Summary:

Quality Contracts in Hordaland County An evaluation of alternative contract forms

Hordaland County Council considers Quality contracts for public transport in the county

On 25 March 1999, Hordaland County Council decided that "the principle of quality contract" should form the basis for all contracts relating to public transport in Hordaland as from 1. January 2000¹. In this respect a "quality contract" signifies an output-based subsidy contract depending on the level of service provided. It is stated that the agreement with the traffic companies will attach importance to stimulating product development, and that the companies will bear the economic risk over both income and costs. Further, it is an assumption that the agreements will stimulate trials with various fare structures within the framework of the existing rates. Realised savings in cost of providing services shall initially be utilised to further develope public transport in the county.

Current efficiency agreements had little effect on income

In the period 1996-1999 the relationship between Hordaland County and the individual public transport companies was regulated through efficiency agreements. The aims of these agreements was:

- 1. to reduce the county expenses in the acquisition of transport services
- 2. to develop public transport in the best interests of the user
- 3. to regulate the responsibilities and interests of the various parties
- 4. to co-ordinate the transport network and services.
- 5. to increase efficiency without the use of tenders to achieve the same cost levels, which would have been achieved with tendering.

Asplan Viak (1999) undertook an evaluation of the efficiency agreements. This study concluded, among other things, that while the efficiency agreement focused on costs, aspects of revenue were placed well in the background. There appears to be

The report can be ordered from:

¹ Hordaland County in Western Norway includes the township of Bergen, and has a total population of about 450,000.

Institute of Transport Economics, PO Box 6110 Etterstad, N-0602 Oslo, Norway Telephone: +47 22 57 38 00 Telefax: +47 22 57 02 90

broad consensus that the main weakness of the agreements is a lack of market/revenue incentives.

What is the most effective socio-economic subsidy contract?

The guiding principle of this project is that it should be possible to develop quality contracts for public transport in Hordaland that promote both X-efficiency and market efficiency while relying on the commercial interests of the companies concerned. Key issues in this respect are the level and principle of allocating subsidies. If the level and quality of services shall be left for transport companies to decide, a major problem i related to how the benefits to existing transit users from improved services shall be internalised in the accounts of public transport companies.

The approach taken to this problem is as follows: We use a model that capture the essential features og the cost structure, demand and constraints facing a public transport company. This model is used to find the level of services and fares that maximises net social benefit. The solution is used to test alternative subsidy schemes subject to the condition that the transport company shall provide the level of service that maximises profit.

From this exercise we conclude that a proper subsidy per revenue kilometre and revenue hour supplemented by some additional measures will provide tha appropriate incentives. In many respects these subsidy contracts may be regarded as a further development of the efficiency agreements which have existed in the county hitherto, but with greater importance attached to market *efficiency*.

Challenges facing public transport in Hordaland

The county programme for transport and development pattern for the Bergen region (1993) states that public transport is to be the main element in the urban transport system. A development programme is more closely defined in the *Strategy and action plan for public transport in the Bergen region* (1999). This programme is an important basis for providing a unified transport system in the urban region and its suburbs. Parallel with this plan, and under the premise this establishes for the role of public transport, the *Bergen programme for transport, urban development and the environment* (1999) was approved. Reliance on public transport and payment by road-users are the main elements of this programme. One of the objectives is that "a larger proportion of traffic growth will be associated with public sector". A central task for the subsidy contracts must thus be to ensure that the aims of the Strategy and Action Plan are more easily attained.

Public transport is particularly exposed to competition

The future challenge to public transport in Hordaland is to maintain or increase the present market share at the expense of the private car which, particularly in the urban areas, results in considerable costs for society both in economic and environmental terms as a result of queues, noise, air pollution and traffic accidents.

It is therefore important that public transport services are efficient and supply an optimum level of service. The greatest challenge in the future will not be to operate present services as cheaply as possibly, but to develop the best possible and competitive service within the financial constraints facing the sector. The development of such a service will take time.

Simultaneously, the public transport system is dependent on a continuos and targeted product development in order not to lose its market share. An analysis of the development of public transport in the 10 largest urban areas in Norway revealed that if the services were maintained at current levels the number of passengers would decline by 1.6 percent per annum. In Bergen the competition was even more severe with a declining market share of 2.4 percent annually if nothing was done with the services or frameworks for public transport. This suggests that public transport in Hordaland is extremely open to competition, which is entirely dependent upon a subsidy contract, which provides the opportunity for an targeted product development.

At the same time there is little or no competition between the public transport companies in Hordaland or for the access to the market. This is a protection for the companies that must not be a form of "cushion" for the companies. It is therefore important to develop subsidy contracts containing threatening competition, i.e. open up for competitive tendering if the existing companies do not fulfil the defined demands for quality prescribed in the contract. Which demands for quality are to be prescribed must be determined by the authorities.

Both domestic and international experience indicates that competitive pressure can be much more effective than competitive tendering. This is particularly important when the overall objective is a continuos and targeted product development, and a more effective use of those resources used for public transport purposes. At the same time threatening competition will provide the possibilities for longer subsidy contracts and increase the degree of freedom for the companies.

The question as to how public transport shall be organised and financed in the future is thus initially dependent upon the organisation form, which is best, suited to attain the overall objectives of regional transport policy. What, in the short term, will contribute to lowest costs or subsides, will be of secondary importance if these simultaneously change the opportunities for a continuos and targeted product development or a co-ordination of the product. The choice of organisational framework will thus largely be a question of strategy for the development of public transport in both short and long terms.

The best possible organisation and financing of public transport for Hordaland in the future is that which unites a socio-economic and a commercial objective for operations, i.e. which provides the possibility for a decentralisation of the decisions made at the company level without that this is at the expense of the overall objectives of public transport in the county.

The need for a more defined division of responsibility

Experience from other countries shows that those public transport companies which have long-term and predictable external constraints have also managed to develop the best services. Both long-term investments and possibilities for a re-allocation of resources over time can provide the basis for a more effective use of subsidies to public transport.

The introduction of "output-based contracts" demands a relatively clear and quantifiable definition of the goals, and agreement on the indicators used in measurement. By "output-based contract" we mean a contract where:

- Subsidies to the company are dependent upon the achievement of output
- Reward or penalty will encourage the company to strive towards the authority's specific goal
- The company have the liberty to find the best service level in on order to achieve those goals.

Reduced subsidies to public transport

Public transport in many Norwegian urban areas is operated with steadily declining subsidies from the public sector. Among other things this is the result of reduced transfers from the state to the counties, increased use of efficiency agreements, and the threat of competitive tendering. On a national level, the annual subsidies to the public transport companies has been reduced by about 1.2 billion NOK at 1997 levels in the period 1986 – 1997, a reduction of 42 percent in fixed prices. Regarding Hordaland, the annual subsidies to the bus companies has been reduced by 47.3 million NOK, or 21 percent between 1990 and 1998. For Gaia and Vest Traffic the reduction is 92 percent!

These reductions have resulted in more efficient operation and the public transport subsidies in Bergen are currently among the lowest in Europe (Figure S.1). Our analyses show that cost efficiency for public transport in the Bergen region (Gaia and Vest Traffic) during the past ten year has been approximately 15 percent, flattening out somewhat after 1992. Public transport in the Bergen region is operated today with 14 percent lower costs than the average for Europe (Figure S.2). The main reason for this development is increased productivity whereby the public transport companies in the Bergen region are some 8 percent more productive, measured in bus kilometres per employee, than the average for Europe.

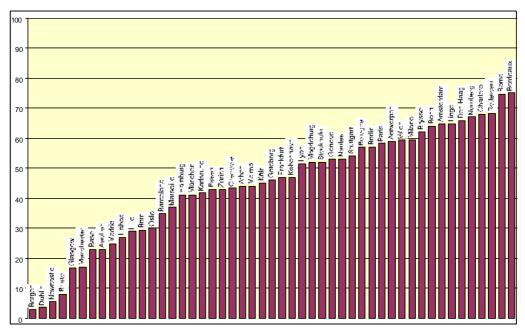


Figure S.1: Subsidies to public transport in percent of operating costs. Selected European cities. Source: Jane's (1999)

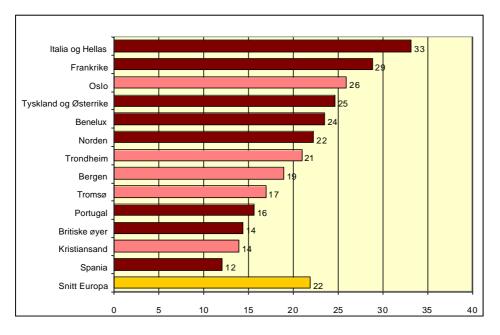


Figure S.2: Total costs per carriage kilometre in 1997 NOK. Mean for selected countries and cities in Europe in 1995. Source: ISOTOPE

The public transport companies have not succeeded in improving cost-efficiency at the same speed in which subsidies have been reduced. This has resulted in reduced frequency, higher fares and, seen in isolation, 16 percent passenger decline since 1986. The subsidies are passed on to the passengers in the form of higher fares and reduced service level. These costs are higher than the reduced subsidies in the period. The result shows, however, that Gaia and Vest Traffic are under severe financial constraint and operate with a significant deficit in the accounts. Without a

change in the current financial framework it is reasonable to assume that changes in the fares or services must be undertaken.

Proposal for quality contracts for Hordaland

The Institute of Transport Economics has undertaken analyses of the new subsidy contracts for Hordaland, both in the long and short terms, depending on the level of freedom in the contract. This applies both to the financial constraints and the division of responsibility between the authorities and the companies. One main conclusion of these analyses is that an increasing number of restrictions within the contract will decrease the net potential benefit from the reorganisation. At the same time it is not necessary to undertake a complete restructuring of the subsidy arrangements in order to acquire a significant socio-economic gain from output based subsidy contracts. However, certain strategic decisions must be undertaken in the short and long terms in order to benefit from the new contract.

Those analyses, which have been carried out, suggest that it is possible to develop a subsidy contract that can combine commercial profit and socio-economic efficiency. The output based contract contains of the following elements:

- 1. Framework and quality demands of the authorities
- 2. Performance related subsidies
- 3. Conditions for fulfilment of the contract
- 4. Proposals for transfer to new arrangements.

Framework with minimum demands on quality of services

We propose that Hordaland County defines a framework for the contract for those minimum demands for quality of service, which have to be fulfilled. The framework for the contract should consist of overall quality requirements regarding price, service and accessibility that the authorities require to be included.

The following elements can be included within such a framework:

- * *Net contact* with income responsibility for the companies.
- Establishment of an on-going *travel quality survey* used as a quality indicator and where the contract may be terminated or renegotiated if the indicator falls under a certain level. The surveys carried out in the year 2000 provide the basis for the base level.
- The authorities to have the responsibility for defining the fare structure and for differentiating fares within this level.
- The companies to receive the responsibility for providing on-going tertiary reports on central key statistics for the quality of the services concerning:
 - route kilometres basic service and rush-hour extra services
 - number of stops
 - frequency
 - reliability
 - patronage

- revenue

Performance-related subsidies

Within this framework the county authorities can enter into a performance-related subsidy contract with the companies where the main elements are:

- 1. The companies receive a fixed subsidy per bus kilometre
- 2. The subsidy level is different between peak service and the rest of the operation
- 3. In addition will they receive a fixed subsidy per journey for peak passengers.
- 4. The companies are free to decide the optimal service level according to the revenue and output based subsidies, according to their commercial profit
- 5. The agreement between the county authorities and the companies initially applies for 4 years, but with a clause on index regulation and subsidy rates during this period of agreement.

Specified conditions relating to fulfilment of contract

An output based subsidy contract will be more demanding for the companies as it will place more focus on product development according to passengers' expectations and needs. Simultaneously, the external framework, both for cars and public transport, could largely influence this passenger development. It is therefore important that the contract contains a mutual obligation between the three companies' party to the agreement and the county authorities, to ensure that the conditions are set such that the contract may be fulfilled as satisfactorily as possible.

In a follow-up to the county council resolution on a strategy and action plan, the county authorities shall establish a public transport committee for the Bergen region. We propose that this committee will serve to contribute to the co-ordination of measures, which can improve the framework for public transport in the region.

Proposal on the transitional arrangements

This is a demanding contract for the companies in so far this requires a close market understanding, both of its own cost structure, and not least factors on the demand side. The output based contract stimulate improved services, but simultaneous to more cost efficient service capacity.

An assumption for achieving the full effect of this type of model is that it provides long-term and predictable frameworks and room for re-allocation of services and the bus fleet. The contract will, in a way, decentralise the decision level to the companies at the expense of the political authorities. This increased level of freedom implies, however, increased responsibility for their own economy.

At the same time there is some uncertainty of the estimated subsidy level in the short and long terms for the individual companies. According to our calculations, these risks are low in the short term, but in the long term can result in higher subsidies than today. This suggests that there is a need for a transitional arrangement with the intention of furthering these after the companies have adapted themselves to the new contracts.

As a transitional arrangement, we would suggest that the contracts are based on today's service and subsidy level, and that the output based subsidies cover *changes* in relation to this level. Such a transitional arrangement provides greater predictability for the county authorities, and a more gradual adjustment for the companies in the short term. It is important that the county have a bonus that can cover the increased subsidy demand.

Consequences of a new subsidy contract

The consequences of a new subsidy contract are increased focus on market development and how to attract more passengers. The most innovative companies will have the most to profit by the new contracts, while those who continue to operate according to current service levels will find their income base reduced. We have undertaken analyses of the consequences of the new output based subsidy contracts, which reveal a good potential of such contracts in Hordaland.