popular.

Today there is in the field of inland harbours the chance to combine both strategies, as well for improving the harbour infrastructure as for the inner development of the cities.

## Situation of the inland harbour cities

The awareness of therewith creating a win-win-situation for cities and harbours bases on an investigation about the possibilities for improving the inland harbour areas, which is exemplary done for the cities at Rhine and Neckar. In this area there are 126 public and company-owned harbours in 78 French, German and Swiss cities, what means an average of density of one harbour per 10 (6) shippable kilometres at the Rhine (Neckar). In all those harbours the efficiency of transhipment is independent from the useable quay length and the absolute transhipment, as figure 1 shows.



figure 1: Inland ports' efficiency in 1998

Further there could be shown, that neither a high nor a low rate of transhipment causes a special type of city. And about 70% of the harbours did respond, that they are working with equipment older than about 25 years and that they do aim at modernising it. So in effect, as well in big cities as in small municipalities there is a potential to improve the harbour infrastructure.

The history shows, that the inland harbours have had a similar but temporally delayed processing to the sea ports. It is to expect, that this process will go on. So the sea ports

development is important: Here changes have already begun because of the changes in sea side transports (containers, bigger and specialised ships etc.). These causes mergers as well on the side of ship owners as shippers as harbours and a more and more technical optimised transhipment<sup>2</sup>. This advanced technology results in modified requirements on land-side space, so that the old and often inner urban harbour areas get set free. The old storage city in Hamburg is one of these examples, which do already exist almost all over the world like the London docklands, the historic Boston waterfront and so on.

By now, this development already seems to reach the inland harbours, as the inner harbour project in Duisburg, the west harbour in Frankfurt am Main or the current urban developments in Mannheim and Ludwigshafen show. Those big cities with 100.000 inhabitants and more have enough financial and technical equipment for organising the necessary processes for an active harbour policy. And they have the geographic opportunity of big and usually more than one harbour area within their own boundary. So in two third of the investigated cases of already closed harbour areas at Rhine and Neckar the harbour function could be concentrated and at least in more than half of the cases co-financed by increased land value of the area set free. This area usually was changed for residences and services with a green public waterfront. But those big cities are only about a third of the harbour cities at Rhine and Neckar.

In contrast the small and middle sized municipalities with up to 30.000 inhabitants (50.000 inhabitants) are 53% (60%) of all Rhine and Neckar harbour cities. Here is often no possibility to copy this strategy, not at last because of the much smaller harbour area sizes. Here the harbour areas enclose in average 5 hectares instead of 17 hectares per site in the big cities. In addition, there is a lack of a second or a third harbour area within the municipalities boundaries. Therefore a direct strategy-transfer for improving the harbour areas is not possible. Doing nothing will in many cases probably cause the going down of the harbour function because of the lack of new equipment, so there will rest just storing or waste areas. This means the loss of jobs and public revenue, what cannot be the municipalities interest. Consequently the municipalities can try to co-operate and bring up a kind of harbour network. Here the municipalities are all financially involved in the harbour function, but not necessarily within their own boundaries: The suitable areas can be improved with investment from the closed and re-used sites. But because in almost every harbour area there are private companies, which do at least a part of the transhipment, the degree of co-operation increases: Not only municipalities or companies among each other, but both together do have to be merged.

## Potential harbour net actors and consequences

For realising the mentioned harbour net strategy first the municipalities do have to agree on co-operating, then involve the harbour operators for improving as well the harbour function as the urban development. But a different application for that strategy could be set by big cities' harbours: They could try to generate more added value by increasing logistic services like packing and unpacking or distribution while trying to increase their transhipped amount of containers. So the transhipment and storing of bulk could get financially uninteresting for them. Consequently they could try to shift it to different harbours. So there could be to expect, that some municipalities very close to the big cities get profit from such a development. But the other municipalities do not. A second possibility could be the shifting of storing areas in those small harbours, what equally to the doing-nothing-strategy causes only a low profit for the close small municipalities, for the others none.

So from the national point of view, which wants decentral concentration and not only big hubs, the or at least only the big cities' harbours engagement is not desirable. On the other hand side, it should be the small inland harbour municipalities' interest to consolidate their harbour function for conserving the location's advantage, but also to concentrate their settlement in already infrastructured areas for saving cost of maintenance. Therewith it seems to be no different better way to handle the improvement of the small municipalities' harbours for the benefit of city and port than the strategy of co-operation, even if it is a hard work to do.

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<sup>&</sup>lt;sup>1</sup> Deutscher Städtetag, Köln and Berlin (Ed.): *Statistisches Jahrbuch Deutscher Gemeinden*, several volumes between 1980 and 2000. Cologne: self publishing or J.P. Bachem

<sup>&</sup>lt;sup>2</sup> Berger, Roland (2002): *Opinions' Presentation by Prof. Roland Berger. In: Experts conference for opinion called: "Vernetzungspotenziale innerhalb der maritimen Wertschöpfungsketten am Schiffbau-, Seeschifffahrts- und Hafenstandort Deutschland"* am 26. April 2002 im Bundesministerium für Wirtschaft und Technologie in Berlin. Bundesministerium für Wirtschaft und Technologie, Referat Öffentlichkeitsarbeit (Ed.). Documentation No. 513. p. 10 - 19