

Dr. H.-P. Weber: Concluding Remarks, Subtheme C

I have to report on the results of subtheme C "Research into the provision and management of transport infrastructure". We dealt with 22 studies of authors from 12 countries and 4 continents. In general the aim "Search for optimum solutions for the constructions and operation of the infrastructure" has to be put in the beginning. Two remarks have to be made in this context. First of all, the empirical results of some reports showed that, if we deviate from the rigid assumption of the economic welfare theory, e.g. if we renounce on marginal cost pricing because of the deficit which is usually connected with it, there is no considerable, but - under certain circumstances - only a minor loss of welfare. On the other hand it must be emphasized that, if not all the criteria which are relevant in this context are included, the problem of sub-optimization arises; in this way the question to what degree the optimum is not achieved remains unsolved. The reports concentrated on the following six main issues:

Three problems have to be mentioned in the area of forecasts: on the one hand the problem of determining the demand curves whereby one report underlined the producer surplus as a substitute; in addition accessibility functions were recommended. On the other hand, and this was a general criticism, the forecasts are often too apodictical. Uncertainties and risks have to be highlighted more strongly than was the case up to now.

Secondly, some reports also mentioned capacity constraint problems, and it became clear in this context that there are various notions of capacity. There is an economic, a technical and an ecological concept, and they can differ considerably and depend heavily on quality.

Thirdly, questions of evaluation were dealt with, and it was underlined that on the one hand if possible all criteria should be included, even if it is difficult to quantify or to monetarize them. On the other hand it was emphasized that all efforts should be made to simplify and standardize the procedures so that the results are comparable. Finally, it should not be left unmentioned that the cost benefit analysis is more and more used for the solution of various transport problems.

Point four was not treated in enough detail: there was only one report on the subject of infrastructure and environment, and the solution that was found there can only in rare cases be recommended as worth emulating.

Point five was given more attention: the question of the financial problems connected with the infrastructure. Here we heard and discussed some analyses of the actual state, for example the problems of infrastructure costs. Criticism was expressed here, and it was underlined on the one hand that if a transport performance can only be rendered with a deficit it is not the business management point of view which can show how meaningful

the continuation of such a production is, but only the national economy point of view. On the other hand, and this could be felt very intensively, there was considerable scepticism as to whether subsidies in the long run really are useful in these cases, and it was emphasized that disadvantages cannot only arise for the subsidized mode of transport, but also for the subsidized industry as a whole.

Lastly, under point six, there was a discussion of some technological problems connected with the study on possibilities to improve the infrastructure and on the traffic guidance on this infrastructure: better road designs, possibilities of accident prevention, of improving riding comfort, and especially of better driver information through already existing traffic guidance systems which are still in the trial stage. In general, it can be said that we elaborated a wide, although certainly, according to the circumstances, not a complete survey of present day problems connected with the construction and operation of the infrastructure.