



Summary of the POLY 5-event 'Spatial Impact of High-Speed Rail' at 24.06.13

Vorhoelzer Forum of the Technische Universitaet Muenchen, 6 – 8 pm

Programme

1. European high speed rail links – importance for the Free State of Bavaria: Harry Seybert, Bavarian Ministry of Economy, Infrastructure, Transportation and Technology, assistant director of the Department for International Transportation
2. The impact of the TEN transport infrastructure for the European Metropolitan Region of Munich: Georg-Friedrich Koppen, City of Munich, Planning Department, head of the Department for Mobility
3. Spatial impact of high speed rail – EU-Project POLY 5: Kristina Erhard, Chair for Urban Development, Technische Universitaet Muenchen, research assistant

The first and second presentation was about the importance of the TEN transport infrastructures for Bavaria, the European Metropolitan Region of Munich, and the city of Munich, while the third presentation was devoted to the spatial impact of high speed rail and focussed on the contribution of the Chair for Urban Development for the POLY5-project.

First of all mobility forecasts for Bavaria indicate that it will grow above the German average. Furthermore, travel distances undertaken are forecasted to get longer. Therefore the importance of high speed rail is growing in Bavaria. Additionally, there is an increasing need to reduce CO₂ through shifting traffic from highways to rail. The goal is to reduce greenhouse gases down to 40 % by 2050 and to shift 30 % of road cargo over distances of more than 300 km to rail by 2030. Expanding air traffic is also of importance. Instead of travel by air on short haul passengers should use high speed rail.

Despite the growing demand for high speed rail, the challenge in Bavaria is to reduce bottlenecks in the existing rail network. There are many single tracks, tracks with permanent speed limits, and diesel powered trains – not only at the important rail link Munich-Zurich. Two EU-corridors are important for Bavaria, the Helsinki-Valetta and Paris-Danube corridors. Concerning the alpine area, the most crucial is the railway track from Munich to the Brenner Pass. While upgraded to high speed tracks on the Austrian side, the German part of the track is not even in the planning stage. At the same time, the Alpine Convention does not allow building new roads, thus the alpine railway network is in dire need of enhancement. Notwithstanding this issue, the poor financial situation in most European countries would make substantial improvements to the network unlikely in the short to medium term. Even in Germany there is a shortfall of money for improvements to the alpine railway network.

For the European Metropolitan Region of Munich the EU corridor Paris-Budapest is of great importance. It would develop an area where 34 Million people live, which is nine percent of the EU population. The corridor will strengthen accessibility to the city of Munich and



thereby its position in the global competition of attractive cities. In addition the attractiveness of the vicinity of Munich main station and nearby parts of the city would be enhanced.

The spatial impact of high speed rail was demonstrated by the TEN corridor Lyon-Ljubljana and especially by the example Città di Susa. The spatial impact of high speed rail can be demonstrated with using an impact model. The model of the Chair for Urban Development indicates improved accessibility as the most important impact. Improved accessibility allows firms to expand their economies of scale and scope, and allows the local population to reach destinations such as universities which were previously unreachable. The Chair for Urban development deepened and concretized the spatial impact analysis with the example Città di Susa. Strengths and weaknesses of the small city for which a high speed station is planned were explored. Furthermore opportunities and threats for the future were specified (SWOT analyses). Based on the findings of the SWOT analyses and improved accessibility through high speed rail, the POLY 5-team at the Chair for Urban Development designed a spatial strategy for the Città di Susa. Spatial strategy encompasses impact oriented spatial interventions geared to designing a positive and evidence-based future alternative for a designated area. The spatial strategy is based on improved accessibility especially for the City of Turin. Therefore the alternative future focuses on a congress center, which can be used either for international congresses hosted by the Politecnico di Torino or other institutions or regional events such as concerts or regional fairs.

Conclusions

1. The necessity for extending the high speed rail network in alpine space is twofold. Firstly, there is a growing demand for long distance transportation of freight and passengers and secondly the road network cannot be extended. Furthermore, the reduction of greenhouse gases requires the usage of rail transport instead of road transport.
2. The Bavarian high speed rail network is not able to provide the needed capacity although there are major benefits deriving from growing accessibility.
3. The benefits of growing accessibility can be demonstrated with spatial strategies that reveal possible futures for locations with high speed rail access, as seen in the case of the Città di Susa.

Spatial strategies might help to foster the expansion of the high speed rail network, because they demonstrate how local and regional stakeholders can deploy the impacts of growing accessibility.