

Research and Library Services



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PUBLIC TRANSPORT REFORM – BEST PRACTICE

Research and Library Services

The Minister for Regional Development is considering options to bring about reform to the way Public Transport Services are delivered in Northern Ireland. This paper provides a briefing on the management of public transport delivery in other countries and regions that are considered to be best practice.

Research Papers are compiled for the benefit of Members of The Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

Summary of Key Points

Public transport management structures are shaped around characteristics that are specific to an area. Policies, structures and performance levels are therefore influenced by an interrelated set of conditions.

Much research is available surrounding best practice principles for public transport delivery. These include: the need for regulation; integration of transport services; private sector involvement; and effective policy.

Management structures vary throughout countries and their regions. This paper considers the public transport management structures as found in Styria, Austria; Achterhoek, Netherlands; and Baden Wurttemberg, Germany which are widely regarded as examples of best practice in public transport delivery.

STYRIA, GRAZ, AUSTRIA

- Broadly comparable to Northern Ireland and Belfast in terms of population size and area.
- All tiers of government have degree of responsibility for public transport provision.
- Framework for transport policy is developed at the national level.
- Styrian Transport Association acts as a management agency for the co-ordination of all public transport provision in the region of Styria;
- Administrative authorities are responsible for broad policy, funding and decision making;
- Design and implementation measures for integrated ticketing; fares; company contracts; marketing; and regulation, is provided by another tier. This is completed by a single company (StVG) which is 100% owned by the Austrian government.
- Provision of services currently rests with 64 transport companies on the basis of cooperation contracts.

ACHTERHOEK, NETHERLANDS

- Rural region in the east of the Netherlands with a population of 400,000.
- Central government is responsible for the development of national transport policy.
- Provincial administration has significant influence over transport policy however municipalities have a degree of flexibility.
- Rail and bus transport is provided by Syntus, a commercial operator owned by NS Dutch Railways, Cariane Multimodal and Connex Holdings.
- Syntus operates services under competitive tender to the Gelderland Provincial Administration who monitor the services in terms of punctuality, reliability and customer satisfaction.
- Government deliberately sought to introduce market dynamics into the sector as a means of improving quality, efficiency and financial self sufficiency.
- Incorporation of both regional bus and rail operators under Syntus was a first for the Netherlands.

BADDEN WURTEMBERG, STUTTGART, GERMANY

- Stuttgart is a medium European City with a population of 590,000. The region has a population of 10m.
- Transport planning based on a three tier governance structure.
- The majority of provision is undertaken at the regional or local level.
- National Rail Services are provided by public limited company however part-privatisation is planned.
- Responsibility for commuter rail system is delegated to the regional planning authority and local light tram/rail/bus services are delegated to the City of Stuttgart and surrounding districts.
- Since 1978, public transport modes have been drawn together under the umbrella organisation, Stuttgart Transport and Tariff Association (VVS) which acts as a management agency co-ordinating routings, timetables and passenger information.
- The VVS has the support of local authorities, regional authorities and operators through a unique shareholding agreement.

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BEST PRACTICE PRINCIPLES

Public transport management structures are shaped around characteristics that are specific to certain countries. Policies, structures and performance levels are therefore influenced by an interrelated set of conditions.

Conditions that must be considered include:

- Background factors such as political, physical and economic conditions;
- EU trends and regulations; and
- Individual policy factors such as management structures; and timing of implementation.

Much research is available surrounding best practice for public transport delivery. A number of key principles emerge from the research.

NEED FOR A DEGREE OF REGULATION

The Commission for Integrated Transport (CfIT) is an independent body advising the national government on integrated transport policy. It states that:

Irrespective of the type of organisational structure established, it is essential that it be democratically accountable.¹

This is a view widely agreed by industry stakeholders within Northern Ireland.

INTEGRATION OF TRANSPORT SERVICES

At a strategic level, it is important that transport policy is addressed within context of wider government objectives on economic prosperity, environmental protection, health and social inclusion.

At the physical level, integration of transport modes is a vital element in delivering an effective service.

CfIT observes that:

Regardless of size or scale, the common link between all successful areas identified was the existence of a single strategic body integrating transport and highway powers (as well as economic development and land use planning) across a unified area.²

Research conducted by Atkins³ notes that *umbrella* organisations have been crucial in improving integration of transport modes and services. Integrated route planning, fare structures; timetabling and marketing have resulted in increased patronage on services. These organisations have also helped to agree common policies and

¹ Commission for Integrated Transport (CfIT), *Scotland's Transport: Proposals for a new approach to Transport in Scotland*, December 2003.

² CfIT, *Moving Forward: Better Transport for City Regions*: 2007.

³ Atkins, *European Best Practice in the Delivery of Integrated Transport, Report on Stage 3: Transferability*, 2001.

objectives between those involved in transport provision, and led to the adoption of (higher) common standards of transport infrastructure.⁴

CiFT also note the importance of integration between local decision makers. When asked to consider changes to the way in which public transport would be delivered in Scotland, it was noted that:

*In many European counties there is a strong regional responsibility for transport integration. Regional authorities provide a bridge between national policy formulation (including infrastructure investment) and implementation of local transport. This helps to co-ordinate policies over a larger area than that covered by a local authority and reduces boundary effects.*⁵

NEED FOR PRIVATE SECTOR INVOLVEMENT

Many sources also note the benefits of private sector involvement. Research conducted by Patrick van Egmond suggests that:⁶

*Public monopolies have become notoriously inefficient due to the lack of incentives in a protected market. Privately organised firms in competitive public transport markets are assumed to operate much more efficiently, but this increased efficiency may be offset by a loss in terms of integration of public transport systems.*⁷

The European Commission has formulated policy with the needs of both citizens and society at mind. This states that the most appropriate organisational mix:

*represents a semi-market model and presupposes also a strict regulation, which may favour the achievement of production efficiency, cost efficiency, socio-economic objectives, and client orientation.*⁸

EFFECTIVE POLICY

A Report on European Best Practice considered the following policy elements as crucial in obtaining an effective service: segregation of road space; high quality public transport infrastructure and fleets; creation of public transport authority; greater choice of travel modes; inter-modal integration; regional co-ordination; marketing and promotion; effective land-use policies; and local political backing.⁹

INTRODUCTION TO CASE STUDIES

The remainder of this paper examines a number of areas that are widely regarded to be examples of best practice in the delivery of public transport. These include:

- Graz (Small City), Styria Region, Austria.

⁴ *Ibid*, pg 12.

⁵ Commission for Integrated Transport (CiIT), *Scotland's Transport: Proposals for a new approach to Transport in Scotland*, December 2003.

⁶ Patrick van Egmond, Peter Nijkamp and Gabriella Vindigni, *A Comparative Analysis of the Performance of Urban Public Transport Systems in Europe*, 2003.

⁷ *Ibid*, pg 237.

⁸ *Ibid*, pg 237.

⁹ Atkins, *European Best Practice in the Delivery of Integrated Transport, Report on Stage 3: Transferability*, 2001.

- Stuttgart (Medium City) and the province of Baden Wurtemberg, Germany;
and
- Achterhoek (Rural Region), Netherlands.

CASE STUDY 1: GRAZ, STYRIA PROVINCE, AUSTRIA

BACKGROUND

Graz is the regional capital of the Styria province in Austria. Styria has a population of 1.2m (Northern Ireland, 1.7m) and Graz has a population of some 240,000 (Belfast, 270,000). Styria covers an area of 16,388km² (Northern Ireland, 13,843 km²).

A benchmarking exercise undertaken by Atkins identified Graz as an example of best practice.¹⁰ The PIMMS¹¹ group, whose remit includes considering best practice in transport and mobility delivery in the EU, agrees.

ROLES AND RESPONSIBILITIES

All tiers of government in Austria have some degree of responsibility for the delivery of public transport.

A framework for transport policy is developed at the national level and a legally binding *Masterplan* outlines future development projects for the nation. Federal authorities are responsible for planning trans-regional infrastructure deemed to be of national priority and key regional infrastructure.¹²

Policy concepts are developed at the regional level. In the case of Styria, this document provides recommendations and guidelines for provincial and local authorities. Key issues addressed in regional plans include land-take up for transport infrastructure, environmental impacts and policy co-ordination.

The Styrian Public Transport Association was set up in the Greater Graz area in 1994. Since 1997, it has existed in the whole province of Styria and brings together all public transport stakeholders. The organisation of the Styrian Public Transport Association is based on a three level model.

The first level is a funding and decision level and is represented by the administrative bodies: the Republic of Austria; Province of Styria; and the City of Graz, on the basis of an underlying funding contract. A steering committee functions as a decision panel.

Planning, designing and implementing services is undertaken at the next level. Responsibilities include: fare and route design; cooperation with the transport providers; development of integrated services such as the distribution of tickets; marketing; and regulation. These tasks are fulfilled by a single body called the Steirische Verkehrsverbund GmbH (StVG) which is 100% owned by the Province of Styria.¹³

¹⁰ Atkins, *Study of European best practice in the delivery of integrated transport: Report on Stage 2 – Case Studies*, 2001.

¹¹ PIMMS is the Partner Initiatives for the development of mobility management services.

¹² *Ibid.*

¹³ Vebund Linie, Verkehrsverbund Steiermark online / The Styrian Public Transport Association.

In September 1997, the Austrian mobility centre “*Mobil Zentral*” was set up. This allows for information regarding timetables and fares to be accessed from one place.

The third tier currently comprises 64 transport companies which cater for the supply of the transport effect on the basis of cooperation contracts. These companies operate a common ticket, single fare, interconnecting transport system.¹⁴

REFORM

In 2000, a new law for local and regional public transport in Austria came into force. The aim of this was to restructure the system and provide a legal basis for inter-connecting transport systems. The main outcomes of the reform resulted in transport companies bearing more economic responsibility through the use of performance contracts and improved efficiency of services through increased competition.

KEY ACHIEVEMENTS

- More than 500 lines served by 64 transport companies using trains, trams and buses;
- 4,500 members of staff employed within Styria Transport Association;
- In 2006, 68.53 million passengers were counted (including schools or corporate);
- Interconnecting transport system is claimed by peers as outstanding¹⁵;
- High quality central area and street environments;
- Low levels of congestion; and
- Increased priority and mobility for pedestrians, cyclists and public transport.

¹⁴ Vebund Linie, Verkehrsverbund Steiermark online / The Styrian Public Transport Association. Company figures are from 2007.

¹⁵ Verbund Linie.

CASE STUDY 2: ACHTERHOEK, NETHERLANDS

BACKGROUND

Transport specialists from around the world have for many years looked to the transport experience of the Netherlands as exemplary.¹⁶

The European Conference of Ministers has attributed this to:

- strong and sustained commitment to integrating transport and land use planning;
- policies to maximise the use of public transport and cycling;
- a highly respected planning culture; and
- institutional arrangements that favour consultation and consensus.

Achterhoek is a rural region in the east of the Netherlands. It has a population of 355,000 and a population density of 378 people per km² (Northern Ireland 125 people per km²).

The Commission for Integrated Transport (CfIT) identifies Achterhoek as an example of best practice and its management structure and key successes are explored further below.

ROLES AND RESPONSIBILITIES

The transport planning system in the Netherlands is based around its three tier governance structure.

At a national level, the central government is responsible for the development of national transport policy. The *National Masterplan for Traffic and Transport*¹⁷ centres on the key objectives of enhancing accessibility and quality of life through co-operation between central, provincial and regional government. The policy document also acts to develop the interrelationship between space, transport and the economy.¹⁸

Since 1998, central government has increasingly decentralised its responsibilities for public transport and other transport planning matters to lower tiers of government. The 12 Dutch provinces and 23 regional administrations now play an enhanced role in the planning and financing of regional public transport, investment in highways, cycling and walking infrastructure, parking policy and the link between land use planning and transport. The Government has sought to introduce market dynamics into the public transport sector as a means of improving quality, efficiency and financial self-sufficiency which replaces the monopoly of formally publicly-owned state companies.

¹⁶ European Conference of Ministers of Transport, *National Peer Review – The Netherlands, Implementing Sustainable Urban Travel Policies*, 2001.

¹⁷ National Masterplan, Netherlands.

¹⁸ The Scottish Government, <http://cci.scot.nhs.uk/Publications/2006/02/02142231/4>.

Archterhoek is found within the province of Gelderland. The provincial administration has substantial influence over transport planning and practice and the 17 municipalities found within the province, have a degree of local flexibility.

In Achterhoek region, bus and rail public transport is provided by Syntus, a commercial operator owned by NS Dutch Railways, Cariane Multimodal and Connex Holdings. Syntus has operated services in Achterhoek since 1999 under competitive tender to the Gelderland Provincial Administration who is responsible for monitoring the services provided in terms of punctuality, reliability and customer satisfaction.¹⁹

There are separate urban/suburban network in the region and these are provided by a range of private operators such as Connexions, Hermes and Novio.

The incorporation of both regional bus and rail operations under Syntus was a first for the Netherlands. The former state owned NS previously had a monopoly on rail transport, owning and managing both infrastructure and operations. However, vertical separation of track and operations has been achieved at national levels since 2001.

KEY SUCCESSES

The CiFT report identifies key successes as:

- *decentralisation of transport planning and budgets to regional level;*
- *lower growth in car ownership than the national average;*
- *integration of regional bus, rail and taxi services under a single operator, with introduction of new vehicles and "light rail" rolling stock;*
- *Innovative demand-responsive regional taxi system, aimed at improving public transport quality and cost-effectiveness, now carrying 1,500 per day and growing at 15% per annum;*
- *Exemplary provision of pedestrian and cycling infrastructure and over two fifths of all trips now made by sustainable modes; and*
- *Impact of safety policies and measures in reducing road casualties.*²⁰

¹⁹ Atkins, *Study of European best practice in the delivery of integrated transport: Report on Stage 2 – Case Studies*, 2001.

²⁰ *Ibid.*

CASE STUDY 3: BADDEN-WURTTENBURG REGION AND THE CITY OF STUTTGART, GERMANY

BACKGROUND

The following case study provides an analysis of the state of Baden-Württemberg and the city of Stuttgart. Based on a European benchmarking study commissioned by the Commission for Integrated Transport²¹, the city of Stuttgart scored highly. The information provided below is adapted from this study.

Stuttgart has a population of 590,000 (Belfast, 270,000). The region of Baden-Württemberg is significantly larger than Northern Ireland with a population of 10m (Northern Ireland, 1.7m)

Stuttgart is a wealthy city, car ownership is high and there is a strong manufacturing base. Interestingly, locally manufactured 'metroshuttle' buses have the latest hybrid power systems.

Given the governance structures within Germany, there is competition between the city and surrounding towns for tax revenues, therefore transport provision is seen as a way to secure revenues.²²

ROLES AND RESPONSIBILITIES

The transport planning system in Germany is based around a three tier governance structure.

The majority of public transport provision is handled at a regional or local level with the exception of national rail.

National rail services are provided by Deutsche Bahn AG. This is a public limited company and the Federal Republic of Germany owns 100% of the shares. Part privatisation of Deutch Bahn has been agreed by the government after 14 years of controversial debate. It is planned that 24.9% will be floated off to private investors by the end of 2008.²³

In the Baden-Württemberg region, responsibility for the commuter rail system (S-Bahn) is delegated to the regional planning body (VRS) and local light rail/tram and bus services to the City of Stuttgart and its surrounding districts.

Regional Transport Plans (RTP) contain objectives for increasing efficiency, improving public transport and encouraging mobility. More detailed plans are drawn up at the district level. These plans are based on assessment by an *umbrella* authority which encompasses existing public transport providers and decision makers.

Since 1978, all public transport modes in Stuttgart region have been drawn together under the umbrella organisation of the Stuttgart Transport and Tariff Association

²¹ Atkins, *Study of European best practice in the delivery of integrated transport: Report on Stage 2 – Case Studies*, 2001.

²² *Ibid*,

²³ Spiegel Online, *German Parliament Gives Green Light to Railway Privatization*, 30th May 2008.

(VVS). VVS acts as a ‘management agency’ co-ordinating routeings, timetables and passenger information in the Stuttgart Region.²⁴

The Atkins report notes that this change in structure has led to a patronage growth of 4% a year since the introduction of a common fare structure, allowing passengers to use more than 300 routes with a single ticket, ongoing extension of the commuter railway and the conversion of trams to modern light rail.²⁵

Importantly, the VVS has the support of the local authorities with responsibility for public transport, the regional authority and also the transport operators, through a shareholding arrangement.²⁶

This unique mix of public/private sector, planning/operations, successfully allows the inclusion of local authorities in public transport decision making, without burdening them with financial responsibility for service delivery.

Table 1 below demonstrates the shareholding agreement.

Table 1: Stuttgart Transport and Tariff Association²⁷			
Transport Operators	50%	Public Bodies	50%
DB	19%	Baden-Wurttemberg	7.5%
SSB	26%	VRS	20%
39 small public and private cos.	5%	4 Districts	3.75% ea.
		City of Stuttgart	7.5%

Politicians in districts that are actively seeking to further increase public transport modal share negotiate with the VVS for additional services. VVS plans the improvements in consultation with operators, agrees the likely patronage and revenue increases and then advises the district on the extra subsidy required before a final decision is made.²⁸

The regional authority (VRS) has set up eight working groups to help co-ordinate transport and other local policies, including planning new development and providing support for job creation. The groups have acted as ‘think tanks’ and encouraged a more holistic approach to transport planning.

The Atkins report notes that at all levels of government (federal, state, local) the supply of public transport is seen as a priority and therefore provision and regulation have remained largely within the public sector.²⁹

²⁴ Atkins, *Study of European best practice in the delivery of integrated transport: Report on Stage 2 – Case Studies*, 2001.

²⁵ *Ibid.*

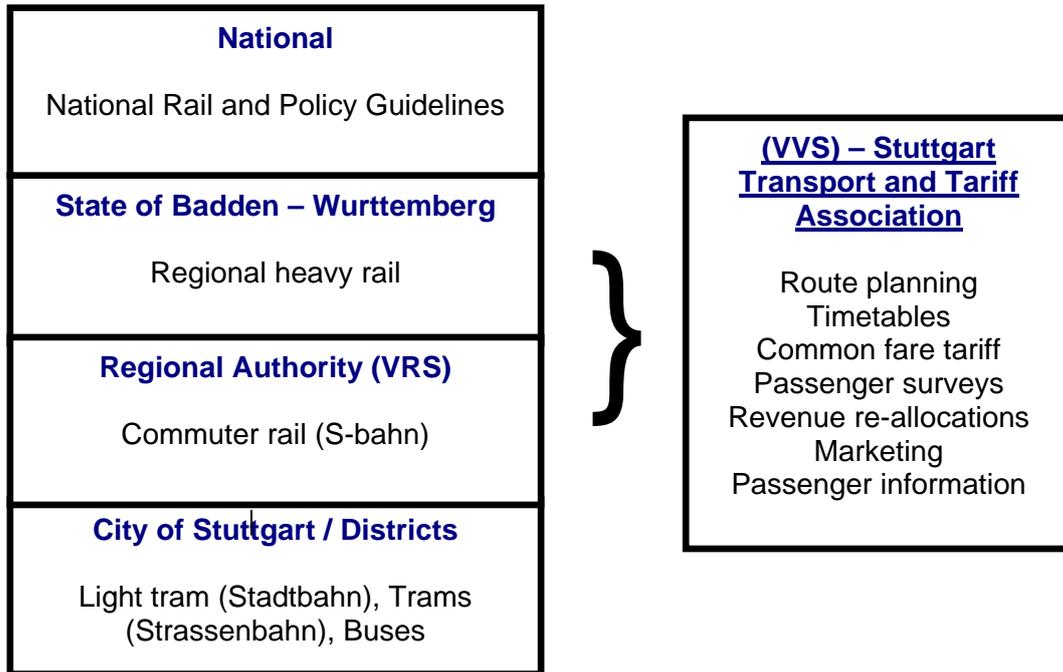
²⁶ *Ibid.*

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ *Ibid.*

Figure 1 below outlines the structure of the public transport provision in the Stuttgart region³⁰



KEY SUCCESSES

The Atkins report notes the key successes of the system as:

- *Public transport patronage continuing to grow by 4% per annum in response to integrated ticketing, network extensions and ongoing upgrading of fleet;*
- *Highly regulated management agency responsible for planning and co-ordinating services, monitoring usage and responding to customer needs;*
- *State of the art provision of multi-media travel information;*
- *Strong branding and promotion of public transport and support for mobility initiatives;*
- *Conversion of car dominated streets to attractive people space; and*
- *Regional ‘think tanks’ ensure joined up thinking between policy areas, especially transport and regeneration and integrated transport planning.³¹*

³⁰ *Ibid.*

³¹ *Ibid.*

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